Neighborhood as Factory: The influence of land development and civic politics on an industrial cluster in Delhi, India

by

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Submitted to the department of Urban Studies and Planning in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Urban Studies

ABSTRACT

This dissertation proposes the *Neighborhood as Factory* as a conceptual framework to think about one important form of industrial development. Using the case of Viswas Nager in Delhi, one of India's most important industrial clusters manufacturing electric cables and conductors, it argues that particular kinds of neighborhood settings can allow for highly productive economies to develop. Here, land policy can be a very effective industrial and employment policy.

- Differentiated land markets allow diverse firms to cluster and inter-link to create highly efficient and flexible manufacturing processes. Incremental growth permits firms to upgrade their production over time in response to changing markets;
- Surpluses from real estate development provide capital funds for the local economy, via complicated financing mechanisms to permit the manufacture of ever more sophisticated products. Inter-linked processes at different levels of sophistication spur localization and urbanization economies, which in turn spur local real estate values. The *Neighborhood as Factory* can thus become a highly productive system.
- The Neighborhood as Factory has important political aspects. Local groups and elected representatives transform the Local State into a Porous Bureaucracy via a vigorous political process. The institutions of local government permit local interests to influence the implementation of developmental programs. This is especially true for infrastructure and services that are essential for industrial transformation. This political process works both ways. Just as it transforms the Local State, it also transforms local groups into a politicized civic society.
- The local economy and the *Porous Bureaucracy* underpin the political and economic autonomy of local civic society in its conflicts with corporate interests and national authorities. It is not relative production inefficiency that threatens local economies in their struggles over economic turf, but rather their decreasing political power to acquire public infrastructure for their land.

This dissertation proposes that land policy should be the central instrument for economic growth and employment.

The methodology uses extensive field observation--case studies to obtain qualitative and quantitative data at the neighborhood level: the transformation of the neighborhood land market in parallel to the evolution of manufacturing linkages; financing mechanisms; and the local political process.

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This dissertation is dedicated to my wife Gitanjali: For her untiring intellectual support, reading numerous drafts to the point of mental exhaustion, especially when the dissertation took away so much of our life together

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Politics of the local setting

- The importance of political clout for poor groups to accumulate economic clout
- How the settlement process helps poor groups accumulate political capital by forming *vote banks*
- How the increasing political power of the poor transforms the Local State into a *Porous Bureaucracy*
 - * The Porous Bureaucracy in turn makes for an easier settlement process
 - * The Councilor as a key agent of the porous bureaucracy
- The *Porous Bureaucracy* makes possible appropriate neighborhood settings for sophisticated economic activities, and a distinctive local politics. The increasing economic strength of local groups unpins the political autonomy of the *Porous Bureaucracy*

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 - * Insights into contemporary urban conflicts between corporate and local economies in both rich and poor countries.
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Acronyms:

DDA: Delhi Development Authority

DESU: Delhi Electric Supply Undertaking

DA: Delhi Administration KVA: KiloVolt Ampere

Ckm: Core Kilometers (Unit measurement of cables and conductors)

MP: Member of Parliament

MLA: Member of Legislative Assembly

Govt. of NCT: Government of the National Capital Territory

HP: Horse Power

Rs. 36 = 1 US\$ in 1996 Rs. 100,000 (Rs.1 lakh) = US\$ 2,777

Rs. 10,000,000 (Rs.1 Crore) = US\$ 277,777

GOI: Govt. of India

DSIDC: Delhi Small Scale Industries Corporation

SSI: Small Scale Industry

A clarification about the presentation in this dissertation

I extend the discussion in the main text in three forms. First is in the form of footnotes placed numerically at the lower part of the page. More extended discussions are placed at the end of each chapter as lettered end notes. Finally, discussions on background points, calculations, or descriptions of procedures are placed as various annexes. These are numbered not sequentially, but rather in correlation to their chapters from which they are draw from. For instance, while Chapter 1 has an Annex 2., Chapter 2, 3, 4 do not have any annexes, Thus, there are no Annex 2,3,4. Instead Chapter 5, 6, and 7 do have annexes named Annexes 5, 6, and 7.

The following text, diagrams, and photographs have been re-produced in their original or modified form from my previous research on Viswas Nager (Benjamin 1991). This is with the kind permission of its publisher, The Lincoln Institute for Land Policy, Cambridge Massachusetts. The page numbers in italics represent locations in the original book.

- 1) Fig. 2-1 (Page 18)
- 2) `A Model for the Evolution of Production' (Page 24-27) I have drawn from this text, and updated it with new data from more recent fieldwork.
- 3) Fig. 3-1 (Pages 28)
- 4) Fig. 4-3 (Page 35)
- 5) 'The Entrepreneurs' (Page 42-43) I have drawn from this text, and updated it with new data from more recent fieldwork.
- 6) Text Boxes: The Extended Family & The New Partnerships' (Pages 43, 44).
- 7) `Evolution of land uses and land values' (*Pages 47-55*) I have drawn from this text, and updated it with new data from more recent fieldwork.
- 8) Fig.5-1, 5-2, 5-3, 5-4, 5-5, 5-6, 5-7.
- 9) Sociopolitical mechanisms in acquiring tenure' (Page 57-59) I have drawn from this text, and updated it with new data from more recent fieldwork.
- 10) Text Box `A typical Factory Owner' (Page 65)
- 11) Photos 4,5,6,19, 20, 24,25, 38,40,44,45.
- 12) Fig.6-1, 6-2, 6-3 (Page 74-76).
- 13) 'The mobile family' (Page 79).
- 14) `Choosing a site for a temple' (*Page 80*).
- 15) Text Box 'Three Types of worker housing in a consolidated colony' (Page 83).
- 16) `Mrs Rai, a Private School Principal' (Page 92) I have drawn from this text, and modified it as per more information on such cases.
- 17) Text Box 'Mr. Prakash, a school Teacher turned Entrepreneur' (Page 96)
- 18) Text Box 'Cycle Rickshaws' (Page 99).

CHAPTER 1: SLUMS CAN BE PRODUCTIVE

It is universally recognized that urban job creation is one of the most serious issues confronting poor countries. This dissertation starts with a paradox. How is it that what looks like a slum on the periphery of Delhi turns out to be India's largest industrial cluster

manufacturing cables and conductors? This neighborhood called Viswas Nager in East Delhi, is just one mile long by a quarter mile wide. The 2000 firms here, many of which are home based, control almost 30% of the country's market in the Light Tension category¹.

If this does not stop one in one's tracks, then let us consider this: The firms here manufacture a wide range of 27 cables and conductors. These are

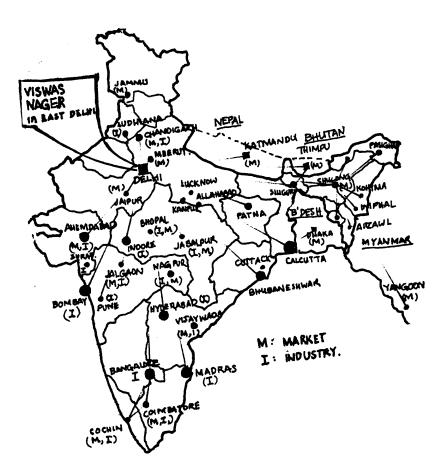


Figure 1: Supply of cables and conductors from Viswas Nager in East Delhi to the rest of India and surrounding countries

not simple or roughly put together fabrication jobs either. Some of the firms here,

 $^{^{1}}$ Annex 1 provides a detailed overview of the cable and conductor industry in India, and places the industrial productivity in this larger picture.

many of which are home based, manufacture 'Ribbon Cables' used inside computers. Many more manufacture co-axial cables used to transmit cable-TV signals. These products are marketed to wholesalers located in small towns and cities all over India, as well as to surrounding countries of Nepal, Bhutan, and Burma. Some firms here, are major suppliers to government agencies like state electricity boards. Among them, a few even supply specialized cables to the Indian Railways -- known for its stringent quality control of input raw stocks, testing of finished products, and regular inspection of the manufacturing process.

In addition to cables, Viswas Nager is also a market for skills. Many entrepreneurs from across the country visit this neighborhood to buy the machinery that makes these cables, and if possible, lure away skilled labor with advance salaries up to three years and a 35% raise over their existing ones.

Viswas Nager's industry generates an employment which is no less impressive. With a voter age resident population of about 20,000, a very conservative estimate of the jobs linked to manufacturing ranges between 35,000 and

1) Copper wire Drg. 0-16 Gauge 16-28 Gauge 16-30 Gauge 28-44 Gauge 30-46 Gauge 2) Aluminum Wire Drg. 10mm to 1.4mm 1.4 mm-0.5mm-0.3 mm 10mm-1.4mm-0.5 mm 3) Aluminum Core Steel Reinforced (ACSR) 4) All Aluminum Cables (AAC) 5) LT power Cables 6) LT Control Cables 7) Tinned Copper Wire hot. 8) Tinned Copper Wire cold. 9) Tough Rubber Sheathed Cables (TRS) 10) Auto Cables 11) Short Firing Cables 12) Domestic Cables 13)Super Enamelled wires 16 to 22 Gauge 14 to 22 Gauge 22 to 30 Gauge 30 to 40/42 Gauge 14) Paper Covered Cables 15) Cotton Covered Cables 16) Flat Ribbon Cables 17) Twin Flat Cables 18) Battery Cables 19) Flexible Cables Cords 20) Welding Cables 21) Jumper wires 22) Drop Wires 23) Twin Flat Cables 24) Dish Wire 25) Fiberglass Insulated Cables 26) Pair cables

1:Cables and conductors manufactured in Viswas Nager

27) Flat Ribbon Cables

50,000². These figures do not include the effects on the construction industry. Well recognized as having the largest employment effect in urban areas, the industry here is spurred by the constant upgrading of homes into factories, and upper floors for rental apartments for incoming entrepreneurs and workers.

Contrary to most job creation programs sponsored by governments, this employment generation and industrial productivity has developed with no public institutional finance, no special training or management programs³. On the contrary the incoming industry has generated money. Residents use incomes from plot rentals, or sub-divisions to upgrade their homes, build extra rooms and pay for civic improvements. In fact to cap it all, the entrepreneurs here had initiated a negotiation process to pay the municipality vast sums of money in return for licenses which would allow them to legally draw electrical power.

If Viswas Nager had resulted from a nationally sponsored employment or manufacturing program, its success would have been widely publicized in brochures, official reports, and political manifestos. If its' development had been aided by NGOs, they would have been able to draw in more funds, more research investments and participation in international seminars and conferences. All this would undoubtedly attract official dignitaries and planners from far off countries attempting to see what they can learn for their own situations. This dissertation will show that development here has come out of a complicated local political process. Government involvement has not been that of a central employment or financing agency with its slick posters advertising its numerous financial packages. Rather, it is the local municipality with its dark and scruffy rooms often filled with the smell of musty files and petty officials

² Information about the voter population was provided by Mr. R.N. Goel, MLA Shahdara November 1995. The schematic estimates about Viswas Nager's employment was provided by Mr. Nawratan Bengani in 1993 on the basis of different kinds of firms in Viswas Nager, and other employment activities related to mainstream. manufacturing.

³ Such a case is especially important when academicians and policy makers have come to the conclusion that the benefits of most government programs for poverty removal and employment generation have not accrued to poor groups. See my essay on this issue in Annex 1, section A.

casually drinking tea. The local groups pushing for development are in sharp contrast to contrast the smooth talking Delhi NGOs, their jeeps, AV equipment, and the masses of publications to organize the community. Instead, the associations in this neighborhood, are groups of entrepreneurs and residents who speak with a heavy local dialect. Organizing does come about, but often along varying issues and as part of daily life. For most of the time, for instance, associations come together to put an end to harassment by inspectors. At other times, as this

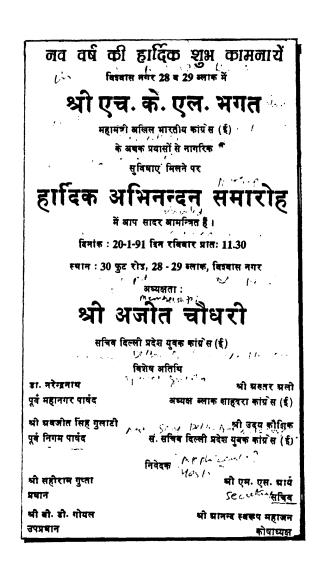


Figure 2: Poster for a public meeting attended by a member of Parliament and local politicians to celebrate the installation of a transformer and water line in Western Viswas Nager (REFER CASE OF BLK. 23-29 ON PAGE 249)

dissertation will show in its ending chapters, it also means forming a larger federation to sustain a long agitation in parallel with negotiations with city authorities.

Celebration for those living and working here, comes when a new transformer is

finally built, when water and telephone lines extended. For it is these that bring life to

the neighborhood economy and its society. Celebration rarely happens when a new financing scheme is announced, or a international conference on employment is declared open in New Delhi or any other capital.

Viswas Nager's development defies an easy description. Thus, what does Viswas Nager look like?

A walk through the streets of Viswas Nager reveals a panorama of life in its everyday process: Wet clothes being put out to dry on the terrace above a cable manufacturing unit, children playing in the streets, a buffalo being washed clean, while the room next door is used to house a lathe busy grinding down a machine casting. The line between industry and residence here is a thin one.

Above most streets in Viswas Nager heavy duty cables, coiling like black serpents, supply the lifeline to this power-hungry industry clustering in the interior parts of blocks. Parallel to the mainstream manufacturing firms many are support services. Some are small factories repairing and manufacturing electrical equipment like control switch-gears, and industrial heaters. Other firms recycle the plastic to help make the insulation for the cables. Then, there are also firms that manufacture the specialized machines used to manufacture cables and conductors. On the streets outside, are hundreds of cycle rickshaws to transport residents within the neighborhood. There are also many modified cycle rickshaws and scores of vans that help to transport semi-processed stock from one factory to another.

Scattered through the neighborhood, are also retail stores and social services like home-based primary schools, day care centers, and medical clinics. Viswas Nager is also an important residential neighborhood of East Delhi. In fact, in some parts of this neighborhood that have only recently been settled residents are already putting up extra rooms to rent out to entrepreneurs, and workers, or for small workshops or retail stores. Many residents in Viswas Nager have also become 'sleeping' partners in manufacturing firms -- contributing perhaps the most important resource: land. Thus, the congruence of firms and residence in many of Delhi's neighborhoods like Viswas Nager, has created a distinctive neighborhood economy.

CONCEPTUALIZING INDUSTRIAL NEIGHBORHOODS

This dissertation is about the way we think about industrial clusters. I argue that it is in fact no paradox that industrial clusters like Viswas Nager have evolved in what seem like slum settings. To be productive, this is where they have to be. My dissertation demonstrates five characteristics of highly productive industrial districts:

a) The clustering firms in close physical proximity, which share

production linkages, but under individual management.

- b) Their neighborhood setting which comes out of an incrementally developing but unregulated land market. This allows firms to start production easily, and upgrade it over time in response to emerging markets, and their social, economic, and political situation;
- c) Real estate surpluses brought about by the development of land finances the manufacturing process, while industrial productivity in turn, spur real estate markets;

The industrial cluster exists in a highly political environment where:

- d) Firms apply pressure on local governments to provide infrastructure and services that drive both industrial and land development. The Local State, in turn, is shaped by these political pressures.
- e) Finally, this local politics around land issues also responds to competition with corporate capital and institutions operating at a higher political level. Thus, industrial clusters do not operate in isolation, but exist in an urban arena where they compete for land and infrastructure with other social groups. This competition is not only though economics, but also has important institutional aspects.

The issue of industrial districts is a very important one for urban economies and employment. Studies in both rich and poor countries show that small firm clusters provide extensive employment, and in many cases, substantial opportunities for workers to improve skills (Sengenberger et.al 1990; Portes et.al 1989). In the case of cities of poor countries, economies centered around small firms enhance incomes, and provide incentives for the poor to upgrade their physical environment and services (Sengenberger et. al. 1990; Doebele 1987); These firms are not an insignificant part of the urban economy. In Delhi for instance, a third of the revenue of the local government comes from industry, which also account for a third of the capital's employment (DSIDC 1995)⁴, all this when more than ninety percent of these firms have less than 10 employees (DC,SSI 1994). Most of these, like Viswas Nager,

⁴ These are official estimates of accounted incomes, which usually tend to be incomplete. Accurate figures 'or both direct and in-direct contribution, including un-accounted capital flows within the city's economy, as well as employment, would undoubtedly be much higher.

locate in 'slum' settings with only 3-8% locating in the publicly built industrial estates (DSIDC Op.cit; DESU.GOI 1994; CSE 1994)⁵. Given the importance of the issue, it is useful at this stage to review how other scholars have viewed local economies and especially industrial clusters.

LITERATURE REVIEW

In reviewing the literature, I use three filters to discern various viewpoints⁶ as they relate to economic development. These are:

- i) The unit of analysis;
- ii) Perceptions of the Local State; and,
- iii) Land as an issue.

In this introductory chapter, I focus on revealing how scholars have thought about what they know, rather than attempt a detailed summary of the whole literature. I will cover here what is important to explain my own conceptual framework of Neighborhood as Factory discussed in greater detail in the next chapter. In the concluding chapter of this dissertation, I return to this literature to discuss how my conceptualization of industrial clusters is different from existing approaches. To understand existing approaches as they relate to the local economy, I look at two sets of literatures. The first relates to perspectives on industrial clusters, and neighborhood economies. The second, relates to perspectives on the local setting of production as they relate to land. The first set of literature is an obvious one to review.

⁵ The 3% estimate is calculated on the number of SIP (Small Industrial Power) connection made by the DESU, and estimates of units in non-conforming areas mentioned in the Vasant Committee report (See DESU 1994, 1995). The 8% is estimated by the DC,SSI figures. Both are based on the estimates by the Delhi Pollution Control Board (quoted in CSE 1994), that 8500 firms locate in Industrial Estates.

⁶ Scholars have discussed a wide range of issues. For instance, in focusing on industrial clusters some have discussed the issue in terms of a larger movement of history, or very localized issues like trust and the role of ethnicity. At this time, I **on**ly focus on those aspects which are directly relevant to **my** own conceptual framework. At the end of this dissertation, I briefly discuss these other issues as they are informed by my findings.

The second on the neighborhood setting, is important because of the particular finding of this dissertation that land issues (in both their economic and political aspects) have played a central formative and sustaining role for local economies.

PERSPECTIVES ON INDUSTRIAL CLUSTERS

There are three traditions of scholarly thought which have looked at the local economy and more recently on clustering firms: The writings of Marshall and Lenin; the concept of the 'informal sector;' and, the interest in Flexible Specialization.

The unit of analysis, and consequences for economic development:

The classical writings of Alfred Marshall and Lenin contrast in the way they approached clustering firms. With the cluster as the unit of analysis, Marshall drew attention to their urbanization and agglomeration economies (Marshall 1880:268-271):

"..When an industry has thus chosen a locality for itself, it is likely to stay there for a long time: so great are the advantages which the people following the same skilled trade get from near neighborhood to one another. The mysteries of the trade become no mysteries; but are as it were in the air, and the children learn many of them unconsciously. Good work is rightly appreciated, inventions and improvements in machinery, in processes, and the general organization of the business have their merits promptly discussed: if one man starts a new idea, it is taken up by others and combined with suggestions of their own; and thus it becomes the source of further new ideas. And presently subsidiary trades grow up in the neighborhood, supplying it with implements and materials, organizing its traffic, and in many ways conducing to the economy of its material."

The other significant thing about Marshall was his recognition of the need to have a diversified economy within the cluster, and his suggestion that the continued growth of industrial clusters depended on this diversity (ibid pg. 272). Thus, Marshall did see clustering firms as being the proponents of economic development.

In contrast to Marshall's functionalist perspectives, the unit of analysis for Lenin was individual firms, but aggregated in terms of their common class consciousness. He is particularly explicit about this in writing about the development of capitalism in Russia:

"...Under **natural** economy, society consisted of a mass of homogenous economic units, and each such unit engaged in all forms of economic activity ...under commodity economy, heterogenous units come into being, the number of separate branches of economy increases, and the number of economic units performing the one and same economic function decrease...Thus the **social division of labor** is the basis of the entire process of the development of commodity economy and capitalism...the principle feature of the latest stage of capitalism is the domination of monopolistic associations of big employers...we have seen the latter (free competition) being transformed into monopoly before our eyes, creating large scale industry and forcing out small industry, replacing large scale by still larger scale industry, and carrying concentration of production and capital to the point where out of it has grown and is growing monopoly...Monopoly is the transition from capitalism to a higher system...(Socialism)"(Lenin 1899. emphasis mine)

Not surprisingly, small scale production threw a spanner in this historical process:

"..The Narodnicks contrive to cling to their intention of retarding contemporary economic development, of preventing the progress of capitalism, and of supporting small scale production, which is being bled white in the struggle against large scale production..".(Lenin 1899b).

Thus, for the classical marxist, small firms caught up in their daily struggles, had a inconsequential role for economic development.

In recent times, there has been a renewed focus on local economies via the concept of the 'informal sector'. The take-off theories of development (Lewis 1954, 1959), were centered on a dualistic model. This was on the assumption of unlimited supply of labor making possible the surpluses available for investment into large firms. While the latter would spearhead economic development, the masses <u>would in time</u>, benefit from development that trickled down. Poor groups in this

conceptualization, were not seen to be of any economic consequence, or as agents of economic change or dynamism. It was apparent by the early seventies that it was taking a long time for development to trickle down. Even when one section of society had become 'modernized', there were large masses of poor who remained as 'residuals' clinging to a traditional way of life. This prompted the concept of the 'Informal Sector' coined by Hart and popularized by the ILO (Hart 1972; Sethuraman 1981). While this analytic framework did focus on the economic condition of the poor, it saw these as marginalized individuals involved in survival strategies waiting to be absorbed in the formal sector. They were in-capable, on their own, of a lead role in broader economic development. The assumption about their marginality, and the usefulness of this dualistic approach was however critiqued by scholars (Perlman 1976; Peattie et.al.1981; Peattie 1987). Even so, the concept found popular usage among planners which continues till today. The Left also saw the economic potential of poor groups to be limited. Involved in "petty commodity production", they were too exploited and divided for both economic development and for a common class consciousness to develop (Bromley 1979; Bromley et.al 1979; Bromley 1978). Some scholars questioned their economic autonomy by showing their exploitative sub-contracting linkages (MacEven Scott 1979), and others extended this at a larger scale as part of a global economic system between a center and a periphery (Breman 1985; Chilcote 1977; Moser 1978). Just as the viewpoints of the informal sector, this conceptual framework too saw the poor as individuals.

In contrast to both the proponents of the informal sector and the neo-Marxist, a third school, symbolized by De Soto's work, see the informal sector as the 'new entrepreneurs' (De Soto 1989). Although they are seen to be potentially important for economic change, this is seen to happen via their highly competitive behavior as individuals.

In very recent times, there has been a renewed focus on small firms via theories

of 'flexible specialization' (Piore et.al 1984). Although, this discussion has evolved from industrial clusters, most of the discussion views firms as individuals linked by economic ties, in responding to flexible and rapidly diversifying markets. Some scholars like Nadvi & Schmitz (1994) and Morris & Lowder (1991) do emphasize the cluster as the unit of analysis⁷. Even here, however, the bonding factor between firms is seen to be distinctly in economic terms in responding to export markets via agents, or by 'trust' needed for efficient movement of capital at low risks (Schmitz 1996). The opponents of the 'flexible specialization' viewpoint, also center their analysis around firms as individual economic entities, but linked in a larger world market. In fact, much like the classical Marxists, they see this individuality as resulting in their low bargaining power and the firms becoming "flexible causalities" (Amin 1989).

Thus, in general, the unit of analysis has been individual firms. This with the exception of the writings of Marshall, and some of the very recent literature on flexible specialization. Similarly, it is in only these two literatures that local economies are seen to have a significant role in economic development.

The Local State⁸:

While Marshall does highlight the economic role of industrial clusters, we have

 $^{^{7}}$ In fact, Nadvi et.al (1994:1) suggest that this change in focus, although very significant, goes back no further than 1989.

⁸ Urban India has a three tier government system of a national or federal government, state governments, and municipal bodies. There are also several national and state level quasi-public bodies which have their branches at the local level. Delhi being the capital, has a particularly complicated institutional structure since civic and urban development is undertaken or controlled by institutions of the national government. For example, land development is the responsibility of the Delhi Development Authority which is headed by the Lieutenant Governor an appointee of the **ce**ntral government. In this dissertation, I define the 'Local State' as being the sum total of the institutions operating at the local level including the branch offices of national and state bodies as well as of quasi-public bodies.

little idea of the political role of the guilds, or of the state (or royalty) and its politics⁹. While the classical Marxist did develop a sophisticated analysis of the transformations of social relations, they too did not give much significance to the role of the Local State, or associations/guilds in the process of economic development. The Local State was assumed to be captured by the local elite, while the guilds, as evident from the quote in the preceding section, were bled white in the daily grind of life.

This lack of consideration of the local state and economic development carries through in the literature on the informal sector - petty commodity production. The proponents of the informal sector saw the issue as getting the National State to "modernize" the sector and incorporate it into the mainstream. Until that happened, the more immediate role of the National State was to cushion the economic uncertainties that the poor faced (Sethuraman 1982). In any case, the informal sector was seen to perform an important welfare function, relieving the state of its role in this matter to an extent (Sanyal 1996). Thus, the proponents of the informal sector saw the Local State as a sort of bureaucratic black box -- an administrative functionary of a national state. Development was to come instead from the National State as a unitary body, concerned with the welfare of the masses.

The Neo-Marxist, very much like the proponents of the informal sector, assumed an inconsequential role for the local state in promoting economic development. This was because they saw the Local State to have little political autonomy, and be captured and 'softened' by the local elite. The planning process, by promoting this sector, was fudging the issue and delaying action on more substantive issues. While they did visualize an ultimate unitarian role in the national state after

More recent scholars like Mumford (1938:145) and Jones (1971) on the other hand, do link the abolition of the guilds and the devolution of local governments to the intrusion of financial capital in London. This is reinforced by Castells (1977) when in discussing the historical evolution of various types of urban organization, he argues that the development of industrial capitalism was one of the key factors in causing the devolution of London as a 'institutional and relatively autonomous' social system.

the stage of imperialism has passed over -- the Local State in any case did not seem to matter for them. For the De-Soto school, the strong regulatory environment of the bureaucracy of the Local State hampered the enterprise of small firms. Much in the tradition of Lenin, the real entrepreneurs were bled white in the struggle against the corrupt bureaucracy, retarding true progress. Even so, with the right policies, and convinced by sheer logic of it, the national state could be transformed into a benevolent one.

Perhaps the most significant conceptual contribution of the concept of <u>flexible</u> specialization, is that it has focused attention on the role of the Local State and of local associations. This is in their role as incubators and providers of real services 10 (Capecchi 1989; Schmitz 1989; Nadvi et.al. 1994:37-41). Some of this literature from the Italian cases, in pointing out the socialist/ communist backgrounds of local municipalities, did suggest political aspects. However, there is little discussed on the process of the Local State becoming helpful, and the reasons why it got to be that way. Thus, in most of the flexible specialization literature and its conception, the Local State remains as having a technocratic function. This perspective carries through when the issue is seen in the context of poor countries. Here, some scholars further weaken the case for local governments by arguing that few studies assign an important role to local governments in the development of clusters. They conclude that local governments are: 'rarely a strategic force behind the growth of these clusters', due to the dependence of local governments on allocations from central governments that leaves them with little financial maneuverability (ibid:40). Instead these scholars suggest an alliance between local sectoral associations and national governments to ensure access to markets, relevance of training programs, credit (Nadvi et.al 1994). This implicitly assumes the benevolence of the national state.

¹⁰ This was in the way they provided help in access to markets, sponsored institutions for training, provided specialized machine tooling centers that promoted new technologies in making firms responsive to new markets, professional management practices, and social services for the work force.

In all of these various perspectives, we see that the Local State is assumed to have a marginal economic and political role. Industrial clusters have been conventionally been perceived to be based around functional, and to an extent, social and ethnic linkages between firms. Political aspects if considered, like notions of economic development, relate largely to the broader movement of social and economic change as it trickles down.

In the above discussion, the reader will see that I have woven the literature around two inter-linked themes: The role of the Local State in its economic dimension, and local economies in their political aspects. This is to raise a substantial issue on the nature of choice between promoting one form of economic development and another. This raises two questions: First, what are the kind of social and political processes that underlie these choices? Second, what are the consequences of these decisions on the poor? This is not only in their narrow economic perspective, but rather, in the way it structures civil society. This broader issue is obviously out of the scope of this dissertation -- especially since I have decided to explore this terrain via a detailed local level study. As the reader will see in subsequent chapters, in my detail micro-level research of the evolution of a local economy in parallel to its political aspects, land issues become increasingly important. To prepare a conceptual ground for this exploration, I now focus on the local setting.

PERSPECTIVES ON THE LOCAL SETTING AND ITS IMPACT ON ECONOMIC DEVELOPMENT

Marshall explained the origins of clustering by the availability of raw materials, and patronage of the courts, and later by attraction of localization economies (Marshall 1880:268-271). For the classical Marxist, the political arena was a consequence of the productive system rather than influenced by the setting where production took place. Thus, except for Marshall's references to the importance of the setting as a supplier of raw material, there is little other link to economic

development.

In the informal sector debates we see the setting being initially discussed from the perspective of modernization. This implicitly equated a marginal economy to a marginal neighborhood (See Peattie et.al 1981). Compounding the problem of this perspective, were the few local level studies that documented these processes in detail (Peattie 1987; Doebele 1987). Just as poor people were seen to be in-consequential to economic development in the informal sector discussions, most of the literature also saw the neighborhoods where they lived in the same way.

A limited literature linking the informal economy to informal housing activities did develop. One part of this literature argued that housing, usually thought of as a social investment for governments, was actually a productive one as well (Strassman 1982, 1986, 1987; McCallum et.at 1985; Baken et.al 1991; MulkRaj et.al 1990). Another part focused on the important employment effects of the construction industry (Ganesan 1975), especially when non-hi tech technologies were promoted (Strassman 1985). While this literature did serve a useful function at its time in highlighting the need to see housing as a productive investment rather than only of consumption, it suffers from three major conceptual and operational problems:

First, the local economy is commonly viewed from a dualistic framework of 'Informal - Formal' sector, lacking an institutional focus, especially around the role of the Local State¹¹;

Second, the elements and processes of shelter consolidation are seen to be separate from those of the local economy.

Perhaps most important, the political issues, and the institutions

¹¹ Peattie emphasizes the ne**ed t**o conceptualize problems more accurately rather than a min**o**less collection of data. Peattie 1987:273. Unfortunately, with housing and employment, much of the latter seems to have been the case with the empirical data collected.

around which these economic activities develop are almost totally missed out.

The flexible specialization and flexible accumulation literature implicitly links the setting of production to the notion of development. Much of this, similar to initial work on the informal sector, equates the slum setting as symbolizing a downhill path of development, involved in sweating labor (as the flexible casualties of the system). The impression one gets is that firms in these slums are pushed down a low road of flexible specialization producing low quality goods inadequate for export markets¹². A lengthy quote from Nadvi & Schmitz (1994:10) exemplifies this:

'Such clusters often in peri-urban, semi-industrial or low income and marginalized neighborhoods where they operate under relative poor and unregulated work conditions. In most such cases, while there may be a critical mass of enterprise, backward and forward linkages are less extensive. Moreover, few of these small firm agglomerations have a prolonged or notable local history. Many have emerged in the face of an extended or notable local history. Many have emerged in the face of an extended macro-economic crises, where limited incomes and declining employment opportunities in the formal sector have forced individuals to be self-employed as small entrepreneurs.

Despite characteristics of informality, several such clusters demonstrate not only a survival or coping strategy (built around petty commodity production) in the face of crises, but a growth potential built upon the local concentration of specialized expertise.' (emphasis mine)

Thus the 'setting' where this clustering happens, is seen as **external** to the condition of clustering, and reflective of a process of modernization. This misreads the situation and focuses on irrelevant issues. Many scholars, on the basis of detailed field work, have shown that slums are not the outcome of a process of modernization but result from the conflicts between different groups in society over land, and control over the housing process (Turner 1972, 1977; Perlman 1976; Peattie 1968;1981).

¹² For instance, Holmstrom (1994) notes that the opposite to the 'high road' of progress is the 'low road' or 'weak competition' characterized by lack of innovation, low quality products, minimal flexibility and cheap labor.

However, there is another substantive issue at stake. The literature on industrial organization and micro-enterprises, did not see land and infrastructure as having any economic significance. The setting was seen to be only a neutral base for economic activity, and at times, glossed over (as discussed above) in a dualistic framework of 'planned' and 'slum' areas. This assumption that it is irrelevant will be shown in this dissertation to be a serious mistake. Another implicit assumption that it is equally accessible to all groups is shown to be wrong by a literature now spanning over 25 years on land, housing, and urban development. This literature well recognizes that land issues are some of the most central ones of urban development -- both in their political and institutional perspectives (Doebele 1987; Baross 1990; Gugler 1988; Angel 1983; Beir 1976). Doebele (ibid:111) puts this most clearly:

"..Numerous studies have shown that access to land is a critical element in providing upward mobility. It is through the acquisition of a small parcel of land that people establish themselves in an urban economy. It is on this parcel that they engage in "brick-by-brick" capitalization, gradually accumulating the materials for a house, or in later stages, the addition of a rental unit that not only brings them income but adds to the housing stock of the city without use of public funds.. A secure parcel and house can be the basis for small commercial and industrial enterprises, in which the whole family may become economically productive (and) provide a financial cushion. 13,

This is particularly important to consider today, when scholars from varying ideological spectrums agree that access to serviced land, and consequently housing, is becoming more and more difficult for poor and even middle class groups (Doebele 1987; Hardoy et.al 1987; Durand Lassarve 1983; Doebele 1983; Sarin 1982). Not only has demand increased, but land markets are also much tighter than ever before. Poor groups face severe competition from middle and high income groups, both in central city locations as well as land in the periphery (ibid). This conflict is highly politicized, and documented in growing literature (Collier 1976; Van der linden et.al 1983; Sarin 1982; Castells 1982).

¹³ For a illustration of this in the case of Delhi, India see Benjamin (1985).

While this literature is critically important, it approaches this politics from the issue of housing, rather than of a broader perspective of economic development. There is another important and growing literature, that of real estate markets in illegal or unplanned areas. Here again, the stress is largely on how we can understand the legal framework, and its sociology. Although these perspectives are an important first step, there is little discussion on its impact on economic development. Thus we see a great divide: The literature on the local economy has missed out issues of the local setting and its politics, and the literature on land and housing has missed out important dimensions of economic development.

IMPLICATIONS FOR THIS DISSERTATION

In developing my own framework for the Viswas Nager case, I find the critique on the dualistic aspects of the informal sector concept useful to the extent that scholars argued that it was more important to abandon dualistic approaches and get down to documenting how things work (Peattie 1982, Portes et.al 1989; Sanyal 1991), and how the economy worked at the grassroots, its political, and institutional aspects (Peattie 1987a). In this context, not all the informal sector literature was uninteresting, and several, via case studies, did highlight interesting socio-political issues (Bromley 1978; Peattie 1982)¹⁴.

Based on my detailed field work in Viswas Nager since 1989, I am convinced of

¹⁴ Others too moved research along this path: First, the growing interest in squatter and illegal settlements, started off in a 'process' based analysis of physical form as linked to social-economic consolidation by John F.C. Turner and William Mangin (Mangin et.al 1968; Turner 1972). This soon spurred an interest on the on political aspects (Collier 1976; Cornelius 1974; Leeds 1976), including some scholars focusing on particular themes. For instance, on the relationship between local groups and the state, see: Portes 1973; Collier 1976; Van Der Linden et.al 1983; Castells 1983; On the impact and relations between local groups and the planning process see: Peattie 1968, 1988; Sarin 1982; Sarin 1979; Doebele 1976; Nelson 1979. On the political aspects of small enterprise see: Portes et.al 1989; Sanyal 1991. On issues of land and housing, see: Doebele 1976a, 1976b; Gilbert et.al 1985. There are a few but very interesting studies on the urban local economy from a political economy perspective (Jones 1971; Vyasulu 1985). There is little or no work to my knowledge, on neighborhood economy at the micro-level as linked to neighborhood politics.

the value of a rather different perspective on its local economy. Yes, functional linkages between firms do matter, and so do the ethnic backgrounds of groups working here. In fact, my own research makes a very strong case for both these aspects. Larger political aspects also affect production at the neighborhood level-- as the concluding chapters of this dissertation discusses. However, the main point I have discovered is that clustering firms are also bound by political linkages that relate specifically to local governments. The other significant issue is that this politics revolves around issues of land, which draws in a larger neighborhood economy, which not only caters to entrepreneurs and workers, but draws in a wide range of resident groups. Thinking about such neighborhoods goes beyond the realm of industry, into a broader perspective of a life support system.

Since conflicts over land are becoming sharper and sharper, local politics also relates to much broader concerns reflecting conflicts between different urban groups. This dissertation is not only about how we think about industrial clusters but also about the way we could begin to think about the city's ability to give their deprived employment, and



Figure 3 Entrepreneurs and residents protesting outside their neighborhood electricity office to press for legal connections and against power breakdowns. (REFER PAGE 261)

a place in their society. In a nation like India, with its vast social and economic divides, these issues are highly political. Analyzing Viswas Nager, in many ways, is a vehicle to understanding these issues more accurately. This is important because academicians and policy makers, while recognizing the presence of local economies,

have only recently begun to understand their complexities¹⁵. For most, in fact, these seemingly chaotic economies appear as a nightmare. Physical planners cannot fit them into their neat master plans. Policy maker find the politics of implementation messy, and closer to home, their own institutional relationships towards these areas confounding. Administrators confront groups angry that their daily needs are not being met. For the residents of these neighborhoods, planned development always seems to imply a demolition of their meager belongings. For the poorest of them, it seems to come as a sword, that often cuts more sharply as their poverty increases.

In all this, the surprising thing, as Doebele puts it is, that cities still function at all (Doebele 1987:114) -- sprouting local economies as if the very mess of urban life works as a enrichment to social, economic and political space. All this suggests that we really need to re-think the notion of 'slums'. Rather than viewing a slum as a place of non-existent infrastructure & services, and poor quality housing, we need to view it as a seed-bed for extremely significant economic growth. In this context, the Neighborhood as Factory framework attempts to squarely places issues of the local economy in this arena to explore an alternative paradigm of development centered around neighborhood economies. In the next chapter, I focus specifically on this conceptual framework conceptually and then fleshed out by an introduction to the local economy of Viswas Nager. Subsequent chapters of this dissertation will focus on different themes as listed in the table of contents.

¹⁵ This is in part, due to a lack of field level studies (Portes et.al 1989; Nadvi et.al 1994). For instance, little is known about the organization of the local economy and its relationship to the physical, regulatory, and political setting. Another **re**ason are the notions of modernization from divergent ideologi**Ca**l perspectives: linking large scale production with modernization, while small scale, dismissed as a stage of underdevelopment (Peattie 1987; Sengenberger et.al. 1990; Piore et.al 1984).

CHAPTER 2: THE LOCAL ECONOMY OF VISWAS NAGER

The next chapter explains the functional logic in the context of Viswas Nager, while the rest of the dissertation fills in its major themes relating to the evolution of the cluster and land development, financing mechanisms, and civic politics.

The concept of "Neighborhood as Factory"

One term that could be used to conceptualize industrial clusters is "Neighborhood as Factory". Although this is incomplete¹, as I shall discuss below, it nevertheless serves as a powerful metaphor.

Figure 1 on the following page, shows a medium sized cable manufacturing factory. As can be seen, the factory has different kinds of space allocated sequentially to the various production processes: i) Wire drawing; ii) Preparation of the insulating materials; iii) Extrusion of the wires along with the insulation into cables; iv) External insulation of cables; v) Curing; vi) Armoring with steel reinforcement; vii) Rolling. The management of all these various industrial processes, which happen under one roof, is centralized -- located spatially in the office to one side of the main production shed. There are also subsidiary services, likewise located within the same shed: In one corner, there is space allocated for the maintenance of the capital machinery, in another a testing laboratory. Also, a substantial portion of the total area is also devoted to storage, for the finished products and for raw materials needed. Goods, are taken to and from the plant in large batches by trucks.

To explain this logic of manufacturing in Viswas Nager, which contrasts to the type industry just described, one entrepreneur picking up a pen in front of him, said:

¹ While the 'Neighborhood as Factory' is a us**eful** conceptual metaphor, the use of the term 'factory' should not been taken in purely in the sense of production, but also in the political management that is part and parcel of the lives of entrepreneurs here. For lack of a better term, I use it in a short hand way.

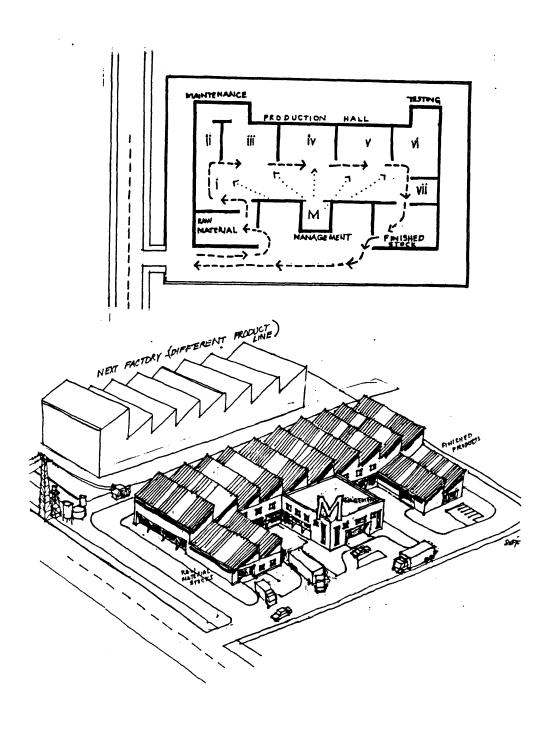


Figure 1: Plan of a typical medium sized cable manufacturing unit

Chapter 2: The local economy of Viswas Nager

'Here is a fountain pen. If the cap is made in my factory, and the nib in the one next door, the ink capsule in the next, and so on, and if another factory finally assembles it and markets it to wholesalers, then it is the same as we handle copper wires here..'(Benjamin 1991:40)²

This simple analogy represents the intricate network of large and small factories, and various types of workshops, that forms the cable and conductor industry of Viswas Nager. Thus in the case of cable and conductors, all these various functions, (functions i to vii mentioned above) including the servicing/repair, are disaggregated spatially in a neighborhood into separately managed units. These units are however, in close physical proximity. The propinquity makes possible markets strengthened by social relations, use of a flexible transport system based on cycle rickshaws, and a variety of supportive services. Figure 2 on the following page, sketches this in a conceptual form. This would be very similar to what Viswas Nager is today. In fact, this "sharing" of linkages is specifically highlighted by almost all of the entrepreneurs I have met during my research here since 1986. They attribute the logic and success of manufacturing in Viswas Nager to the strong functional linkages that exist between factories (Benjamin 1991:40).

There are several other advantages to these firms clustering in close physical proximity:

- A) The flexible movement of raw material: Raw or semi processed stocks can be moved from one factory to another using cycle rickshaws in smaller batches. This promotes employment as well as gives the flexibility required in the manufacturing process. It lowers capital costs by permitting small batches 'just in time' operations;
- **B)** Social and political interaction: Being located close to each other allows for close face to face interaction -- be it on technical, market conditions, or as chapter 6 will show in detail, on political issues;

² Interview with Mr. Ashok Dabbas, Chaudhri Metals. 1986

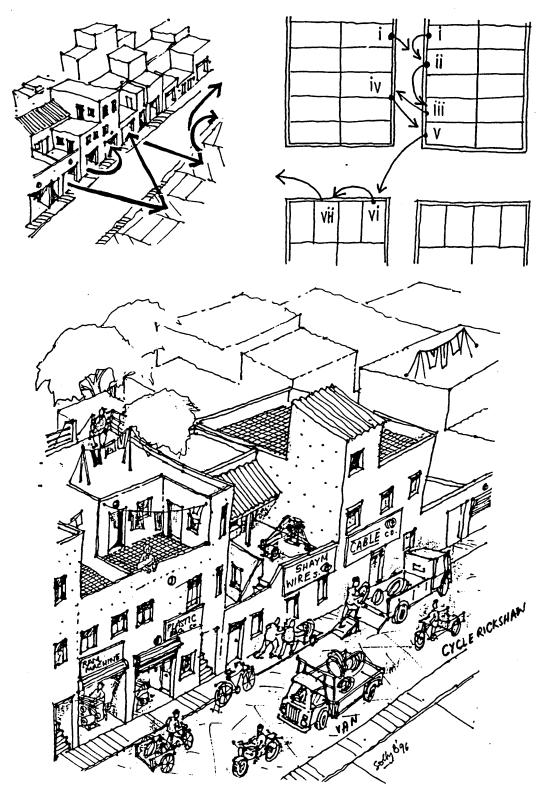


Figure 2: A diagram of the Neighborhood as Factory.

C) Infrastructure and land is more efficiently used. In the case of the medium sized consolidated cable manufacturing unit described above, some of the production processes are not as infrastructure intensive as the others are: The copper wire drawing (i) does not utilize as high an electrical load as compared to PVC compounding (iii), which in turn, is slightly less power intensive than PVC extrusion (ii). The curing of cables (v) in fact, is mostly by steam, while that of armoring cables (vi) draws on a medium level of electrical power. Finally, the rolling of the finished cables is mostly a mechanical process of winding the finished product on to five feet rolls requiring less electric power. The storage space for both raw material and finished products³, maintenance workshops and management offices use almost no power (See Fig. 3 on the following page).

However, since all of these are under the same roof, each of these production processes (i-vii) have access to the same high level of infrastructure & services. This level is calibrated to accommodate the production process that requires the most⁴. This means that for each of the processes which do not require full infrastructure provided, these are in effect, being under-utilized. In the context of a poor country where services and space are at a high premium (as the literature review at the end of this chapter will reveal), this is obviously a serious issue. Since the provision of these are in any case being paid for, either by the government under its industrial subsidies programs, or by the entrepreneur, this cost is paid by society as a whole.

³ This can be quite a lot of space since in a typical mass-production based factory, these are normally for three months, sometimes up to even a year in the case of raw materials.

⁴ I have simplified these requirements from a real case for which I am an architect. The design process can bring about some differentiation in the 'quality' of space (and hence investment on part of the entrepreneur) for some of the processes i.e., wire drawing. But in the overall schema, this is minimal. The main point is that in the typical industrial estate, the public authorities are providing a plot of land built to the highest level of off-site infrastructure and services.

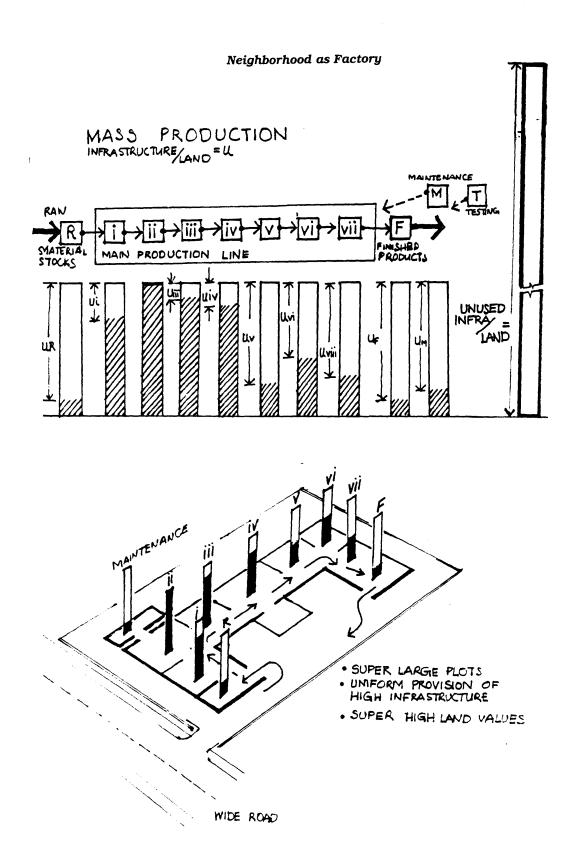


Figure 3:Productive land index & efficiency in mass production

Chapter 2: The local economy of Viswas Nager

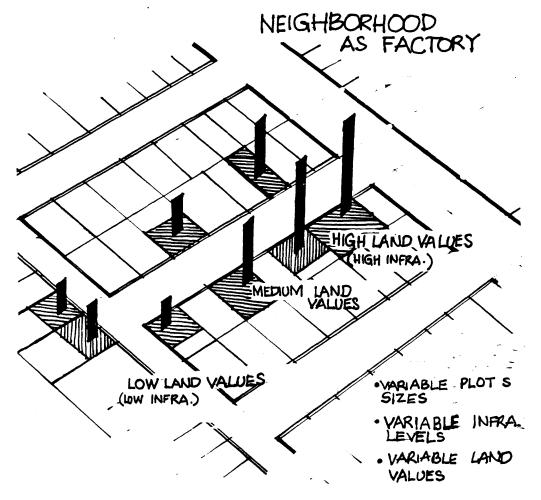


Figure 4: Variable infrastructure levels and land prices in a Neighborhood as Factory

To appreciate this argument better, let us return to a cluster of firms in Viswas Nager. Like the factory based on mass production mentioned above, let us assume that there are seven inter-linked production processes (i-vii), and another one (viii) relating to machine maintenance. Due to the extensive use of 'just in time' techniques, we could also consider the space (or rather the lack of it) for two other items: The storage of raw material (R), and finished products (F). As I explained previously, each

of these require different amounts of infrastructure requirements⁵. Neighborhoods

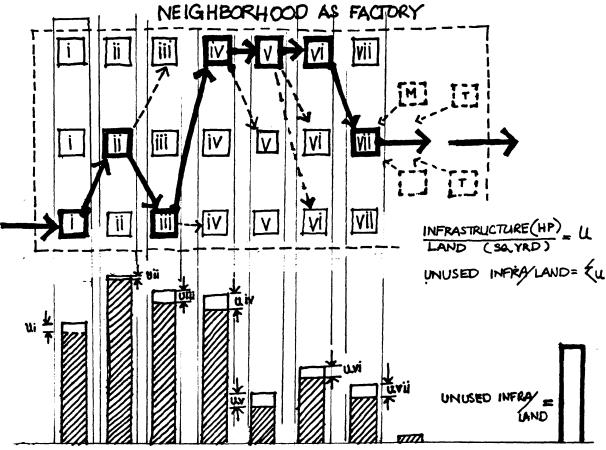


Figure 5: Productive land index and efficiency in a Neighborhood as Factory (REPER TO FIG. 17, Pg 152 FOR AN ACTUAL CASE)

like Viswas Nager, (as explained in detail Chapter 4 on land development) have evolved a highly differentiated land market within a single territory. This gives access to plots with varied infrastructure levels, reflected in their access costs (See Fig.4 pre-

⁵ Strictly speaking, this would be a bundle of attributes: Electric power in both single or three phase, ground floor or first floor possibilities; minimum production areas; access requirements etc. Similarly, one should also consider different land attributes (location, degree of tenure, existence of building and the constraints it puts etc. For the sake of clarity. I consider only the most explicit and critical from the point of view of entrepreneurs and public authorities: electric power. This discussion is only schematic for the sake of communication. A detailed listing of infrastructure, machinery, and land costs, as well as the relationships between firms is given in Chapter 3. The reader will note that if these were substituted, these complexities will not refute the argument, but instead emphasize it to a even greater extent.

page)⁶. Since the production process is de-centralized within the cluster, each of the firms manufacturing a particular process can locate reasonably close to the kind of infrastructure level it has access to (or vice versa, what that location provides).

Although this is not a 'perfect fit' -- because land markets do not operate like clock work, this 'fitting' process is close enough to generate substantial savings since the market cost of infrastructure per unit of land is very high and varies substantially in these neighborhoods⁷. Thus, investments into the setting for production, whether by the public authority providing the infrastructure, or the entrepreneur buying the land and the service, are more efficiently used for that production process. Locating in close physical proximity means that the storage costs are also lowered⁸. Figure 5 illustrates this issue in a diagrammatic way.

D) Effects on equity and mobility. When both entry and operating costs are lowered due to a more efficient use of infrastructure and land as mentioned above, this means that foremen with experience but limited finances are able to enter into partnerships with either sales persons or landlords can start off firms more easily. Being located in the cluster means that they can get access to machines on rent, access to credit and raw materials due to the personal contacts they have developed (see Chapter 5 on financing), and perhaps most important, be part of the system to develop a market niche, especially in product lines that rapidly diversify. This last

⁶ These figures will become especially clearer to the reader after Chapter 3.4, and 5. These are previewed here as a brief introduction to the issue which will discussed in greater detail in subsequent chapter.

⁷ In my field work, I consistently noticed that in almost all factories, since serviced land (due to power & location) was at such a premium, machinery was 'squeezed' into the tightest possible space. The marginal return from the extra bit of machinery was much higher than the loss of efficiency due to tight spaces. This was especially true in the case of the smallest firms -- of three workers and one entrepreneur, where all four would be operating machines. It was not that the effects of the squeeze was felt only by the workers. Many a time, the 'office' consisted of a simple chair and table with a phone right at the entrance or even in cases pulled outside the door to allow maximum space for production.

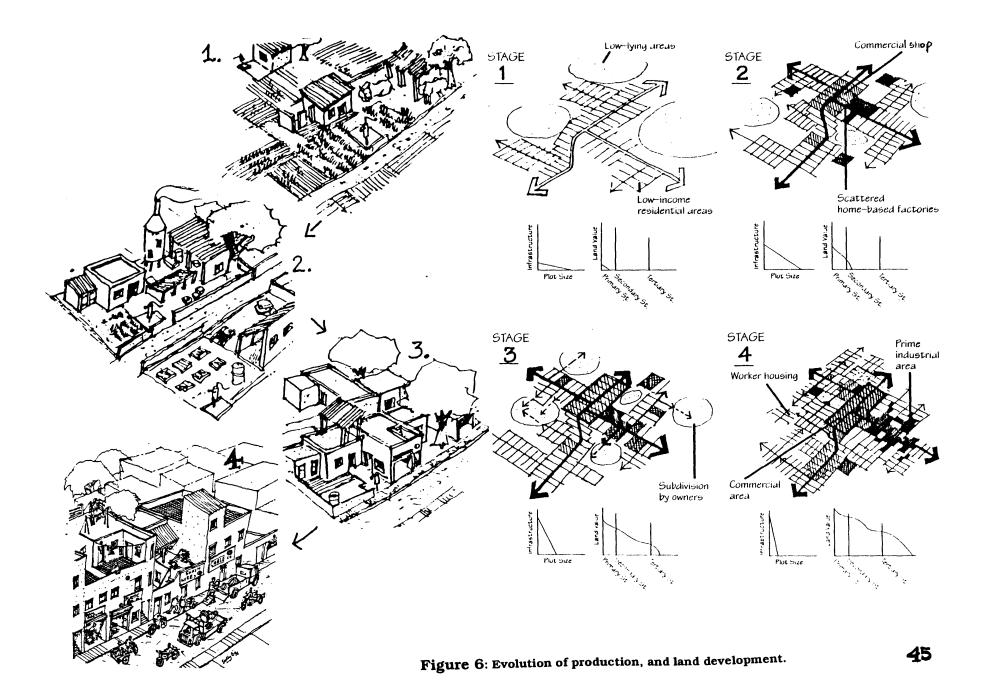
⁸ There is some amount spent on transport between one factory and another. But then, any proponent of ecological use of energy will support the idea of *vs*ing cycle rickshaws rather the heavy duty electrical cranes within the factory, and massive trucks outside. Besides, the cycle rickshaws being made locally probably have a local economic linkage, not to count the revenue to its migrant driver.

issue is again very significant. Chapter 4 shows that not only is the land market differentiated, but also that plots can be upgraded over time. This means that even if a new partnership has started off in a relatively simple way (on rented machinery, 10-15 Hp electrical connections) they can upgrade both land and infrastructure in parallel to production. In many cases the working area within the plot is also increased -- usually within the same plot, but in some cases by taking on another plot within the same neighborhood. Figure 6 shows this situation consolidates these issues in a diagrammatic way. Chapter 3 will explain then in detail in the context of Viswas Nager.

Thus, we see from the above points, that the organization of work in a 'Neighborhood as Factory is intrinsically connected to its setting, where the high "density" of economic linkages achieved from clustering provide for more efficient production. High intensity use of infrastructure (and hence public investments), as well as mobility of entrepreneurs and workers also contribute efficiency and, hence, competitiveness of local products in national and even international markets.

As I will discuss in Chapter 4, most of the neighborhoods which have taken on industrial characteristics (including Viswas Nager), exist in various shades of illegality⁹. In addition, as Chapter 6 will discuss in detail, the industrial use of plots happens **after** the settlement process, and many years **before** these neighborhoods are fully legalized or complete infrastructure and services have been introduced. In this context, the advantages of clustering are not simply technical. At one level, by clustering together, entrepreneurs can reduce the harassment by inspectors hounding them for bribes. At a more substantive level, which Chapter 6 discusses in detail, clustering together also gives them a '**political' density** to get secure tenure, services and infrastructure from public authorities.

⁹ It is important to clarify here that this illegal status comes from not confirming to planning standards and land transfer arrangements rather than criminal activity. Chapter 6 goes into this issue in detail.



We can now see the whole conceptual picture. A medium to large sized corporate industry, like the one depicted previously, internalized its productive environment¹⁰: Its services, maintenance, supportive production, transport, and often housing for middle and senior management staff¹¹. Together, these groups form financial and political capital which corporate firms use to affect national policies. Cases like Viswas Nager on the other hand, externalize their supportive economy at the neighborhood level. This decentralization of economic activity into a neighborhood congregate reflects the political and social environment created by the various groups staying and working here. It is not surprising that a lot of the interaction between entrepreneurs is around issues of local politics, because this is what safeguards their investments, as well as defines their economic future. This seemingly simple observation however, reveals an important issue: The definition of the 'neighborhood' in the concept 'Neighborhood as Factory'.

The boundaries of the "Neighborhood":

Conventionally, architects and physical planners believe the neighborhood to be bounded by specific recognizable physical boundaries. It is also assumed that these house distinct 'communities'-- sometimes sharing common cultural roots¹². Like other authors, I reject this simplistic conception in favor of a more complicated but realistic one. For me, the neighborhood is defined by a common economic/political purpose of groups living and working there. I see this to have two aspects:

i) The administrative/political process of legalization (as Chapters 4 and 6 will show in detail) and the extension of services and infrastructure, have important **territorial** aspects, where either certain blocks within neighborhoods or the entire

 $^{^{10}}$ This analogy from a functional perspective, is provided by Sengenberger (1990).

Most often in these cases, the middle and lower level workers are left to house themselves in squatter colonies, since the land within public industrial estates is very tightly controlled.

¹² For a critique of 'neighborhoods' as defined by physical planners, see: 1) Bowden et.al 1981; ii) Peattie 1988.

neighborhood is designated for investment in civic infrastructure. Obviously, this is not clear cut and is characterized by contradictions, because the politics of land issues relates not only to legally established "rights", but also "claims" by people who have settled over some time. This at first, might suggest a situation of total chaos. However, the process of defining territory, and the level of infrastructure and services have been the result of a political process (moderated by conventions) since the early nineteen sixties. During this period of thirty five years, almost a thousand (out of an estimated 1400) neighborhoods like Viswas Nager (and most other industrial clusters in Delhi) have undergone legalization where settlement-based claims are a basis for negotiations between local groups and authorities. Thus, the definition of a territory is a socio-political process whereby local claims interface with the legal framework (Smart A. 1985; Karst et.al., 1973; Razzaz 1992, 1991).

ii) The second point defining the boundary of a <u>Neighborhood as Factory</u> is the extent of economic linkages. At one level, these economic linkages can extend on a countrywide basis as in the supply of cable to a distant town for retail purposes. However, I refer here to a particular 'density' of economic linkages which comes out of clustering and the functional linkages mentioned previously.

Both the above points suggest that the definition of a <u>Neighborhood as Factory</u> has important institutional overtones. These translate into territorial issues, but not fixed physical boundaries. <u>This is important, because the causality towards defining territory come from its administrative, economic, and political aspects, **and not** the <u>other way around</u>. Also, the definition of the territory negotiated over, changes as it relates to the particular issue being negotiated.</u>

This conceptualization of industrial clusters raises an interesting issue from an institutional perspective. In some ways, the <u>Neighborhood As Factory</u> resembles a corporation. The corporation can be thought of as an organization that co-ordinates manufacturing, but also develops and **use**s political capital in order to establish and safeguard its financial capital. In the case of the <u>Neighborhood as Factory</u>, while the

co-ordination of manufacturing is more dis-aggregated at the neighborhood level, its central umbrella of associations (and a federation at times), share political and to an extent, financial attributes¹³. Obviously, the legal standing of the Neighborhood As Factory is not as clear cut as a corporation: The cluster as a whole, does not have a clear-cut legal sanctity, although its' member association may be registered with public authorities. In spite of this, the cluster, through its associations (irrespective whether they are registered or not), negotiates with public authorities to make civic investment, and change administrative policy. It that sense, through the process of negotiation, and the fact that almost a thousand other neighborhoods are or have been in a similar process over every substantial public investment, the Neighborhood as Factory does acquire some sort of legal standing via associations or other representative bodies.

In other ways, as Chapter 6 will illustrate, the <u>Neighborhood as Factory</u> resembles a dis-aggregated Community Development Corporation (CDC) concerned with the social environment, civic development & welfare policies of the state, as well as the resolution of internal conflicts between groups settling here. From the above discussion, it is clear that the <u>Neighborhood as Factory</u>, is a useful, although not a clear cut or an easy concept. This is largely because it requires us to conceptualize the organization of industrial clusters across conventional categories, in relation to the dynamics of the situation.

The above section has explained the conceptual framework 'Neighborhood as Factory' in its technical aspects. Later chapters build up this concept by focusing on land and political issues. The section of this chapter focuses on the case of Viswas Nager, which I use to illustrate this concept. I start with a brief introduction to Viswas Nager via a vignette of street life in Viswas Nager, helping to establish its' neighborhood economy in daily life. After this introductory section, I detail out the

¹³ However, it is not necessary that the individual firms are 'satellites' of the large ones, or that over time, necessarily become so.

neighborhood economy in terms of two sets of economic relationships. The first is on firms manufacturing cables and conductors -- the driving force of this industrial cluster. The second set relates to the variety of support services that have evolved here, through which the manufacturing economy has become an intrinsic part of daily life.

SECTION B

Viswas Nager is located in Shahdara, its larger neighborhood district in East Delhi. Shahdara, one of the most important industrial districts, is well known to wholesalers of electrical items all over India. Those specializing in cables and conductors in the light tension category know of Viswas Nager, as the center of manufacturing of these products. Viswas Nager as the accompanying

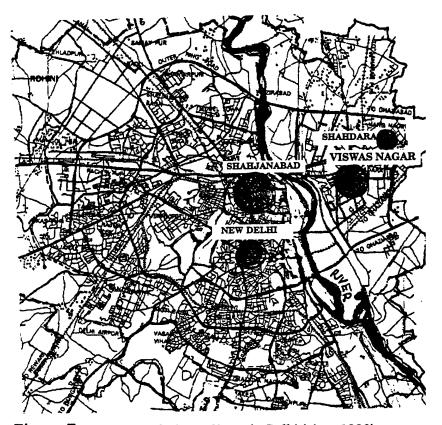


Figure 7 Shahdara and Viswas Nager in Delhi (circa 1990)

plan shows, is about a mile long and a quarter of a mile wide. Like most such neighborhoods, the plots here are placed in a simple rectilinear grid along two longitudinal spines. Unlike the image of a conventional factory with its tall chimneys, and sheds, Viswas Nager is quite different.

A vignette helps to visualize this neighborhood:

Street Views Viswas Nager

'Viswas Nager looks like a typical residential area of greater Delhi. Its most prominent features are houses in various stages of construction, with owners continually building additions or subdividing their plots. Along the streets, there is a constant motion of people and vehicles...But this is not just a residential neighborhood. Inside the "houses" are extensive production halls. The cycle rickshaws that must be dodged in the streets are transporting not only people, but also raw copper stock from factory to factory. The environment has a rustic quality. Landowners enlarge their homes to accommodate both a growing family and a new piece of manufacturing equipment. There is the pervasive smell of new brickwork and the noise of machinery in front-room shops (Benjamin 1991:36).

The neighborhood has evolved around two spines running along its mile long length. Across its northern boundary with Shahdara, is Pandav 'Marg' or Street. Pandav Marg is from old times. Reflecting the 1940's urban morphology of Shahdara, it narrows in places to a congested ten feet. Along some stretches, three storied buildings with overhanging balconies loom above. Traffic here is mostly pedestrian, driven to the side at times by the cycle rickshaws who even manage to force the occasional motor cycles and scooters to a slow crawl. This street is the traditional commercial spine. Retail shops here, date back to the early fifties. From their dark ill-ventilated musty interiors, their stout shopkeepers sell grain, household items for daily use, and a few sell vegetables. In between these shops, a potter sun-dries his pots in an empty lot and on the pavement. There also used to be two lime kilns located here, with their smoking stacks like dwarfed volcanos. These have been built over, making way for more housing and more contemporary shops catering to todays' demands: The local industry. One of these is a machining shop with its lathe grinding down a pulley, and the second is a retailer selling plastic resin coloring compounds. Further down the street are some more recent arrivals. These sell electrical items. Even with these changes, landmarks still remain the same, especially when travelling by foot or by cycle rickshaw. One is the traffic light, blinking its red signal at a presently irrelevant junction. The second is the location of a factory that has long ceased to exist but its name lingers on: 'Tash' Factory or for factory playing cards.

Walking through one of the many streets southward from Pandav Marg, one comes to Viswas Marg. Its newly laid tar, gleaming in the afternoon sun, and the newly painted sign boards, announces what development here has been all about. Development for one, is its 60 feet width --few neighborhoods can boast of such wide roads. Not surprisingly, locals don't use its formal name Viswas Marg, they call it the '60 feet road'.

Viswas Marg is highly commercialized. In a small stretch in its eastern part which is still residential, the houses here are obviously high income houses with their gaudy multi-colored plaster and stone facades fronting the eight foot wide pavement.

Chapter 2: The local economy of Viswas Nager

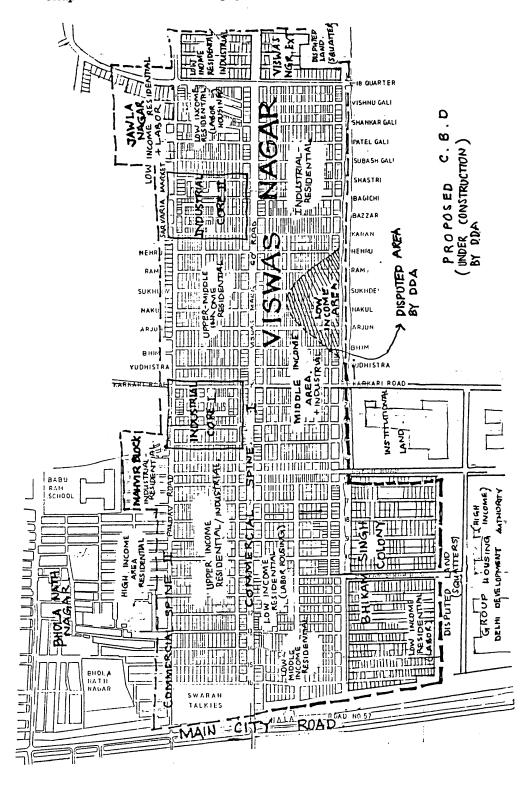


Figure 8 Viswas Nager in 1995

Shops here loudly proclaim the sale of electrical items: Industrial heaters, switches, and a variety of cables of reputed brands. Many more are retailers of PVC, raw resin and the chemicals used to make electrical insulation. While most mechanics and machining shops locate deep inside the blocks, a few locate on the main road. One signboard brazenly proclaims it as being the best in the repair of PVC extruder machines. Others specialize in packaging, selling bags made of jute and plastic, cardboard boxes, and brightly colored plastic base rolls used to mount cables upon -- spilling out on the pavement as in advertisement. There are others here too: Property agents, financiers, and even one industrial consultant who promises relief from taxes, labor law and the bureaucratic baggage that accompanies manufacturing. Not all shops are industrial, though. Viswas Nager is also an important residential area. Many shops on Viswas Marg display the latest consumer items in the latest aluminum packaging. There is also one motor-cycle showroom with the bikes all lined up in their sparkling chrome. Another displays TVs and music systems, with two large fancy speakers framing the main entrance booming the latest craze.

Hidden between these loud announcements, in tinted glass to protect its unadvertised interior, is the office of the industrial federation. This meeting place of the various industrial associations, is decorated only by chairs laid out in a circular formation. Discussions are mostly verbal, rarely written and all records are personally maintained by a designated member. Roughly located in the middle of Viswas Marg is the single large and upscale restaurant -- a favorite of the entrepreneurs to take the client out to lunch. There are many more tea & refreshment shops, but these are usually located in corners of the interior streets. Smaller and more casual with wooden slat benches and tables, these are patronized by entrepreneurs and workers, as hot spots to hangout in and get the latest political gossip. Also located in these interior clusters are the cycle rickshaws used to transport goods. Instead of the passenger seat at the back, these have a wooden deck bolted on the steel frame, and reinforced wheels for heavier loads.

The rickshaws that carry passengers mostly locate on Viswas Marg itself—usually near the public bus stops to pick from the congregating masses there. The buses, tearing down with their blaring horns, scatter any lesser vehicles from their paths. Viswas Marg is today, a major route to other East Delhi neighborhoods. At its two ends, connecting to major city arteries, locate the transport companies. The vans line up ready to dispatch goods. Their drivers hang around smoking, a respite from the many trips they need to make across the city and at times, to neighboring towns. For their 'cleaner' boys, this is work time and they busy themselves with washing the muck off the paint, the wheels, or clean out the carburetors and filters with petrol.

The physical transformation from raw land in the early fifties to a bustling neighborhood as portrayed above has been spectacular. More interesting is that Viswas Nager has evolved a complex mix of land uses -- industrial and commercial, which overlay its residential functions. Most manufacturing clusters in two 'cores',

with a couple of blocks in the eastern portion south of Viswas Marg fast developing into a third. To the north of the Viswas Marg is mostly high income residential. This does not however mean that there are no factories here. In fact, there are only five streets which are almost totally residential. A large proportion of the industries here are home based. While the factory locates on the ground floor, the landlord or the entrepreneur stays above. In many ways, this mix of uses relates to the logic of how industries start off and are improved incrementally as business picks up:

'....When factories were first starting in the colony, (ethnically) related families would often join together to initiate a business. Drawing on the financial and management resources of the extended family, members were able to assemble the needed capital and business experience. Everyone contributed to the business, and, typically, the extended family lived together on the factory premises...(Benjamin 1991:43)

Thus, a if one were to enter one of such home-based factories this is what one would find:

The Extended Family

'.....The family we shall call Shanker owns a wire-drawing factory on Viswas Marg, the main road of Viswas Nager. Like others who live and work in such surroundings, the Shanker family members have a variety of professions. The aged father is a retired veterinarian, the eldest son is a local politician and manages a construction supply business, the two younger sons manage the business and are part-time property dealers. Theirs is a joint family, with the brothers, their wives, and children all living in one house. Typical of orthodox families, the brothers' wives spend most of their time at home.

The factory looks like a residence from the outside. However, inside, on the ground floor, are a large production hall, an office, and storage areas for finished copper wire. Over time, most of the living areas have been moved to upper floors of the building, which are more private.

The production hall, formed out of the building's courtyard and one of the former bedrooms, is a large room with a high ceiling. It is filled with machines. The hall buzzes with the noise and movement of machines and exhaust fans. The shining copper wire contrasts with the simple but sturdy machines that draw it into standard gauges after which it will be transported to a factory in the adjoining block to be made

into cables.

Vibration from the machines disturbed the residence above until the family ingeniously mounted the machine block on a layer of sand and bolted the machines to the floor. Recently, the family bought some new machinery to produce narrower gauges of wire. These machines are in a new, small, production hall, which was formerly the back yard of the plot. Like the family, the business has grown over time, assuming a life of its own.

The factory office is a converted bedroom; in fact, it still contains a bed for the brothers' father. The room also includes a small TV, a steel safe, and, usually, many people gathered around an oversized table. The seemingly incongruous atmosphere is added to by the cross-currents of conversation on a wide range of issues--work orders to and from other factories, recent property deals in the colony, and speculations about upcoming elections. (Benjamin 1991:43)

In more recent times, as Viswas Nager's reputation as a industrial cluster has grown, a different breed of firms have started off -- seeded by the very clustering of firms and their agglomeration and localization economies. Many of these firms are initiated by foremen and sales persons, or suppliers, who are attracted to start production here. The foremen after accumulating experiences and contacts, start their own firms, drawing on rented plots, rented machines, and very often loans and job-contracts from previous employers. What do these new types of firms look like?

The New Partnerships

Pooling their experience, money, and business contacts, a factory foreman and an ex-salesman become joint owners of a new factory that produces copper wire. Their new factory is a 10 feet by 10 feet room within a one and half storied building located on a 50-Sq.yds. rented plot in the prime production area of Viswas Nager. The landlord lives above their workshop, as well as has a visitors rooms below. The partners' own residence is in the same neighborhood, helping them maintain the control needed for small-scale manufacturing. The entrepreneurs rent their machinery, and obtain work orders under subcontracts from other factories, especially from their previous employers within the colony. They believe that they will be able to invest in their own equipment in a year, but, for now, they cannot afford the costs of purchasing machinery or land. In another partnership, a new entrepreneur has agreed to build a second floor to the factory, to reduce his rent or security deposit payments. In still another situation, the landlord is a "sleeping" partner in

the factory operations, contributing the land and the structure, while the new entrepreneur manages the work.

These highly personalized arrangements allow a person to be a worker, a consumer, and an entrepreneur, each at some time in his life. For workers, such social and financial flexibility provides an opportunity for independence. One worker said, "A new businessman in Viswas Nager often finds an experienced worker in an existing factory and hires him away. This worker becomes a foreman, or sometimes a partner, in the new business. Together, they hire less-skilled workers who are drawn to the colony because of its reputation." (Ibid pg.44)

Thus, it is common to see washing put up for drying on a terrace of a building, while spools of shining copper wires are unloaded from a rickshaw into the factory below. Another common image is of the landlord still tending his buffalo tied to a pole outside his door, while the adjoining room has machines busy extruding copper wire to cables.

Not only are entrepreneurs staying close by, but also workers and foremen. The eastern part of Viswas Nager has a relatively recent development called 'New Viswas Nager.' The plots here are smaller, 100 Sq.yds as compared to Viswas Nager's 200 Sq.yds with mostly lower and middle income groups staying here. Many of these families have build extensively on their upper floors renting these out to workers and foremen. Similarly, some blocks within the western part of Viswas Nager along Viswas Marg, and its adjoining neighborhood further south, Bhikam Singh Colony, house even more workers. On the diagrammatic opposite end of Viswas Nager, a neighborhood Jwala Nager along its North East side, also houses workers. Thus, within Viswas Nager as well as in walking distance, workers, and foremen find a place to live, and also possibly to start their own little workshops as I shall explain later in this text.

This worker housing may look rustic, but the dwellings are of brick and cement from the hard earned savings of their middle class owners. The streets outside may look dirty, but once inside, the house is clean. In a courtyard, providing light and

Walking around Viswas Nager's interior lanes, we come across many different types of residential types where workers live. Three types are sketched below:

Scene One shows a room built in the front area of a family's residence (Photo 41). The room is 135 sq. ft. in size and is shared by two workers who pay a combined monthly rent of Rs. 200 (\$11.90). The workers share the hand-pump and toilet facilities of the family.

Scene Two shows a large complex built on a 200-sq. yd. plot (Photos 45 and 47). The plot is located on a side road, which connects an existing commercial street with another that is being upgraded. The owner is a government employee who lives in one of the many rooms in the front of the house. The rooms are built around two courtyards, and each courtyard contains a hand-pump for drinking water. A toilet block has been constructed using a dry latrine system. Each room is 9 ft. x 12 ft. in size, shared by two or three persons, and is rented at Rs 50 to Rs 75 (\$2.98 to \$4.46) per person per month. Two rooms on the ground floor are rented out as workshops. They are used to fabricate small plastic water pipe fittings. Some of the laborers in the workshops reside in the complex.

Scene Three is a room built on the roof of a one-story factory (Photo 44). The youth in the photograph works in the factory below. In 1986, he had been working in the factory for about eight months and was earning about Rs 700 (\$42) per month. Rental charges for this type of unit are slightly less than market rate. Toilet and washing facilities are on the lower floor.

l Different Options for worker housing

ventilation to the structure, clothes are up for drying on the washing line. Usually, two workers share a medium sized room of 12' by 15'. The toilet is shared with the landlord's family and a small kitchen is built upstairs for cooking. Talking to them on a Sunday morning, one can see the contrast to their factory clothes. Rather than the oil stained shirts and dirty pants, they are all dressed fresh after a bath and combed hair. Many of these foremen would commonly become entrepreneurs themselves, possibly in partnership with their present landlords. In many ways, social and class distinctions between the landlord and tenants are grayed through this neighborhood economics. This is not to suggest that all workers may be in this situation. There are also youths (as mentioned in Scene three in the box above) staying above the factories they work in. However, in conversation, they discuss their life situation and objectives to first accumulate basic skills, later switch jobs to seek out a 'line' and then their dream of their own little workshop in a nook somewhere. The issue of living conditions is a complex one, but suggesting very clearly that a central one is that of mobility brought about by the clustering of firms here.

While most streets have varying numbers of factories inter-spaced between residential use, Viswas Nager also has three distinct industrial areas. Two of these

have always been so since the early seventies, and the third has recently developed since the late eighties. In these industrial cores, almost all the lower floors are factories. The density of industrial use has led some plot owners to even build basements for production, and upper floors for light manufacturing and offices. Most of the rooms on the second and third floors are still maintained for residential use -- either the entrepreneur or for a foremen. Residing in close proximity helps entrepreneurs, foreman and workers to respond to the erratic supply of electricity. For the entrepreneur, it also means better control -- especially if he has grow up sons, and in some rare cases, even wives and daughters members pitching in the management of the firm.

Such images may seem complex, but they reflect the life giving processes that have made what Viswas Nager is about: A neighborhood with a powerful local economy, providing employment to much more that its own population. This congregation of land uses making up the economy of Viswas Nager, is not ad-hoc but influenced by the technological relationships between factories here. It is useful to clearly lay out these relationships to develop a accurate conception of the neighborhood economy. I do this by defining two broad sets of relationships. The first below, relates to mainstream manufacturing of cable and conductors. These descriptions are complimented with Figures 9, 10, 11.

Manufacturing relationships in the Cable and Conductor industry:

At the most basic level, the manufacturing system here is composed of three production areas: Cables, Conductors, and PVC Insulation. My descriptions of these technical aspects has two objectives: First, these help to understand the functional relationships between firms. While the broader description is accurate, I have simplified some of the detailed technical specifications for the ease of communication of this issue; Second, a key point to note is that not only are the different firms

connected, but that they have varying requirements for power, plot area, capital investments in to machinery and worker skills. I give a brief illustration of this in this text, while more details can be found in Chapter 3.

Cables:

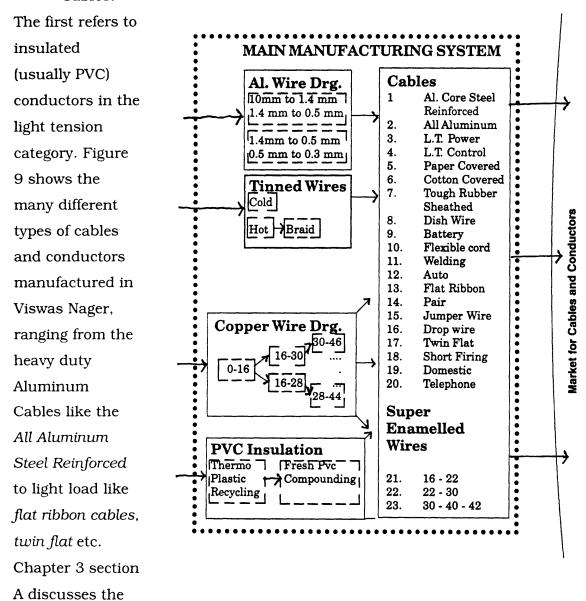


Figure 9 Firm relationships in mainstream production

products in

evolution of these

greater detail. The smallest cable firms, might typically manufacture the simplest Pair

cable, and twin flat cables, and 'braid' (or plat) them on the side. Located on a 50 Sq.yds plot using about a 20 HP electricity connection, these firms would have the owner and two to three assistants. More upscale are firms manufacturing auto cables, flexible cable cords. These ones locate on a 100 sq. yard plot with a 40 Hp connection and employ about 6 workers, possibly headed by a foreman. Even more sophisticated are firms manufacturing a range of aluminum cables: All Aluminum Cables or Aluminum Core Steel Reinforced cables. Here, production would be spread out over a relatively large plot area of 250 Sq.yds using motors drawing power from a 100 to 150 HP connection. In many cases, these enterprises would also draw their own wire especially those gauges they most commonly used. Even so, a substantial portion is procured through regular sub-contractors.

All of these cables draw their basic inputs from two other manufacturing processes: Conductors and PVC insulation as described below.

Conductors: There are two kinds of conductors used in these cables: copper & aluminum. Both are processed from raw metal stocks usually in the form of thick rods of '0' gauge. These are drawn into specific gauges¹⁴. While the rods are procured from rolling mills, most of which are located in the Shahdara neighborhood district, their drawing is all done in Viswas Nager. Just as the different kinds of cables require different infrastructure levels especially power, and plot areas, the processing of different gauges of wire requires varying plot sizes, capital investments and electrical power. In general, processing at a lower gauge (thicker wires) requires more power, heavy duty machinery and larger plot sizes. This is not true for some specialized gauges of both aluminum and copper. Normally, one factory would process a group of these gauges. For instance, a medium sized factory located on a 100 Sq.yds plot with a 40 HP connection, would draw gauges 28 to 44, and 16 to 30. More sophisticated ones would in addition, also draw gauges 30-46 which requires high precision dies and a dust free environment to avoid the very fine wires from breaking. Larger

¹⁴ A gauge standard rating system measuring the thickness of wires.

factories would, in addition to the higher gauges, also draw the gauge 0-16, which is a power intensive process requiring heavy duty machines and a electricity connection of 100 HP. On the other extreme, a very small firm, fitting into a room 10 feet by 10 feet, might only have a couple of machines drawing wires in the range of 28-44 and a 10-15 HP connection.

Copper wire drawing relates closely to two other product areas: Enamelled wires and tinned wires. Enamelled wires are used in transformers, motor windings, and electro-magnetic instrumentation. In this process, drawn copper wire of specific gauges is insulated by an enamel baked on to the copper core. As above, there are many different types of grades and quality of insulation, as well as a range of gauge sizes. There are two kinds of firms involved in this product area. One type uses the more expensive 'vertical plant' while the other uses a cheaper horizontal plant. This is relative to each other, because both draw on heavy electric current (above 100 HP), expensive enamel and capital manufacturing machinery based on a plot size of 200 Sq.yds or more. The workers here have also to be very skilled, and heavy losses can occur by even the slightest power fluctuation, as the baking of enamel will be uneven affecting its insulation properties.

In contrast to the enamelled wires, there are also many firms manufacturing tinned' wires. Here, narrow gauges of copper wire are procured and tinned either by electroplating, or by dipping in a molten bath of tin. Space requirements for the 'hot' tinning process are minimal coming down to less than 50 Sq.Yards, where an entrepreneur would have a couple of wire drawing machines complimented by a couple of (hot) tinning machines. Power requirements are also in a low range under 20 HP. Since the machinery for this process is relatively light, these factories can also locate on upper stories of buildings, thereby also reducing capital investments towards land. In the case of cold tinning, power requirements increase since electroplating is a power hungry process, initial investments are also higher. These tinned wires are supplied to Tough Rubber Sheathed (TRS) cables, or more extensively as a 'screening' for dish wires used for Cable TV transmission.

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part of the manufacture of cables is its insulation in the neighborhood. This forms the third basic industrial process. Most insulation is PVC based, involving two inter-connected process and firms. The first type of process is commonly called PVC preparation. These firms re-constitute re-cycled (thermo-setting) plastic. Here old PVC hose pipes, soles from shoes, and used PVC cans among a variety of products are sorted in big heaps. After being washed and dried,

The owner of the factory works in an office approximately 7 ft. by 5 ft. in size, constructed of partitions inside a large production hall. In the office is the image of <u>Lakshmi</u>, the goddess of wealth, and a bed used by the owner for quick naps. The factory owner operates from behind a huge table that nearly hides him. He is the center of hectic activity. His actions are interrupted continually by the ringing of one of his two telephones and by a steady stream of visitors.

Often using both phones at once, he gives and takes orders and exchanges information on market conditions. He also greets visitors, who are of two kinds: buyers, who are treated to sweet tea, and foremen from adjoining factories. With the foremen, his business dealings are swift-the men discuss specifications and quantities of wire, exchange slips of paper recording the agreed-upon quantities and costs (much like the dealings on the floor of an active stock market), and give and take bundles of money from a desk drawer. At the same time, the owner conducts business with his buyers, discussing schedules and terms of credit.

2: The office of a typical entrepreneur

these are cut up and mixed with additives like rubber and other materials for processing. After being heated together the product emerges from a nozzle as a black tube that is cut into pellets while still warm.

Bags of this black pellet are then dispatched to the firms involved in the second part of this product line, popularly called PVC compounding. In this process fresh PVC resin is procured from large industrial plants in Western India via their local dealers in Viswas Nager. These white granules are mixed with the black pellets and 'DOP' a binding chemical. Various additives like rubber, colors and special agents are also added in specified quantities, to give the insulation particular of fire and chemical resistance, as per the requirements of customers. The area requirements vary slightly for the two firms. The recycling firms can make do with a area of 75-100 Sq.yds and some operate from smaller 50 Sq.yds. The PVC compounding firms require a larger area of about 100 Sq.yds. The electric power requirements remain the same at about 40 HP. However, both require high investments. This is due to the nature of credit flow between these firms and those manufacturing cables. Unlike cable manufacturers

whose turnover of credit ranges between 4 days to a week and a half, the credit flows here range between a month to sometimes even a month and a half. Thus, entrepreneurs here have to be able to block their funds for that period.

B) Support Services

One critical aspect of the Neighborhood as Factory as exemplified in Viswas Nager, is the wide variety of support services. Just as the range of production processes -- of cables, conductors, cables, and insulation, feed into each other, four types of support services feed into the production system (Fig. 10). These are: i) Machine manufacture & maintenance Services; ii) Specialized Retail; and, iii) General services.

Mr. Prakash, a school teacher-turned-entrepreneur

Mr. Prakash is a specialist in the wire-drawing machinery business. He is in his early forties. About 20 years ago, he came to Delhi from a rural town in which he had been a high school mathematics teacher. First, he worked as an apprentice in a factory in Kirti Nager, a West Delhi industrial area. The factory fabricated machinery for production of large copper wires and cable. After gaining some experience and accumulating savings, he started to plan his own business.

While still working in that factory, Mr. Prakash developed contacts with potential clients. In 1978, he moved to Shahdara in East Delhi and rented space in the newly established Jhilmil Industrial Area. At that time, copper wire production in Viswas Nager was just starting, and Mr. Prakash saw increasing demand for his design and machining skills. His location near Viswas Nager provided an excellent opportunity to develop good contacts.

Today, Mr. Prakash is a successful specialist, and he employs two young men as apprentices. He coordinates machine fabrication, produces and adds the finishing components to the machines, and installs and starts up the machines in the shops. He has clients in Viswas Nager and subcontracts work to businesses throughout Shahdara.

i) Machine manufacture & maintenance Services: Figure 10 shows the large variety of capital machinery and their components that are manufactured in the Viswas Nager area -- all within a close proximity of a kilometer. The size (in terms of number of workers, plot size, power requirements) and sophistication (skill levels) of firms involved vary substantially (For an illustration, see Chapter 4, Section B, Case of Dish wire manufacture). For example, firms manufacturing insulating extruders, enameting and annealing plants are relatively large, with a plot area of 100 to 150 Sq.yds, using a 40 HP power load and capital investment of about Rs. 150,000. In

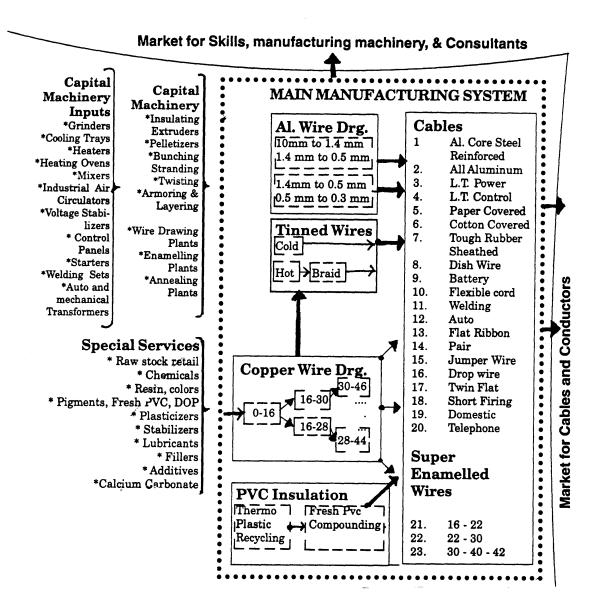


Figure 10: Support services

the medium range, would be those who manufacture wire drawing machinery. Here the plot sizes are less-- about 50 sq.yds with a 15 to 20 HP power connection to run the lathe and welding set. The smallest are small rooms of 10 feet by 15 feet and the adjoining pavement by default, where minor repairs and machining can be carried out.

The important thing is that most manufacturers further sub-contract particular

jobs (See Fig. 11 for an illustration). Thus, the heating ovens used in the manufacture of insulating extruders mentioned above, would be by a small firm that only specializes in these items. One such firm for instance, is located in two small rooms. The larger of the two, 12 feet by 12 feet, is used as the main manufacturing area, while the smaller one, 8 feet by 5 feet is used as office cum storage of finished. products. Most products used in this shop are again procured locally (like copper wire, and the metal castings). Some like the insulating mica sheets and steel sheets are procured from the city's wholesale markets located in the walled city Shahjahanabad. The tools and materials used in this case might be simple, but the job is highly skilled. In a similar way while the manufacture of wire drawing machinery requires reasonable accuracy and machining, the skilled part of this process is sub-contracted to a smaller firm which manufactures small diamond dies though which the wire is passed under pressure to a specified gauge. This is made in a one room firm located deep inside the cluster but conveniently near one of the major firms making wire drawing machinery. The room for the die making, in contrast to most industrial interiors in Viswas Nager, is bare. There is a table in one corner with the finished dies neatly and carefully stacked, while on the other end a youth with a eyeglass ponders over a die he is making. His work area is brightly lit with a 100 watt table lamp. In another corner is a sophisticated machine (the main investment in this firm) used for accurate measurement. The distinctive feature is that this entire work area is partitioned off to avoid any dust from coming in. Like many computer centers in this dust laden city, anyone who enters is required to remove shoes.

Many of these capital machines are customized according to the entrepreneur's particular requirements or their own innovation in the production process. Due to the accumulated experience of these entrepreneurs working in close relationship with others in the mainstream cable and conductor industry, Viswas Nager has also become famous in the supply of the capital machinery required for cables & conductor industry. Most owners of these machine shops will proudly show orders received from factories located in remote parts of India, and tell how they were paid first class raii fare to install and operationalize the machines there. To further substantiate their

point, they also relate as to how their clients, so keen to procure their machines, would pay a 100% advance, and offer much more to pick up orders that were ready in the shop waiting to be transported to others¹⁵.

Cables Tough Rubber Sheathed Dish Wire **Tinned Wires** Cold Braiding Hot Tinning **PVC Insulation** Copper Wire Drg. Fresh Pvc Thermo Compounding Plastic Recycling Extruders Control Panel Voltage Stabilizer Starters Switiches Grinders Cooling trays Welding sets Heating ovens

Thus, when we look at Figure 10 and the listing of capital machinery listed

Figure 11: Interconnections between mainstream manufacturing and support services. An example of Dish wire manufacture (REFER Pg 151-152, FIG 17 FOR DETAILS)

there, these in fact, are linked to a complex set of functional relationships to smaller and larger supplier firms which are of varying sophistication like the dies manufacturers previously mentioned. Figure 11 illustrates these linkages in the case of dish wire manufacture. In turn, all these supply their finished products to a range

¹⁵ One manufacturer from Bangalore manufacturing cables collaborates this point when he relates the difficulties of ordering for capital machines from Shahdara. He said that it was absolutely necessary to go there and spend the two weeks on site when the machine was being manufactured. Otherwise, despite advances, some other local entrepreneur would offer the manufacturer much more and 'steal' the order.

In the course of discussing the advantages of Viswas Nager in how people start off business with a group of three entrepreneurs, we were served hot steaming tea. Coincidentally, we were passed by a youth wheeling a bicycle with a wooden box as a 'carrier' over the rear wheel. One of the entrepreneurs shouted out to him to illustrate his point in our discussion of how people start off in this neighborhood. The following story emerged:

Ram today moves round the inner lane on his second hand by-cycle upgraded with brand new tires. The cycle is useful because it can negotiate the narrow lanes, and scale the open drainage channels with step stones, that often crises -cross across them. Most important is the extra-wide carrier at the back of the cycle. Ram uses this to store small bundles of waste copper meticulously collected door to door from the many copper drawing, cable manufacturing and enameling factories on his round. These days, with the increasing power cuts and erratic supply, business has picked up. With each interruption, entrepreneurs are forced to 'waste' some portion of the cable or conductor. Ram makes his way buying this at a low rate and often on a days' credit. Thus, for the material picked up in the morning, which is roughly weighed, he consolidates and sells it to larger scale versions of him --- entrepreneurs who trade in these items to sell them in bulk to the smelters. Some times he does collect enough to sell his stock directly to the smelters, but this is rare. With the money coming to him in the evening, a part of it goes back to those who supplied him the waste products. The rest go into his living expenses, some meager savings and investments like the new tires, or the wooden box bolted to the carrier. There are others like him, some specialize in different kinds of waste plastics. The main thing in this business is personal contacts and 'goodwill'.

It is interesting how Ram developed this. He actually started off as an assistant in one of the corner tea shops. His job was to run around the various factories in the cluster distributing tea. It was not easy, the pay was low, and balancing the six cup pack of steaming tea in a wire frame time after time drains energy especially when the factory has a office on an upper floor reached by a steep stair. However, his cheery personality got him lots of friends. Some factory owners, in return for a tip, asked him to sweep the floor and he discovered that he could collect the copper waste. One thing led to another and soon he was on his way. Today, most of his previous 'tea' clients are his suppliers. The earnings are not great but much better than his job at the tea shop. He sees his future a waste manager --- much like the people he sells his collections to. One of the things he is now on a look out for, and word has been spread through his suppliers and friends, is a small side space where he can safely store and consolidate the copper he collects. Maybe then he can also employ a helper to widen his territory of collection.

4: Ram's story: A tea shop boy turned entrepreneur

of firms involved in main stream production as graphically described in Figure 9. Here, the Dish Wire is the end product of a long chain of inter-linked manufacturing processes in Viswas Nager. In turn, there are a range of supporting processes of machine manufacturers -- extruders, control panels, who in turn are supported by manufacturers of their sub-components like welding sets, heating ovens, cooling trays, switches etc. Thus, all these activities together make up a wide web of manufacturing relationships which in turn are linked to a variety of services as explained below.

ii) Specialized Retail Services: Just as the industrial cluster has evolved machine manufacturing firms, an equally important local economy revolves around the raw material retailer business. How did this happen? With the development of the industrial cluster, more and more smaller manufacturers of cables and PVC started their business in Viswas Nager. These industries were able to locate here because of a variety of factors: The availability of 'production halls' available on rent, the easier access to capital from within the neighborhood, lower cost machines since they were locally made, skilled labor available locally, the access to the know-how and the increasing market for this product and perhaps most important, the possibility to develop social contact and develop 'good-will' essential to get finance, material on credit and markets information (Chapter 5 discusses these issues in detail).

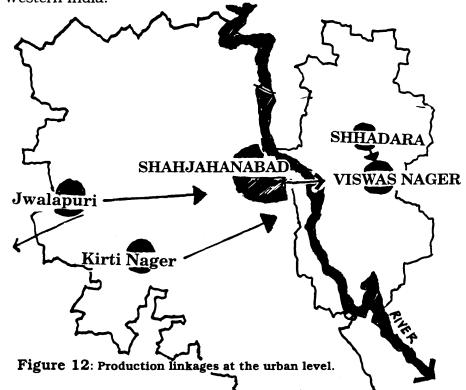
Unlike their earlier counterparts in this production line, these new firms generated a growing demand for chemicals and colors in smaller batches to respond flexibly to the rapidly emerging market. This was also reinforced by frequent changes in market niches which usually happen in the beginning stages of setting up businesses, as well as the lack of space and capital (either personal or on credit) to store large stocks.

The demands for smaller batches attracted retailers. In the early stages of production in Viswas Nager, around the early to mid-eighties, retail businesses started off in terms of waste and recycled plastic being supplied to firms involved in PVC compounding. Apart from these items, firms in mainstream production procured the fresh PVC raw stocks from wholesale outlets located in Kriti Nager, an important industrial cluster and market for plastic products in West Delhi. However, as demand grew by more and more small enterprises in mainstream production, increasing numbers of retailers also decided to set up shop in the neighborhood. Once started, this process has been self-reinforcing. Small firms in recent times have gained an additional incentive to locate here -- the availability of smaller batches of raw stocks.

Most retailers locate on Viswas Marg for the visibility. However, due to the high

cost of land here, they have a front office here. This is a small room of about 8 feet by 6 feet housing a couple of chairs, a table, and a phone. Displayed on the wall behind are samples of colors and fresh PVC resins. Deep in the interior of the cluster, often in someone's basement, they would rent a storage space where the raw stock kept in bulk. This is transported directly to the factory via a hand cart or a cycle rickshaw. From time to time, their stocks are replenished by trucks bringing in new materials from factories located in Western India.

We have seen above, that the industrial cluster of Viswas Nager has spurred a variety of linkages within the neighborhood itself, as well as within the larger neighborhood district of Shahdara. Many of these linkages extend beyond to other specialized clusters in the city. There are two



significant ones. As mentioned earlier, Kirti Nager was the source of plastic raw stock, and in the very initial years, of the capital machinery itself. Today, most suppliers of raw stocks source their inputs directly from suppliers in the states where these are manufactured: Gujrath and Maharashtra.

The other significant linkage is to procure re-cycled plastic (See Fig. 12 above). This is trucked in from *Jwalapuri* in West Delhi. Spread over two square kilometers, Jwalapuri is reputed to be Asia's largest plastic recycling complex. Here, thousands of workers, many of whom are women and children toil in difficult

conditions to expertly sort out plastic by color and basic types¹⁶. Most of the raw stock is trucked in from all over north and central India. An entrepreneur in Viswas Nager has only to make a phone call, or send a representative with a sample, and within a day, sometimes by the same afternoon, a truck bringing waste plastic of the type required, will arrive at the factory.

In the discussion above, I have stressed the functional linkages between mainstream production and support services. However, these also have an important social dimension affecting the mobility of workers.

The social dimensions of economic diversity:

The cable and conductor industry has been characterized by both a rapid expansion due to demands made from all over the country -- both in small towns, cities as well as the metropolitan cities. Parallel to this expansion has been a diversity of cables being used as the electrical and electronic industry has developed new products. The next chapter will focus specifically on this issue. Both increasing demands, as well as the demand for specialized cables has in turn led to the development of new firms in mainstream manufacturing processes, as well as in a wide range of service activities. This diversity obviously has a strong technical rationale to it: Seeking out niches via specialization to ensure economic stability, and economic returns. However, how this diversity comes to be, also has an important social dimension to it, which is spurred by the very process of clustering. To illustrate this point, I describe several possibilities of how partnerships in these newer areas come to be.

¹⁶ Often these are entire families staying long hours on these dumps. The main threat is that of disease. Since broken glass or sharp metal is often mixed with the plastic, these workers especially their children here suffer from cuts which turn septic in contact with rubbish. The other problem is that of fire. Just recently, the entire neighborhood went up in flames -- one of the biggest the capital has ever seen. About 20 huts were destroyed and many injured by the toxic gases released by the burning plastic. The debate about this settlement, as has been going on for years, is centered on its illegality and as such little action to provide even clean water to drink or wash ones self.

Just as new firms in mainstream production start off, a foreman who has been once employed in a factory manufacturing cables, might be drawn into starting a side activity of maintaining and servicing capital machinery of his product line. Coming in daily contact with the local machinist employed in the lathe shop, might prompt both of them to get into partnership to manufacture particular components of these machines, or in some cases, even the total machine itself. In another case, an accountant working with a factory and coming into contact with sales agents, might decide in collaboration to start a small shop selling chemicals in small batches. Another possibility could be for the same accountant and the sales agents to start a small transport business with a couple of vans, or even a small shop selling electrical items needed by the local industry. While the permutations and combinations are limitless, these are guided by the nature of social contact -- people whom you meet on a daily basis, complemented by a discovery of your own skills and aptitude. The important thing is that the close clustering of firms of various capital investments, power requirements, and skill levels brings these circuits together, to make these collaborative arrangements possible.

Another important impact on sub-contracting relationships between established entrepreneurs and foremen starting of their own firms, comes from rapidly developing markets. The latter by forming partnerships with persons with a sales background (with contacts in different towns and cities), they can establish a direct link. This helps in many ways:

First, the margins are obviously better and more stable to selling the finished product to traders in the wholesale market of Delhi¹⁷;

Second, and perhaps more important thing is that the manufacturers

¹⁷ Many entrepreneurs independently told me that one of the most important things in starting off business here was to first secure a stable market. Everything else could be got from the neighborhood system: Plots, raw or semi-processed materials on credit, finance, second hand or rented machinery, skilled and semi-skilled workers. One commented, in response to my question, that there is nothing like a un-skilled worker: They all become semi-skilled within weeks'. The common strategy, after an initial forav into manufacturing with the help of previous er ployers, was for one of the partners to travel to towns and cities seeking out relatives and friends. In contrast, most were disdainful of the wholesale traders in Old Delhi, who would only look at the price rather than the quality.

are able to tune their product according to the client's specification. This develops into a fertile ground for innovation, where the need for specialized cables spurs that of specialized machines which in turn means modifying machines parts to get the right fit. This process of customizing has important social impact in making relations between workers, foremen, entrepreneurs, less polarized since they call for a collaborative effort:

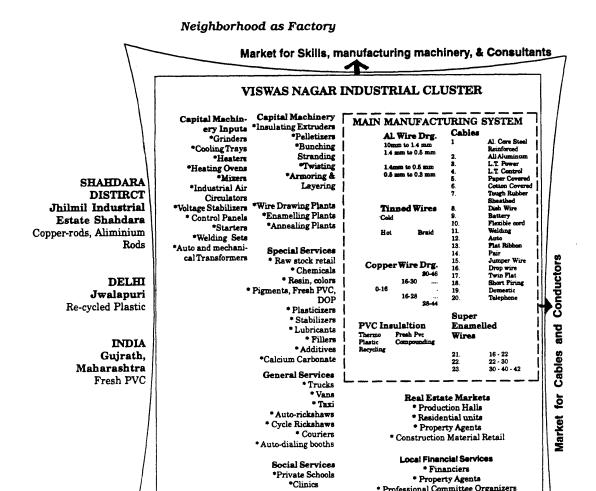
Third, the opportunity for innovation is a 'proving ground' for skilled personnel, and a way for them to establish themselves in the neighborhood's social environment. This is especially important when they want to start their own enterprise;

Fourth, decentralized marketing reduces the need for a foreman starting off to be only dependant upon his employer. Being able to develop a variety of clients improves the bargaining position of new entrepreneurs within the neighborhood.

All together these social dynamics make the economics of clustering more powerful and self-reinforcing. This economics, in turn, further reinforces the development of a wide range of general services as described below.

General Services:

There are three categories of general services which support manufacturing in the neighborhood (Fig. 13). The first category of transport services like trucks, vans, down to cycle rickshaws and manual carts is obviously linked to manufacturing. All scales are important. Since the industrial cluster houses mostly small firms sharing inter-dependent processes, rickshaws and carts are important to transport small batches over small distances. As Viswas Nager's centrality in the production map of India has grown, much of cables and conductors manufactured here are exported to other cities and towns all over the country. Thus, there is increasing demand for vans and trucks to transport these either to the railway station or directly to smaller towns and nearby cities. Along with the van and the truck come the maintenance shops. These are usually located near their 'stands', and employing a chief mechanic surrounded by a whole lot of 'cleaner boys'.



* Professional Committee Organizers

EXTERNAL MARKET FOR FINANCE

Figure 13: The external markets of Viswas Nager

Another important service is that of finance, which Chapter 5 explores in detail. Here, I summarize it briefly. Few firms in Viswas Nager have access to institutional finance. However the clustering of firms, as well as the close relationship to land markets and production make it possible to acquire finance through five methods. The first involves getting on credit, for which the terms vary between one production process and another. A second set relates to strategic partnerships with landlords who become sleeping partners in the firm. A third relates to financing mechanisms called 'Committees' which are a form of co-operative financing where entrepreneurs pool resources which are allocated to each of them in turn by a bidding process. A fourth process is taking on investments from financiers who are usually connected to the property market. A fifth process is starting firms with partners who have capital. All

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these mechanisms are based on trust between the participating group, but this trust, just like the five possibilities of finance are greatly influenced by the clustering process.

Other such services include communication booths which have auto-dialing long distance facilities -- critically important to keep a track of orders. Many of these operators install their own private mini-telephone exchanges which connect up to the entrepreneur's own phone. The advantage here is that the facility is less likely to be misused in the factory environment. Also related are the numerous private and intensive uses of public courier services. This is for job-orders, communications and also samples. Then there are tea shops and eating places.

The second category of general services relates to the real estate market. In many ways, this is the most fundamental of forces which affect the manufacturing environment in many different ways. Chapter 4 will show that the incremental consolidation of land is critically important in the evolution of manufacturing, especially because it allows the possibility of differential qualities of land to exist in close physical proximity (Benjamin 1991:15-29).

This market also makes available space for rent as well as purchase. While in the initial stages most production space is on the basis of sale, later stages see more renting -- as land is less easily available and also when production gets to be more sophisticated. In the rental market, 'production halls' play a particularly significant

role. These are ground floors or basements cleared of their internal dividing walls leaving only columns and external walls, and rented along with a electrical power connection. Another such market, as discussed earlier, is that of rental housing catering to incoming residents, entrepreneurs and workers.

Both land and manufacturing co-generate such an intensity, that real estate

CYCLE RICKSHAWS

The cycle rickshaw business is an important secondary enterprise in Viswas Nager, and it illustrates the wide range of occupations that are generated from the primary manufacturing in the colony. Viswas Nager's cycle rickshaw businesses employ operators, fabricators, and maintenance personnel.

Cycle-rickshaw operators can be one of three types: owners who rent them to others, operators of the rented vehicles, and owners who operate the rickshaws themselves. Contacts between owners and renters are usually established by an introduction from an existing renter, often based on family relationships. The highly personalized relationships ensure security for both parties. Cycle rickshaws are rented to operators on a daily basis, usually for the standard fee of Rs 7 (\$.42). Major maintenance and mechanical repairs are performed by the owner, while the renter is responsible for minor maintenance. If there is an accident, the owner and renter usually split the cost of repairs.

Although some large-scale operations do exist, most cycle rickshaw rentals are small- to medium-sized enterprises because the owners can usually afford only 25 to 30 cycle rickshaws. In addition, the supply of land for storage is limited within the consolidated areas of the colony, where demand for the service is greatest, although this problem can be alleviated somewhat by storing rickshaws on the roadside pavement. Self-employed transporters (owners who operate their own vehicles) come from various backgrounds and tend view this strenuous job as temporary. In some cases, these owners obtain contracts to transport children to and from local schools in addition to serving the general industry and commerce of the colony.

<u>The Fabricators and Maintenance Personnel</u>: Many lower-income people obtain jobs building and maintaining cycle rickshaws. Most of the vehicles are fabricated locally from a standard "kit of parts," available in central city markets. The skills needed to fabricate and repair cycle rickshaws are highly differentiated; the work is labor-intensive. Repair and fabrication services are closely linked to the network of recycled parts and the building of lesser-known brands of cycle rickshaws in small factories.

services themselves become inter-twined with the manufacturing and service economy. One part of this relates to the construction retail business, and the property business. The former remains viable for a substantial time catering to local demands. In the beginning stages of development of a neighborhood, the construction market is 'heated' with the high intensity of building in the neighborhood. So much so that, at this time even general stores normally selling milk and bread will have a stack of bricks outside aiming at the one off customer who ran out of bricks the last minute. Over the years though, the demand for finishing and more specialized products increases. Thus, shops that initially supply sand and aggregate, steel and wooden form-work, and lumber material yards become retailers for sanitary ware, paints, hardware, electrical, and hardware. Some who locate in the interior parts of neighborhood still remain so. For instance, many of the shops along Viswas Marg started off as selling construction related stuff till the late eighties. Today, very few remain in this business. Till the late eighties, there were even two lime kilns located in

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A PRIMARY SCHOOL IN VISWAS NAGER)

Mrs. Rai is an experienced teacher in her mid-forties who taught in a government-run public school for almost fifteen years. She started a home-based private school in about 1984 in the southern section of Viswas Nager The school was converted from a residential building on a 100-sq. yd. plot that she owns. She is the principal of the school. Mrs. Rai's husband, employed in government service, has been entitled to public housing for many years, but their allotment came only recently. In the meantime, they lived in what is now the school building. Currently they live in public housing in a central Delhi neighborhood.

The school is recognized by the government and provides primary education to about 120 children. The building is clean, with white-washed walls, reflecting the strict supervision and management of Mrs. Rai. The students are well disciplined and wear clean uniforms. They come from the surrounding neighborhoods in their school bus, a converted cycle rickshaw. Because Viswas Nager is continuing to attract middle-class residents, the school is likely to experience increasing enrollments. The school has four classrooms, a staff common room, a small room for Mrs. Rai, and a toilet. The roofs of two of the classrooms are made of temporary materials, which Mrs. Rai hopes to upgrade to reinforced concrete in the near future.

Mrs. Rai employs three teachers who are all in their mid-twenties. As they previously had little teaching experience, this job provides them with training. From here, they may start their own schools or join a larger and more established school. Mrs. Rai herself started this way--first teaching in a government school, then tutoring. This process established her reputation as a teacher and also provided contacts with parents who wanted their children to receive personal attention. Mrs. Rai charges between Rs 45 and Rs 70 (\$2.68 to \$4.17) a month for each student, depending on age. Each student must have a uniform. This reduces any sense of inequality that might be perceived among the children, who come from varied income groups and social backgrounds. Teaching materials are simple: slate, chalk, and plastic and wooden toys.

the interior portions -- supplying slaked lime to most of Shahdara.

Viswas Nager has also evolved a variety of day care centers and schools. These emerge because as such neighborhoods consolidate, they attract both lower income groups as well as middle income groups -- with desire to have their children educated. Many of these are entrepreneur families themselves, who are un-educated and see the need of education to deal with officials¹⁸. The case study of the primary school teacher mentioned above illustrates one of the many attempts of residents responding to a varied range of local demands set off by the emerging local economy -- as

Many entrepreneurs in conversation, were very embarrassed when it came out that they had difficulty reading and writing, although they were excellent in math. This did pose a serious problems when dealing with anything official -- banks, inspectors and also in some ways, differences between them and those entrepreneurs who were better educated. When money came in, three important priorities emerged: Investment into production, a 'proper' house, and education of sons. Money for daughters however, is saved up for the elaborate and expensive marriage as is the local norm. This might explain a strange fact that fact that the Shahdara neighborhood district (most of which is industrialized like Viswas Nager) seems to have many schools as compared to other neighborhoods which are less industrialized.

discussed in detail in the next chapter. This can only happen when residents are able to exercise control over their environment and be able to upgrade their physical structures to accommodate such activities. Chapter 4 illustrates this in its developmental aspects, while Chapter 6 highlights its political ones.

In the above description we can see that Viswas Nager as a industrial cluster inter-relates many different types of firms, and diverse markets, as well as diverse interest groups. Secondly, as important as the economic or functional linkages, are the social linkages which develop with the complexity of human life processes themselves. The next chapter discusses in detail the evolution of manufacturing.

CHAPTER 3: THE EVOLUTION OF A DIVERSIFIED LOCAL ECONOMY

The previous chapter showed the great diversity of Viswas Nager's economy, and how its manufacturing processes related to service and support activities. This chapter shows how this economy came to be. It describes the evolution of Viswas Nager's economy in a broader contextual perspective — affected both by national and local level sociopolitical conditions. For ease of presentation, and due to the significant political events, I choose five time periods: 1971-77, 1977-89, 1980-85, 1985-90, 1990-95. In particular, this chapter is about the technical links and firm and product characteristics. However, each technological description over a time period is prefaced by a broader socio-political description of the forces that have affected technological change. This highlights the larger social and political context within which the Viswas Nager Neighborhood as Factory has evolved. Subsequent chapters of this dissertation focus on issues of land, finance, and socio-political aspects.

To fully appreciate the manufacturing history of Viswas Nager after 1971, it is useful to get a sense of the development of the larger neighborhood district of Shahdara¹. These developments are the formative roots which later flowered into the industrial cluster of Viswas Nager.

THE INDUSTRIALIZATION OF SHAHDARA

The River Yamuna, separating East Delhi (or Trans-yamuna or *Yamuna-paar*, as it is locally called) from the rest of Delhi, forms an important natural barrier between two important neighborhood districts. On its western banks north of the British creation, New Delhi, is the Walled City of Shahjahanabad. Dating back to the reign of the Mughal Emperor Shah Jahan in the 17th century, Shahjahanabad houses the fortified palace complex (the Red Fort'or the *Lal Kila* as it is also called) and the Old Delhi Railway Station. Like other traditional city structures, it is laced by a

¹ I use the word district is a general way, and not in the way of administrative territories since these overlap in a complex way. Shahdara is divided into two basic administrative divisions: 'Shahdara North' consisting of the older sections (what I refer as the Shahdara district) and Shahdara south -- consisting of areas more recently developed since the early eighties. In addition, Shahdara south and north are sub-divided into many wards. The master plan for Delhi overlays this further with a number of zones which do not necessarily correspond with any of the above.

labyrinth of narrow streets, some only three feet wide. Residential quarters are fast giving way to manufacturing and commercial activities. This change of land use is influenced in large part by the concentration here of wholesale markets for several products that are famous all over India.

Across the river Yamuna on its eastern banks is the larger neighborhood district of Shahdara. Deriving its name from the word 'shahi-darwaza' or 'royal gateway', Shahdara was an important node on the historic Grand Trunk Road, linking

Since the early twenties, Delhi, and in particular the Walled City Shahjahanabad, has been one of the most important national level markets. Goods made here and in other towns, are dispatched to locations all over the country. Even today, despite of the decentralization of economic activities throughout the country, the wholesale markets here have a national level economic impact. Interestingly, these are concentrated in particular streets. For instance, paper, cardboard and stationary products are located in Nai Sarak, electrical goods and electronics in Bhagirath Palace, grain, spices and dry fruits in Sadar, printing and publishing in Darya Ganj, cycle market and photographic goods in Chandni Chowk, metal sheeting and tubes in Lal Kauan, building materials and hardware in G.B. road. These are tiny workshops, barely enough to fit in two men with their tools. Ceilings are low, making space to house stores and in some cases, an additional worker. Often clustering in a lane, they are interlaced by the dangerously low electric power lines.

Even the larger streets are not that large. Most are seven feet narrow, shaded from the harsh summer sun by buildings 30 ft high on either side. On the lower level are tiny shops, often with a frontage of five feet and depth of 8 feet. Inside, the shopkeeper with his cordless phone in one hand and intercom in another, barks dispatch orders to the gowdown (storage place) deep inside an inner street. Business, handed down from several generations, is transacted in millions every day over fax, and long distance phone calls. Outside on the street, the only mode of travel is walking and the cycle rickshaw. Here, workers manually pull a cart full of goods to the Old Delhi railway station 15 minutes away.

Real estate prices are sky high in this economic magnet housing residents of contrasting life styles. While most of the rich traders have shifted out of the walled city due to the increasing congestion and manufacturing activities, there are still many who prefer to stay in these courtyard centered houses and a particular life style. For the men, the day's end of business dealings brings the evenings' dinner, after which, a customary glass of sweet milk at the street side vendor. For the women, life in most parts is more restrictive than what it used to be. The rapid take over of residential space by manufacturing and commercial activities, has filled the street with strangers for them. Gone are the days of an evening stroll to the Red Fort 'maidans' (or gardens) or neighborly meetings. Today's evenings are spent behind the purdah, watching the TV serial after the days' cooking. The streets below house workers mostly newly arrived migrants who work as manual labor. As dusk falls, these tired masses huddle together for the basic street facilities offered by the pavement economy: Simple food cooked on kerosene stoves by some, while others rent out blankets for the cold winter's night. Night falls for street sleepers and the traders above.

^{1:} Street-scape Shahjahanabad

Chapter 3: The evolution of a diversified local economy

the trading towns of Afghanistan in the West to Calcutta in the East.

In more recent times, during the second world war, Shahdara's evolution is linked to the increasing economic centrality of Shahjahanabad. The shortage of space in the walled city, and the close proximity of its wholesale markets to the city railway station, promoted extensive

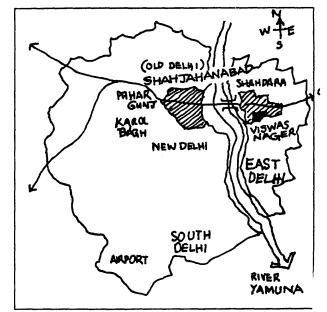


Figure 1: Shahdara, Shahjahanabad and Viswas Nag r

sub-contracting of job-works beyond its boundaries -- to *Karol Bagh* and *Paharganj* to the West, and Shahdara to the east.

In the late thirties and forties, lower class entrepreneurs and workers, settling on the cheap land across the river, took boats across the Yamuna to work. Later, in an effort to consolidate their position, they brought back job orders, to be completed at home. For instance, silversmiths in *Chandni Chowk* ('Silver square') in Old Delhi, would sub-contract their refining works to small home based workshops in Shahdara. Over time, this paved the way for traders in a variety of other trades: paper, textiles, metalwork, to engage in similar activities. One entrepreneur called this the '100 Rupee businesses':

A worker staying in Shahdara, would procure thread from the wholesale textile market at *Sadar Bazaar* in the Walled City. At his home of mud plastered walls enclosing a courtyard, his wife, children, and relatives would reel these into bobbins. By noon time the next day, he would travel back across the river in a boat with the finished product, to the wholesale markets of Shahjahanabad. There, he would collect Rs. 100, their wages for the day, and return with a fresh stock for processing. Gradually, accumulating skills and contacts, some of these rudimentary businesses

would consolidate, and hire labor from outside the family to expand operations beyond the Rs. 100 threshold. These home based economic processes, adding substantially to the household budget, would soon attract neighbors to start off similar ventures. Together, these families would cluster to share market and trade information, raw material and skills. In this way, clusters of families accumulated experience.

What started off as a part time activity to supplement income, became full time work. In time, these initial economic activities responded to new manufacturing lines opening up in the city markets, and entrepreneurs in Shahdara rapidly shifted into plastics, metal work, rubber fittings, and other such product lines. The extensive use of plastic extruders, lathes, and spot welders complemented the more manual processes and fabrication. Apart from its proximity to the wholesale markets of Shahjahanabad, the industrialization of Shahdara also relates to its location on a trade route to the neighboring state of Uttar Pradesh. From the mid-thirties till the mix sixties, the Martin Burns Light Railway Pvt. Ltd, a British railroad company, ran a railway service connecting Sharanpur, Baghpat in Uttar Pradesh, and Shahdara. Being a narrow gauge railway, it was called the chote line (Small line). This transport link induced small businessmen to locate in small towns along this route, to gain access to Shahjahanabad via Shahdara. With its closure in the mid-sixties, and the lack of a reliable and safe transportation option, these businesses decided to locate closer to the wholesale markets. Most came to Shahdara for three reasons: First and foremost, Shahdara had a well established transport connection to the walled city via 'phutphuties2' carrying goods, and passengers across the double decker Old Railway Bridge, and a regular boat service.

Second, it was on a high ground and relatively safe from the floods that used to

² These are three wheeled motorized taxi cabs powered by Enfeild motor-cycle engines. They and can carry up 10 6 passengers with ease and can squeeze in two more thin ones. These are still in operation along certain city routes between the Shahjahanabad and Connaught place in New Delhi. Today, the enfield engines are replaced by locally manufactured diesel engines. The chassis however, remain the same.

Chapter 3: The evolution of a diversified local economy

Shahdara's landscape of 18 foot wide wide streets sub-dividing its blocks reflect the developers' simple and rustic planning. Behind the small shops, are closely packed double storied houses, lit and ventilated by inner courtyards. Shahjahanabad might have been like this in the sixteenth century, except that the traffic and congestion are already there -- and so are the factories.

Walking down the main street, one can hear their mechanical grind behind closed shutters. The cycle rickshaws that transport you also at times carry other goods: newly molded plastic TV cabinets, neatly stacked and oiled metal boxes, shiny chrome plated tubing for furniture. Their daily routing often takes them across the 19th century railway bridge across the River Yamuna to Shahjahanabad. Adjoining them in the constant traffic jams, are horse-driven carts, vans, and 'tempos' (indigenous manufactured three wheeled vans) carrying similar ware. In addition, there are the masses of bicyclists, scooters, three wheeled auto-rickshaws followed by an occasional elephant.

Unlike Shahjahanabad, most of Shahdara's residents are middle class. Many are entrepreneurs who were previously workers and who moved here from the central city districts. The richer sections of neighborhoods have paved roads punctuated by sewage manholes, electricity lines from the transformers hoisted up to allow for the traffic below, and the long distance dialing telephone booths advertising their presence by their bright yellow boards.

Outlying from the main streets are the newer and poorer sections of the neighborhood. The physical structures here is not very different. The roads, however, are a dead giveaway. Slushy and un-even, they are especially dangerous during the monsoon when the adjoining drains swell to a sheet of murky water. At night, they are even worse, with minimal or non-existent street lighting. The only real advantage is the low price of land. This is the story of the newly arrived worker: Buying a medium sized plot, and waiting for the next election and its much promised civic development. And a lot of it does happen -- when elections are frequent enough.

Election time, not surprisingly, brings a frenzy of activity, propelled by deep seated expectations. Politicians here don't talk about national level ideologies. They talk about better water, roads, drains, more transformers, garbage collection, legalization, schools, police stations, bus routes, and more attentive and responsive municipal workers. All this means less disease, cleaner water, and easier access. For many, this also means better incomes. The electricity lines from the newly installed transformers allow machines to be upgraded, the levelled roads allow goods to be transported, and the drains reduce the monsoon flooding. Improvements also attract the more prosperous classes, who are more likely to start factories, or may have better connections in the municipality to get services faster. Election time is also the time to upgrade houses without harassment from the Municipal Corporations' inspectors on the prowl. This means adding rooms or replacing sandstone and steel beam roofs with concrete ones. Some of this is for living. A lot of the upgrading is for workshops for rent, or extension to existing ones. Many are rooms rented to unskilled workers, mostly migrants who would return to their villages for the harvest after their routine stint of work in the city. In Shahdara and neighborhood areas, rental accommodations are very attractive for those starting out life in the city. A room, even if shared, is better than the street sleeping in Shahjahanabad. Street scape Shahdara is what Delhi is about, where the masses live and the tourists rarely come. It is not the well maintained South Delhi, with its 5 star hotels, plush NGOs offices, and the elite.

2: Street-scape Shahdara

inundate the banks of the River Yamuna. Third, the wells in Shahdara were acclaimed

for their sweet water, as compared to other parts of East Delhi where water was brackish. Many of the businessmen moving into Shahdara spurred its industrialization by investing in more specialized enterprises catering to the growing economic center in Shahjahanabad.

This move was not without its problems. Until the mid-seventies, settlements surrounding Shahdara were well known as the headquarters of the organized crime network of western Uttar Pradesh, extending from Ghaziabad to Saharanpur and, even up to the western districts of Madhya Pradesh. Farsh Bazaar was the 'Wild West' of this area, notorious for its shoot-outs. Upto the late Seventies, rickshaws would refuse to take passengers there after 5 PM, due to the high incidence of crime. Untill 1974, the entire Trans-Yamuna area had only one police station at Farsh Bazaar. Since then, thirty have sprung up. Kastuba Nager, north west of Viswas Nager, was reputed as the dacoit (bandit) headquarters. Ram Nager, further north, and the border check-post was famous for the stocking of illicit liquor. Thus, in some ways, the industrialization of Shahdara, especially in subsequent years, might have helped to develop an alternative economy centered around manufacturing, rather than around drugs and prostitution, like so many other contemporary cities of present times.

The third factor promoting the industrialization of Shahdara, related to the above point, was setting up of several industries between the 1930s and 1960s. Prominent among these factories was the Sansar Machine Tools, set up by a famous Jain industrial family from Saharanpur in the Western part of Uttar Pradesh. This factory produced high quality sewing machine parts, and undertook specialized casting and forging works. Another factory was the Tejab Mill, (Acid factory), set up in the neighborhood of Friends Colony by Seth Moti Ramji, a famous industrialist of his time. The other important factories were the Ajanta Iron and Steel Rolling Mill and the Chhwala Rolling Mills established in the 1950's -60's. In addition to these famous factories, many important Jain families from Saharanpur also established smaller industrial units here.

Chapter 3: The evolution of a diversified local economy

The location of these factories and the specialization of some clusters provided a fertile training ground for many residents of this area to become entrepreneurs in their own right. Employed initially as workers and foremen, they started small units in their own homes on a job work basis, with help from their employers³. Often the new enterprise would run parallel to what was then a common source of income: a home based dairy with a couple of buffalos. As opportunities in manufacturing grew, the cattle would be shifted to an extra room, while additional machines were set up in their place.

With these local enterprises driving the neighborhood economy, more and more of living spaces would be devoted for part time or full time production. This mix of work and living spaces went against the conventional wisdom of master planning, much to the discomfort of the western educated planners and administrators. However, the 'Trans-Yamuna' area had always been considered as the scheduled caste (the 'un-touchable' caste) area of Delhi. As one resident of Shahdara commented:

"..When a fire burns in your stomach since your birth, with no job, no money, and young blood, 'non-conforming' use (according to the master plan) is inconsequential....in any case, the Shahdara area has always catered to the lower and middle classes. Even the latter, were till recently, lower classes who have struggled upwards. Yamuna-par (Trans-yamuna) has always been seen, even now by the elite in South Delhi, as a scheduled caste (lower caste) area and neglected (in the allocation of facilities) by the planners in their Master Plan...".

By the late sixties and early seventies, Shahdara was well on the way to being industrialized. The general range of home and neighborhood based workshops started earlier, specialized to form an extensive printing industry. Later, by the mid-seventies, the printing industry moved over to *Khureji*, in the south eastern part of Shahdara. This opened up space for more power and space hungry factories manufacturing plastic items, metal work, electrical goods, and later, electronics gadgets.

³ One old time **en**trepreneur and resident of Shahdara recalls that till very recently, almost all of the reputed entrepreneurs there were at one time or another, employees of the Sansar Machine Tools. He called that factory an important nursery for highly skilled work.

Entrepreneurs moving in found the large plots in newly settled neighborhoods like Viswas Nager especially attractive -- even if infrastructure and services were deficient in the beginning.

THE DEVELOPMENT OF VISWAS Nager

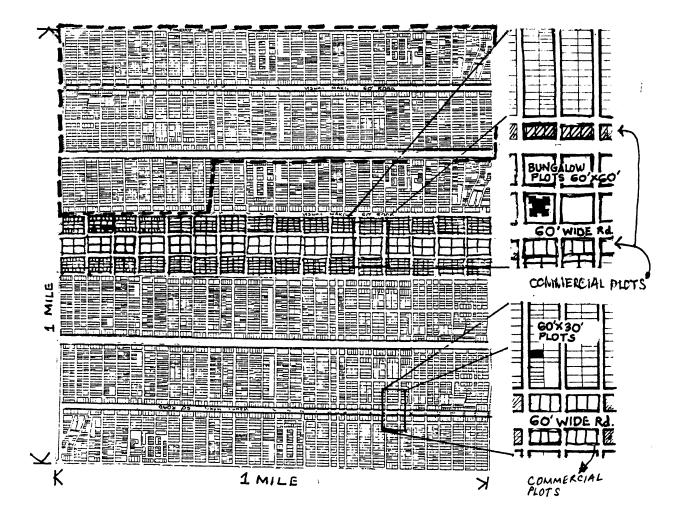


Figure 2: The Sarvaria Plan for Viswas Nagar circa 1935. Present day Viswas Nagar in dotted line.

Viswas Nager, located along the southern boundary of Shahdara, had in fact been conceived by Sia Ram Sarvaria as early as 1935. Born into a rich and well connected family involved in land development, politics and trade, Sarvaria was a well

Chapter 3: The evolution of a diversified local economy

travelled man who had visited London and Paris. Inspired by river front development in those cities, he visualized Viswas Nager as a model development for the East Delhi river front. Unfortunately for him, 1935 was a period of political instability for the British in India, and World War II was imminent. His proposal to the British administration stagnated and with independence of the country in 1947, the Sarvaria family lost much of its political connections, and their ambitions to develop Viswas Nager. The land they had consolidated as promoters, rapidly changed hands -- some by sale and others by squatting. Initially, many Jain families from Western Uttar Pradesh bought land here at very cheap rates of about Rs. 0.50/ sq.yard. However, few could settle immediately due to the high crime rate. Consequently, many local residents of the surrounding neighborhoods occupied many plots to stake their claim on them. An additional supply of plots came with the partition of the country in 1947. Fearing violence, many Muslims abandoned their properties to leave for Pakistan. These plots were in turn, used by incoming groups, many of whom had abandoned profitable enterprises across the newly created borders. Interestingly, the settlers maintained many aspects of the original layout envisaged by Sarvaria (Fig.2). Viswas Nager today still bears the imprint of 1935.

THE INDUSTRIALIZATION OF VISWAS Nager

The early settlement of Viswas Nager in the 1960s: Viswas Nager's transformation from a residential neighborhood to incorporating commercial and manufacturing activities was spurred by the closure of the *Chota Line* as mentioned above. Newly formed neighborhoods like this one provided an attractive location due to their low prices -- even if physical conditions were tough and crime rampant.

Even so, the low price of land in the sixties and seventies, attracted even more established entrepreneurs moving here from other areas. The low price of land was

In the late sixties and early seventies, Viswas Nagar was a neighborhood still emerging from an agricultural economy. In those early days, its landscape of rough roads and marshy land, bred giant mosquitoes and malaria. Most plots had simple mud plastered single room structures, built partly to ensure claim over the land housed. Residents, cautious in an early evening's desolate landscape, took care to return home after a days' work in the more central parts of Shahdara or the walled city.

With prices rock bottom, their plots were large. Many residents were involved in dairy activities, grazing their cattle in the vast fields stretching out over its southern quarters. Further west, was a big pond -- used to bathe the cattle and replenish the numerous wells. In the middle of the neighborhood, on the eastern bank of the pond, was a graveyard. Three decades later and greatly reduced in sized, this pond would front Viswas Nagar's major commercial street. The vast fields would be notified for an ultra modern 8 storied corporate commercial center, and sandwiched in between, an important industrial cluster of Delhi.

For some of the initial entrepreneurs who started production before residing here, basic facilities were hard to come by. For food, there were no hawkers. They would have to get packed lunch all the way from *Khari Baoli* in the walled city. After 1972 things began to change as more and more plots began to be settled. This really caught on after 1974, with the boom in the domestic economy.

3: Viswas Nagar in the late sixties and early seventies

partly because it was an 'un-authorized' colony still in the process of legalization⁴.

There were also two specific local reasons: First, the close proximity of a *shamshan*y ghat (a cremation ground), which depressed land values; Second, this was also due to the close proximity of Kastuba Nager, notorious as a base for organized crime as

⁴ 'Un-authorized colonies' are neighborhoods which have developed in violation of the Master Plan. The Delhi Master Plan does not permit private sub-divisions of land. Master Plan approved housing is unaffordable and inconvenient to most lower and middle income groups. Hence, there has been a proliferation of unauthorized private subdivisions of rural land (i.e., that which the Master Plan designates as agricultural) for urban (residential or other) purposes. Since between 35-40% of Delhi's population lives in such areas, there is great political pressure to legalize or 'regularize' these settlements. Since these are deficient in services and infrastructure as per planning norms they are first designated as 'slum' areas, to initiate public improvement. The provision of services and infrastructure takes a long time, often over a decade. Since civic improvements happen street by street, and item by item (water, roads, sewage, electricity, telephones, etc.) a neighborhood can be in the regularization stage for a long time. In the case of Viswas Nagar for instance, civic improvements and legalization has spanned from the sixties to the early nineties. I will discuss this issue in greater detail in Chapter 4, and its political aspects in Chapter 6.

discussed above⁵.

With access to cheap land, increasing production linkages with Old Delhi, and local factories providing a fertile training ground, Viswas Nager started to develop extensive home based manufacturing. Initially like the rest of the Shahdara district, firms were connected to the printing industry. In fact, even to this day, an important local land mark in Viswas Nager, long after it has closed down, is the *Tash* Factory manufacturing playing cards. The single electric transformer was located nearby, attracting a few more factories to cluster around. These firms were involved in a variety of manufacturing lines, mostly on job works from the Shahjahanabad: rubber rollers, auto parts, machining, transistor case assembly to name a few.

The beginning stages of the cable and conductor industry: 1971-77

The end of the Indo-Pakistan war in 1971 witnessed a boom in the national economy. This brought in extensive electrification in Delhi, among other cities. Demands for cables increased substantially and promoted the rapid growth of the industry in Shahdara and especially Viswas Nager. The naxalite movement in Bengal and Bihar during this period, pushed some entrepreneurs to shift production to Delhi. Some of these entrepreneurs, especially those from Calcutta, brought with them skills from the electrical industry which at that time had its base in that city.

These centers of production grew till June 1975, when the country was put under a state of internal emergency for one and a half years. This period was

⁵ One old timer recollects that land price was and is still the biggest factor in affecting industrial growth in Delhi. When he and his partners moved to Delhi in the late seventies from Assam and Bengal in Eastern India due to the *Naxalite* movement in the 70s, land was available here in some locations for as cheap as Rs. 300 to Rs. 350 a square yard. The cheapest Delhi Development Authority (DDA) auction rate in other East Delhi locations much further away from the central city markets was not less than Rs. 550. However, as explained before, crime was a very serious issue, especially for business men returning in the evening after collecting their payments. Thus, when they started production in the seventies, this entrepreneur and his partner had an arrangement that while one of them stayed in Old Delhi for the night, after a day's work of arranging buyers, the other partner at the factory would be locked in to reduce the chances of a break in. The next morning, he would be replaced by the person who had gone to the market.

characterized by severe insecurity in middle and low income groups: entrepreneurs, residents and workers. Development in this police state, was governed by tough regulation and authoritarian planning by bureaucrats, directed by national level political concerns.

Local level political representation

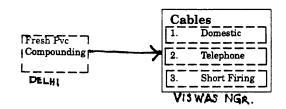


Figure 3: Production relationships 1971-77

was non-existent, with all opposition politicians put in jail or going underground and the press was censored. Many neighborhoods like Viswas Nager faced extensive demolition without warning and their residents were packed off in trucks to resettlement camps. These camps, huge site and services projects on the periphery of the city, were away from employment opportunities. Their tiny plots offered little space for economic activities. As a consequence, economic growth stagnated.

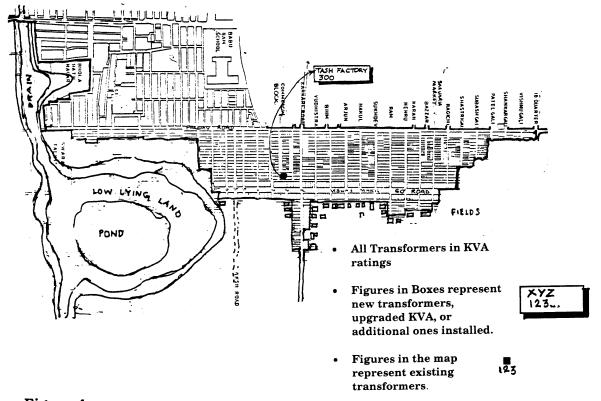


Figure 4: Electric transformers 1971-77.

Chapter 3: The evolution of a diversified local economy

IMPACT ON VISWAS NAGER

In 1971, the first few cable and PVC manufacturing units emerged in Viswas Nager. Drawn wire was procured from the Friend's Colony industrial area, and from Dilshad Garden, both about a Kilometer north. These formed the basic inputs for the 4-5 cable units located near the single transformer in the Tash Factory area. These cable units got their raw materials, imported PVC from two more firms located nearby which compounded fresh PVC resin with re-processed plastic. The re-processed plastic was procured from another two units. In a couple of years, with increasing demand, a copper wire drawing unit joined this cluster --setting off another important backward linkage. Figure 3 provides a diagrammatic view of these production linkages. The close inter-working between these firms formed the basis for a powerful local economy which would, 25 years later, spread its linkages at a national level.

These were all tiny firms --carved into the spaces provided by the large sized residential plots. Most new firms were set up, a trend that continues till today, by sales agents who had come here to purchase cables at a lower price than retailers in the Walled City. It still was not easy though. Entrepreneurs recollect half amused that even for a ball bearing, they had to send someone to the walled city. This would mean halting of production for at least two hours -- the person taking a rickshaw to Shahdara, and then from there, a ride on a motorized van. In fact, for all of their supplies, they were dependant on the walled city. Raw PVC, hesin cloth, polytene bags and jute rope for packing came from Tilak Nager. To transport goods long distance, one had to travel to Kamla Nager more than 10 km away. There was only one telephone in the locality, that too, if it worked. Life was not simple, but then the land was cheap.

The capital machinery was available then from firms in West Delhi, using the most rudimentary technology to produce the simple cables: telephone wires and domestic cables. These were little competition to the more sophisticated imported products available in the market. However, the prices of the indigenous products were cheap and responded to the generally low levels affordable to the masses. The cable

and conductor units here formed one of the many clusters of firms that had sprung up in Shahdara in the early seventies.

With the emergency imposed between 1975 and 1977 however, almost all manufacturing came to a halt. People were insecure with the demolitions around them. Even though Viswas Nager was relatively safe, being developed so far back, some less settled portions in its western sections faced a risk of demolition (see case of Block 28-29 in Chapter 6). The slowing down of construction the country over, coupled by the insecurity, depressed demands during these authoritarian years.

Political democracy and the emergence of mass-markets: 1977-79

With the newly formed Jantha government voted to power in 1977, a more liberalized attitude set in. Policies were redesigned to serve the 'common person', and emphasized by the renewal of local political process. As a result, people had accessibility to the highest authorities via their elected representatives. As one entrepreneur put it:

"...People got confidence that a person from 'their' society could reach the top.6."

The government also explicitly recognized the small scale manufacturing sector through exemptions from excise duty and other taxes, reduced paper work, and the ad-hoc licensing scheme started for tiny industries. Local entrepreneurs claim that this was in large part due to an MP from Jaipur, Satish Chandra Aggrawal, who promoted the cause of small firms, and pushed for exempting small units from excise duties and curtailed the 'inspector raj' to avoid harassment to small entrepreneurs.

 $^{^{6}}$ N. Bengani Industrialist and General Secretary, Shahdara Manufacturer's Federation July 1992

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IMPACT ON VISWAS NAGER

During this period, many neighborhoods, including the northern sections of Viswas Nager were regularized, and electrical power made more accessible. Political representation via councilors elected from the neighborhood helped to ensure the proper implementation of the regularization program via the

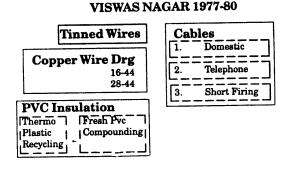


Figure 5: Production relationships 1977-80

improvement of infrastructure and services. These improvements further boosted production. All these factors, as well as the pent up demand for electrical products and cables over the previous two years led to a rapid growth of manufacturing in Viswas Nager.

Perhaps the most important influence on Viswas Nager was the Jhilmil Industrial Estate, set up in the mid-seventies. Initially, copper wire as a raw material for cable production was mostly procured from copper wire drawing firms in the Friends Colony industrial area located to the north of Viswas Nager. After the industrial estate was set up, its larger rolling mills became the prime source of low gauge copper wire for cable manufacturers and the few higher gauges wire drawing units in Viswas Nager. Similarly, the supply of PVC compound was procured on a more stable basis from Kirti Nager in West Delhi and Tilak Market in Shahjahanabad. PVC scrap for re-processing was procured from Seelampur in East Delhi itself on a small scale, and Karol Bagh in Central Delhi on a larger scale.

By this time, many more units started copper wire drawing, due to its low entry costs and the increasing local demand for this product. Initially the machinery was made in West Delhi. With an increasing number of users in Shahdara and in Viswas Nager in particular, some experienced foremen in workshops in West Delhi decided to shift to Shahdara and start their own enterprises. For the last five years for instance,

this capital machinery has been manufactured in Viswas Nager itself. Along with copper wire, two other processes took hold in the neighborhood. Fresh PVC compounding and its sister process, thermo-plastic recycling. Both of these processes, along with wire drawing, became the mainstay of the production system in Viswas Nager. In the case of plastic re-cycling, its production was reinforced by Muslim refugees from Calcutta, who brought with them the skills to sort plastic.

As in the case of wire drawing, the capital machinery was first made and then 'transferred' to Shahdara via experienced foremen. Figure 5 above shows the relationships between the production process during 1978-80. In contrast to copper wire drawing, in domestic and telephone cable manufacture, the requirements of capital investment, electrical power and workers skills in PVC compounding and recycled plastic processing were much higher. As a result, only richer and skilled entrepreneurs could initiate these processes.

However, since these are 'core' processes, their appearance in the cluster spurred many more copper wire drawing and cable firms into production. In fact, by

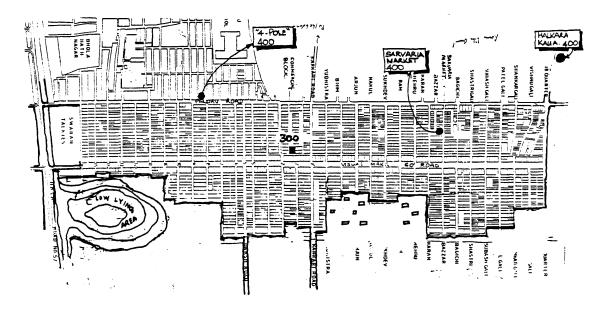


Figure 6: Electricity Transformers 1978-80

Chapter 3: The evolution of a diversified local economy

now, smaller firms manufacturing even higher gauges (narrower wire) requiring lower level of investments as well as plot sizes and infrastructure requirements complemented the existing firms focusing on the lower gauges of manufacture. All these processes increased demands for electric power. Partly in response to this, as well as to the increasing settlement of Viswas Nager, several new transformers were installed in the neighborhood as shown in Figure 6 above.

Emergence of Specialization: 1980-83

Due to infighting in the Jantha Party, the Congress party was voted back to power in 1980. To gain public support, there was extensive legalization or 'regularization' of squatter areas and unauthorized colonies in Delhi, following national and municipal elections. Real estate markets, especially in these outlying areas, were very active, witnessing a rapid rise in land prices. A major focus of public policy was to promote rapid indigenous industrialization, via small scale industries (SSI). Along with the introduction of color TV for the Asiad Games, the government extensively promoted the manufacturing of Black and White TVs, and other electronics items. The stress on indigenous industrialization, especially in the electronics sector, spurred demands for a variety of products. While the core components (for instance, picture tubes of TVs) were manufactured by the larger of the SSI units, the smaller of these firms manufactured simpler items like the plastic cabinets, fixtures, switches, cables and conductors:

IMPACT ON VISWAS NAGER

By the beginning of the eighties, the industrial production system in Viswas Nager was well developed in most of the basic processes -- copper wire drawing in several gauges, thermo-plastic recycling and compounding, and the production of insulated cables -- even if their range was limited. Some of the drawn wire was sent to firms in surrounding neighborhoods, to be enamelled. Most industrial expansion happened in these core production lines. This growth also provided a stable base for diversification into newer lines, spurred by demands for instrumentation and telecommunication cables.

The diversification was especially undertaken by the more experienced firms, experimenting and innovating as they went along. The trials and errors relating to co-axial cables, started in this period of Viswas Nager's history, were to prove particularly significant five years later. For instance, 'twin flat cables' were initially used for domestic feeder single phase conductors. Later, the same production process was modified to produce black & white TV

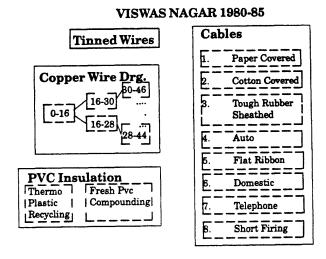


Figure 7: Production relationships 1980-85

aerial wires. Other production lines like copper wire drawing got more sophisticated. Some finer gauges, like 30-46, required specialized conditions, for which the more experienced entrepreneurs were able to develop the necessary capital machinery. Figure 7 provides a diagrammatic view of production linkages between firms in the period 1980-85.

Technological change and transition was also a result of the lenient regularization climate for private sub-divisions of land. Their legalization opened up possibilities for improvement of services and infrastructure. Firms were even more diverse in their operating conditions -- both technological operating conditions and factors such as plot sizes, electrical power requirements, etc..

With electric power more easily available, small entrepreneurs found it easier to start production. This was also helped by the active real estate market, which provided firms with a steady supply of plots for rent or sale. Many landlords invested these real estate surpluses into production (as explained in Chapter 4). The rapid expansion of the industrial system further accentuated the need for electric power. Some of the newer firms were involved in power-intensive manufacturing processes, like copper wire

Chapter 3: The evolution of diversified local economy

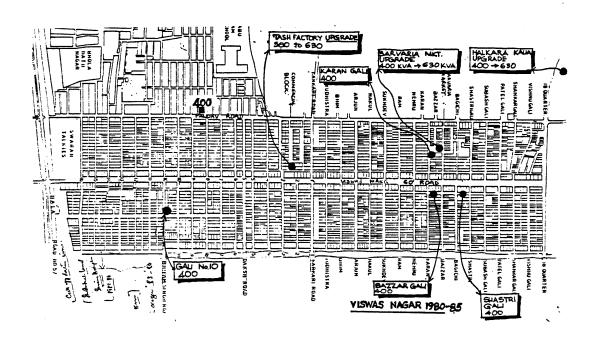


Figure 8: Electrical Transformers 1980-85

drawing in the gauges between 30-46, and TRS cables. As before, new transformers were installed. In fact, with these additions, Viswas Nager had more KVA allocated to it than an high-income residential neighborhood would have had, and many times more KVA than other private sub-divisions without such manufacturing activities. For instance, going by the standards of infrastructure provisions of adjoining private layouts in a similar stage of regularization, Viswas Nager should have had only 1200 KVA, while it actually had transformers rated totally at almost 3900 KVA (Figure 8).

Consolidated & diversified local economies: 1984-89

In 1984, Prime Minister Indira Gandhi was assassinated, and Rajiv Gandhi voted in. His government launched the 'New Economic Policy'⁷. This promoted hi-tech industrialization, the extensive use of computers, and the liberalization of telecommunication policy. The most immediate impact of this approach was a spurt in industrial production of consumer durables, including that of the computer assembly

⁷ For a concise critique of economic policy followed after 1989, see Kurian 1995:100.

industry. Such a policy had a negative impact on some parts of the economy, for instance the hand-loom sector where it created large scale un-employment. There was however, an industrial boom and rapid economic growth, both of which were short lived due to massive central government spending and extensive imports. To an extent, this short lived industrial upsurge in electronics goods boosted indigenous electronic manufacturing. The SSI sector, which sub-contracted extensively to tiny firms, was still relatively safe from corporate interventions of multinational corporations. In addition, the Modified Value Added Tax system was proposed, and adopted as the 'MODVAT' during the Feb.1986 budget⁸. In parallel, rural electrification was promoted in a big way.

However, political instability in Punjab reached an extreme, with the rapid spread of the insurgency. This pushed many entrepreneurs to Delhi, seeking temporary or even permanent places for business⁹.

Small firm led development: 1989

The Congress government, headed by Rajiv Gandhi, was voted out of power for many reasons: charges of corruption, promotion of elitist policies and centralization of decision making within the government and the Congress-I party. The re-constituted Jantha Dal (with the support of the BJP) was voted back to power. The new prime minister, V.P. Singh, stressed economic development based on social justice and employment generation. While the need for liberalization was recognized, it was also recognized that the larger corporations should not be allowed to stifle the growth of small firms, through monopolistic and capital power. Policies were made liberal towards small and tiny firms, especially in credit and access to raw materials. As before, elections were followed by extensive regularization of un-authorized colonies.

⁸ MODVAT (Modified value added tax) was introduced by the then Finance Minister (and later Prime Minister) V.P. Singh. This was to avoid the cascading effects of taxes for SSI units when their goods pass through state boundaries to various national level markets.

⁹ This was possible since many of these entrepreneurs in any case had business connections due to the close proximity to Delhi, as well as relatives staying in Delhi.

Chapter 3: The evolution of diversified local economy

In addition, for the first time, 'informal sector' activities were recognized in the Delhi Master Plan. Land markets and the construction industry throughout the city continued to be very active throughout the city in this period. Although the V.P. Singh government did not last too long, the next Prime Minister, Chandrashekhar, followed the same policies.

IMPACT ON VISWAS NAGER

1985 to 1990 witnessed the peak of Viswas Nager's industrial growth, due to a variety of historical and technological factors. Figure 9 illustrates the complex linkages developed between firms in this neighborhood. The promotion of hi-tech industrialization, especially in the use of computers, boosted demands for instrumentation cables, and computer 'flat ribbon cables'. The liberalization of the telecommunication policy had similar impacts -- generating demands for drop wires, twin flat cables and jumper wires.

Some firms, which had been experimenting with the production techniques and innovations in machinery required for these new products, were successful by the mideighties. The close interaction between firms, complemented by the process of foremen starting their own firms, resulted in the rapid spread of techniques in Viswas Nager. Many new firms, instead of moving into the production system via the traditional route of copper wire drawing, started with foremen manufacturing twin flat cables, jumper wires, drop wires, dish wires, or flat ribbon. This was possible due to their low to medium level of initial investments. Thus, many small firms were able to consolidate their markets in the consumer goods and electronics sectors.

Another area which developed, especially for small and medium sized firms, was the market for domestic cables, pair cables, flexible cable cords (FCC) and tinned wire. The first was specifically in response to the markets opening up in small towns due to the rural electrification policy, as well as to the high rapid growth rates of most towns and medium sized cities. In these areas, pair cables and FCC found use in the rapid expansion of the domestic and consumer goods industry -- tape recorders, irons,

lighting fixtures, etc.

A similar impact was the boom in the building industry in those towns and cities, and in the metropolitan cities. Cold tinned wires found applications in TRS rubber cables (used in electric irons). Hot tinned wires, developed initially in the early eighties as fuse wires, found a new use when they were used for 'screening' purposes in the manufacture of co-axial cables. With this, many more firms moved into the manufacture of hot tinned wire, as the machinery required was quite simple, and initial starting costs were low.

In a similar way,
medium sized firms involved in
the manufacture of auto-cables
diversified to manufacture
three kinds of low voltage high
current cables: battery cables,

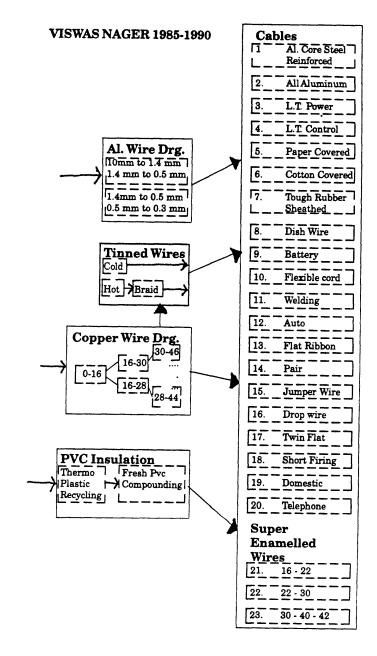


Figure 9: Production Linkages 1985-90.

welding cables, and flexible cable cords (FCC). This was achieved by innovative changes in the machinery. These changes allowed many small and medium sized firms to respond to new markets. Most of these firms, especially the smaller ones, were proprietorship concerns. However, with the technological requirements of adapting

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It has been a long time since the sixties in Viswas Nagar. The pond at the western end has long been tamed into a drain to form its western boundary. The neighborhood's main commercial spine, Viswas Marg, was then just a rough and dusty track separating rows of un-built plots. Today, thirty years later, the plots fronting this 60 feet wide road are bustling with retail activity, selling daily consumption goods, furniture, building material. There are also those who are more specialized: selling chemicals, plasticizer, brightly colored dies, and plastic rolls to roll cables into. Other shops sell cables, enamelled wires, and a host of electrical gadgets — switches, industrial heaters, circuit boxes, bulbs, bolts and hardware. A few rooms on the road front are still machines shops — their lathes plainly visible with unfinished jobs on the pavement outside. The eastern part of Viswas Marg is still residential. The houses here, are three storied high in reinforced concrete and today's kitsch of colors. Driving down this street requires patience and skill. If it is not the rickshaws meandering across carrying bundles of freshly enamelled copper wire, then it is the vans abruptly moving in to side lanes loaded with sacks of DOP — the raw material for PVC insulation. Worse are the public busses at breakneck speeds, packing restless passengers. With all this, the end of Viswas Marg is partly dug up for a new trunk sewer passing along the neighborhoods mile long length.

Moving in the inner street is easier on foot. At the corner of Shastri Gali is a 'tea' shop, serving tea, the morning's newspaper and snacks in a relaxed mood. Further on, hectic activity. A van blocks the 18 feet wide road to unload the 5 feet high rolls of aluminum wire to a factory. A hoist is ingeniously set up to avoid the heavy duty power lines that run dangerously low. This factory is a large one. Sixty feet inside with a frontage of fifteen feet to accommodate the large aluminum wire drawing machines. At one side is a switchboard feeding the 25 HP motors straddled on the floor. Opposite is a staircase and a cramped plywood and glass cabin with one partner inside constantly on the phone.

The stairs, with an external entrance, lead up to a smaller unit with lighter machinery. This one manufactures 'ribbon cables' used in computers. Thin cables of multiple colors stream out from one end to be heat pressed into a flat ribbon. At the far end of the room, a foreman supervises two extruders — converting the hair like shining copper wire into cables of multiple colors. In a small room next to the stairs, two workers pack these rolls into cartons, after sticking on the labels. The entire operation is relatively noiseless as compared to heavy grind of the machines below. The stairs lead further upstairs to a set of offices, stores, and the toilets.

Not all the units in Viswas Nagar are as large as this three storied factory complex. Some are residences. The house next door for instance, is still a residence above with clothes hung out after the morning wash. The lower floor, recently converted, has remnants of a living room, a bedroom, and a kitchen next to it. Even with some walls broken down, machines cramp moving space. The entrepreneur and his helper is at the job himself, his foreman sick today. Their freshly extruded cables string across the room into the next. There, these are twisted together by machines resembling 3 feet high spiders furiously spinning their arms. Appropriately known as 'twin' cables, these will find use in a variety of middle class domestic situations. In the veranda outside, two workers stick labels on the mornings' stock.

Out on the lane again and on to another road block. This time, workers are pushing in a shiny locally made 'powala' or wire drawing machine up a ramp. The mechanic-entrepreneur is there with the demountable parts: Diamond dies, bridge pieces, winding wheels and ten years of experience to ensure its birth on this factory floor. The new owner, harried but excited, is busy adjusting the location of his previous second hand machine. They both have to fit in somehow into the 10 feet by 15 feet room.

4 Industrious Streets: Viswas Nagar 1990

such cases, one of the partners would take on a marketing role, and travel to small and medium sized towns all over the country to secure new markets. In other cases, partnerships also grew out of 'sleeping' partnerships with resident-owners of larger plots, part of which were used to house the factory. In this case too, the 'value' of the technical expert in the partnership grew.

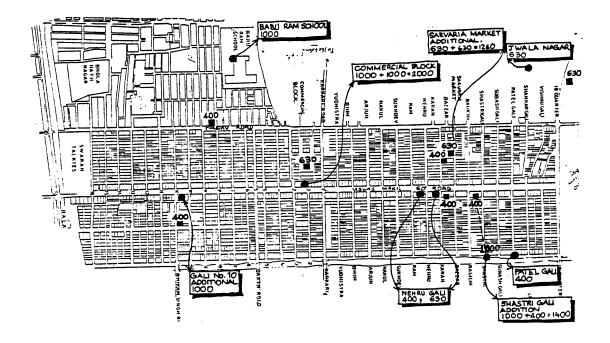


Figure 10 Electrical Transformers 1985-88

Larger and medium sized firms in Viswas Nager focused on consolidating their markets in two areas. Rural electrification built up demands for heavy duty transmission, instrumentation and power cables used by State Electricity Boards. Similarly, the adoption of the MODVAT system opened up public sector markets to SSI firms. Although there are very few 'SSI' firms in Viswas Nager itself, their expansion elsewhere promoted extensive sub-contracting to the smaller 'tiny' firms in the neighborhood. The use of aluminum, rather than only copper, pushed firms into a variety of processes: aluminum wire drawing, all aluminum cables (AAC), and a few firms manufacturing aluminum conductor steel reinforced cables (ASRC). Another area that large firms to shifted into was super enamelling, used for transformers, motor-

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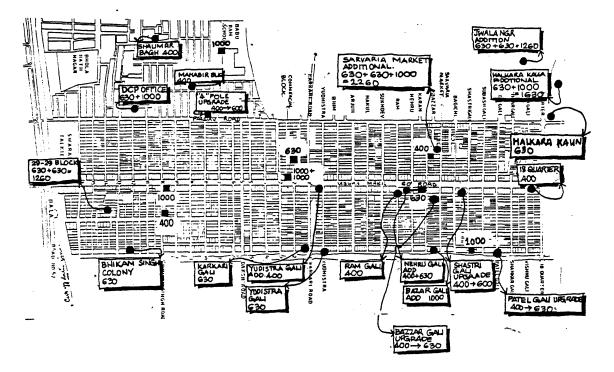


Figure 11: Electrical Transformers 1988-90

winding and the electro-magnetic industry in general. Due to the large investments required in land, electrical power, and capital machinery, almost all the firms involved in these processes were partnership based firms.

The emergence of new production processes reinforced the core processes: copper wire drawing, PVC compounding and re-processed plastic. The latter got a significant boost because of the evolution of a vast cluster of recycling firms in Jwalapuri in Western Delhi. Initially, in the late eighties, these firms had been shifted from Shahjahanabad to minimize the risk of fire. Since then, this cluster had developed into Asia's largest plastic recycling area, covering over a square kilometer and getting supplies of plastic wastes from all over North India. Entrepreneurs in Viswas Nager could place an order for specific types of thermo-plastics in the morning and expect a couple of trucks arriving with these goods by the evening or by the next day at the latest.

To meet the increased demand for electricity, Viswas Nager saw a further increase in the numbers of transformers installed (Figure 10,11). The causality however, ran both ways. One engineer from the DESU, the electricity department, recalls:

".. Within weeks of installing new transformers, or upgrading existing ones, new firms would start within weeks, and the transformers would again operate at full capacity. Many frequently suffered burn outs and blow ups due to the heavy overloading...With so many transformers concentrated in one area, routing supply lines was very difficult in the central office, and could only be done in the field..."

The trend of installing additional transformers reached its peak in 1990, with Viswas Nager getting more than 24,500 KVA -- 20,000 KVA <u>double</u> of what a private subdivision with similar density would have consumed if it had a purely residential density. Despite this, the summer of 1991 witnessed more transformer burn outs than ever before. The DESU engineer recalls that there was one almost every week, with all the transformers operating at 20% over their rated values due to the heavy demand for power.

Another important local factor was the rapid increase in the number of rolling mills in the Shahdara district. Viswas Nager's reputation as a center for conductor and cable manufacture grew rapidly, attracting large entrepreneurs to set up rolling mills in this district and supply raw stock to firms in Viswas Nager, and, to a lesser extent, in other neighborhoods. There were reports in the press that Delhi was also the point of consumption of copper rods smuggled in from Nepal (See Figure 12)¹⁰.

Finally, entrepreneurs coming from Punjab chose to settle in the Shahdara and the Viswas Nager area, since these areas were gaining a reputation as industrial clusters. This brought in new skills. Since many of these entrepreneurs maintained their market contacts in Punjab, these moves opened up possibilities for new markets in Western India.

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 $^{^{10}}$ The figure of 2000 tons of copper traded every m**o**nth, mentioned in this report are highly unlikely (or a typographic mistake) according to office bearers of industrial associations. This is more likely to be in the region of 200 tons.

While the V.P. Sinah Government changed the economic path the country was taking, this did not slow down the growth that Viswas Nager's industrial cluster was taking. In fact, it probably reinforced it. The stress on employment generation, indigenous industrialization via the SSI sector, and the liberal policies towards small firms in raw material and credit¹¹, all helped small firms to secure markets in metropolitan and smaller towns.

Copper wire rods being sold illegally

by smuggled copper wire rods which are being sold illegally to speculators and unscrupulous traders at Rs 15.20 per kg. cheaper than the legally imported rates.

traded in the Delhi markets every month since July-August this year, taking advantage of the fact that the conversion cost of enamcilled there are about 300 enamelled wire wire from copper has become a manufacturing and fabrication units boon to the duty evaders causing a in and around Delhi," alleged Mr O. P. Dhanuka, Secretary, Winding Wires Manufacturers' Association of India, while speaking to newsper- for more than one-third of the sons here today.

of the smuggled materials landing flooding the markets with substanup in the Delhi markets are coming dard materials.

CALCUTTA, Nov. 2 (HTC) from Bombay and are meant for Delhi markets have been invaded some 'faceless' importers based in Nepal. Painting out that Nepal has no need for such huge quantities of copper wire rods, Mr Dhanuka quoting wire industry sources, said that a few NRIs are behind this illegal business. However, there has On an average, 2,000 tonnes of been a slight downward trend in the smuggled copper wire rods are being inflow of smuggled copper wire rods in the last few weeks in Delhi.

The hike being almost equal to loss to the exchequer to the tune of Rs 60 crore.

These duty evaders accounting national annual production are Mr Dhanuka contended that most cheating the consumers also by

Figure 12: News report in the Hindustan Times. Nov 3. 1994.

Increased economic stability and access to new markets for small, medium and larger firms in Viswas Nager was also complemented by increased access to services and infrastructure through regularization programs -- an important pre and post election event. This also spurred the real estate market in neighborhoods like Viswas Nager. Land prices in Viswas Nager, among other neighborhoods, were on the rise again. As will be explained in greater detail in Chapter 4, some of these real estate surpluses found their way into production. The recognition of 'informal' activities by the Master Plan (under political pressure) had another positive impact: it reduced the threat of demolition, though land was still not directly available through the planning process.

¹¹ This credit was mostly accessible to the larger of the SSI firms, with very few of the smaller SSI firms getting access (less than 2% according to a Reserve Bank study (See Nayak Committee report), and almost no tiny firms.

The crises of electrical power: 1990-92

The V.P. Singh and Chandrashekhar governments did not last long due to extensive infighting within the Jantha Party, and new elections were announced. However, Rajiv Gandhi was assassinated while campaigning in South India. In May 1991, the Congress party was voted back to power with P.V. Narasimha Rao as the Prime Minister. Emphasizing the liberalization program, his new economic policies promoted foreign capital for direct investments in the corporate finance and manufacturing sector. As part of this, the share market got a substantial boost due to a variety of factors relating to taxation as well as manipulation by financial institutions leading to the well known scam. As part of the policy to make the SSI sector more competitive and to improve quality, investments limits for SSI sector were increased¹² and certain manufacturing areas were de-reserved. The consumer goods market rapidly increased. Due to the easy import policies, however, these products were often manufactured abroad with only fabrication or labels applied indigenously.

The increasing returns available in the share market attracted investments away from land development and production activities. Land prices in Delhi remained stagnant. Later in 1992 when the share market had reached un-precedented heights, it crashed, revealing extensive manipulation by financial institutions as well as major players. This created serious losses in investor circuits and consequently a shortage of "liquidity", in the market. Reinforced by a general recession in the economy, these slowed overall growth in manufacturing.

IMPACT ON VISWAS NAGER

Viswas Nager's industrial structure was, by this time, extensive and well

¹² These investment limits pertain to capital investments. The government defines small scale industries (SSIs) as those in which the capital investment is less than the set investment limit. SSIs gain concessions, and permission to manufacture products in certain notified product lines. During this period, investment limits was raised from Rs.35 lakhs to Rs. 60 lakhs. This brought in extensive protests from existing SSI firms who feared that large firms would sponsor subsidiaries to overtake markets. They also criticized that the reality of existing institutional finance not reaching most of the small firms was not being addressed. (See Nayak Committee report, Reserve Bank of India 1992).

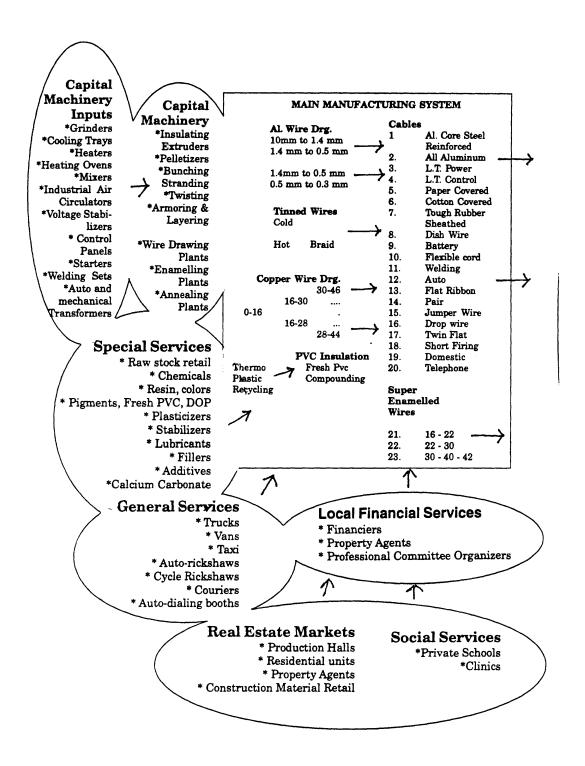


Figure 13: Neighborhood Economy 1990-91

established (Figure 13). This was not only in a wide array of industrial processes, but also in the local manufacture of capital machinery, and a sophisticated service sector. The service sector catered to both to the cable and conductor industry, and to residential demands. Since the local manufacture of capital machinery allowed firms to respond to new markets and innovate in production techniques, their owners gained respect and were considered as entrepreneurs in their own right, rather than only mechanics. Second, the diversity of repair and retail services increased employment opportunities for those who could not enter main stream production -- in large part due to the low entry costs associated with many of these services.

During this time, there were no significant developments in production, but a consolidation of existing production processes. One firm began to manufacture 'LT power and control cables' as an offshoot of 'AAC' manufacture. This process required substantial investment in land, power, and skilled supervision. However, the major factor to restrict the entry of more of Viswas Nager's firms into the this product line was the discrimination faced by them in the market as compared to corporate industry. Since this product is supplied to public sector agencies, their policy of inviting global tenders and increasing the size of bulk orders restricted the participation of firms in Viswas Nager.

Another reason for the lack of expansion into new lines was that Viswas Nager's industrial economy suffered a severe setback in the May of 1991. This was on several accounts:

First and foremost, the electricity department, The Delhi Electricity Supply Undertaking (DESU), carried out extensive raids in some of Delhi's industrialized neighborhoods, and in Viswas Nager in particular¹³. Power supply was disrupted and the Undertaking threatened to cut off connections to several factories in the neighborhood.

¹³ A 'raid' is a inspection without warning or legal notice carried out under public authority to investigate illegal activity. This can be undertaken by income tax **autho**rities, or as in this case, by the Electric Supply Undertaking to detect illegal connections or the misuse of legal connections. See Chapter 6 section D for details.

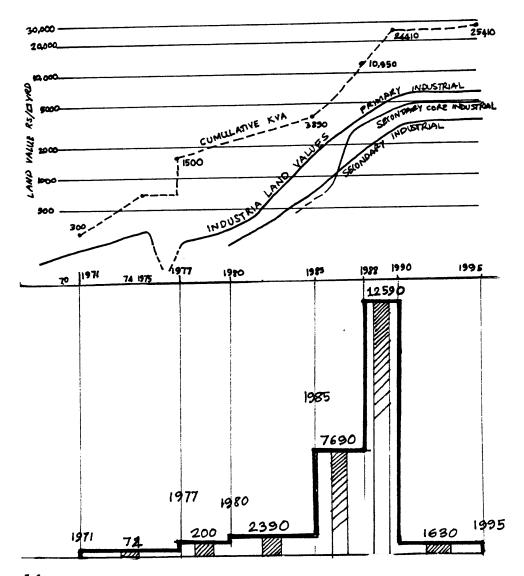
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Entrepreneurs, and their associations, demonstrated against these cuts, turning violent on one occasion. The DESU raids also created a climate of instability and insecurity in the neighborhood, bringing production to a standstill. To counter this situation through negotiations as well as to focus political pressure, the Shahdara Manufacturers Federation, a federation representing the eight industrial entrepreneurs' associations in the neighborhood, was formed. The federation made a proposal to the DESU and the Delhi Administration¹⁴. Under this, its members agreed to declare the actual electric power loads they utilized and pay the default charges in return for legal connections.

Unfortunately, negotiations stalled because the DESU wanted these to be paid retrospectively for the previous three years. Although these negotiations did not lead to specific actions, the raids did cease. Power supply, however, was still erratic. Access to electrical power, is still a key developmental issue at the local level. Figure 14 and 15 show the relative slow down in the increase in electrical power capacity of the transformers installed in Viswas Nager, especially as compared to the period between 1985 to 1990.

The lack of an elected government made it difficult for the administration to take policy decisions, as well as for the federations, associations and residents to represent their case to the administration. Complementing the severe power situation, was the slow down of the real estate market due to these local factors. Land prices were stagnant all over the city, especially so for industrial plots in Viswas Nager due to the insecurity there (See Fig.14). The scams in the share markets further deepened the crises by siphoning local capital away from production. As a result of this, entrepreneurs felt a severe shortage of working capital.

¹⁴ Details of this event are found in Chapter 6.



 $\textbf{Figure 14}: \textit{KVA. industrial land values 1971-95. Periodwise addition in KVA:} Total \textit{KVA} \div \textit{Nos of yrs in that Period.}$

The optimism of elections: 1993-94

Elections were held for the Delhi Legislative Assembly, and the BJP was voted in, with Madan Lal Khaurana as the Chief Minister. This was followed by the announcement of extensive regularization of un-authorized colonies, and the declaration of a Development Board for East Delhi. The ad-hoc licensing scheme for tiny industrial

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units, suspended till then, was renewed¹⁵ (See Chapter 6 Section C for details). Political instability due to insurgency movements in Assam and the North East drove entrepreneurs from there to Delhi, while the normalization of the political situation in Punjab attracted some entrepreneurs to return there.

IMPACT ON VISWAS NAGER

Elections to the legislative council, suspended since 1985, and announcement of the ad-hoc licensing scheme, made residents and entrepreneurs in Viswas Nager optimistic about resolving the electric power issue and about the faltering local economy. This was also reinforced by the announcement of regularization programs (especially relevant for the eastern part of the neighborhood, Viswas Nager Extension), and a licensing scheme for tiny firms. All these events boosted the local economy, and attracted new firms -- especially marwari entrepreneurs from the north east of the country moving away from the insurgency-hit areas there¹⁶. These new entrepreneurs either took on partnerships with locals, or opened sister firms.

Urban level conflicts: 1995

On the basis of two separate public interest litigations the Supreme Court of India passed orders to the Delhi Administration. The first directive prohibited the Administration to undertake any form of permanent improvement in 'unauthorized colonies¹⁷, areas -- in the provision of water, roads or electricity. The second, was a

 $^{^{15}}$ The 'Ad-hoc' licensing scheme is a license which allows a person to undertake manufacturing on land which otherwise is not designated for industrial use. Obtaining this license from the municipal authority, provides access to electrical power up to a specified KV load. The scheme is highly politicized, being initiated at the time of political expediency. For most entrepreneurs, this is one of the few ways to be legally recognized since almost all of them cannot afford the high prices in officially developed industrial estates in Delhi, nor survive the bureaucracy that goes with getting access to it.

 $^{^{16}}$ The <u>marwaris</u>, originating from Rajasthan, are a ethnic group traditionally involved in business structured by a closely knit ethnic ties. Having relatives in Shahdara and in many cases in Viswas Nagar, helped them to set up businesses here. Chapter 5 discuss these issues in greater detail.

¹⁷ Even though Viswas Nagar has been regularized in most parts, there vere still portions of the neighborhood which did not have all the services. For example, its' eastern most portion, New Viswas Nagar (or Viswas Nagar Extension) lacked sewage and a completed road system.

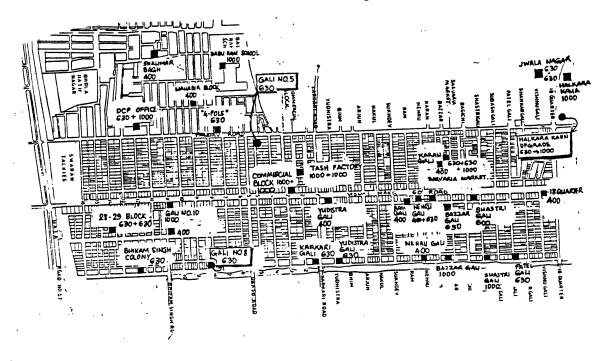


Figure 15: Electric transformers 1990-95

directive to the Administration to shift 9000 industrial units out of Delhi on grounds of pollution. Surrounding states, Harayana, Rajasthan, and Uttar Pradesh, eager to attract investments, announced schemes to attract the dislocated firms there.

At about the same time, the 'Vasant Committee Report' on large scale power theft was presented to Delhi Government. This commission recommended that the electric power rating of "non-conforming" uses in residential areas be regularized upto 2 KVA, irrespective of Master Plan recommendations, and the setting up of a Electricity Board similar to other those of state governments.

IMPACT ON VISWAS NAGER

The first directive on civic improvements, although a hurdle, was bypassed by elected representatives and administrators using legal technicalities. This was due to the extensive representations by residents of these slum areas -- comprising almost 70% of the city's population. The second directive, on shifting 8378 units, caused more serious concerns, since the DESU resorted to raids and cutting connections of the listed units

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without notice. The Supreme Court clarified that this action was illegal, but this resulted in a stalemate, since civic authorities were hesitant to undertake any improvement programs.

In Viswas Nager, 358 cable & conductors manufacturing units are notified by the $\sqrt{}$ order for shifting. Along with other associations and federations in the city, countercases were filed in the Supreme Court arguing about the methodology and criteria used to identify the erring firms. General insecurity prevailed in all industrial clusters, including Viswas Nager, affecting production (See text box 5).

While the Vasant Committee recommendation regarding the 2 KV connection was a positive event for residents undertaking simple manufacturing, many of the larger firms in the 'tiny' category, contemplated shifting out to neighboring states. Small firms were left in a serious situation due to the reduced work orders as well as power problems. The erratic power supply has forced a few entrepreneurs to install their own generators rather than to depend on DESU. Most could not do this due to the cost and lack of space. All these factors affected land prices of industrial properties in Viswas Nager. These have stabilized, with little hope of a rise in the near future.

This situation is serious because Viswas Nager, today, has developed into a neighborhood of a variety of inter-meshed land uses centered around its industrialized local economy. There are major and minor commercial spines, and industrial clusters with a variety of characteristics, each contributing to a variety of property markets. Some of these industrial markets spill over to adjacent neighborhoods like Mahavir Block of Bhola Nath Nager and Jwala Nager to the north, Bhikam Singh Colony to the south, and New Viswas Nager (or Viswas Nager Extension as it is also known locally) to the east. Complementing this are the variety of residential clusters catering to a variety of income groups in close physical proximity.

In the last months of 19**95** Viswas Nager is witnessing yet another economic transformation -- again centered around its real estate. With the break up of the USSR,

India and Delhi in particular is visited by increasing number of East-European tourists coming to purchase garments to be then retailed in their home towns. The largest wholesale Indian market for garments is Gandhi Nager, located just 4 km away on the western part of Shahdara. So intensive is this trade that many shopkeepers have employed unemployed (and normally broke) graduate students of Russian studies at high salaries to negotiate deals and help in translation and the tough bargaining that is characteristic of the garment business.

Space is a big issue, since garments are bulky. For the East Europeans (said to 2° financed in part by the

Shastri Gali is quiet. Its workers are all out, some crowd the front door step. Their factories are dark inside. For the last three days, electric power has been on an intermittent supply, bringing production to a virtual standstill. Yesterday it came at three in the morning, with entrepreneurs and workers pitching in a night shift the second time in a row. Today, its already noon and there is no sign of it.

The residents are also irritated. No power and they openly blame the factory owners. One argues that they broke the convention of not running the machines at night, while the entrepreneurs huff that with the erratic supply, there was little choice. And after all, the residents too have benefitted from the factories being there -- the rents are higher, their sons are employed and when power was failed, the entrepreneurs did all the running around and paid the bribes. Another group of entrepreneurs are irritated that one of the politicians, himself an entrepreneur, lead a delegation of residents to the administration. All this would only divide them.

One firm, deep inside the inner lanes, still operates. This one makes industrial ovens for the plastic extruders. He claims to be the best in Shahdara with a long list of references. Using more labor intensive techniques, he can adjust his work schedules around the erratic power. However, he too is uncertain how long his job orders are going to continue with this industrial slow down. His neighbor is already in the thick like the rest. For this factory making PVC insulation, a power cut of more than half an hour, means a 10-15% wastage of the PVC. The extruders also need reheating and the extruder head re-cleaning - another forty five minutes. With the current competition, it takes 8 hours of machine running time just to cover capital investments and labor costs. All this when the heavy credit flows required in this line are killing him.

Down Viswas Marg, in the western part of the neighborhood, a small group of entrepreneurs from all over Viswas Nagar and some surrounding clusters meet for a emergency meeting in the federation office. Here, behind the aluminum frames and tinted glass window, they sit in a circle with one of the local politicians as chair. The despair has let to anger, frustration and suggestions of another demonstration like the one in 1991 when it all first started. Another suggests political action. Finally one experienced entrepreneur explains that with the Supreme Court involved, demonstrations are of no use, and will only attract police action. The politicians too cannot do much, and afraid to speak openly as this might amount to contempt of court. He introduces an office bearer of an industrial association from another industrial cluster facing similar condition. This speaker suggests a larger group action involving other federations in Delhi. Next day, in a meeting of representatives from several industrial clusters in Shahdara, it is decided to contact a famous lawyer and MP based in Calcutta -- known for his oratory powers, and well bred in a cause of employment. It just might end up being a long legal battle.

5 Streets of Despair: Viswas Nagar February 1995

Chapter 3: The evolution of diversified local economy

Russian Mafia), the basements of most five star hotels are valuable assets. In these dark interiors, instead of cars, space is blocked off to house bales of clothes wrapped in jute sewn together hurriedly. For the traders, other issues are even more critical. For one, the cloth arriving in truckloads from garment factories throughout the neighboring states of Punjab and Harayana, has to be stored. Many of these garments are 'seconds' and need on-the-spot mending to rectify or hide defects. Gandhi Nager, like any other wholesale market is tightly packed with narrow streets reflecting in many ways Shahjahanabad. Shops use every square inch due to the high cost of land. Thus, as business has picked up, as the Russians get more selective and professional in specifying what sells well in their own market niches back home, the shopkeepers and their graduate student partners need to be specialized in the goods they deal with, and also have access to a variety of garments at short notice. Instead of keeping their bulky inventory on high value land, they have sought out storage space in surrounding neighborhoods which can be accessed by phones, and a rickshaw ride to get the particular type of garment at short notice. These locations also house the tailors who manually or on simple machines do the mending.

Viswas Nager forms a prime location for this decentralized storage and minor mending work. This is due to a variety of factors: Its relatively easy access, its wider internal streets, extensive access to basic electrical power, and perhaps most important a local resident populations who are familiar in dealing renting out property for industrial use. Thus, while the cable and conductor industry stagnates in this neighborhood, a new one is being born. This one though, is very different. Its markets are export-linked, and with that also comes the fluctuations in prices, susceptibility to global political issues where local politics has little impact, and finally, a marketing system which, unlike the cable and conductor industry, is highly centralized.

Some entrepreneurs claim that with this stagnation skilled workers are moving out of the neighborhood. The new ones coming in lack the skills and if the economy does not pick up, the learning will be very slow. Second, all this means that the intensity of linkages between firms here might never be the same again. Finally, the

political clout that Viswas Nager enjoyed might also change: With the key entrepreneurs moving away, its economic base is transforming if not withering. With civic development restricted to an extent by one of the two Supreme Court orders, its industrial structure clipped in its wing by the other, its real estate surpluses being invested in distant markets, Viswas Nager might become a Mafia area with a drug economy on the forefront. Other entrepreneurs, although very much in the minority, see this as a time to get access to plots when prices are stagnant. They are more optimistic, relying on its past reputation as an industrial cluster of repute.

In this chapter, we have seen the evolution of the production system in Viswas Nager from the early seventies to the present period. In addition to technological factors specific to the product manufactured, technological change has been influenced by both local and larger level social and political events. However, to understand this more completely, one needs to get a more detailed sense of the mechanics of civic development, and of land development in particular. Viswas Nager has also evolved a diversified land market thorough a process of 'incremental land development'. The next chapter is significant because incremental land development paralleled the diversification of manufacturing that we saw in this chapter.

CHAPTER 4: THE EVOLUTION OF DIFFERENTIATED LAND MARKETS

This chapter attempts to address the issue of the <u>'setting'</u> of firms as it affects the neighborhood economy. The previous chapter has shown the complicated history of Viswas Nager's economy as it was influenced by both national and local events. While such influences are highly contextual, Chapter 3 also suggested three interesting generalizable issues: First, Viswas Nager's local economy is characterized by a growing diversity of economic processes, most of which are inter-connected very closely; Second is that these firms have varying plot sizes, and needs for infrastructure especially electricity connections; Finally, that land and infrastructure related investments are quite substantial, often more than half of the total investments needed for small firms. These three observations suggest that the setting of the firm not only plays an important part, but that its differentiated quality has a bearing on the process of diversification.

This chapter is in two parts. The first discusses the evolution of land markets in Viswas Nager. The second proposes a conceptual model to see the relations between the diversification of the neighborhood economy and the differentiated land markets here. This issue is illustrated by a case of the manufacture of Dish Wires, one of the 21 kinds of cable manufactured in Viswas Nager (See item 24 in Figure 1, chapter 1).

SECTION A: INDUSTRIAL CLUSTERS AND THE UN-AUTHORIZED LAND MARKETS OF DELHI

To understand the evolution of land markets in Viswas Nager, it is first useful to get a sense of the process of land development in un-authorized colonies where most of such industrial clusters evolve.

WEST & SOUTH DELHI

URBAN VILLAGES:

1) Basai Darapur Electrical fans/motors 2) Basti Shalimar Paints/Plastics

3) Haderpur Electrical Fans & Motors

4) Garhi Peeran **Plastics**

Wood & Sanitary Goods 5) Dhirpur 6) Wazirpur Metal/Auto Parts Wood/ Plastics 7) Khayala 8) Ram Pura **Plastics**

9) Chirag Delhi Garments 10) Samaypur **Plastics** 11) Badli Plastics/Metal 12) Naraina Plastics/PVC 13) Shaizadabad Garments 14) Zamridpur Garments

PRIVATE SUB-DIVISIONS (Un-Authorized

Colonies)

15) Shakur Basti Metal/Plastics

16) Raja Park Auto parts/ Plastics/ Metal 17) Rani Bagh Auto Parts/ Plastics/ Metal

18) Tulsi Nagar Tin work & Metal 19) Inderlok Tin work/Metal 20) Vishnu Garden & Ext. Wood/ Metal 21) Ravi Nagar & Ext. Wood & Metal 22) Hari Nagar Lights & Auto parts 23) Narsingh Garden Metal Castings

24) Sant Nagar Metal Castings 25) Jawala Puri Plastics Recycling 26) Tri Nagar PVC/Plastics

27) Shastri Nagar Wood/ Paper/ Plastics

28) Manohar Park Plastics 29) Daya Basti Metal/ Plastics 30) Subash Nagar Metal/Plastics 31) Ram Garh Metal/ Plastics

32) Sudarshan Park Incandecent Lamps & Rubber Plastics/ Wood/ General 33) Kriti Nagar

Other (Industrial Estates, Refugee Rehabilitation, Re-settlement Colonies, EWS Housing)

34) Mayapuri Plastics/ Metal/ Building Materials

35) Kirti Nagar Plastics/Metal 36) G.T. Karnal Rd. General

37) Wazirpur Inds. Area Stainless Steel & Plastics

38) Najafgarh Rd. Inds. Area General 39) Rothak Rd Inds. Area General 40) Mangolpuri Inds. Area General 41) Badli Inds. Area General 42) G.T. Road Inds. Area General 43) Narela Inds. Area General 44) Lawrence Rd. Ind.Area Plastics. Metal 45) Anand Parbhat Auto. Parts, Metal

Castings, Plastics.

46) Okhala Ind. Area (Ph.I,II,III) General

47) Nariana Ind. Area General 48) Tilak Nagar General

49) D.C.M. General 50) Udyog Nagar (I & II) General 51) Moti Nagar General 42) Transport Nagar Transport & General

EAST DELHI

URBAN VILLAGE

1) Patparganj Packaging/ Plastics/Metal 2) Jheel **Auto-Scooter Parts** 3) Babarpur Cable/conductor, castings 4) Khuriji Printing, Auto-parts, Wood, Plastics

PRIVATE SUB-DIVISIONS (Unauthorized Colonies)

5) Viswas Nagar Cable & Conductors, PVC Pipes

6) Ram Nagar Cable & Electrical Parts, Plastic

7) Gandhi Nagar Ready made garments 8) Jheel Scooter Parts

9) Krishna Nagar Printing, Paper, Garments

10) Navin Shahdara

mechanical, plastics. 11) Friends Colony Cable, Conductors,

Castings 12) G.T. Road General, Rolling Mills,

castings

13) Chandar Nagar Plastics, Printing

14) Shiv-Puri Laminate 15) Dilshad Garden Cables &

Conductors, Electrical,

Electrical,

Plastics

16) Babar-pur Cables.

Conductors, Plastics 17) Loni Rd. Cables, Castings,

conductors.

OTHER (Resettlement, Refugee, Industrial Estates etc.)

18) Seelampur Cable stripping & Recycling

19) Nandnagri Plastics & General

20) Jhilmil Ind. Est. General, Rolling

Mills

21) Patpargunj Ind. Est. General.

Figure 1: Industrial clusters and neighborhood types

The location of firms in Delhi Most industrial clusters in Delhi evolve in privately sub-divided land popularly called 'un-authorized colonies' (see Fig. 1). Since almost all entrepreneurs belong to the middle and lower income groups, they find plots in industrial estates unaffordable, and inconvenient to consolidate their business (See Annex 4a). Most important, the pattern of development in industrial estates is 'one-shot,' where the in-coming entrepreneurs are expected to develop all of the plot at one time, and pay for the access to the highest level of infrastructure in the beginning itself. This pushes out almost all small entrepreneurs who cannot afford this way of starting their business, especially when they are still testing out markets. This makes un-authorized colonies with their possibility to stage physical development in relation to the process of economic consolidation very attractive.

Apart from un-authorized colonies, there are two other land sub-systems: Urban Villages and the walled city of Delhi², which house industrial clusters in varying degrees. These three sub-systems share the common advantage of flexibility in land use, possibility of incremental growth, as well as loose building and bylaws and enforcement of land-use regulations³. Interestingly, together with unauthorized colonies, these three types of neighborhoods are also important residential areas housing almost half of the city's population⁴. Thus, industrial activity happens in

¹ Out of the 97,000 (or 300,000 according to the DESU) industrial units in the capital in 1994, only 11,500 industrial units locate in publicly built industrial estates. Furthermore, of the total number of firms, including those in the industrial estates, only 32,000 of these have municipal licenses. (Central Pollution Control Board in CSE 1994)

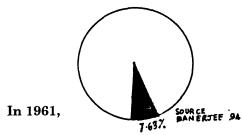
 $^{^2}$ By 'sub-system', I refer to a particular process of land development and settlement involving a particular social groups. Annex "4 b" provides additional details of sub-systems in general, and for a description of the various housing and neighborhood typologies in Delhi, see Bharati 1986; Segal 1987-88.

³ These is due to important political aspects. Chapter 6 explores these in detail.

⁴ Presentation by R.G. Gupta, Director Planning DDA on 'Built Form & Environment', held at School of Planning & Architecture May 12th 1992. Gupta presented the following break-up of population in Delhi: 75% of capital's 8.5 million population in 1992 lived in 'sub-standard' areas: 1.2 million in shanty structures, 1.8 million in 'slum' designated areas, 0.5 million in urban villages, 1.2 million in re-settlement colonies; 1.2 million in un-authorized regularized colonies and 0.5 million in un-authorized colonies. Official DDA figures for 1986 were 1.2 million in un-authorized colonies (Banerjee 1994: Table 1). These figures usually relate to residents holding 'ration' cards. Thus, it is almost certain that they miss out large numbers of residents in more recently formed neighborhoods who usually do not have ration cards, or those with central city addresses. Another important population group missed out are rental populations, which make up a substantial part of residents

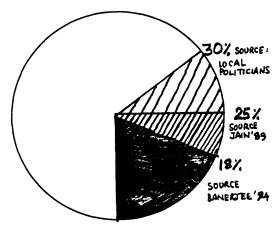
close physical proximity to commercial and residential use.

The evolutionary process of unauthorized colonies: Unauthorized colonies are private subdivisions of agricultural land for urban residential purposes, located usually in the periphery or the outer limits. Agricultural land is sub-divided by a colonizer (or developer) into medium to large sized plots of 100 to 200 sq.yds in a rectilinear way and sold to prospective residents at rockbottom prices. Roads and other infrastructure are minimum. Over time, those are improved through the efforts of residents who undertake basic upgrading and later by the local government to extend civic services. This highly politicized process is described in detail in Chapter 6.



Total no. of households in Delhi: 576,000.

Total no. of households in un-authorized colonies: 44,000 (7.63)



In 1991, Total no. of households in Delhi: 1,600,000 (100%) (Banerjee 1994:5)

Total no. of households in un-authorized colonies: 300,000 (18.75%).

Figure 2: The growth of un-authorized colonies in Delhi. (Source: See footnote 4 this text)

in more consolidated neighborhoods. It is very likely that with Delhi's population being about 8.5 million in 1992, the population of residents in both regularized and unregularized unauthorized colonies, was about 2 million or about 23% of the capital's population. Since their increase in numbers as well as populations housed here has been consistently high, it is very likely that by 1995, between 25-30% of the capitals population live in these areas. Jain (1989), Jt.Director Planning DDA, reports that in 1988 itself the 900 odd un-authorized all together housed a fourth of Delhi's population. Of these 900, 600 at that time were under regularization. Local politicians claim that there are more than 1200 un-authorized colonies which house more than a third of the city's population.

Un-authorized colonies, is a very common way neighborhoods come about in almost all Indian cities. In Delhi, there are no exact figures about how many there are. DDA officials estimate that Delhi has about 900 to a 1000 such neighborhoods which are in various stages of being regularized (ibid). This does not include those neighborhoods which are still in the initial stages of settlement with almost no recognition. There can be many such cases since the formative process of unauthorized colonies is one of sub-dividing rural land, getting it legalized, and over time, incorporated within urban limits. Even so, the little documentation that there is strongly suggests that their evolution in Delhi has been dramatic since the Fifties. Many reasons have been attributed to this growth, ranging from the shortage of serviced land, and lack of choice in the legal land and housing market, the lack of affordable of legal housing options, the policy for large scale land acquisition⁵. I briefly discuss the more technical reasons as to what is it that makes them 'unauthorized'. Chapter 6 focuses on their political aspects which overshadow these technical ones.

The 'un-authorized' status of these neighborhoods essentially relates to the fact that private sub-division and sale of land is not allowed in Delhi on the basis of the 1972 Delhi Land Restriction on Transfer Act. According to this act, intended for the large scale acquisition of land under the Master Plan, the transaction between the land developer and the settlers is considered illegal. This, however, continues via several loop-holes in the legal system⁶. By default, no official sanction is sought prior to the sub-division process. Being illegal and the lack of official sanction means that

⁵ For other reasons, see Majumdar 1983; DDA 1985; World Bank 1985; Buch 1984. M.N. Buch, an ex-vice chairman of the DDA (as its CEO) blames the large scale land acquisition policy of the DDA for the rapid spread of un-authorized colonies in the capital.

⁶ Initially, one common practice was to transfer land on the basis of a 'Power of Attorney'. After the 1972 Act, this changed to 'gifting' land. Today, a power of attorney or gifting is registered in the neighboring states of Haryana and Rajesthan, operating as a well oiled system: A person wanting to register a sale deed has to pay a fixed charge which includes travelling by taxi to a town there, lunch, and a crate of beer thrown in (The last is due to the lower taxes on liquor in Haryana). To make the system more **t**ight, un-authorized construction was declared as a cognizable offence in 1986, by the famous 'black laws', resulting in harassment of poor and middle class families by the police.

these subdivisions invariably contradict Master Plan land use zoning, and building regulations⁷. Some of these sub-divisions may be on agricultural land on the urban fringe and under acquisition by the Delhi Administration (for development by the DDA), or adjacent to urban villages in more central city locations⁸. Even if they are illegal and outside the planning process, about 1200 of these neighborhoods are in various stages of legalization under political pressures from the large sections of society that live and work here. This process, called 'regularization', is explained in its technical aspects in Annex 4C and in its political aspects in Chapter 6.

There are two sets of reasons as to why industrial clusters tend to evolve here. The first relates to the nature of development possible within these neighborhoods. Out of the three sub-systems where industrial clusters evolve, un-authorized colonies have a distinct advantage over the others in having wider roads and larger plot sizes. These relatively large plots allow future growth by rooms being built in an incremental way over time. Even if infrastructure levels are initially low or even lacking, they too can be upgraded this way. This leniency in regulations combined with possibilities for future growth, have two implications. First, the internal development of the plot can **flexibly** respond not only to the situation of the owner, but to what is happening in the immediate neighborhood, in the larger neighborhood district, or even larger level influences. The other is that one plot **is relatively independent** of the development of its adjoining one, although they both might share common characteristics⁹.

⁷ The latter happens though, because in most cases, the master plan is framed many years after the settlement has already happened. However, since these are illegal, they do not exist on paper -- assumed to be all demolished to make way for planned development. However, by the time the Master Plan does plan out land use and circulation routing, these are already settled. With this starts conflict since the master plan designates roads to go though these neighborhoods, and allocates land already settled to other groups (most often higher income groups). Chapter 6 discusses these issues in greater detail.

⁸ In the latter, these legal case is complicated because the land could also be notified for acquisition. In fact, many un-authorized colonies are formed in response to notices for public acquisition, since the market value of sub-divided land is higher than the compensation given by the DDA (DDA:12-15).

⁹ This situation contrasts with public housing or industrial estates where each plot, even if independently bounded has to have its development follow prescribed norms of set-backs, density, land use etc. In the industrial estates, the homogenous and large sizes of plots with access to a uniform high level of infrastructure pushes up initial costs to be very high and is too restrictive for small entrepreneurs.

The ability of residents in un-authorized colonies to subdivide their plots, add industrial or commercial uses, to build rooms for rentals, all together helps entrepreneurs to spread their investments over time -- as production takes hold and markets are developed. This, in effect, reduces starting costs, especially important since most entrepreneurs go through a long period of 'testing' out markets, and product lines before specializing. The other advantage due to the flexibility of land use changes is that most entrepreneurs can live in close proximity to their factory -- either in the same neighborhood or, even start their enterprise within their residence. This helps them to keep close control over manufacturing as well as seek help from family members in the management of the firm. One person firms are in reality, one family firms. A vignette of a typical un-authorized colony below, just starting to evolve industrial uses, roots this economy, as part of daily life:

Small Firm Landscape

Delhi, its economy and culture, for most part is one of small firms and neighborhoods. The one pictured here, is an unauthorized colony, ten years after it first began as half settled plots and rough roads on the outskirts of the city. Ten years is not a long time. Even now many of the internal streets still remain the same. Now however, many of the residents here have become entrepreneurs. Others have rented/sold space to entrepreneurs moving in. Often ex-foremen, these entrepreneurs seek neighborhoods like this one for their low land prices to start their own workshops, and if possible, a place to live close by.

Location drives it all, whether a small corner on what has now developed as the main street, or what still remains as a large plot deep in the interior. The street junction on the main street has become useful to the fabricating shop. More specifically, the wide pavements here are used for welding steel frames into staircases, or for banging together steel sheets to form gleaming water storage tanks. In a side street, a mechanic taps the electricity available to run his drill and fix the windings on the burnt motors around him.

Other entrepreneurs are deep inside the neighborhood. The large plot here is cheaper to rent or buy. The road to it though, is more pot holes than track. Here, one factory quietly weaves 150 feet long GI wire strands into a fine mesh used as

mosquito proof netting. Eight weavers, originally from eastern Uttar Pradesh (known for its weaving skills), sit in shallow pits at one end below their wooden looms. Each of them has a assistant who walks along the strands to mend any breaks and untangle knots. The machine is totally mechanical and locally made. The plot is a large one – 250 square yards – but with no electricity connection. In the corner however, is a pump to draw out water and on the other end some roughly assembled toilets.

Situated next to this factory are houses belonging to workers. They, however, find employment in the walled city connected by a 45 minute bus ride. Further in the interior, is another factory. This one makes water proof canvas. Thick cotton cloth, procured from the wholesale markets of the walled city, is dipped in a steaming tack paste to water proof it. The lack of electric power is made up by a coal furnace heating the liquid to a foaming broth. The entrepreneur claims this is a secret process, with a unique formula for the mixture. The factory's distant location deep inside this neighborhood, and his relatives as the skilled workers, helps to keep it all within the family, and the competition to the minimum. His large plot allows the coated fabric to be washed, sun dried, and rolled into bales. These bales are loaded onto a modified cycle rickshaw and transported to the walled city from where it goes to hundreds of small factories all over the capital. Some of these firms cluster in the tiny rooms of public mass housing projects. Here, again helped by family members, relatives, and some hired help, these firms stitch the canvas into bags for school children, travellers, sales agents, and house bedding rolls used on long distance train journeys.

Many of these products, brought to life in the rudimentary environment of un-authorized colonies, find their way into markets of the hundreds of towns and cities in North India. Some in contrast, respond to local demands, often within the same neighborhood. The freshly painted staircase fabricated on the street junction of this neighborhood, for instance, will be used to access new rooms added on roofs of homes here. The rooms are valuable rentals or for children growing up. Similarly, the locally made water storage tanks helps to prepare for the hot summer ahead. The mechanic repairs pumps that are sold to the shop supplying second-hand evaporative coolers commonly used by residents here. Delhi may be a city of small firms and roughly hewn neighborhoods, but their economic relationships continue to spread far and wide.

With this general description of un-authorized colonies, I now turn to Viswas Nager's land and property market.

SECTION B: THE LAND AND PROPERTY MARKETS OF VISWAS Nager

The economic history of Viswas Nager is one not only of industrial transformation but also of transforming land markets. When Sarvaria, the promoter of Viswas Nager in 1935 had initiated its development, land was probably very rural in nature -- undistinguishable from the surrounding countryside. With time, these plots were settled in. Till the early seventies, Viswas Nager was still mostly residential, on self occupied plots. It was only in the late seventies to early eighties that industrial uses evolved -- again mostly on self-occupied plots. By the middle to late eighties, these had not only consolidated but developed an extensive rental market.

Thus, the transformation of land use, as well as from self-occupation to rental accommodation, has occurred gradually, but also in the way they have accommodated non-residential uses. To understand this transformation, I make use of land value charts. These however, need some prior discussion for us to be accurate in their interpretation. Location is a key factor in the growth of land values in any land market. Until now, this relationship has largely been seen in a much broader urban perspective (Mohan 1980, 1996; Durand Lasserve 1983). In this research, I take a much more local perspective to find that land values in Viswas Nager, while being affected by urban factors no doubt, are strongly affected by the neighborhood's own development, its economy, and its differing characteristics at the micro-scale. This happens at two levels:

At one level, land values can be understood in terms of the location of a plot assimilating its physical attributes (for instance, low lying land, etc), its access to surrounding areas (for instance, access to the main road), and its level of public services (such as, electricity, water supply, sewerage, and telephone connections). The accompanying diagrams of land values, thus, reflect all these factors. In this logic, commercial and industrial uses evolving here influence land values

positively. While this correlation between land value increases and the type of use put to a structure is a complicated one and often debated on the issue of speculation, it is generally true in this case that land values do tell a lot about what is happening on the ground, as well as in the local economy. Also documenting these values is important because they seriously influence the economics of production.

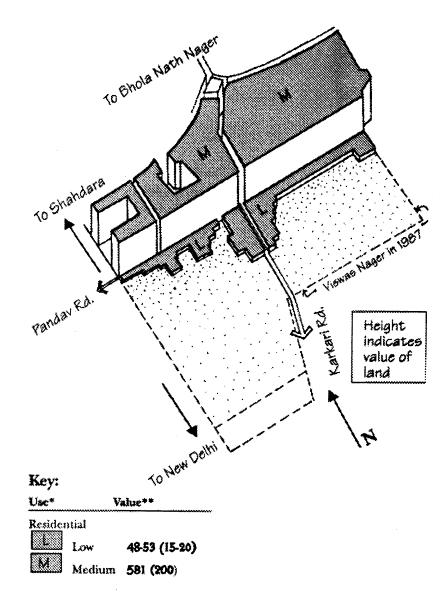
ii) However, there is an important systemic aspect to it. Chapter 2 and 3 have shown that the local economy of Viswas Nager is centered around inter-connections between firms promoting a density of economic linkages. This implies that the location of a plot of land also assimilates its access to economic linkages, reflected in the proximity both spatially and functionally of the firm here to others clustering. This means that the evolution of the land markets in Viswas Nager is not only in response to larger urban level economic forces, but also to the neighborhood as an economic cluster. This relationship however, is a complex one due to two factors. First, just as land values reflect the density of economic linkages, the converse is also true. Second, as chapter 6 will discuss in detail, the development of land is a highly politicized process in access to infrastructure and legalization, influenced by the organization of local groups.

Thus, the growth of land values over time reflects a complex set of forces. While these complexities make detailed correlations difficult, the evolution of land values also, by the same definition, provides us with a useful analytical tool to develop a working sense of how the local economy functions. With this brief discussion on land values and the local economy, I now turn to the way the land market of Viswas Nager has transformed into various property markets. I place this discussion in the context of the growing diversity and inter-connections between firms as discussed earlier in Chapter 3.

Chapter 4: The evolution of differentiated land markets

1965-70s: Staking Claims and initial settlement

For many years, Viswas Nager and the other unauthorized colonies in East Delhi developed primarily as residential areas for Delhi's lowerincome inhabitants. In 1965 (Fig.3), most of the residents were employed in the Old City 'Shahjahanabad' on the west side of the river. Viswas Nager probably looked like what most unauthorized colonies in their initial stages of development look like: A vast landscape of plinths, some with rooms set amidst vegetable gardens, but most bare and wind swept. For the incoming settlers, the main advantage was the large



- Predominant land use in area
- ** In Rupees per sq. yd., 1980 Rupees. Unindexed Rupees in parentheses.

Figure 3: Land uses and values 1965

plots available at low prices. The difficulties were the low levels of infrastructure and difficulties in access to these areas. The latter however, was a powerful incentive, knowing from the experience of others that if they could somehow rough it out, their neighborhood too would develop over time. In this early period, most homes comprise only a couple of rooms, while surplus land was used for cultivating vegetables. Some

fronting Pandav Road were more built up. While exact 1965 data on land values in Viswas Nager is not available, based on experience in other unauthorized colonies, it appears that apart from the immediate row of plots adjoining Pandav Road, the property values south of it are low and generally consistent from block to block. Properties on Pandav Road are higher and even higher towards the north due to the proximity to Shahdara.

The main reason for the low values south of Pandav Road is that the area is naturally low in elevation and prone to flooding. In addition, the area has very few public services: brackish water out of hand pumps only useful for bathing, and dirt roads. The only access to the central city, the Shahdara Bridge, is 4 km (approximately 2.3 miles) away. These conditions make the area an unattractive settlement option for middle- and higher-income groups in days when the roads were not well made. However, Viswas Nager's large 200 sq.yds plots in a rectilinear layout contrast to the main Shahdara town where streets are narrower and uneven.

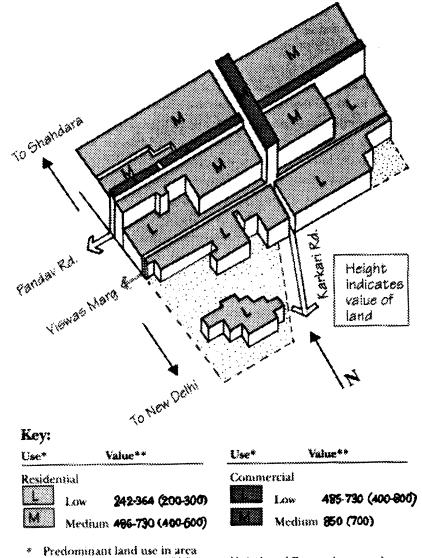
In the early 1970's, however, the demand for middle-income housing grew, and a medium-value residential area was developed between Pandav Road and Viswas Marg, complementing the existing low-income land market south of the latter (Fig.3). The location of the new residential development is most likely linked to the improvement of Karkari Road by the Delhi Municipal Corporation and the supply of drinking water -- first by animal drawn carriers and later by pipe-line. All this also attracted some renters from the neighborhood of Bhola Nath Nager in the north.

1970-75: Settlement and the Emergency By the early to mid-seventies, there are three notable changes. First is the extension of piped water to more blocks within the neighborhood. Second is the evolution of a new low-value residential neighborhood in the flood-prone, southern portion of the colony. Thirdly, the emergence of two commercial areas. The primary commercial area (medium value) develops along Karkari **Ro**ad due to continued expansion from the north, and the secondary area (low value), which intersects the first, is located along Pandav Road

Chapter 4: The evolution of differentiated land markets

(See Fig.4). By 1975, much of the basic physical occupation of the colony has taken place. The majority of the structures are one and half stories in height.

During the Emergency, between 1975 to 1977, however, vast areas of lowincome housing all over Delhi were demolished. Land values fell all over the city due to the generally insecurity during these one and half years. This is felt explicitly in the southwestern low lying part of Viswas Nager, where the newly developed housing areas are



** In Rupees per sq. vd., 1980 Rupees, Unindexed Rupees in parentheses.

Figure 4: Land Uses and Land Values up to 1975

threatened with demolition (See Chapter 6, Case Study of Blocks 28-29).

Evolution of manufacturing uses: As mentioned before, Shahdara had a well developed printing industry by the early to mid-seventies, and a few of these firms located in Viswas Nager close by on cheaper land. There are very few electric power based factories. These are clustered in the 'Commercial Block' around the middle

portion of Pandav Road since this is also where the only 300 KVA transformer is located. All together, these industries are probably too few to make any significant difference on property values.

1982-1984: The beginnings of an Industrial Cluster

This period is characterized by the expansion and differentiation of the residential and commercial land markets. A major event for the entire neighborhood, in the late seventies, is the construction of a proper bridge in the southwestern corner of

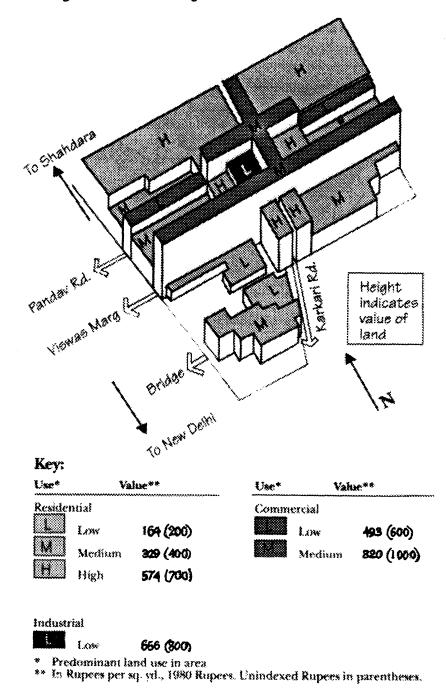


Figure 5: Land uses and Values up to 1982

improving access to Old

Viswas Nager,

Delhi and Shahdara. This opens up more land for settlement across a low-lying area and spure a further influx of low-income and middle income residents to the southwestern corner of the colony. There are also other property markets developing

Chapter 4: The evolution of differentiated land markets

both for middle and especially low income groups. With increasing security of tenure, Viswas Nager attracts middle income and some high income groups. The latter settled in a high-value residential area at the intersection of Viswas Marg and Karkari Road, because the area was legalized and offered good public services. The southwestern area of the neighborhood continued to develop and attract the former.

Initially, immediately after the emergency in 1978, it attracted squatters, who perceived that the populist government would be lenient with them. Later, it also attracted low-income

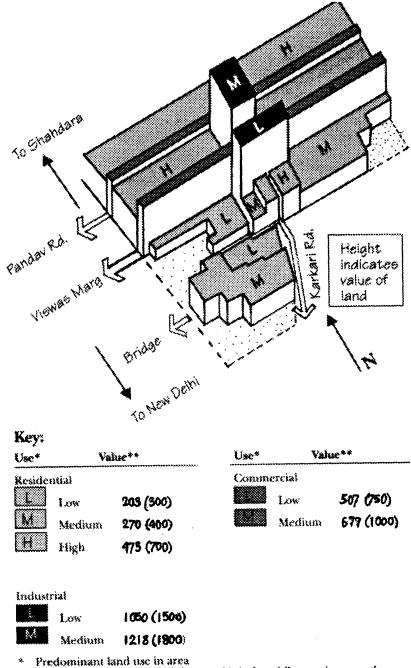


Figure 6: Land uses and Values up to 1984

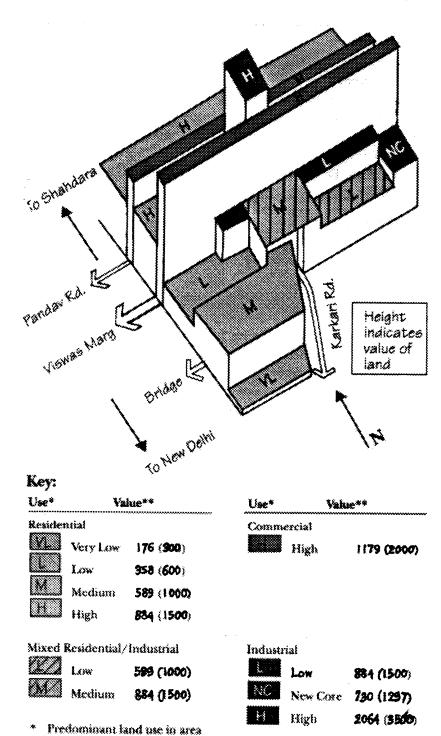
residents as the area was improved. The poorer ones seeking out affordable places to settle, were prepared to undertake the labor of improving the flood prone land on the

In Rupees per sq. yd., 1980 Rupees. Unindexed Rupces in parentheses.

southern part of the road. Thus the land in the vicinity of the new bridge develops into a medium-value residential area.

During this same period, residential land values dropped slightly or are stable in real terms for properties north of Pandav Road and between Pandav Road and Viswas Marg. This may be due to the extensive building, as well as the opening up of new areas further south around the entire stretch of Viswas Marg.

By 1984, the low-value commercial properties along Pandav Road and the medium-value commercial properties on Viswas Marg were priced only marginally higher than the residential



** In Rupees per sq. yd., 1980 Rupees. Unindexed Rupees in parentheses.

Figure 7: Land uses and Values up to 1986

properties located between them (Fig. 5-6). This is because commercial space is obtained easily, usually by converting the front room of a residence. The stability of commercial values from 1982 to 1984 is probably due to the high rate of conversion to commercial uses compared to the relatively stable rate of population growth.

As mentioned previously in Chapter 3 with a change of the government in 1978, the government initiated extensive legalization of neighborhoods like Viswas Nager, explicit recognition of small industries, and perhaps most important, extensive electrification. Thus, home-based manufacturing spread in Viswas Nager centered around cable and conductor manufacturing. This is especially in a core area north of Viwas Marg along the Karkari road (Fig.4). The property market responded to all these changes including the increasing numbers of industries and generally reflected in the land values as discussed below.

The increasing impact of industrial use: Another influence on land values came most probably from the effects of industrial clustering in the commercial block and the junction of Karkari Road and Viswas Marg. Thus, in 1982, property values in the industrial area were higher than the highest-valued residential land but lower than the most expensive commercial land in the colony. By 1984, however, they started to rise rapidly especially due to the effects of clustering as well as the setting up of the Jhilmil Industrial area in Shahdara in the mid-seventies.

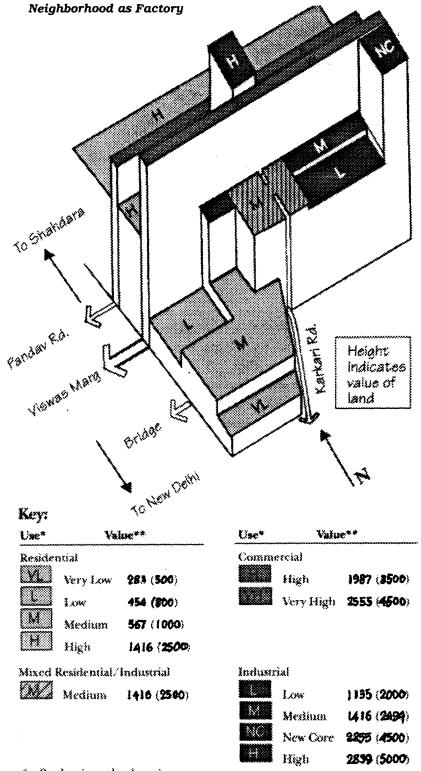
This was a major event, opening up opportunities for subcontracting to home-based factories in Viswas Nager. The government-sponsored factories in this industrial estate produced thick copper wire from ingots, and helped to increase the supply of the important raw material. Until this time, copper wire was mostly procured from the nearby but smaller industrial cluster of Friends Colony.

Most of the small factories in Viswas Nager operate on the domestic electricity provided to the colony **b**y public authorities -- reflected in three new transformers set up here (see fig 8 in Chapter 3). The higher property values (labelled "medium") in the

also reflect the
availability of threephase (heavy-duty)
electric service to the
firms located there.
Over time, this first
industrial area becomes
the primary production
area of the colony,
known as the "Market".

1987: Impacts of an increasing consolidation as an industrial cluster

From 1984 to
1987, Viswas Nager was
characterized by
increasing
industrialization. This is
perhaps most explicitly
reflected in the increase
in the numbers of
electricity transformers.
If Viswas Nager had
only residential use, it
would at this time have
had only between 12001500 KVA. Instead,
between 1980-85, the



Predominant land use in area

Figure 8: Land uses and Values up to 1987

⁶³ In Ropecs per sq. yd., 1980 Ropecs. Unindexed Ropecs in parentheses.

three existing transformers were upgraded, and four new ones were installed pushing up the power availability to 5290 KVA (See fig. 11 in Chapter 3). By 1987 the total KVA available to Viswas Nager was almost 7500, almost double than what it was two years earlier. Similarly land values by 1987 which had peaked in its two industrial areas, had also risen in the entire southern belt of Viswas Marg reflecting the increasing number of factories here.

As Chapter 3 had shown, this increased power supply correlates with the increasing sophistication and diversification of manufacturing, the emergence of new product lines and to an extent, also of supporting industries in an inter-connected network of uses. The factories in the "Market", area engage in cable and PVC manufacturing, which require a relatively high level of electricity.

Land values, as can be seen in Fig.7 and Fig.8, are highly differentiated. The industrial cores have the highest values here, but significantly, almost the entire area south of Viswas Marg developed as a mixed residential-industrial area. This area now accommodates lower-technology factories involved in wire drawing, general manufacturing, and machinery repair -- growing from the "island" of low-value industrial land, which appeared in 1984. Also, these factories do not require the levels of public services that had been brought into the core area for the mostly cable and PVC factories locating there. The 1987 land values in the new core and the mixed residential /industrial area reflect the area's political strength in bargaining for public services and infrastructure, high levels of industrial productivity, and limited supply of alternative, appropriately serviced areas in which to produce cable and PVC. Land values for commercial and residential properties increased substantially from 1986 to 1987, but the general patterns of both land use and land value remain alike.

During this period a "new core" area for industry developed at the eastern end of Viswas Marg to relieve the demand for industrial property in the original cores, which are by now, fully built-up. Many of the businesses in the new core are run by entrepreneurs who have relocated from the Punjab because of the ethnic unrest there.

One former Punjabi entrepreneur started the neighborhood's first enamelling factory; other factories here produce cable and PVC. Plots can be as large as 200 Sq.yds., well adapted to the higher-technology industries, because the area has been relatively undeveloped. The new core had moderately high land values as compared to the existing core areas because of the relatively recent settlement of manufacturing here. Land values tend to rise rapidly.

The impact on residential markets: The expansion of manufacturing helps to support a residential land market for a range of income groups. By 1986 (Fig.7), the residential properties north of Viswas Marg are at a high value and are occupied by middle-income residents who also get involved in manufacturing by sub-dividing their plots to accommodate industrial uses. At the same time, by the late eighties, this trend accentuates and this form of land development helped by the legalization and electrification of the area, caused their property values to double between 1984 and 1986 (See Fig. 6 & Fig. 7).

The low-value residential land south of Viswas Marg was now increasingly settled by newly arrived middle-income entrepreneurs. Many residences in this area are developed by adding second and third floors to existing one- or two-story structures, often aimed at rentals for low income entrepreneurs and workers. The most affordable residential land for workers continued to be in the low-lying southwest corner of the colony¹⁰. This extensive rental housing allows many workers to live near the factories. This helps production to be more efficient, and also attracts skilled employees. Thus, parallel to the diversifying industrial structure, is a diversified land and property market.

By 1986, Viswas Marg was well established as the main road in the neighborhood, with largely commercial uses, and public buses started to operate

¹⁰ This corner now includes the housing rented by factory workers and a new cluster of very low-value squatter settlement in the extreme south, which occupies land that is under dispute in the courts. Many of these are squatters are building construction workers and un-skilled factory workers.

along its length. Shops here catered to the newly arrived middle class. The commercial land values on Viswas Marg were about 30 percent higher than the values along the older, Pandav Road. However, the difference in land values between the two commercial areas does not reflect the relative activity levels seen on the streets. Shops on Pandav Road are very busy; along Viswas Marg, the shutters on many shops are closed -- indicates possibly that their owners are speculating or expect that business will pick up at a later date (which it did).

1987-90: Land and property markets of a well consolidated industrial cluster.

This period of Viswas Nager is centered around very intensive industrialization. Again, two indicators of the number of electricity transformers and land values reflect tremendous growth. The neighborhood witnessed many more transformers installed. Due to the increasing demand for enamelled wire, many new firms manufacturing this sophisticated product located in this southern part, since most land in the older market area was already filled up. The interesting aspect of this period of Viswas Nager's industrialization was the growing inter connectedness between firms, their growing technological diversity as illustrated in Chapter 3 and the diversity in their needs for plot sizes and infrastructure levels. In many ways this is reflected in the wide variation in land values in the neighborhood, which give some idea of the variety of sub-markets for both industrial and residential use.

By 1990 we see the peak of Viswas Nager's industrial capability. As before, the two indicators of electric power and land values not only show an increase in the core production areas but significant increases in secondary manufacturing locations: The entire belt along southern Viswas Marg, and also, some portion to its north on its western side. By this time, Viswas Nager has access to some 25,000 odd KVA. Of this, 7300 KVA would be residential. This leaves more than 19,000 KVA being used by industrial production! Fig.9 shows land values in Viswas Nager during this period.

The key aspect to understand is diversity both of manufacturing, and of residential and commercial activities. Figure 13 in Chapter 3 showed the diversity of

production processes that emerge in this period, and their requirements for electric power and infrastructure -- which varies quite substantially. In fact the new firms emerge **across** this spectrum, rather than concentrating on either end. The third issue of particular interest is that less than 50 (some entrepreneurs put this at 30) of these firms are large ones defined as having 300 sq.yards with power ratings of above 60-100 HP and having a Small Scale Industries status. Thus, the vast majority of firms are small sized suggesting a very large middle and lower level rental sub-market for industrial use.

This is also borne out in discussions with property dealers as well. The suggest that during this period, land values per sq.yd. ranged between Rs.12,000 (in 1990 prices) for the core industrial and commercial areas, while residential areas averaged between 4500 to 6000. The western part of Viswas Nager which was low-lying and still being settled, had slightly lower prices around Rs.4000 per sq.yd.

The other significant technological aspect is that almost all these firms use locally manufactured machinery. The exceptions are the 30-50 large firms, but even they would order only specific machines among their entire capital machinery stock from manufactures outside of Viswas Nager. Thus, it is not only small and medium sized firms in mainstream production, but also support activities and services that locate in the non-core industrial areas.

In fact, to substantiate this point, during this period, a new development on the eastern boundary of Viswas Nager emerges called 'New Viswas Nager'. Here the plots are smaller -- usually 100 square yards of which many are subdivided to 50 Sq.yds. The lower floors of these are almost always rented out to small firms while upper floors remain for residential use. These firms are both in mainstream production as well as support services. Thus, the diversity of land markets not only reflects the diversity of mainstream production but also that of the a variety of service and support activities.

Diversity of land uses also has other, contradictory, effects on development of the neighborhood, which are reflected in changes in the "peaks" and "valleys" of industrial land value. Entrepreneurs initiating new businesses are often attracted to areas where land values are lower. This drives up the lower land values and tends to even out the peaks. Simultaneously, the new entrants increase the overall productivity of the colony. Directly or indirectly, they become suppliers to higher-technology firms, many of which are located at the points of highest value. Thus, even though new entrants occupy the "valleys," their activities make the leading producers more productive, and land values at the "peaks" increase. Conventional land use planners and land economists might see such diversity of land values as representing conflicting functions, which are counterproductive. This view needs to be redefined in terms of the functional importance of clustering activities that link activities on locations of differing qualities. Also, as I discuss in Chapter 6, it needs to consider the significance of the political strength that the colony gains from those residents who occupy the lower-value land.

Impact of Commercial and Residential Uses: This diversity in the local economy is reflected in two other areas: commercial and residential values. In 1987, commercial values in both Viswas Marg and Pandav Marg were lower than the peak industrial locations. By 1990 onwards, this situation has changed. Commercial values along Viswas Marg are equal to those in the core production areas and slightly higher than the general production area along its southern industrial-residential belt. In many ways, this reflects the process of Viswas Nager also developing as an important residential area generating demands from a mix of income groups. The economic centrality of Viswas Marg is further accentuated by the increased public bus service using this as a major route to other neighborhoods.

Similarly, residential values also rapidly change. This is especially in the south western portion of the neighborhood which is upgraded by civic authorities under popular pressure (see chapter 6 for a detail account via the case of Block 28-29). The new housing developing here also forms an important supply of rental housing for

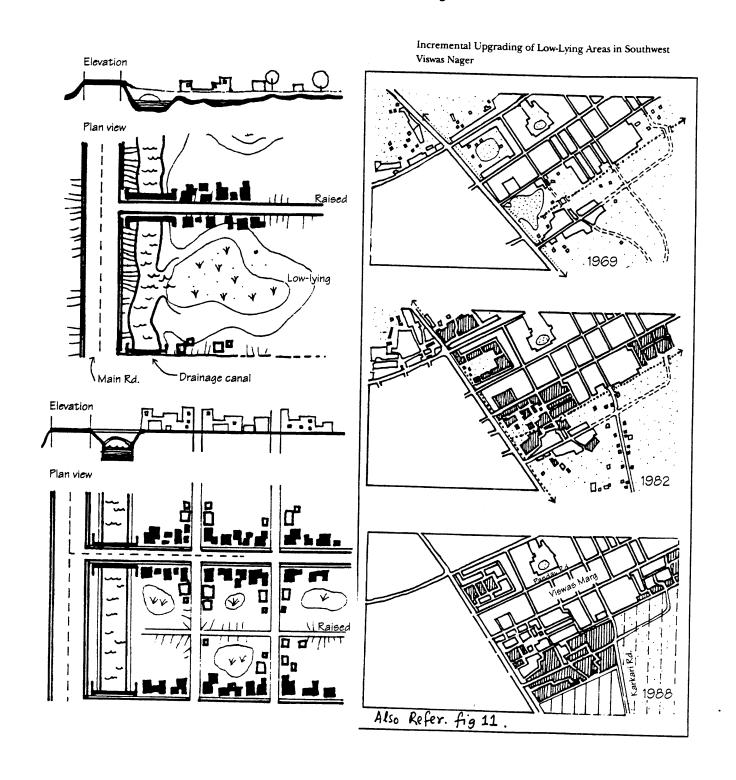


Figure 9: Development of secondary lands via incremental upgrading

workers and entrepreneurs. The clearest way to understand the effects of upgrading on land values is to understand the settlement process. Early in the history of Viswas Nager, as the government installed the main roads, it brought in large quantities of fill to raise them above flood level (Fig.9). Incoming residents, who settled first along these main roads, filled their plots to the height of the streets. This resulted in "ribbons" of development in the early stages of the colony, with the low-lying interiors of the blocks becoming a number of small "land banks" for further development. The value of the safe, well-drained land along the road was much higher than the value of the land subject to flooding in the interiors of blocks. Even when the centers of the blocks were not low-lying, their land values were relatively low due to poor accessibility (Fig.10. Note the low values on the secondary roads V/s tertiary roads, which do pick up once this low -lying area is filled)

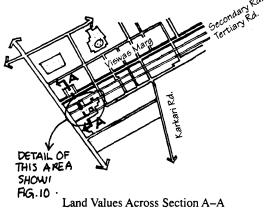
With the passage of time and continued development via the filling of low lying areas, internal roads began to be built across the secondary areas, making the interiors of the blocks smaller and easier for residents to develop. This is reflected in land values in this portion. Conventionally, land values would decrease from the main road down to the secondary road and further still down to the tertiary road (see Fig. 11). However, due to the low lying area which often gets flooded in this part, land values are lowest around the area of the secondary road. However, as this low point is filled in by the co-operative efforts of the residents (and the state as shown in chapter 6), the land value trajectory changes to be what one would conventionally expect across primary, secondary and tertiary roads.

As this occurred, the difference in price between land along the main road and land in the interior decreased. Figures 9 and 10 illustrate this trend as it occurred in the southwestern corner of Viswas Nager. The first figure in Fig.10 shows how development advanced into the interiors of the blocks. The second shows relative changes in land value between the main road and the interior roads from 1972 to 1987. For instance, in 1972, the value of a plot on the main road, Viswas Marg, was substantially higher than the price of a plot along the interior secondary and tertiary

roads. The price differential declined dramatically between 1972 and approximately 1980 and further between 1980 and 1990, as roads and drainage began to be introduced into the interior areas.

After a full road network was in place, the value of the interior plots first increased to the level of land in surrounding residential areas, and then it increased even more, due to a perceived potential for more intensive development.

This process of development, centered on the way local groups organize themselves, allows land values to be lower and developed



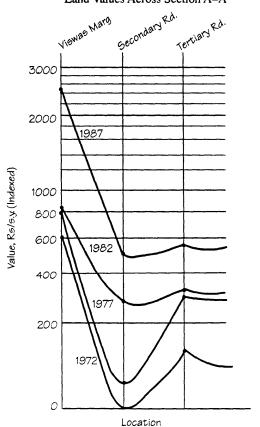


Figure 10: Relationship between land values and proximity to main commercial road.

according to the opportunities in future times rather than forcing a complete

development all at once. This also helps workers, low income entrepreneurs and residents to locate in close physical proximity to the more industrialized and high value cores. For instance, these groups seek location in some of Viswas Nager's adjoining neighborhoods -- Jawla Nager in the North East, to an extent in 'New' Viswas Nager in the east, and Bhikam Singh Colony in the south west. The inner lanes of these residential areas -- especially in the southern belt along Viswas Marg, also see the opening up of social facilities like day care centers and schools.

1991-95: The impacts of industrial stagnation

Chapter 3 briefly discussed the problems with the electricity authorities in the summer of 1991 that completely disrupted production. For instance, from 1990 to 1995, only 1630 KVA-year were added as compared to 12,590 KVA-year between 1988 and 1990, and 7690 KVA-year between 1985 to 1988. This is also confirmed by local property agents and entrepreneurs in the neighborhood. The latter say that while land values for core commercial and industrial areas peaked around the end of 1991 at between 12,500 to 15,000 per sq.yd, they have generally remained stagnant ever since. Residential ones-- especially in the recently developed south-western portion rose from being in the range of Rs.4000 per sq.yd. to between Rs.6000 -6500.

Just when a resolution of the issue came in sight with the elections to the Legislative Assembly in 1993-94, the Pollution Case in the Supreme Court further accentuated economic instability. Presently, Viswas Nager remains today, at a cross roads.

Section B

Chapter 3 highlighted in detail two important processes of Viswas Nager's local economy. The first was its increasing diversification not only in terms of product lines in a product experiencing expanding markets, but also the firm's working requirements of plot size, capital investments and power requirement; The second was the increasing inter-connections between firms. This chapter has until now, focused on the evolution of differential land values and the neighborhood's diversified land market. To understand the link between the diversified economy and the differentiated land market as described, we need to get a clearer idea of how technocratic change in firms relate to the processes of land development. I clarify this issue by laying out a simple conceptual model. Rather than having predictive value, it is aimed at clarifying the links between land development and technological change. One important caveat is that I have deliberately not introduced political aspects in this description for two reasons. First is for the ease of communication. Since these are complicated issues, Chapter 6 focuses on these issues in greater detail. Second, political aspects do not contradict the description of economic change as portrayed here.

A CONCEPTUAL MODEL OF INDUSTRIAL PRODUCTION

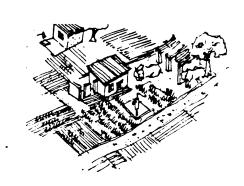
In this model, I describe four situations of land with various characteristics and how this forms a setting for firms. The model conceptualizes a broader process of land transformation. This is from the time the land is first sub-divided from agricultural to urban residential use, and later when residential use accommodates industry and commerce.

Neighborhood as a low-income residential areas

Un-authorized colonies initially develop as very basic sub-divisions of agricultural land, with public infrastructure and services being improved over many years. Industrial uses emerge later in the developmental process. During the initial stages of consolidation, the neighborhood develops as a housing area essentially for lower- middle income groups who have saved enough to invest in land. Land tenure is extremely insecure since public authorities can demolish these areas on grounds that they do not confirm to legal planning norms. On the other hand, the settlers also

The evolution of differenciated land markets

develop political clout to organize against demolitions, and if possible to get new services. The neighborhood is upgraded with basic public services: Street lighting, and water stand posts. Roads usually remain unpaved, water is available from the ground with use of a hand pump, and sewage is disposed of in dry latrines.



As a result of the low levels of infrastructure, services and the insecure tenure, land values are very low. There is little variation between land values except from plots near roads which tend to be higher. Normally, the size of an individual plot is relatively large, ranging from 100 to 200 Sq.yds. In this early period, most residents, who have moved here from central city locations, divide their time between improving their plots in the new colony and working at their existing jobs in more central locations. Thus in many cases, the extra land in the plot is used to cultivate vegetables. To meet the demand for basic necessities, some small commercial stalls (if their plots are in better locations) are started up and operated by residents as a part-time business. The main point is the residents know that if they can rough it out, and sticking together to muster up political support, they get access to large plots which can later subdivided if need be, to give a valuable source of capital.

Manufacturing Activities:

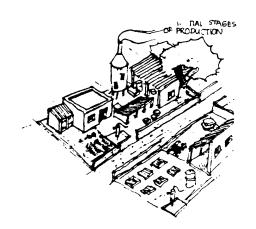
There are few industrial activities as the tenure is still insecure. 11

Firms in neighborhoods

As more people settle in the un-authorized colony and press for legalization, rudimentary infrastructure is brought in gradually, and security of tenure is

 $^{^{11}}$ In large part, this is due to political aspects described more fully in Chapter 6.

improved. Land values remain relatively low because of the colony's minimal levels of infrastructure and the quality of the land is undifferentiated. The neighborhood, apart from new residents, also attracts entrepreneurs. These are usually experienced foremen who want to start businesses on the relatively inexpensive land here¹². Factory workers too are attracted to the colony because they are able to find cheap housing here, either on part of an under-utilized plot, which can be had for very low rent. Most might still work in more



consolidated industrial clusters though. Those that do find employment in local factories would normally stay in one part of a factory plot at no rent.

Manufacturing Activities

Production processes that start off here in these recently sub-divided unauthorized colonies, usually use large areas of land. The technology is low -- dependent on human and material resources available locally 13. In a few case, where a single line electricity connection is available, entrepreneurs can initiate processes like silk screen printing which require very low electrical loads. Job-contracts are acquired on a job-work basis from more consolidated colonies where the entrepreneur has business contacts. Although production levels are low, the margin of profit for the entrepreneur is adequate because of his low initial investment and the lack of competition.

¹² Foremen wanting to start off their own business, usually have two choices: First to locate their factories either in rental space in more consolidated areas (i.e., within a more established industrial cluster) or second, to purchased land in less-developed areas.

 $^{^{13}}$ Some factories, as that described in text box 1 'Small Firm Scape' use simple machinery and wood or coal for energy.

The evolution of differenciated land markets

Neighborhoods as the site of clusters

If the neighborhood has been able to muster up political support, public authorities would have introduced some infrastructure and services. Electricity for street lighting along with single point domestic currents along with piped water is usually the first priority. In addition, government agencies improve roads and public transportation, providing access to the central city. In some areas, sewerage might also be constructed, but these remain at a primitive level in most areas of the colony.



Parallel to these public investments, residents and entrepreneurs continue to settle in the neighborhood. Many existing families or individuals are joined by their family or extended family, while new families settle either in sub-divisions of larger plots, often given out as cheap rentals. Some families even initiate settlements in the outlying areas of the neighborhood. They are attracted not only by low land values, but also the success of the older neighborhood in getting some form of tenure, and upgrading by public authorities. Thus, security of tenure, although much more certain in the more established parts of the neighborhood, is uneven -- especially in some of the outlying areas where new residents settle in.

Land values are substantially higher in the central parts of the neighborhood, than they were in previous times reflecting both the differentiated infrastructure and tenure conditions. All these changes open up a complex range of options for existing residents. They can sub-divide their plots and use the capital to invest in building up more on one part. This is especially for those who have plots in good locations. Alternately, if they have expanding families, with more working members, they might choose to use the entire plot. Some, if they can afford it, hang on knowing that the future value will always be greater. In effect, the neighborhood is developing a variety

of sub-markets. This is due to a variety of factors: These social processes described above opening up choices for residents here; the demand for rental accommodation by new settlers; the differential land values that are now more explicit between one part of the neighborhood and another, the sub-markets are also related to differential level of infrastructure since public upgrading happens from block to block over many years.

Manufacturing Activities: All this opens up new opportunities for production. At one level, these relate to individual decisions: An entrepreneur who had settled in the initial stages of the neighborhood's development, might choose to sell off half of his 200 sq.yard plot, and invest the surplus in additional machinery or start a related but more profitable line. Alternately, he could also use part of the plot as a residence, building a couple of extra rooms adjacent to the existing one, or above it on the terrace. This is quite common when he has a large extended family when some of them can help out in the production. This plot then becomes a residences-cum-factory. Some resident-entrepreneur might see other choices:

- i) Continuing with manufacturing as a secondary occupation;
- ii) Using it as their primary source of income;
- iii) Leave it altogether and sell off half the plot to use the money in some other business.

If they choose to consolidate their business, they might physically separate their living space from the portion of the plot used for the factory. In effect, all these choices relate to the availability of large plots of land in the initial stages of development, although minimally serviced when these sub-divisions first start off.

At another level, these options have a systemic aspect to it, especially when new incoming firms tend to be those who share some linkage with the existing ones. This relates to the increasing differentiation of land — in terms of values, access to infrastructure/services, and tenure. Some of these new entrants might be lower income entrepreneurs, with two basic options: Either they can rent smaller 50 sq.yds plots, subdivided from original 100 sq.yds plots. These plots may be small, but adequate to

The evolution of differenciated land markets

start simple production with the support of firms already established there. Alternately, they can buy medium sized plots in the neighborhoods' periphery, to go the way the initial residents did. In contrast to these low income entrants, there might also be richer entrepreneurs, who view the existing entrepreneurs as potential sub-contractors. They might outright buy a large plot, or even rent it out to test out the 'market' of sub-contractors. In some cases, some of the existing entrepreneurs who have hit it right, might expand production on their existing plot and shift residence to the upper floor, or buy another plot for residence. The clustering of firms in related production lines attracts a distinct group of semi-skilled workers arriving from the central city to work and settle permanently in the colony. Some might initially view these locations as providing cheaper housing than more central city locations. However, some, especially the more experienced workers, might also see it as a way to seek out a affordable plot to start off their own firm at a future date — usually linked to what already is going on in the neighborhood.

As before, the source of contracts for most enterprises is still largely job-work. Margins of profit decline because of the increased competition within the colony. However, because costs of production are lower due to better support services, improved access to metropolitan markets, and greater volume of production, net profits are not affected significantly and might in fact increase.

The main point here is that the options to use land begins to be affected by linkages between firms which in turn is affected by the increasing diversity of infrastructure conditions. The reader will see a parallel between this description and the cable and conductor industry in Viswas Nager in the early to middle seventies described in Chapter 3.

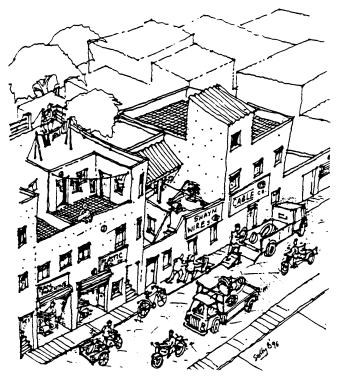
The neighborhood as the basis of the industrial cluster

By this time, the neighborhood is almost totally legalized and most parts of the neighborhood are well serviced. In many ways, this neighborhood is undistinguishable on the surface from other 'planned' residential areas. All this results from a

culmination of the social and economic processes that began to emerge in the previous situation.

Manufacturing Activities:

Some such neighborhoods might also evolve a distinct industrial area within them, which in many cases are specialized in the manufacture of particular goods. In fact, what might have started as scattered home-based factories in the beginning stages of development, have become a covert industrial area



that functions with great efficiency. Prime production areas have access to high levels of infrastructure, including the three-phase electricity needed for industrial machinery, a telephone system, water distribution, sewers, and ready access to the central city via paved roads and public transportation. Other residential blocks develop into secondary residential areas accommodating housing and some ancillary production activities.

Some of the streets here become important commercial spines, responding to the variety of groups settling here, as well as to demands from adjoining neighborhoods. The colony is now attracting many different types of entrepreneur - residents. New, high-income entrepreneurs bring experience in manufacturing. The latest generation of workers brings diversified skills in manufacturing and other areas. Finally, there are also providers of social services, and entrepreneurs of ancillary industries and services also arriving to take their place in the production network of the neighborhood.

As mentioned in the previous situation, these changes are influenced by wider systemic changes in the economy. These are in turn influenced by the highly differentiated land values and sub-markets, in response to locational differences

The evolution of differenciated land markets

throughout the colony, or due to access to very high or specialized inputs of infrastructure available: For instance 3 -Phase electricity current.

These characteristics of property markets relate closely to the linkages between firms. The development of manufacturing and service linkages between firms is closely related to the ability for them to locate in close physical proximity. Here, as before, but even more accentuated, the emergence of a wide variety of rental space

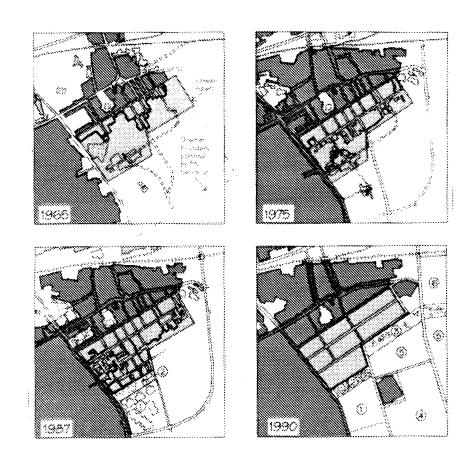


Figure 15: The Evolution of Viswas Nager

in locations of differentiated land value helps to attract entrepreneurs and workers from a range of income groups. Also, secondary, support industries such as plastics recycling and transportation systems find a convenient location near the main manufacturing areas in the neighborhood. All this facilitates even stronger linkages among firms that provide basic, specialized, and ancillary products. Similarly, commercial activities also diversify, responding not only to the new groups but also to the emerging market for machinery, parts, and building supplies.

These changes in the setting of production as well as how economic processes

are linked, affect the economy of manufacturing. Due to the increased competition, the margin of profit per factory unit declines. However, the market for goods produced here is greatly expanded with entrepreneurs involving themselves in a growing decentralized and diversified retail network to both local and national markets. This means that total net profits remain high due to the increased volume of production. As markets increase, and entrepreneurs are able to directly negotiate with retailers, opportunities for specialized cables grow. This specialization also helps to increase net profits. Finally, the local manufacture and service of machines and extensive opportunities for specialized sub-contracting, helps to bring out innovations and lower costs.

The above model brings together Chapter 3 on the evolution of manufacturing in Viswas Nager, and the first part of this chapter on the evolution of the land markets here. In Chapter 3, I had described in detail new product lines, as well as cases of existing firms taking on new production lines. I had also showed that almost all of these firms have varying requirements for land and infrastructure, although they are linked in a closely knit production system, as well as in close spatial proximity.

Dish Wires

To illustrate this point in greater detail and to emphasize the importance of differentiated land markets, I take an example of the manufacture of Dish Wires, a co-axial cable used for Cable TV:

Dish wires are manufactured from five different components as shown in Fig. 16.
i) The inner conductor of a 30 gauge copper wire; ii) PVC spacers; iii) PVC insulation; iv) A screening woven from 46 Gauge tinned wire; and, v) PVC outer sheathing. All of these come out of eight different manufacturing processes¹⁴.

First, there are three different steps of copper wire drawing, providing the inner

¹⁴ The PVC spacers used to separate the inner conductor from its outer one are procured from an industrial cluster in West Delhi which specializes in plastic products.

The evolution of differenciated land markets

conductor as well as for the screening. Then there is the hot tinning of the 46 gauge wire for the screening, followed by its braiding. Finally, there are three PVC based processes. The first is the manufacture of spacers which are extruded from fresh resin. The other two processes relate to the manufacture of recycled PVC and PVC compounding. Finally all of these sub-inputs are used by the firm to manufacture Dish Wire, through an extrusion process.

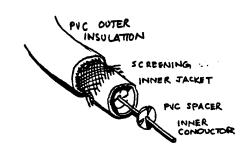
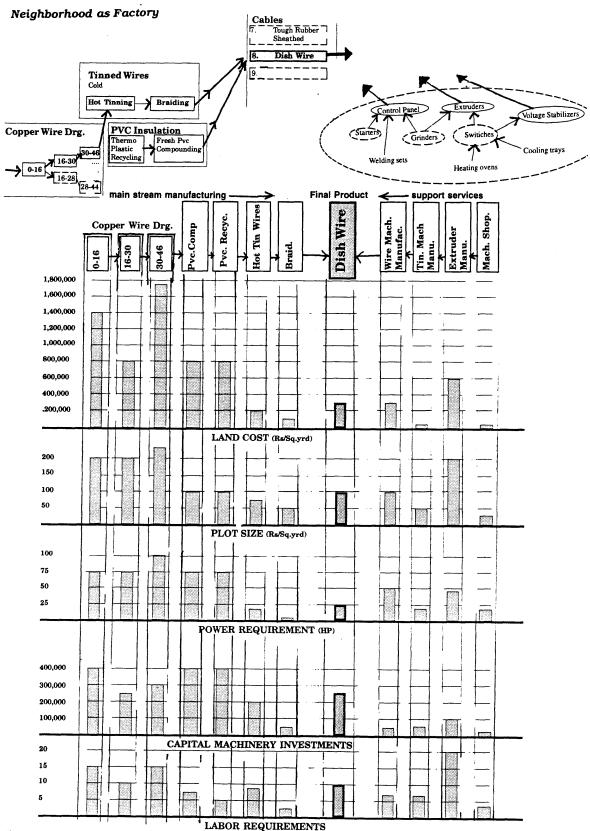


Figure 16: The five components of a Dish Wire.

Fig.17 shows the general production process involving the seven stage firms and the eight which makes the actual product. More interesting, it also shows the levels of plot areas, investment into land, electrical power requirements, capital investments into machinery, and number of workers. To highlight the extensiveness of the local support system I have also shown the secondary firms involved in the manufacture of the capital machinery, as well as their own particular infrastructure, land, power, and other requirements (Refer Fig.11 in Chapter 2).

In this larger picture, we can see that this clustering incorporates firms with very varying characteristics. Moreover, it is not that the final product firm is the largest or the most sophisticated (numbers of workers, investment in land, power utilization). The third significant point is that investments into land can be quite substantial.

All these systemic characteristics point to a broader issue: The location of these firms in Viswas Nager. Here, I draw upon what I presented in the first part of this chapter, the differentiated land market. For argument sake, let us conceptualize Viswas Nager as having five types of areas, each signifying the level of



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Figure 17:Inter-relationships between firms.

(REFER FIG 5 Pg.42 FOR A CONCEPTUAL DISCUSSION OF THIS CASE)

The evolution of differenciated land markets

infrastructure/land development: A, B, C, D, E. "A" are plots with the highest level of access to infrastructure, & services (power, good roads etc), "B" is next, while "C" is somewhere in the middle, "D" is on the lower end, and "E" is the lowest quality of land. Within this working schema, the networking of the eight firms can be located in how they fit into a differentiated land market, and vice versa, how a differentiated land market responds to it (Figure 17). In some sense, since access to electric power is such a big issue, these infrastructure variables can be distilled to the amount of power (HP rating as used locally in Viswas Nager) and the amount of land. Taking this as a "Land Infrastructure Index", as explained in Chapter 2 of this dissertation, Viswas Nager illustrates how its differentiated land market helps the firms mentioned above to locate in close physical proximity, making possible the important advantages of clustering.

Thus, in this chapter I have shown the close parallel between land development and its evolution into a differentiated market and the diversification of the local economy in Viswas Nager. This has been by a detailed description of how land markets came to be, followed by a conceptual discussion, and finally by a actual illustration of one of the 27 cables and conductors manufactured there. The broader concept of the Neighborhood as Factory will be further emphasized when we get a better sense of the financing of production in Chapter 5. Most important perhaps, a sense of the political processes that underlie these technocratic descriptions will complete this conceptualization in Chapter 6.

CHAPTER 5: FINANCING THE NEIGHBORHOOD AS FACTORY 1: OVERVIEW

Chapters 3 and 4 showed that the productivity of Viswas Nager as an industrial cluster has come about from the relationships between a variety of firms each requiring different investments in infrastructure and capital. Although starting costs are low, many of these firms, once consolidated, do operate with significant investments.

This chapter raises two questions: First, how is it that the manufacturing economy of Viswas Nager could attain such high productivity levels without access to institutional finance? Personal resources are just not adequate to fund most of the enterprises, especially when consolidated. Chapters 3 and 4 also showed that the manufacturing system evolved in a span of 25 years and especially over the last ten years. This raises the second question as to how it is that the financing of enterprise has been sustained over such a long time period?

I argue that to understand these paradoxes one must understand the interface between local land markets the inter-linked production processes of this neighborhood economy. This chapter makes two overall arguments. First it shows that the financing of the local economy of industrial clusters like Viswas Nager happens through an important cycle involving the investment of real estate surpluses into production. This reinforces the arguments presented in Chapters 3 and 4 which showed how Viswas Nager's diversified economy related closely to its differentiated land market. Its second argument is that the financing of the neighborhood economy has important social aspects and is closely linked with the social dimensions of inter-linked economic processes. This second theme will be further emphasized in its political sense in the next chapter of this dissertation.

To understand this more clearly, the reader might recall the conceptual model of land development outlined in Chapters 3 and 4.

Emergence of a local economy (Fig. 1):

First, as chapter 4 showed, incremental developing land markets make the settlement process easier for both residents and entrepreneurs. The simple enterprises that move here are attracted to the larger plot sizes, and affordable land values, connected to the low levels of infrastructure and services.

Second, as shown in chapter 3, the possibility for flexible land-use and location allows for the evolution of inter-linked production processes.

Third, inter-linked production develops opportunities for outworking of semi-processed jobs. This chapter will show shortly, that it also allows for personalized credit flows. Both help to develop powerful localization

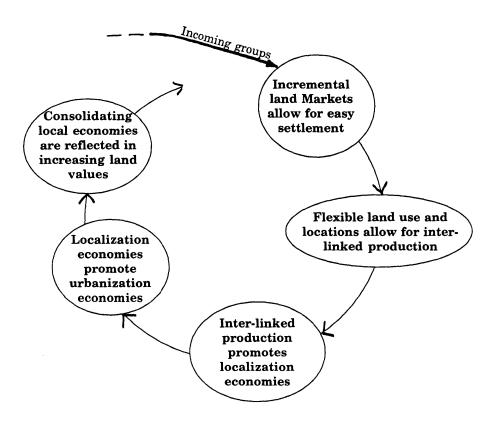


Figure 1: The evolution of a setting for production

economies.

Fourth, localization economies generate demands in turn, for a variety of service activities attracting these to locate in close physical proximity. All these increase demands for non-residential uses, as well as rental markets for incoming entrepreneurs and workers. Due to the possibility of incremental land sub-division, and flexibility in changing land use, many land owners can respond to these demands and develop part of their plots to accommodate these needs. In effect the growing density of these economic processes reflect urbanization economies, which in turn, impact land values positively.

Thus, as we shall see in this chapter, is the stage set for an economic organization where real estate surpluses play an increasingly important part in the

manufacturing economy as explained below:

The consolidation of a local economy:

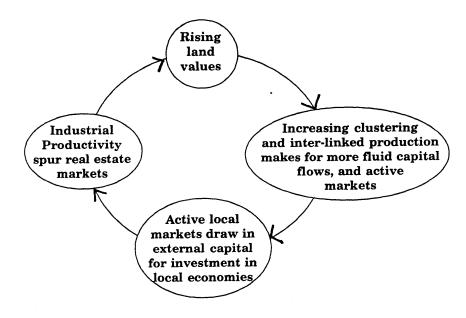


Figure 2 The financial circuit of Viswas Nager

First, land values rise as groups settle in the incrementally developing neighborhood. A growing part of increasing land values are capitalized for production, and form an important source of finance.

Second, living and working in the same area brings about close relations between entrepreneurs. These are further reinforced by the linkages between production processes. This allows them to use finance mechanisms which are safeguarded against default by peer pressure and economic sanctions resulting in an efficient flow of capital. All this makes for a very fluid capital market at low operating costs;

Third, the efficient capital market draws in external finance, based on ethnic sources, for investment in manufacturing and land. This allow for more capital intensive enterprises to be started. These capitalized enterprises, by focusing on more sophisticated products, give rise to outworking possibilities and attracts other smaller firms and service activities to locate in close physical proximity;

Fourth, investments into manufacturing and land further spur real

estate markets and land values.

From this above cycle of financing (Fig. 2), we can see that the neighborhood setting of production, and the way its land markets transform to accommodate industrial use, have a direct influence on the nature of enterprises and vice versa. There is an important social-political dimension of this process which I will discuss in greater detail in the next chapter.

As the reader will shortly see, the issues presented in this chapter are complicated ones as they traverse many boundaries. Thus, it is useful to step back and focus on the way these are presented in this chapter. In the introductory section to this chapter I had presented an overall picture of the cycle of real estate flows into manufacturing to provide a sense of how these evolve. In the logic of the sequence presented, external finance is attracted for local investment after the neighborhood economy attains a particular sophistication and 'reputation' for its productivity¹. As such, the discussion of external financing as a mechanism should be towards the end of this chapter. For the sake of clarity of communication, I have chosen to first discuss all the mechanisms of financing, and then focus specifically on how real estate markets inter-face with production to provide an overall economic context.

This chapter is in three sections. The first section explains the various mechanisms of financing that make up the local economy of Viswas Nager. Here, I describe five mechanisms of financing, four of which are used in Viswas Nager. The second section shows how surpluses from real estate are invested in industrial production and the neighborhood economy. In many ways, the second section forms the core of this chapter and one of the main themes of this dissertation. The third section is a broader discussion on these financing mechanisms as they relate to the organization of work as well as of local society.

2: IS FINANCE AN ISSUE?

Almost all policy makers and scholars from diverse ideological perspectives, point out the lack of credit available to small firms in the so called "informal sector" (Bromley 1985; Breman 1985; Ash 1985; World Bank 1978). Scholars researching small firm industrial development in India, highlight the serious polarization of institutional finance in their access to small firms (See RBI:24-31; Kalra 1994)². As a

¹ Although, real estate markets are also affected by these capital inflows.

² Section A of my essay 'Institutional Support to Small Firms' in Annex 1 discusses this issue at length from the perspective of the Indian experience for small firms in general as well as those in the cable and conductor industry. For instance, the RBI report admits that the SSI sector received a level of working capital assistance of 8.1% of its output. Smaller firms could get only 2.7% of output, while the larger units of the SSI category,

result, credit also forms one of the main planks of government policy, that of Non-Government Organizations, and certainly of international agencies who fund programs (World Bank 1978; Ash 1985). In many ways, after all these efforts, one might take the importance of credit as a given. If this stress on the importance of credit per se is correct, then Viswas Nager's rapid industrial growth has been a paradox. Most entrepreneurs here belong to the lower middle and middle income group, with limited personal and family funds not sufficient in themselves to sustain such a proliferation of enterprise.

There is no doubt that credit is important. Scholars also rightly point out that most institutional credit is 'poached' by large firms (RBI 1992; Kalra 1994; Jain 1995). I argue that in the seed bed of neighborhood economies, there are more fundamental issues revolving around the settlement of land and organization of work. Access to credit would help small firms, assuming that they get to see it. However, access to land and the ability and autonomy to evolve an organization of work like that of Viswas Nager is more critical. As Chapter 6 will show, the 'poaching' of serviced land by large corporate organizations (often by co-opting national powers) is likely to have much more serious impact than the present situation of large corporate organizations receiving a disproportionate share of institutional finance. In the first part of this chapter below, I explain four financing mechanisms used by small firms. In the second part, I look at their systemic aspects.

3: FINANCING MECHANISMS IN VISWAS Nager

Chapter 2 showed the wide variety of firms involved in the neighborhood economy, and how manufacturing, retail, real estate and transport are intrinsic to each other. Similarly, a number of these financial mechanisms inter-relate these

get 18.8% still under the working norm of 20%. **Ka**lra shows the substantial advantages and clout enjoyed by large corporate firms where medium and large industries are not only able to attract substantial finance, but also at lower costs, subjecting banks to a bidding process to access cheap capital.

economic processes. Firms use these mechanisms differentially, depending upon where they are located in the production system. They draw resources from four financing mechanisms to complement their personal or family funds. These are:

- i) The Committee or 'Boli';
- ii) The Lucky Draw;
- iii) The Marwari Dalal-based financing;
- iv) Land related financing.

I first start with a description the 'Chit Fund'. Although this is not commonly used in Neighborhood as Factory, it helps the reader to understand its close cousin -- the much more extensively used 'Committee'. This is followed by 'Lucky Draw', and Land related financing. At the end of the description of these mechanisms, I discuss the more complicated and efficient 'Dalal system' used by two ethnic groups in Viswas Nager. I end this chapter by discussing the systemic aspects of financing. This highlights the relationship between these mechanisms and the structure of the local economy.

a) The Chit Fund

A Chit Fund Company brings together a group of people to pool their contributions as a consolidated sum of money popularly called the 'Chit'. This sum is allocated to each of the members in a sequence directed by a bidding process. Very few entrepreneurs in Viswas Nager, or other small entrepreneurs use chit funds, for reasons discussed later.

The pooling of resources by various members and its allocation to one of them, happens when all members come together for a 'round'. This is usually a monthly meeting held at a pre-arranged date and time at the chit fund company's office, when the pooled amount is put up for a bid. Each member is allowed one bid. There are as many rounds as there are members, to give every member a chance. For example, a typical chit of Rs.100,000/ with 20 members means that each would contribute

Rs.5000, and the chit would operate for a period of nineteen months³. The members also include a "foreman", a representative of the chit fund company, who manages the entire bidding process and the allocation of funds. The manager also has a share in the chit. Annex 5-II exhibits a typical account book of one such Chit Fund operating in Delhi.

The Bidding Process: When a member puts up a bid for the pooled 'kitty', (s)he specifies a "discount" offered on that amount. The 'discount' is the amount of money offered by a member bidding for the pooled sum, to the rest of the group in case that members bid is accepted. Thus, if the bid is accepted by the group, the discount is shared by the members. The member who offers the highest discount to the group, wins the bid. The winner would take the entire pooled amount, after deducting the discount and paying 5% of the total chit to the foreman as the company's commission. The discount however, is not shared with the rest of the members immediately on completion of that round, but held in deposit with the successful bidder till the next round. Thus, the bidder would have the entire chit (minus the foreman commission) for the period of one month. In the subsequent round, this discount will be returned to the group before the bidding starts, to be adjusted against their respective installments. Thus, in our example of Rs. 100,000, say member 'A' makes a winning bid of Rs.70,000. After giving Rs.5000 to the Foreman, member A takes back in hand Rs.65,000, and the discount of Rs.30,000 for a period of a month. In the second round the Rs.30,000 is put back on the table before the bidding starts, providing a dividend of 30000/20 = Rs.1500 to each member. All members (including member A and the foreman) will have to pay only Rs. 5000 - Rs. 1500 = Rs. 3500 as their monthly installment during the second round, instead of Rs. 5000. Together, their contribution make up the Rs. 100,000 chit, now available for the next round of bidding. In case two or more members bid equally for the same amount, then that particular chit is subjected to a lottery between the bidders. The winning bidder, "B",

³ As I shall below in describing the bidding process, the last month's amount is accrued in total to the last (in this case 20th) member.

of the second round has to pay up the discount of the second round bid and his/her installment in the third round. The same system is carried forward for the subsequent rounds, except for the foreman's round, described later. Table 1 in Annex 5-II shows an overall cash flow of one such example. Figure 1 in Annex 5-II illustrates the sequence of bids in a typical chit.

Once a member has made a successful bid, s(he) loses the chance to bid again, although s(he) still has to make the monthly contribution till the completion of the Chit. This ensures that the pooled capital is maintained during each round. Since the members who make successful bids are eliminated from future rounds, the arena is open to smaller and smaller circle of bidders till the last round when the last member gets the full chit without offering any discount to the group, but still has to pay the 5% commission to the Foreman.

The functioning of chit funds is governed by legislation that varies from state to state. An important rule instituted by the Government for chit funds is that the maximum discount that can be offered during any bid is 30% of the total chit value. This has been instituted to reduce excessive speculation, and to reduce risks to the entire group by discouraging people who are involved in high risk - high return ventures. Thus in our example, even if two members A & B are willing to pay Rs.35,000/ and Rs.40,000 as a discount to the entire group, it will be deemed that both are offering a discount of Rs.30,000/ and subject to a lottery to decide which one of them gets to keep the chit.

Members can also bid on the telephone, or send their representative. The former however happens, only when a working relationship and trust has developed between the chit fund company and members. In general, it is useful to personally attend the meeting to get a sense of the bidding trends and also to develop personal contacts with fellow members.

Returns to the Foreman: As an organizer of the Chit Fund, s(he) has certain

privileges. The first, as has been mentioned above, the foreman gets a 5% commission of the total chit during each round. Secondly, while the foreman does not participate in the bidding process, (s)he is entitled to the entire chit amount of the 5th (or sometimes the 7th) round. In the illustrative example, the foreman would take the entire Rs. 100,000 during the 5th round without offering any discount. For the subsequent round, all members will have to pay a full installment since there is no dividend to be shared amongst them⁴.

Responsibility of the Foreman: Apart from the management and paperwork connected with the chit, the primary responsibility of the foreman of the chit fund company is to safeguard members in the case of default by one of the members, and make good the losses to members. To counter this possibility, as well as that of the Company itself committing a fraud by non-payment of dues, the government has instituted regulations to act as safeguards^a.

Innovations: Some organizations, in recent years, have introduced two innovations which have helped to spread the 'benefits' of the chit fund in response to particular problems. The first problem was that of the delay in decrease in discount level. This was due to the high demand for the first chit, complemented by the 30% limit on the discount. In our example, the first chit was bid at Rs.70,000. In times of high demand, the second, third, fourth, and sometimes even up to the tenth round (out of the twenty), the bid would hover around very closely at the Rs.30,000 mark. In this case, simply drawing a lottery between the contestants does not address the issue of the raised cost of borrowing for those not winning in the lottery. While members who prefer to bid towards the end of the chit obviously gain from such a situation due to the increased returns, this is explicitly at the cost of the initial bidders (except for the very first, member A) -- creating a bad 'climate' and working relationship. To avoid

⁴ A convention followed in some chit fund companies, is that the foreman, and not the winning bidder of the first round, keeps the dividend portion for a nio ith after the first round. Thus if member 'A' has put in a winning bid of Rs. 70,000/, apart from the Rs.5000 that accrues to the foreman as the commission, the discount of Rs. 30,000 will be kept by the foreman till the next round.

this situation, some companies introduce a 'floor' of a 1% (of the chit value) increase on the bid amount (i.e, a decrease in the discount amount) <u>for every round</u>. Thus if the first round bids at Rs.70,000, the second one has to start at Rs.71,000 (since the discount has to be less than Rs. 30,000.), the third at Rs.72,000. In case there are two or more bidders for any bid, a lottery is drawn. In this way, members not winning a lottery in a particular round are given some compensation.

The second problem faced is of a cartel being formed by the last few members of a chit fund. Towards the later rounds, when a smaller and smaller group remains, there is a strong possibility that they may collude to decide internally as to who gets what bid, and restrict each others' attempts to lower the rate of a bid. This is serious risk because members often develop personal links between each other⁵. In the example of the Rs.100,000 chit, the last member would get Rs.95,000 in hand (since 5%, or Rs.5000 goes as the foreman's commission). If the last three persons formed a cartel, they would all tend to bid at the Rs.95,000 mark or with a marginal difference of Rs.50/. In this way, the members of the cartel would all gain while the rest of the members, who have bid in the initial and mid-stages of the chit, would lose their dividends. To avoid this situation, some companies have, in the last couple of years, introduced a 'ceiling' of 1% (of the chit value) increase in the bid (i.e., decrease in the discount) per round. Thus, with the last (or twentieth) bid being 95,000, the one before that cannot be more than Rs.94,000, the eighteenth bid less than Rs.93,000, and so on. As before, conflicting bids are resolved by a lottery. To get a more through sense of the operation of the chit and its profitability to various members and the Foreman. See Table II: 'Profit analysis' and Fig. 2 in Annex 5-II.

 $^{^{5}}$ In fact, most new members join on the basis of personal recommendations given by a member to the foremen.

b) The Committee or 'Boli'6

The Committee is very extensively used in industrial clusters all over Delhi, and almost all entrepreneurs, especially small ones are directly involved or have been at some times closely involved in 'Committees'. So extensive is the use of the Committee in Viswas Nager, that one entrepreneur there called it the artery and pulse of an industrial area.

The operation of the Committee is very similar to that of the Chit Fund. Like the Chit Fund, it revolves around the pooling of resources and its allocation to members via a bidding process. Just as the consolidated sum in the Chit fund is called the Chit, the same in this case is popularly called the Committee. Annex 5:III provides a quantitative illustration of a typical Committee in Viswas Nager.

There are however, important differences between the Chit Fund and the Committee. The most important difference is that the Committee is based wholly on cash transactions, with no written records, and is totally dependent upon the trust between members. The management of the Committee is done by the "Organizer", who has a similar role to that of the Foreman in the case of the Chit Fund. However, while the Foreman of the Chit Fund takes a 5% commission of the total chit amount on each bid, and the complete 5th or 7th bid (and in some cases, the interest on the first round's discount), the organizer of the Committee only takes the complete second round. No additional commission is paid. This is an important issue because as we shall see later, it affects the distribution of money generated.

⁶ The 'committee', as will be described in the text, is perhaps derived from the concept of the group of persons known to each other getting together. My main informant for the information on committees, is a well reputed property dealer, financier and professional committee organizer in Viswas Nager. More specific information has been gleaned from small and medium sized entrepreneurs. In addition this information corelates with that of two other entrepreneur - professional committee organizers from two other industrial areas - one in West Delhi, and another in North West Delhi. While there are individual variations, the broader mechanisms remain the same. In some parts of industrialized Delhi, the Committee is also known locally as 'Boli' translating as: 'to call out'', presumably referring to the bidding process. Some ethnic groups, like the Bania or business community, also refer it to 'Lottery' -- perhaps referring to more co-operative models discussed later in this text.

The lack of commission perhaps reflects the status of the Organizer in the Committee, which, is lower than that of the Foreman. The organizer could be an entrepreneur who needs to generate capital or funds for running expenses and thus promotes a Committee among his close friends. Usually, these groups would be of a small to medium size, ranging from Rs. 20,000 to Rs. 30,000 as the consolidated amount with 8 to 12 members. Quite often, the organizer of one such Committee, would participate in another one as a member. There are also professional organizers, who sponsor 3 to 5 medium to large sized Committees at a single time, ranging from Rs. 100,000 to 150,000 to even Rs. 300,000, with usually 20 to 25 members⁷. Normally entrepreneurs seek their own 'level' of participants so that they share a common affordable level of monthly installments⁸.

Issue of Trust & Fraud: The Organizer of a Committee (like the Foreman) is totally responsible in case of fraud or default of payment by any member. This is critically important since there are no written records, and all transactions are in cash. If, for instance, one member is uncomfortable or doubts the reputation of a fellow member, the Organizer will be asked for a guarantee against that member. If another member offers to 'secure' the reputation of a fellow member, again it will be communicated and seconded through the Organizer. A guarantee is a word of honor -- there is no physical item deposited (say gold/ assets etc) or any written document. In case a member cannot pay installments (either because of bad business choices, death or fraud), then the Organizer would have to pay up to make do the losses. In some cases, usually in non-professional Committees, members might agree to spread the risk equally and share the loss of an unforseen event.

Among the upper middle class, planners, policy makers, and administrators,

⁷ An interesting aspect is that other industrial areas in Delhi, committees are usually of 6-12 persons and rarely above 15, contrasting Viswas Nager's norm of between 15 to 20 persons.

 $^{^{8}}$ In major wholesale markets of the walled city of Delhi for instance, traders move large amounts of money and committees there range between Rs. 300,000 to Rs. 500,000, and at times, reaching even Rs. 1,000,000.

the common perception about the Committee (and in many cases about the Chit Fund too) is that it is open to a lot of fraud -- either the organizer or a member running away with the pooled money. In interviewing both entrepreneurs as well as organizers about this issue with respect to the Committee, a more complex if not quite the opposite view emerges9. All the professional Organizers of Committees I met in Delhi, as well as almost all of the entrepreneurs mention how rare fraud and failure are. One Organizer, who is also an entrepreneur, says that in the last four years he has not had one problem of fraud. Where there was a case of default due to business problems or death, all the remaining members including the organizer, agreed to cover up losses of one of their friends. In any case, he and his partner keep a share of their profits aside to cover up a case of serious default or fraud. They are, however, confident that this is highly unlikely because they select their participants after ascertaining their backgrounds very thoroughly via the local social circuit. The trustworthiness of members is judged by their past record in payments, ownership of real-estate in the same neighborhood district, profession, family position and a host of social factors.

The Committee system does accommodate uncertainties in business. Entrepreneurs distinguish between late payment due to business uncertainties and outright fraud. When organized by entrepreneurs, the rest of the members decide what interest to charge defaulting members. Professional organizers are more severe. They can even decide to impose a late fee or 'fine' which can be about Rs. 300/ to Rs.

Only one entrepreneur had operational problems. He preferred to participate in committees organized by fellow entrepreneurs rather than professionally organized ones. The organizer would be known more closely due to the sharing of production linkages, and members would be familiar with each other's economic and social circumstances. All these lower risks. He claimed that in the case of professionally organized committees, failure in one committee can affect the cash flow in another one. However, he also said that a limitation of the more personalized committees is that they have fewer numbers of participants and consequently, limited resources. For him however, this was quite adequate since his factory manufactured copper wire drawn at higher gauges, he did not have very heavy cash flow requirements.

500/ per day depending upon the gross amount (of about Rs. 5000- Rs. 10,000/)¹⁰. A day is counted as being the subsequent day before the banks open. In a few cases, the organizer can give relief, either bearing the cost himself or sharing it with the participants.

Most entrepreneurs, especially the experienced ones, say that it is the close working relationships between entrepreneurs that keep the system 'clean'. If a member created a fraud, he would immediately find himself excommunicated as a black sheep. In fact, with his reputation soiled, few other entrepreneurs would deal with him, or they will increase their margins to such a high level that he would find it impossible to undertake any business. Even the slightest fraud is immediately news. For instance, if an entrepreneur tried to sell his product to a new person, the buyer would immediately discreetly check with the original customer as to whether there had been any dispute. These issues are very sensitive, as reputation is a very important issue. To illustrate how sensitive the appearance of financial stability or worth is, my informant on Committees related that during the first round of the Committee, entrepreneurs are often hesitant to take on the first bid because it might give the rest of the members an impression of financial insecurity. This in turn, might affect transaction rates and the credit rating. He feels that this factor is especially true in Viswas Nager, since all production activities are inter-related making firms interdependent.

Safeguards in Committees: limits on discounts, floors & ceilings.

Interestingly, as in the case of Chit Funds, reputed Committees in Viswas Nager (as well as some others operating in other industrial districts in West and North Delhi) have instituted limits on discounts ranging from 30% to 35% of the total Committee value. My main informant commented that in his ten years of experience as a professional organizer, almost all the medium & larger Committees (Rs. 100,000)

¹⁰ Some in Viswas Nager complair. that there are entrepreneurs who habitually delay payments, **bi**aming it on bad tours (to market their products in other cities). However in such a well knit neighborhood, these types rapidly gain a 'reputation' leading people to 'adjust' their terms in their dealings.

and above) he has seen in Viswas Nager which did not institute ceilings on discounts, ran into problems because they attracted high risk investors. By pegging a ceiling on profitability, such participants are weeded out, attracting only those who are more stable in their earnings. However, entrepreneurs say that in smaller Committees in Viswas Nager with a closely knit group, this convention is not used -- the close personal contact and multitude of trade and manufacturing links between members precludes the possibility of including risky members.

Another similarity with the Chit Funds is in the adoption by reputable Committees of 1% increase/decrease in the discount as 'Floors' and 'Ceilings' in the bidding process -- as explained in the case of the Chit Fund. However, since this is a convention reflecting the state of the neighborhood economy and the rate of <u>local</u> inflation, the 'floor' in some cases in Viswas Nager, is fixed at 1.25% or even 1.5% of the Committee amount. Similarly, ceilings on discounts vary between 30-35% of the total Committee. The 'floor' and 'ceiling' as conventions are particularly useful as stabilizing factors in industrial areas where capital movements are often characterized by sudden fluctuations in demand and supply.

Many professional Organizers also act as financiers. For example, two participants bid higher than ceiling discount rate during a round. Both parties are desperate, but one gets the Committee amount after the lottery between them. In this case, the Organizer can offer to lend money to the other member, either at a specified interest rate or at the ceiling rate, in return for a chance to take an additional bid on behalf of the borrower. Thus in this case, the Organizer gets two chances of access to Committee funds: First, as his/her right of the second round where he gets the entire Committee, and second, as a bid with a discount on behalf of the borrower.

Diversity of members' background: Organizers, including my main informant in Viswas Nager, stress that it is important to have members of various backgrounds for the successful operation of a Committee. In Viswas Nager, a typical composition of a professionally organized Committees would be slightly more than half to three

quarters to be entrepreneurs of various backgrounds and traders (Equal in number between themselves). The rest would be a mixture of salaried people, property owners or those who have been involved in property deals, and civil servants.

Bringing together people of a similar financial level, but who operate in different cycles with different priorities, sets in place an efficient bidding process. Thus, in this mix (as one members described), there would be the 'investor' types -- who wait for the last few bids, as well as the 'desperados' who move fast for the first few bids. The former are usually service personnel, or white collar persons with a regular income. This group views the Committee as a way of getting high returns on their saving. The desperados are usually traders and entrepreneurs, who require large sums of money at short notice to gain high returns. This group views the Committee as a way to finance ventures -- either for purposes of cash flow or for capital investments. Between these extremes, there is obviously an 'in-between' group who bid midway according to their needs. In many cases, the Organizer would consult members about their likely requirements in advance so as to plan a good mix. Members too, before joining a chit usually consider the mix of the members. Participating in a chit with a predominance of one type of members is not remunerative.

The Meetings: Unlike Chit funds, where the bidding takes place in the company office, locations for meetings in the Committee are either arranged by rotation or fixed in one of the member's factories or offices. Entertainment costs of snacks and drinks, are shared by all members by adjusting these expenses as part of the 30-35% ceiling amount. In some professional Committees, the organizer might also sponsor a lottery with prizes for members, in addition to the bid. The prizes, usually in the form of gold rings, chains or coins of a nominal cost of Rs. 100 to Rs. 300, are used to create 'goodwill.' In some cases, these might be adjusted against the 30-35% ceiling amount.

There are mixed descriptions of what happens during a Committee meeting¹¹. One entrepreneur describes this as a party held in the evening usually at about 6 o'clock after the days's work. At the beginning of the first round, each participating member is allocated a 'number' correlated by a plastic chip coin. No cash itself is brought to the party to avoid detection by a police raid. All payments are made through the organizer the next day before banking time. Other entrepreneurs describe Committee meeting as being more business like, where installments are consolidated on a central table and the distribution is done on the spot.

The trend of bidding is not always very clear cut. If, due to lack of demand, the pace of bidding slows down and discounts decrease, long term investor members usually choose to bid sooner. On the other hand, if the demand for capital is high, the period of heavy discounts continues even up to the middle rounds. Another important aspect that affects the bidding process is the way different members perceive returns to capital. Very few members undertake an orthodox economic analysis to decide the timing of their bids. This is not to suggest that their decision making is irrational, but rather to suggest different kinds of economic environments affecting the bidding process¹². Annex 5-III provides an illustrative example of one such case from Viswas Nager. Table IV in that annex shows the distribution of funds within members including the organizer.

It was not possible to get access to these meeting as an observer since the dealings are all in unaccounted funds. Members are very sensitive about allowing non-members in as observers. For instance, even when I attended a meeting of an association in another part of Delhi, I was taken in as a 'nephew' of the person I was accompanying. In attending a meeting of the federation of small entrepreneurs regarding the DESU raids (discussed in chapter 6), my host gave a long and extended introduction, explaining that he knew me since 1991, that I had known the President of the Federation since 1989, and was also an architect for a public building nearby -- all this to alleviate apprehensions that the members might have.

¹² This, to an extent, is reflected in the way different people describe interest rates. For a salaried person, an important influencing factor is most likely the alternative interest rate calculated on a per-annum basis available in banks or saving schemes like the post office or the Life Insurance Corporation of India. For a businessmen or a trader, per-annum interests rates are irrelevant. Here the money cycles are weekly or sometimes monthly. As a result, their operational descaption of interest is as monthly rates. Money lenders or people who fund hawkers talk in terms of returns to capital in terms of the daily installments -- Rs. 100 given one morning is returned the next as Rs.110/.

For an entrepreneur, the decision to bid is largely affected by the possibility of work orders, pending jobs as well as taking up raw material stock to generate work for under-utilized investments in machines and idle workers. For other entrepreneurs, Committees are regular investments used for raw stock taken on a fortnightly or monthly basis. Members of one group may, in fact, participate in several smaller Committees at the same time to develop overlapping flows of returns. For instance in the Neighborhood as Factory of Viswas Nager, manufacturers concentrating on the plastic, PVC, and enamelling, depend upon professionally managed Committees to provide them with the capital required for raw stock in that circuit, as do lower gauge copper and aluminum wire manufacturers. Smaller manufacturers, for instance the ones involved in re-winding of, higher gauge copper wire drawing utilize the smaller more decentralized Committees, initiated by entrepreneurs within their own group. I now turn to the 'Lucky Draw' which is used extensively by residents of neighborhoods like Viswas Nager.

c) The Lucky Draw

The Lucky Draw, as the name suggests, is a lottery. Organized by professional financiers, it attracts investors from various backgrounds -- service persons, housewives, small traders, to pool their savings and participate in a lottery to distribute the pooled amount given out in the form of prizes or their cash equivalent (See Annex 5:IV as an illustrative example). The group is large, ranging from 100-150 members, who contribute a fixed amount every round, held weekly or monthly. Members are selected by way of personal recommendations by existing members. In most cases, they are usually from the neighborhood where the Financier lives -- allowing him/her to check on employment backgrounds, assets like real estate, and their general financial stability. This works both ways. The fact that the Financier is also living in the same locality builds up his/her credibility among residents.

Neighborhoods like Viswas Nager are ideal grounds for 'Lucky Draws'. Like any other unauthorized colony after a reasonable degree of economic consolidation, Viswas Nager is characterized by the hundreds of additions and alterations to

buildings being undertaken by residents. All this spurs an active real estate market. Complementing these property transformations are the multitude of service, and retail enterprises that rapidly emerge to color the residential landscape. In the case of a Neighborhood as Factory like Viswas Nager, apart from general services, more specialized service activities emerge further strengthening the local economy. All this implies that most residents are able to participate in economic activities and consolidate some form of savings. Furthermore as Chapter 6 will discuss in detail, their are also important political aspects. In this closely knit social environment, residents (both tenants and plot owners), have to pressure authorities to upgrade their areas. The close social relationship between property agents and financiers that is brought about by daily contact, creates a conducive climate to hold lucky draws and hence consolidates the disaggregated savings and surpluses of the neighborhood.

The Financier of the Lucky Draw, in contrast to the Organizer of the Committee, does not participate in the lottery, but manages it in a centralized way. As Table V in Annex 5:IV lists, lottery prizes are not directly centered around cash or financial remuneration, but rather around consumer items of daily use. These do however, have a cash equivalent, allowing the winners to choose the cash option if need be. There are many variations in the prizes offered, in terms of their cash values as well as types: refrigerators, TVs, VCRs & VCPs, tape-recorders, gold chains, coins. The aim is to attract as wide a clientele as possible.

A typical lottery consists of 100 members, each contributing Rs. 400 per month, and runs for 20 rounds (for 19 months). Each member is given a visiting card-sized card bearing a number from 1-100. A counter-foil in plastic bearing the number is pooled and used as a lottery. At the beginning of the lottery, the Financier holds a small party with light refreshments and gives each member an introductory gift. This helps to build a good relationship and for people to get to know him and each other. Apart from the first prize winning draw (totally 20 in number), there are 14 to 16 smaller draws of second, third, and fourth prizes. While the first prize is a substantial one, most of the rest are token prizes. The large number of prizes also spreads the

feeling of being lucky, even if only partly so. The monetary value of the first prize of each of the twenty rounds increases as the number of rounds progresses. In this way, the prize money is increased -- even reaching an amount of Rs. 40,000, the value of a scooter. This helps to keep the expectation of the members high, and also to improve returns to the financier as I discuss later in this text. Although all transactions are cash based, all members are provided with a small accounts page listing the prizes to be won, details of the scheme (Number of members, rounds, installments, return money, special prizes if any, and a table showing dates of installments paid, counter signed by the financier. Annex IV displays one such account book.

In the Lucky Draw, the winner of the first prize of a particular round does not need to make any more contributions for any of the subsequent rounds -- unlike the Chit Fund and the Committee. (S)he also cannot obviously participate in any more lotteries. Thus if there are 20 rounds for a membership of 100, after each round, the lottery is held for one member less. Winners of second, third, or fourth prizes are allowed to participate to try and win again but are also required to continue their contribution of installments. Thus, at the end of twenty draws, and the lottery scheme, there are eighty persons most of whom have not won anything more than the minor gifts as third and fourth prizes, while some have won second prizes of some monetary value. To this group, the Financier gives a parting gift and returns a sum of money equivalent to almost all of their installments made over the twenty rounds but without interest. The return of money after the Lucky Draw implies that participating in such schemes is better than leaving the money unproductive at home. Thus, the implicit feeling is that everyone has been lucky to varying extent. Even the non-first prize winners come home with minor gifts and all of their installments (in undiscounted terms). Also, the lucky members who have won first prizes and even those with lesser amounts talk about their luck. As one member commented: 'Nothing spreads as fast as good luck'. Winning once pushes members to try again. This helps to maintain the goodwill of the financier and also the incentive to participate in another such lottery. This is also helped by the simplicity and transparency of the operation.

This is not to suggest that the members are ignorant about the benefits accrued to the financier from such funds or about the opportunity cost incurred by keeping money with the financier for periods as long as 20 months. It is just that with a reasonably steady source of income, few opportunities for more direct investments, and even fewer opportunities to obtain bank loans to finance newly arrived consumer goods, these Lucky Draws hold forth -- especially when they are held in the same neighborhood members live in, and by persons who are in frequent contact on a daily basis. Table VI, VII in Annex 5:IV provides a quantitative illustration cash flow of one such lucky draw in East Delhi. For the financier, the lucky draw provides an valuable opportunity to draw upon the consolidated savings of a large group of people which can then be used as capital in a financing venture. Figure 6 in Annex 5-IV shows the substantial capital accumulated towards the ending of the scheme before almost all of it is re-distributed back to the members in the last round.

d) Financing Ethnicity: The Marwari system

All the three types of financing mechanisms discussed until now, were not based on the ethnic background of the entrepreneur. Even so, it was clear that the social dimension formed an important undercurrent. While financial wealth is an important pre-requisite for a person to participate in neighborhood financing schemes, it is the social dimension reinforced by the length of residence in a neighborhood or personal introductions by long time residents that is critical to multiply available resources at low risk. In the following discussion, I show how ethnicity and the social environment results in a superbly efficient financial system, where these aspects form the main driving force and its organizing structure. Here, the terms of financing are linked even more intensely to the rootedness of an individual -- extending to highly personalized relationships that span over several generations. This financing system is commonly known as the 'Dalal¹³ system' used in Delhi, and Viswas Nager almost

^{13 &#}x27;Dalal' translates as 'Agent'.

exclusively by two ethnic groups -- the *Marwari* and the *Bania*¹⁴. I focus specifically on the *Marwari* groups¹⁵. To fully understand the rapid growth of *Marwari* firms in Viswas Nager, as well as the operation of the *Dalal* system, it is important to understand more about *Marwari* society and some of the values that structure it.

In many ways, this way of doing business is the essence of the Indian local economy. It is interesting that in the wholesale markets of the walled city of Delhi, the financial worth of a trader is demonstrated by the size of his 'bahee-khataa' 18. Carefully wrapped in red silken cloth, this is a register of 'IOU' counter-foils maintained by the trader. Rather than symbolizing indebtedness, the size of this register shows the extensive trust, credit, and financial strength enjoyed by the trader -- reflecting his/her rootedness in the local market. These 'IOUs counter-foils' are not on legal stamp paper. Rather, these are paper slips bearing the signature and insignia of the lender, backed by an all pervasive social legitimacy. The traders who maintain these do not necessarily fit the image of a traditional trader. Many own airconditioned cars, use cordless phones, and often maintain international bank accounts.

The other significant difference between the previously discussed financial mechanisms and the *Dalal* based mechanism is that the former were spatially centered around the neighborhood district and its particular local economy, with membership cutting across ethnic boundaries. In contrast, the *Dalal* system is widespread over a variety of markets all over India and extends to some neighboring

¹⁴ South India also has its own particular business classes -- the Chettiars in Tamil Nadu, the Naidus in Andhra Pradesh. In rural India, control over particular trades by particular ethnic and religious groups is even more explicit, and reinforced by the financing mechanisms as well as credit relations.

This is for two reasons. First, my main informant belongs to that community. Second, my stress here is to describe the Dalal System in general in the context of the manufacturing economy in Viswas Nager. As such, detail ethnographic differences may be irrelevant. For the latter, there are some useful references, See: Timberg (1995). The first provides a useful historical account especially on the relationships between the Bania and Marwari business groups; Also see, Ghat 1993.

¹⁸ Information by Mr. Archie Sharif. Feb. 1995.

countries like Nepal, Bhutan, Bangladesh¹⁹. This is significant because the *Marwari* originally come from the erstwhile princely State of Marwar in the present day state of Rajasthan in Western India. In fact, even in that state, almost all originally come from only a few districts around *Churu and Pali*, located in south western Rajasthan. The *Bania* community, a business community is more widespread in its origins all over north and central India. A brief introduction below, provides the essence of this financing system:

The importance of 'Introductions'

The *Dalal* based financing system propagates a system of trust in parallel, establishing long term financial relationships based on social regulations. It operates via a network of 'introductions' with the *Dalal* playing a central role. Two statements by my informant epitomize the importance given to these socio-ethnic aspects:

"...We don't lend money, we lend trust and goodwill", and.

"...while a bank goes for paper certification, our (agent) will: "...see your face, who speaks and who is behind you...".

In this system, a *Marwari* entrepreneur is connected to a *Dalal* who, in effect, manages investments into his production by other *Marwari* (in a few cases, non-*Marwari*) investors. The *Dalal* is the central source to direct and seek new investments, and regulate and manage them. Investments can be for varying time periods. The *Dalal* manages all aspects -- renewals, return of deposits, as well as obtaining alternative investors if previous ones do not wish to continue their deposits. Thus the risks are, to a large extent, taken by the *Dalal*-- if he does not meet requirements then his reputation as an efficient organizer of funds is marred. This rapidly leads to a deterioration in his own business.

¹⁹In some cases, due to the trade flows, these financial circuits (related to the gem and diamond business), even extends to distant markets in Singapore, Hong Kong, Belgium and Holland.

The entrepreneur is also saved the bother of dealing with multiple clients (most of whom he does not know well or at all), individual withdrawals and borrowing. For instance, if funds have to be returned by a particular time, then a borrower is reminded on the phone of the due date. The convention usually is that payments are to be received by the next morning before the banks open. In case there is a delay and the borrower has not been able to organize the money, it is up to the entrepreneur to whom the funds were allocated to excuse the delay or decide the rebate on interest charged. If not, the *Dalal* can in some cases charge a whole months' interest, even for a day's delay.

These external investors, seeking secure and safe investments, may not necessarily know the entrepreneur. The *Dalal* however, knows these investors through family connections, or through an introduction by another *Marwari* who has family connections with him. With family connections playing an important direct or indirect role, investors from outside the community are not usually considered safe for lending. Apart from the lack of acquaintance, this is because unstable and risky businesses are not generally inherited from one generation to another. As such, the Dalals feel that family businesses are more likely to be stable in the long run, than non-family ones.

This differentiation on an ethnic and social basis is translated into economic terms. If funds are lent to non-*Marwaris*, they are charged an interest rate that can sometimes be almost double than lending to a known *Marwari*. For example, for Rs. 10,000 invested in a 'known' *Marwari* firm, the Dalal charges anywhere from 18-20% per annum as interest. For a general Marwari client, 20 to 24% would be charged for short term borrowing of between 3 to 6 months. For very well 'established' parties, this would come down to 18%, and in some cases, the lending period could go up to one year at the rate of 17%. For investments, a short term investment of 1 month would give 24% depending upon the season, with 21% for a period of 6 months to a year, and in some cases 18-20 % for investments kept over a year. For a new person in contrast, lending might even reach 30% per annum. For a 'known' non-Marwari

lending into a firm, this might go to 22-24% due to the higher risks involved^b. These are only schematic descriptions since, the fixing of rates depends upon a variety of factors as to where these might be invested, and the time of the year in addition to the personal relationship with the borrower/lender.

All transactions are governed by conventions, with little written in terms of rules. Thus, there are specific conventions regarding payment schedules, introductions etc. 'Introductions' in particular, are critically important. If a *Dalal* strikes a deal with a new person on the basis of an introduction from a known entrepreneur, then it is expected that introducer would help to sort out any problem (such as default), and bear some of the loss if any. Any *Marwari* providing an introduction is expected to know these conventions. At the same time 'introductions' are a way of extending the trust linkage. As my informant told me:

".. In (the) Delhi (business circles), it is different.. if some one gives an 'introduction' here, then the normal mentality is to wonder how much of a 'cut' the person providing the introduction is getting.. Instead, for us (Marwaris), when a person is introduced, we see it as a extension of the introducer, knowing that risks in dealing with the person are reduced.."

Another important aspect of the financing system is that *Marwari* entrepreneurs are expected to borrow from, and lend to the Dalals from time to time, irrespective of their requirements of capital. Many a time, the *Dalal* approaches the entrepreneur to find out if he wants capital, or has some to spare, specifying the time period. In most cases, the entrepreneur can accommodate such requests. If not, he will approach some of his fellow entrepreneurs to organize funds for investing or borrowing. The surety for such borrowing is taken by the entrepreneur whom the Dalal has approached, and not the actual source of funds.

This however has two implications. The first is that these reciprocal obligations keeps the system 'alive'. By borrowing and lending, the entrepreneur is kept informed of the financial climate and gains access to market information. He can in times of

real need, get access to funds. As my informant summarized:

"..being a casual borrower could make you a "casualty" in the system, because the Dalal will not give you priority when you need the capital, or might charge a higher interest rate because you have not been obliging him before..'

The second implication, as a *Marwari* industrialist from Coimbatore told me, is that by constantly borrowing and lending, the entrepreneur can 'hide' any temporary crises in the business, which would otherwise affecting his credit rating and rate of interests. These are very sensitive issues and entrepreneurs go to great lengths to ensure that a business seems stable²⁰.

In many ways, the statement 'Blood is thicker than water' captures the essence of the Dalal system of financing. The Dalal, apart from being an agent, is a person closely known or related to the family of the entrepreneur. Relationships between the two may in many cases, go back several generations²¹. One is born into this set of relationships, or married into them. With this, the notion of 'collective good' and the 'cost of money,' in addition to business skills, is inculcated from childhood itself'. Another important aspect of the close kinship ties is the strict social control at the community level to protect business interests. For instance, one Marwari entrepreneur recalled that except for Bangalore (in Karnataka) and Trivandrium (in Kerala) in the south, whereever he goes on business trips in India, he stays with relatives, as the accepted norm. One reason is that his hosts, like him, do not drink or smoke and he is able to eat home cooked pure vegetarian Marwari food (without garlic or onions). Another reason is that this gives him an opportunity to exchange business information with his hosts. While the hosts acquire information about the

²⁰ The reader may recollect that entrepreneurs are often reluctant to bid the first round of the committee to avoid giving an indication of financial hardship.

²¹ My informant told me of one instance, in which the housewife would quite often, invest capital with a *dalal* who was known to 'her' side of the family, without the husband knowing of the investment, or exercising control. The *dalal* either related to, or known to her parent's side for several generations, would trust her word more than that of her husband. The *dalal* might know the husband, but his own 'family' connection is with the wife's family.

entrepreneurs' home city and its markets, the entrepreneur would get first hand information about markets and contacts in that city. At times, this can pave the way for business ventures, or even proposals for marriage. This custom, apart from consolidating a hold on markets and spreading market information, also ensures that business contacts and linkages are kept within the community. If the *Marwari* entrepreneur stayed at a hotel, he was likely to meet non-*Marwari* entrepreneurs. In such circumstances, it was likely that in the process of socializing valuable information could go outside the community. Also, staying with a family known to relatives induces conservative social behavior along traditional customs²². In the long term, this achieves the same purpose.

Thus we see a complicated social cosmos of kinship relationships inter-related with sophisticated economic decision making. The personalized financial management relationship between entrepreneurs, complemented by their reach into distant markets, is reinforced by yet another important factor -- that of mutual support in times of crisis as discussed later in this text. Before that, I discuss the extensive network of financing operations which extend across different markets in the country

Interconnecting markets at the national level: Perhaps the most important (and complicated) aspect of this financing system relates to the *Dalal* getting access to capital flows from different local and national level markets. The basis for this is the spread of highly personalized connections. The closely knit nature of the *Marwari* community is reinforced by marriages between different families, often in different parts of the country. Not only are families linked, but so are businesses, markets, and information networks at a national level. Another national level network is spread by

²² Interestingly, in cities where he does stay in hotels, one member of the local *Marwari* community of that city, often visits him late at night **or** early morning to indirectly check if he has been drinking or 'womanizing.' These acts would implicitly but surely affect his social 'credit' rating. This amazing fact was collaborated by another of my informants who has close relationships in *marwari* trading circles.

Chapter 5: Financing the Neighborhood as Factory

sales agents of entrepreneurs²³.

This social structure. decentralized in space, yet centralized by conventions and ethnic grouping, forms the basis for a vast and efficient economic networking with rapid movement of capital from one market to another, to ensure that at all times. capital is always productive. In addition, over several generations, the Marwaris -either as businessmen, entrepreneurs, or Dalals, have evolved an important niche for themselves in almost all

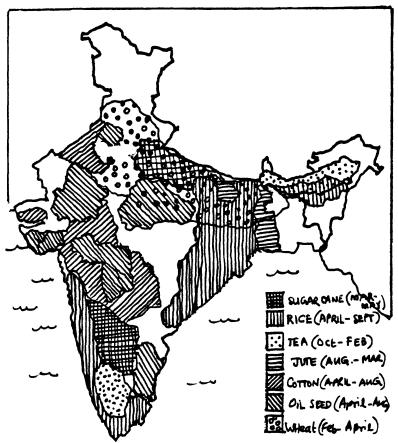


Figure 3: Agricultural regions & cyclic availability of capital

financial markets and accumulated a wealth of experience. This experience, accumulated over generations, has helped them to understand the dynamics of markets at a national level, which is quite complicated as suggested below:

India is a primarily agricultural economy, complementing important urban based financial circuits like the jewelry, real estate, and gold markets (Fig.3). Most agricultural markets, either local or national, are seasonal to a predictable degree, partly due to the monsoon. This means that at a particular place, capital is fully

²³ My informant for instance, has several sales agents in different parts of the country to market his products. Most are from the *Marwari* background. Contact is maintained by courier and telephones. They normally meet at least once **a** year. In December, they come down to Delhi as that is the time when State governments close their financial year in March, and settle accounts. At times when families know each other, this is combined with the children's vacation.

utilized at some time, while vacant at others²⁴. For instance, between August-March, capital in the jute market, largely centered around Calcutta, is 'vacant' and open to investment elsewhere in the country for more productive uses. Prior to that, from April to August, capital from the oil seed markets in the western states of Gujrath and Maharashtra can be mobilized, as also cotton capital from Rajasthan. when these products have been harvested, releasing capital for investment. From October to February, capital from the tea markets in Assam in the North-Eastern parts of the country becomes available. Similarly, from the brick industry in the north central-belt of the country, capital becomes available after October, because the labor is drawn for harvesting. June to October is a lean period for agriculture capital, it being invested for seeds and fertilizer. After harvest in November, till the winter crop begins, this can be drawn for investments. Finally jewelers throughout the country become an important source of investment capital after October, when, during the marriage season, sales are maximum and a substantial surplus is generated. This description is only a schematic one. Each of these markets have differing terms of interests and lengths of availability. The Dalal, in operating between these seasonal but complicated markets, is able to draw on several types of short and longer term capital part of which is invested in production.

Knowing these markets in a technical sort of way is as important for a *Dalal* as developing personal contacts with other *Dalals*. These contacts are developed over several generations, and are an important reference for economic relationships as explained below

Supportive actions within the community: One source of tension, faced especially by small entrepreneurs, is the fear of failure, and of family members being 'thrown on the streets'. This fear, often deep in one's sub-consciousness, restricts risk taking in exploring new products, markets and expanding business. The *Marwari* system has

²⁴ Banks or other financial institutions not only do not give high enough returns, but more important are not flexible enough in their operations.

over time recognized this and developed mechanisms to counter such possibilities. Part of this may again lie in the *Jain* philosophy, which preaches a complex message of non-violence, and social service to ones' fellow community. As my informant commented:

"...'Lending' on the basis of trust, spans a substantial period of time, personal worth & requirements. It is not seen as a one time effort..".

In such a tightly knit community, with a financing system based on trust, those who cheat, or break this trust are ex-communicated and lose a critically important support system. However, on the other hand, if a *Marwari* businessman experiences financial difficulties, as most entrepreneurs do, he has the security of a system to pull him through. My informant provides this interesting account:

... In the December of 1977, a Marwari entrepreneur fell into bad times and owed five parties about Rs.50,000 each amounting to Rs.250,000. He had remaining with him only Rs.50,000. While the creditors started to knock on his door, a fellow Marwari intervened to suggest that if they hounded him, all of them would only get back Rs.10,000/, apart from destroying a business of their community and putting a family on the street. Instead, he suggested that he would invest an equal amount as they had, Rs50,000/ to demonstrate their faith, and advise on the business management. Together, they worked out a financing scheme which ensured that the family was able to maintain a reasonable life style, apart from tackling the business problems it was facing. With this investment and 'backing' of more experienced business skills, the business was able to remain liquid. Every month, after keeping aside family expenditure and the working capital, rent, salaries, electricity, the net profits was distributed between the now six investors. By 1980 all the debts were cleared and the business able to operate independently.

My informant also provides an interesting example of a dispute resolution between two Marwari businessmen. This is a case involving two Marwari businessmen with financial dealings extending over many years. As usual, all dealings were cash with the only records being the family account register, the *bahee-khataa* mentioned earlier. As it happened, a dispute arose about a sum of money which one businessman claimed to have lent the other, while the other claiming that it had long been adjusted in their various dealings.

This matter was not mutually resolved. Two elders of the community, well respected by all and known for their integrity, were brought in as a jury. The jury asked both parties to provide them with their particular *bahee-khataa*. The jury scrutinized these not only for the disputed transaction, but also a general range of transactions between each party and other entrepreneurs with whom they had financial dealings. For this, the jury called for the *bahee-khataa* of these other entrepreneurs too.

All this was done without informing the two parties. Once all these bahee-khataas were in place, the jury sat over a weekend to review all the accounts. They looked specifically for three things. First, they tried to locate the disputed transaction and if it indeed, had been 'adjusted' as claimed by one of the party. This is possible because the bahee-khataa provide a very detailed account of cash flows in several consecutive investments of a single incoming financial amount as it filters through this economic system, making it possible to trace each transaction in great detail. The second aspect analyzed by the jury were the business dealing of each of the businessmen with other entrepreneurs. This was to get a sense of how 'clean' each of the entrepreneurs were in their dealings in general. If for instance, this analysis revealed that one of the two maintained shoddy or incomplete accounts, this would imply that it was likely that the disputed transaction too could have been a result of this. Also, if an entrepreneur was involved in fraud in one case, it was quite likely that he would be involved in other such cases -- reflecting in the comparison of accounts books.

The third thing the jury looked for, were cases of 'cutting out' or over-writing. Marwari account writing has been refined to an art and passed down with great discipline and effort from one generation to another. Young boys in a family are trained to write books in the method, and only when skilled are later entrusted with the family ledger. To do so is a great responsibility because any cutting or over writing reflects on the credibility and business reputation of the family involved. Thus, if the jury saw that of one of the entrepreneurs did maintain a messy ledger, this would go

against them in the final decision. On the basis of these three analyses, the jury made up their minds about who should pay whom, whether it was a case of fraud or just bad account keeping, or if it was a genuine slip on the part of one of them. Obviously if it was the first case it would almost be an economic suicide for the entrepreneur at fault. If it was a case of sloppy account keeping, it would be affect the financial reputation of that entrepreneur. If it was a case of a rare slip, and difficult to make out as to who was at fault, then both would be asked share the loss equally and also contribute a token to the community's temple. The decision of the jury was binding on the two of them. My informant tells me that the first and last possibility are rare. Interestingly, he also mentions some rare cases that were taken by one of the parties to the court. Here too, the judge took the opinion of the marwari elders who had looked over the accounts previously to decide the case.

This case highlights the importance of social regulations and the importance of reputation. It also shows the sophisticated accounting system that ties in a wide range of economic transactions, all of which have a self-reinforcing effect to counter fraud or defaults. To summarize, the *Marwari* entrepreneur has the backing of a fast and flexible system of finance, which draws funds from an extensive range of national level markets, and operates at low costs since it is based on a well regulated system of trust, as well as the security of a supportive social institution in case of business downturns. In this context, Annex 5-V provides a interesting insight into how Marawaris view other financing systems. It is hardly surprising that with these advantages, *Marwari* entrepreneurs have begun to play an increasingly important role in Viswas Nager, as illustrated below^e.

Marwari and Bania entrepreneurs in Viswas Nager: My Marwari informant, an important entrepreneur who moved to Viswas Nager early in its manufacturing history, provides an interesting account of the rapid rise of the Marwari entrepreneur. On the basis of the survey undertaken in 1991 by the Shahdara Manufacturers Federation, of 600 firms in the neighborhood, about 100 businesses were managed by Marwaris, shifting or expanding businesses from the states of Assam, Bengal, and

Bihar in central and eastern India. There were about 200 firms run by local *Banias*, and the rest of the 300 odd firms belonged to *Punjabis*, *Sindis*, *Rajputs*, *Jats*, *Gujjars*, and some Muslims. About ten years ago, most firms belonged to local non-*Marwari* residents. Firms belonging to the *Marwari* and the *Banias* have had the highest growth rates in recent times -- both in number as well as in the volume of business that they handled. Although there are no exact figures available, in general, firms headed by *Bania* and *Marwari* are also generally more well to do than those headed by other ethnic groups. There are about seven to ten *Dalals* operating in Viswas Nager. In addition, there are the so called 'floating businesses' which have no 'establishment', but which operate through these local agents who invest the capital of sleeping partners. This system evolved amongst *Marwari* entrepreneurs coming from Punjab and Assam seeking alternative sources of investment, growth and diversification. How do new Marwari firms start business in a rapidly developing neighborhood like Viswas Nager? Not surprisingly, this again relates to the kinship network as discussed below:

Spreading the kinship network in Viswas Nager: My informant's family, originally from the Churu district in Rajasthan, settled in Delhi after migrating from Assam and Bengal in the North East and Eastern part of India. Today they have many relatives who are set up in the tea and jute businesses in those states. Many of them, passing through Delhi, have decided to set up shop in the Capital. At present he has about 100 relatives settled in Viswas Nager and has played a catalytic role in supporting 30 of them. Of these, 20 were promoted to start their own factories in Viswas Nager with help in getting access to electric power, land, and work orders. 10 more relatives work with him in his own factory. In addition he has helped 10 to market their products in Delhi. How does this process start? Typically, a relative would send his son to him to get trained in the factory. After the youth is trained, and is seen to be capable, both my informant and the youth's family would contribute some money -- say Rs.100,000 to get access to space and infrastructure, and a suitable partnership. This new entrepreneur would be supported by work orders to gradually pay back his loan to my informant and his family. This process also helps to consolidate a mutually useful relationship, with my informant's 'parent' firm,

developing a dependable sub-contractor.

My informant has played a catalytic role in another way -- in supporting many of his foremen to start their own businesses. The support has been in terms of job works, soft loans, and introductions to clients. Over the last twenty years since he began production in Viswas Nager, five foremen have left to start their own units as given below:

Foreman 1 has started a small unit on a 50 sq.yd. plot in Seelampur in N.E. Delhi. about 2 1/2 Km from Viswas Nager. This neighborhood is famous for the stripping of cables to recover the copper and aluminum conductors inside. These are then sold to manufacturers. In addition, there are also some copper wire drawing and cable units located there. After developing some savings, he bought a bigger plot of 150 sq.yds, with a power connection in Loni Road, a neighborhood about 3 Km away from Viswas Nager. Land prices were lower there, and many more copper and cable units were starting their operation. His residence is above his factory.

Foreman 2 started a medium sized 100 sq.yd. unit in Viswas Nager. He also promoted his brother, his son and several relatives to get into manufacturing in close physical proximity. He does not live above the unit due to space shortage. Since most of his family stay in his village, he has invested his surplus in improving production as well as in property there. (See case of Shiv Mandir Association).

Foreman 3 started a unit, but it was a failure, so he returned to being a foreman in a factory in Viswas Nager.

Foreman 4 started a unit in Viswas Nager on a rental basis, but after a couple of years was able to buy land in Durgapuri in North East Delhi, about 6 km away from Viswas Nager. His factory is on the ground floor, and residence above.

Foreman 5 started a factory in Viswas Nager, and his son joined in production. At present his son manages the firm while he has gone back to being a foreman with another firm.

Another support provided by more established *Marwari* entrepreneurs is in securing new markets for their new entrant relatives. For instance, my informant's relatives would often travel between their business centers in the north-east of the country and their hometown in Rajasthan. During this journey, they would stop

enroute in Delhi. Staying at his house, they got exposed to the copper & cable industry, and would request him to set their son up in the business. After his 'training' period at my informant's factory, this new entrant is deputed to secure a new market -- say Bangalore in the south. This is done by using the reputation and product samples from the parent firm. For customers in that city, this new recruit has a backing of a reputable factory in Delhi, with a good track record. Once there is a hold of a market, a partnership is arranged for him, as well as a factory in Viswas Nager. Funds are mobilized, the loans are slowly repaid. Any orders not manufactured by this new firm would be arranged locally by the parent firm, which in any case already has a network of established local entrepreneurs supplying specialized products. My informant stresses that it is important to first secure a market before investing in starting a firm. Thus, with the evolution of new firms, there is usually a parallel development of new markets. These arrangements also have advantages for his own factory. Although his main clients are government departments, the Power Corporations and the Railways -- in case these demands slow down or fail, he can at least meet his establishment (running) expenses from the demand from these wider sources.

4: SEEDS IN A RAIN FOREST

When a seed falls in a rain forest, it takes root within a complex ecological system where other living creatures provide both support as well as competition. This is all within a larger and supportive ecological environment governed by systemic characteristics. The rain forest is structured along a support structure operating at different canopy levels. When a new entrepreneur is moving into a neighborhood like Viswas Nager, one can visualize him as a seed entering into a three dimensional tropical forest of complicated financial circuits. To start production in these fertile surroundings, is to take root within all these -- both in the midst of competition as well as supported by interlocking work, ethnic linkages, relatives already there, and the "introductions" of previous employers.

The local economy of Viswas Nager is thus characterized by differential use of

financial mechanisms by different economic groups. The 'Lucky Draw' is used by the general service economy as well as workers and entrepreneurs residing in the neighborhood. The professional Committees focus in contrast, on a very select group of capital intensive manufacturing processes like PVC insulation, enamelling, and the lower gauges of copper wire drawing and aluminum wire drawing. This would also be use by some of the larger traders like those involved in stocking PVC or resins which require large investments. Entrepreneurs involved in the general range of manufacturing, use personal Committees. However, this does not discount the possibility for personal Committees to be used in the high end manufacturing processes. The Dalal based system is normally used in the high end part of trade and manufacturing, but almost always with Marwari or Bania entrepreneurs. These groups, having a reliable access to this financial network, would not usually invest in "lesser" forms of circuits like the Committees (both personal or professional) as part of daily financial dealings (See my essay in annex 5-V). However, it is very common for larger Marwari or Bania entrepreneurs to financially support smaller entrepreneurs of their own caste or those who have worked with them as foremen. The latter might in any case, also participate in personal Committees.

The main point is that a neighborhood cluster like Viswas Nager with its interlinked enterprises bring together inter-locking financial mechanisms evolved around highly personalized relationships. This financing environment forms an umbrella over a more specific sets of transactions of credit as part of a particular manufacturing job being undertaken. In the next section of this chapter, I shall focus on one key aspect of this tropical forest of finance, the issue of land. Just as the fertility of land in a tropical forest is reflected in its abundant growth, I argue that a key aspect of a financing environment in Viswas Nager is its particular characteristics of incremental land settlement. Here, the low level of regulation of land use and location help to make for real estate surpluses to be invested into manufacturing, and thus into a larger neighborhood economy.

LAND DEVELOPMENT AS A SOURCE OF FINANCE:

abcd

In the beginning of this chapter I had laid out a simple conceptual model of how financing has evolved in Viswas Nager. This was in two parts. The first part (Figure 1, this chapter), building on my conceptual model of land settlement presented in Chapter 4, focused on the process of simpler enterprises moving into a neighborhood taking advantage of the low land values there. The flexibility of land use regulations allow increasingly inter-linked manufacturing processes -- illustrated by Chapter 3 in great detail. Inter-linked production also helps to develop opportunities of outworking and personalized credit flows -- illustrated by the first part of this chapter. The second part of the model (Figure 2), specifically focused on the way real estate surpluses are invested into the manufacturing process. In this concluding section of this chapter, I detail out this issue showing three different ways this happens.

a) Direct financial flows: (Fig.4) This is the case when a landlord becomes involved in manufacturing, providing a part of his plot as his share to the enterprise.

In the initial stages of the evolution of industrial uses, landowners sub-divide large plots or develop ground floors as "halls", as they are locally known. These spaces are usually rented out, or sold for manufacturing uses, while the landlord shifts residence upstairs. This is particularly attractive for small entrepreneurs or local foreman who want to start their own firms²⁵. Since the neighborhood economy is centered around manufacturing and its associated services, it gives rise to daily social contact between the resident landowners and those involved in this local economy: entrepreneurs, foremen and labor. Many such resident landowners, rather than merely providing space for such activities to locate, are attracted to directly participate in the manufacturing and service activities happening around them. The option of

²⁵ As was explained in Chapter 3, property values of plots procured in the initial stages of development at cheap rates, rise substantially during the initial and middle phases of a neighborhood's development.

Chapter 5: Financing the Neighborhood as Factory

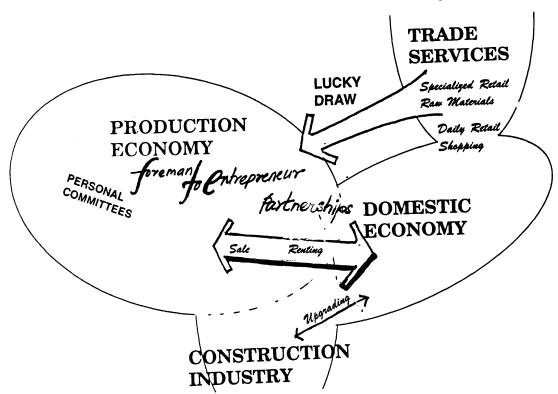


Figure 4: Direct financial flows

selling one's plot is also weighed against its use as a resource to start an enterprise in partnership with those technically skilled or with access to markets²⁶. As one elderly resident explained the social realities involved:

'Sudden money (from a plot sale) is dangerous -- my son might take to drinking, or our relatives would ask for loans which are difficult to get back. Since service (govt. employment) is difficult and pay low, its better the son is involved in some business-- maybe with someone who already has some trade..'

The landlord or his son could undertake minor manufacturing or service activities to

²⁶ This may be in some cases, due to lack of other opportunities, but in many more cases, due to expectation of greater economic stability when residents witness the rapid growth of manufacturing and service activities in their own neighborhood. The process of acquiring a plot of land is a complex social and economic process with powerful emotions tied to it. Rising land values further reinforce these attachments, and opening a business allows them to maintain a claim on it, while retaining the last resort of selling the land if land values reach very high levels. The latter usually happens when the area becomes highly commercialized or industrialized, negatively affecting the residential environment.

accumulate skills which are useful to 'move-up' in the local economy. In cases where specialized activities are more remunerative, the land owner becomes a 'sleeping partner' with a foreman or a trader who has the skills, or market contacts, but lacks capital or space. Since land costs take almost a third of capital expenses in the initial stages of manufacturing, this arrangement with existing landowners can substantially lower starting costs for a small entrepreneur. The point is that the inherent value of the plot -- its size, location, access to infrastructure is directly invested for production -- with an implicit real estate transaction²⁷.

Most <u>Direct Financial Flows</u> happen in 'low end' firms such as those manufacturing grinders, cooling trays, heaters, heating ovens, mixers, industrial air circulators, control panels, welding sets, packaging firms, very simple copper wire drawing at high gauges etc (Refer. Diagram 8). These firms have very simple requirements in terms of plot sizes, and infrastructure requirements. For instance, most would locate on plots of 50 sq.yd. plots in secondary and tertiary locations, use 10-20 HP electrical power connections, investments in capital machinery of about Rs.35,000 and employing 2-4 semi-skilled workers.

In some cases, <u>Direct Financial Flows</u> also happen in firms manufacturing items such as cotton covered cables, copper wire drg. (28-44 Gauge), wire drawing machinery manufacture etc. Here, requirements for infrastructure and services are slightly higher. Such firms would locate on 50-100 sq.yd. plots in secondary locations, use between 20-40 HP power electrical connections, invests Rs. 50,000 to Rs. 75,000 in capital machinery, and employ 4 to 10 semi-skilled workers.

In a few cases, such financial flows also happen in a 'medium' end manufacturing firms such as those manufacturing enamelling and annealing plants,

²⁷ In some cases, property agents serve as an intern. diary between the landlord resident and foreman towards a possible partnership. Usually, the property agent would not charge a fee, as such actions are normally seen as 'goodwill' gestures, returned later in different form.

and cables such as short firing cables. These firms would locate on 100 sq.yd. plots in secondary locations, use 50-60 HP electric connections, invest in capital machinery worth Rs.100,000, and employ 4-10 semi-skilled workers supervised by one experienced foreman. This require a total investment of about Rs.240,000 to Rs.300,000 depending upon the product manufactured.

b) Intermediate flows:

Chapter 4 showed that as neighborhoods like Viswas Nager consolidate, most property transactions happen with property agents acting as intermediaries^e. Most property agents in Viswas Nager, in big and small measure, also act as financiers and organizers of professional Committees. They also operate as financiers of various kinds -- cars, consumer goods, production, and also organize lucky draws²⁸. These professionally organized Committees are much larger in financial amounts, and are linked to various financial circuits in the neighborhood: Manufacturing capital, retail and trade capital, construction capital etc. In contrast, personalized Committees generally operates in a decentralized way among entrepreneurs involved in a particular sub-manufacturing process. For instance, a group of entrepreneurs making twin flat cables, flexible cable cords procuring drawn copper wire from other entrepreneurs located nearby. Due to these two different kinds of Committees, I distinguish between four important 'Intermediate Financial Flows' where surpluses from property transactions are invested into production:

i) Finance loans to entrepreneurs, usually those involved in capital intensive manufacturing such as PVC, cables, and enameling areas. The rate of interests for known parties on medium term basis, would range between 22-26% per annum, and market interest rates (for relatively unknown parties) of 30% per annum for short term lending.

²⁸ For example, there are three major property dealers in Viswas Nager. The first, and my informant, is also a second hand car salesman and financier for new vehicles. He is also a financier for industrial production, as well a professional organizer of committees, as well as arranging 'Lucky Draws'. The second, in addition to being a property agent as a secondary business, is a construction material retailer, financier for production and organizer of committees. In addition, he heads the youth wing of a national level party in the neighborhood. His two brothers manage one of the largest copper wire drawing factory in the neighborhood. The third is both a property agent, and financier for production, as well as arranging Lucky Draws. Most of these activities revolve around close social contact and building relationships.

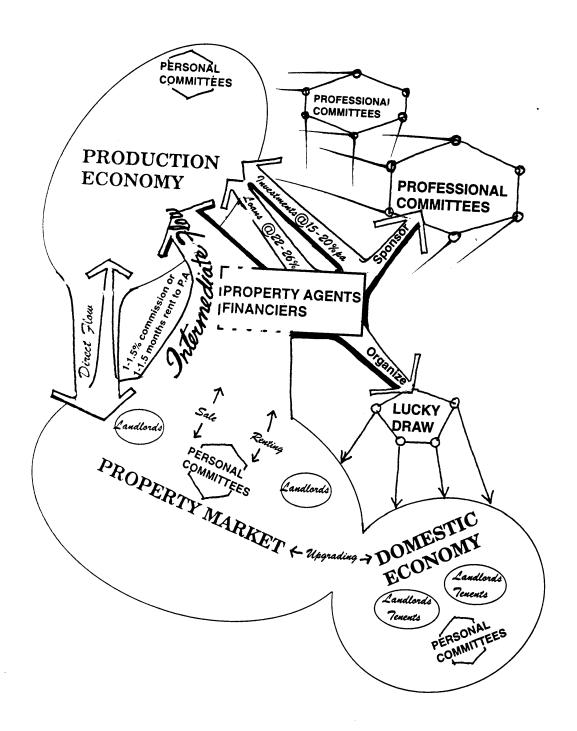


Figure 5:Inter-mediate financial flows

- **ii) Investments in factories of entrepreneurs** with whom property agents have developed a good working relationship. Such entrepreneurs would normally be 'regular' members of the Committees, whom the financier has seen to be stable. Here, investments due to the personalized relationships, would be more secure, long term, with interest rates ranging between 15 to 20% per annum. In a sense, the financier becomes the 'sleeping partner' -- much like the land owner mentioned previously.
- **iii) Funds to initiate 'professional' Committees**. A substantial portion of funds reinvested find their way into production since at least half of the members are entrepreneurs or traders. The latter usually contribute to local service economy relating to manufacturing activities.
- iv) Seed capital to finance 'Lucky Draws'. As explained before, Viswas Nager with its multitude of economic activities, active real estate market and closely knit social structure, is an ideal ground for a 'lucky draw'. The substantial funds consolidated by the property agent/financier during these draws can be used partially or fully by the financier for further investment as described in points (i) to (iii) above.

Figure 5 show these flows in a diagrammatic way. Just as <u>Direct Financial Flows</u> tended to finance a particular category of firms -- just starting off and some middle level firms -- <u>Intermediate Financial Flows</u> tend operate in the middle and upper end of manufacturing circuits. These would involve firms such as fresh PVC Compounding, Copper Wire Drawing requiring high investments such as 30-46 gauge and 0-16-22 gauges, Super Enamelling (horizontal and vertical plants), and some capital intensive cables such as aluminum conductor cables. To give a sense of the financial breakup of firms in these categories I provide three ranges of investments, based upon my discussions with entrepreneurs and my informant. At the lower end of this category, firms here would have similar investment requirements, to the higher end firms of the previous category. As detailed previously, this ranges between Rs.240,000 to Rs.300,000. Towards the middle range of firms investments are higher. Here, a firm would invest Rs.300,000/ in capital machinery, Rs.140,000 for a 100 HP

electric power connection²⁹, rent for a production hall being Rs. 5000, a 'security deposit' for that rental being Rs.50,000, and finally working capital including salaries for workers being Rs. 150,000/. This adds up to Rs. 640,000 plus Rs.33,333 (Which is the capitalized amount of Rs.5000 @ 15%) totalling Rs.6,73,333.

For the very few higher end firms, among all firms in Viswas Nager, all these items add up in the range of Rs.1,385,000/. These types of firms, usually located on a large plot ranging between 250 and 300 sq.yds, would put in a Rs.9000 rent (capitalized to Rs.60,000 @ 15%) with a security deposit of Rs.75,000/. Machinery, some of which might be of a 'standard company' would cost Rs.500,000. Electrical power would require an investment of Rs. 250,000/, and a working capital ranging between Rs.300,000 to Rs.500,000 to pay for the stocks of plastic and copper wire in a cash flow involving longer gestation periods as compared to smaller firms.

As a neighborhood like Viswas Nager develops into a sophisticated industrial clusters, also develops equally sophisticated systems of financing mechanisms. This last point, takes on special meaning where we consider the case of indirect financial flows discussed below.

c) Indirect flows:

Chapter 2 and 3 showed Viswas Nager to have a rich and diverse local economy. This included different trade and service groups related to manufacturing -- raw stocks suppliers, transport, courier services, packaging firms. This complex local economy is related to a equally complicated set of financial mechanisms (Fig.6). Just as in the case of manufacturing, there are personalized Committees operating within a set of inter-linked businesses (for instance traders of plastic), and professional Committees managed by financiers and property agents. The latter, as local investors can also extend finance or become partners to larger local traders and service firms. All these

⁽inc the bribe)

29 The normal rate for a power connection is Rs.2000/ per HP at the time of writing, Oct. 1995. Since these firms tend to cluster in a block, as a group they are able to bargain down the rate of the bribe to be paid.

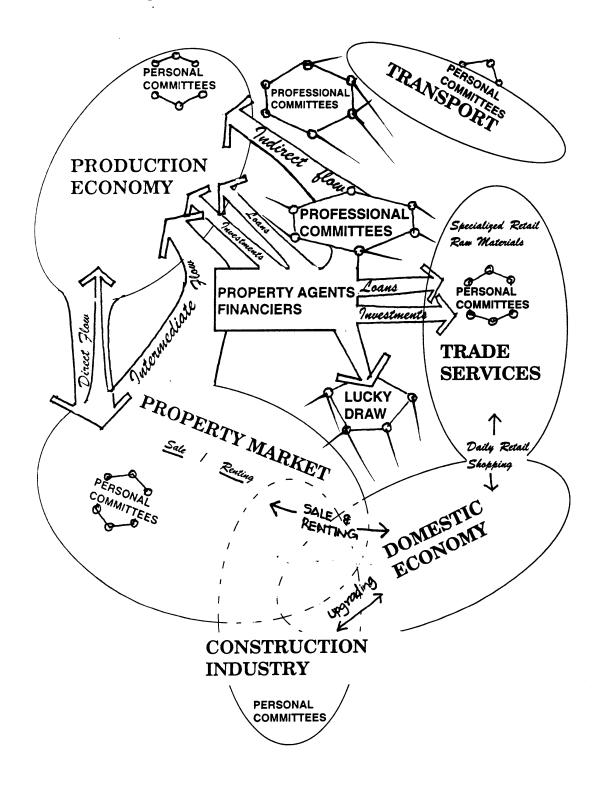


Figure 6: Direct, intermediate, and indirect flows

circuits form indirect financial flows because capital is transferred from one financial circuit involving traders to that of manufacturers, via property agents and financiers - acting as interface agents. Since these inter-face agents also deal in property, we also see real estate capital reinforcing these other capital flows.

Thus, real estate surpluses find their way into manufacturing capital in many direct and indirect ways. This raises an interesting and important point: The nature of financial flows in situations like Viswas Nager make possible investment into the local economy. To fully appreciate this point, it is useful to contrast financial circuits in this neighborhood with those in two 'planned' neighborhood situations. The first is a typical public housing project with multi-storied walk-up apartments. The second, very similar in physical form, is a high class residential development by a private corporate developer. Both these housing areas have some portion of their plots designated for non-residential activities in terms of shops³⁰.

In both these cases, for a variety of complex reasons, residential and especially the non-residential activities, have a market value that exceeds their official value. Without going into the complex causes of these differential values, let us treat this as a 'surplus' that comes out of settlement and non-residential use. The issue here is to see how and where these surpluses are transferred, and can these be invested locally, if the residents so desire. Or in converse, are these bled out irrespective of local groups wishing for these to be invested locally.

This surplus can be quite substantial amount³¹.

³⁰ In some cases, non-residential uses can also include small scale industrial activities. For instance, this is common in Bangalore where a large housing area would also include plots for industrial use. In the case of Delhi, commercial activities are allowed in designated areas within the neighborhood such as 'community shopping centers'. Certain activities like offices for architects, doctors, lawyers and consultants are allowed within the residential plot as long as this does not exceed 35% of the total floor area. In almost all of Delhi's low income housing areas, including that developed by public authorities, it is quite common to see small retail outlets, as well as manufacturing uses. For a illustration of the latter, see Benjamin 1985.

³¹ The issue would not be as significant if it was not that land made available to these housing schemes, is heavily subsidized. This is both in corporate development and public housing. Two consistent demands by private corporate developers are: First, housing should be declared as an 'industry.' This would give them

Unlike a neighborhood like Viswas Nager, where the regulatory environment is 'loose' and allows non-residential activities to develop with relative ease in a decentralized way, non-residential activities in both public housing projects and private corporate development are under centralized controlled. I argue that in both these cases, real estate surpluses are transferred via centralized institutions to outside the neighborhood rather than being used internally as in the case of Viswas Nager. In the case of public housing projects, there are property agents who specialize in the transfer of subsidized units to purchase at near market values. However, much of the profit of such agents must be used for bribes to get the necessary papers and permits from the development authority building these projects. Thus, much of this surplus is leaking out of the neighborhood economy and spent or invested anywhere by the intermediaries or officials who receive these.

In the case of corporate housing developments, the corporate body accumulates surpluses and uses them anywhere where the corporation operates. In contrast, as we have seen in the case of Viswas Nager, the situation is more decentralized, and holds greater promise for re-investment in the local economy if the residents so desire. Judging by the economic boom in the neighborhood, they certainly have.

access to cheap institutional credit, and substantial tax cuts on investments (no corporate and income tax for five years); Second, that public authorities should acquire land under eminent domain (using its police powers as in the past, at under market prices) to be then allocated to them. In the case of public housing, land is similarly acquired from farmers, external infrastructure development introduced, and allocated to 'group housing societies' at lower than market rates. All this can generate a substantial cash income. For instance, in one project where I was professionally involved, the managing committee of about 12 people (mostly exbureaucrats with excellent contacts in the government) had 'cornered' between 3-4 flats each in the name of their children and relatives. If a person has paid Rs.300,000 for a flat in a 'group housing' project before the start of its construction, by the time construction is over, the market value of the flat can be anywhere between Rs.550,000 to Rs.600,000. In these projects, about 25% of the plots would have already been resold before construction is complete, and another 50% within two years of its completion -- when the rate of increase of the market value is the highest.

Ironically, it is common that these plots for co-operative housing as well as what the private corporate sector demands, are both allocated under the master plan framework which in many cases are previously occupied by un-authorized colonies demolished to make way for 'planned development'. I do not wish to get into these political issues here as Chapter 6 deals with them in a more comprehensive way. In this chapter I want to specifically contrast the process of transfer in these two types of projects and that of a situation like Viswas Nager.

I had shown in Chapter 4 that the evolution of manufacturing affects real estate activities. Here in this chapter, we see here the inverse effect, laying out an important cyclic process introduced in the beginning of this chapter.

Fig. 10 below shows the complex structure of financial flows operating in a neighborhood like Viswas Nager. These are in addition to individual credit deals among entrepreneurs.

d) Case Studies

To get a better operational sense of the financial amounts involved, I lay out three working examples. However, before I discuss these cases, it is important to first mention an important methodological issue, since the issue of real estate investments into manufacturing is an important one. This comes out of two questions with regard to the investment of real estate surpluses into production: First, how does one estimate the amount of surplus from a real estate deal?

Second, if these figures are indeed correct, then how do we know that they are indeed being invested in manufacturing?

The first issue was a much easier one to resolve. During my previous research here specifically on the issue of land markets (Benjamin 1991)³², I had developed a good working knowledge of the property market in Viswas Nager. Furthermore, being an architect allowed me to judge, by a quick visual observation of a building under

³² At the time for that research (1986 to 1989), how**ever**, I did not realize how sensitive the issue was, and approached the topic too directly. Also, when doing so, I used the term 'Chit-fund' rather than 'Committee' which as explained earlier in this chapter, are two quite different things.

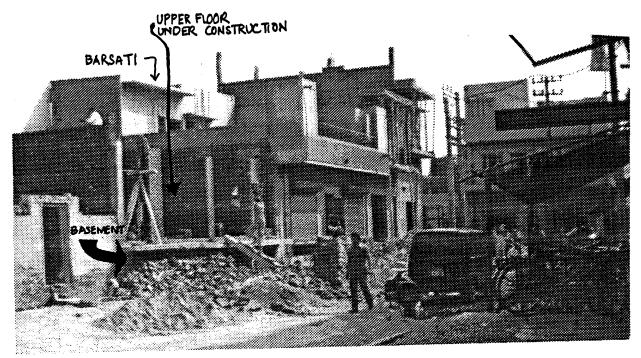


Figure 7: View of a residential plot in Viswas Nager's industrial core area being upgraded to incorporate a factory in the first floor and basement.

construction, as to what were the construction costs involved³³. This experience helped to evaluate the figures given by property agents as well as in more general interviews;

The second issue was more complicated, and largely depends on developing a

As an architect in a small partnership, our firm also undertook the design of a few such constructions in neighborhoods like Viswas Nager -- mostly of close friends or their relatives. This helped me to develop a reasonably good working knowledge of things. For instance, one of out projects was a design for a acquaintance's two sons in an un-authorized colony not far from Viswas Nager. The family had a 250 sq.yd plot and wanted to build a three stored house on the entire plot for their large joint family. Being a corner plot, they wanted to develop the ground floor to have 5 shops and a 'gowdown' (storage space for rent). 4 of the shops were rented out, while the fifth was kept in the family. The 'security deposit' from these shops, taken in advance amounted to about Rs.350,000, were used to finance almost a third of the construction. The rest was from the extended family's savings, and that of the father, a retd. engineer from the public works dept. The other son also had a plot in an adjoining un-authorized colony. He had developed the lower two floors as a medical clinic and wanted us to suggest ideas to upgrade his residence upstairs. Thus, the strategy of capitalizing on the generating activities to fund real estate and vice versa is quite common. In Viswas Nager, such a transactions involve manufacturing because that is what dominates the local economy.

good source. Almost all financial transactions relating to real estate are extremely sensitive since they involve large amounts of undeclared cash. Thus, to get an accurate estimate, one would have to have a very close relative personally involved in such a financial deal, as well as to be able to provide a substantive 'introduction' to a financier/ property agent. I did not have the former. However, I did manage to develop a good working relationship with a property agent, who became my main informant on this issue³⁴.

As mentioned earlier, this informant is involved in both the real estate market and as an organizer of professional Committees, and as a financier. He also has the advantage of growing up in Viswas Nager developing strong family connections in the neighborhood, critical in his business. In this context, the figures given below were worked out jointly by us in an illustrative way based on his experience and daily working. In addition, ever since I first started research in Viswas Nager in 1986, and more intensively since 1989-1990, almost all entrepreneurs and residents in describing how they started off here, mentioned the use of real estate surpluses in different ways (which I explain above). For them, and for me once I got to know the system more closely, this seemed quite an obvious thing to do. However, by 1994, after I had developed a working knowledge of the various financing mechanisms from my informants, my interviews try to direct any conversation to these issues, in an attempt to incorporate gain more detailed insight. In general, these confirmed what my property informant told me, only colored by individual differences arising from family circumstances, as well as the kind of land entrepreneurs and landlords had access to, in the way of its size and location. Thus, this data has come out of a complicated process that is not linear, but more out of working through different kinds of groups, developing cross checks as one goes along. For these reasons, I feel

³⁴ Although this contact proved to be very valuable, there is nothing like a 'real case-study'. It is not that the figures are in-accurate, but schematic discussions with a property agent (usually interrupted by visitors) tend to gloss over exact details which would come out more consistently in a real life case. Unfortunately, one only notices these after a discussion and it is usually difficult to go back to one's contact to clarify exact details since these were schematic in the first place and usually discussed a couple of days previously.

that my data is reasonably representative.

With this diversion into the method of data collected, I shall now focus specifically on the cases outlined by my informant³⁵. The first two are of contrasting firms: a very small one, and a larger one. The third example is of an entire block undergoing transformation, providing a sense of the amount of capital generated for investments into these circuits.

Case I

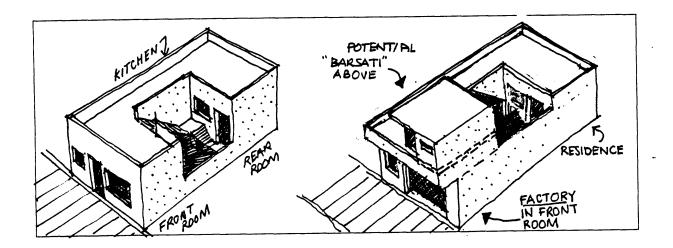


Figure 8: Case I direct flow

In the first case the landlord, a clerk in a government undertaking, has a small 50 sq.yd. (15'*30') plot in a secondary production area of Viswas Nager, but with access to a electrical connection. The residence was originally a two room structure with its front room of about 10 feet by 15 feet and rear room next to a kitchen and

³⁵ For the sake of simplicity in communication, I assume real estate transactions to be mostly **sales** rather than **rentals w**:th security deposited. I do however, provide these details to **gi**ve a sense of the amounts involved. Later in this text, I shall suggest that most transactions tend to be on a rental basis because this makes it easier to draw funds from various financing schemes described earlier.

small toilet (See Fig 8). The landlord agrees to start a partnership with a foreman, who has skills, and a good working relationship with his previous employer. The landlord in this deal contributes his front room for this enterprise. They decide to start off a unit making copper wire drawing using rented machinery and sub-contracts from the foreman's previous employer.

This venture requires the following investment:

* A 15 HP. electrical connection. Rs.10,000 to Rs.15,000 (including bribes)...(A)

* Second hand capital machinery³⁶: Rs.25,000 to Rs.35,000(B)

Working capital: Rs.10,000 to Rs.12,000.....(C)

Total requirements: Rs.45,000 to Rs.62,000 (A+B+C).

This range of investment depends on two things, the amount they pay for electrical power, and the availability of the third machine from the previous employer. This machine could be replaced with one rented or a new one as the business consolidates. However, the above figures do not include the rental values.

In this partnership, we can see contribution of the two partners. The landlord, by contributing the room, forgoes its rental value. This would be about Rs.500/per month with a security deposit of about Rs.5000/-7000/.

Rs.500 Capitalized @ $15\%^{37}$: 40,000 (500 * 12 = 6000) (which is 15% of Rs.40,000)

Loss on security deposit of Rs.5000: 5000 *0.15= 750 or, Loss on security deposit of Rs.7000: 7000 *0.15= 1050

In addition, the landlord contributes a capital of Rs. 5,000/ in cash. The foreman could probably get access to Rs.10,000 from his previous employer as a loan,

 $^{^{36}}$ This depends if they can borrow one of the three machines from the foreman's previous employer.

³⁷ However, it is not only the issue of the money amount. Many landlords view this as a stepping stone getting into more serious manufacturing. Also, given the tight space and a family living at the rear, a partnership would have some control over the type of workers employed. It must be remembered that these are very conservative cultures.

to add to his savings over a two and half year period to make up Rs. 45,000/. Thus, the shares of the two partners would run as follows:

LandLord : Rs.5000 + (Rs.40,750 to 41,050 implicit in plot)

Foreman : Rs.45,000+10,000 Total capital : Rs.60,000 (cash)

Since the foreman brings with him experience and contacts as well as technical responsibility, he would probably take a 70% share of profits. The landlord would remain as a 'sleeping' partner in this firm, and maintain his existing job. In this case, there has been a direct flow of Rs.40,750 to Rs. 41,050 to the enterprise (the capitalized cost of the land plus Rs.5000 in cash), which amounts more than half of the other investments.

We can see in this very simple enterprise, both the landlord and the foreman are getting a foothold in the neighborhood economy. It is possible, if their partnership lasts the ups and downs that characterize the initial turbulent years of any business, they will upgrade their machinery, or move into a better lines. Along with this, they might decide to convert the entire lower floor into manufacturing with the landlord's residence moving up to occupy the entire upper floor. Initially, as shown in the illustration, he might decide to first build a 'barsati' or a small flat on the roof.

Case II

A landlord has a larger plot of 100 sq.yd. plot of land (30 feet* 30 Feet). Initially, he has a two room apartment with a kitchenette and bathrooms on the lower floor (Fig.9). Seeing the increasing industrialization in the neighborhood, he is attracted to rent or sell part (or whole of the plot), and move upstairs. The other alternative is for him to seek a partnership. With two growing sons, he chooses the

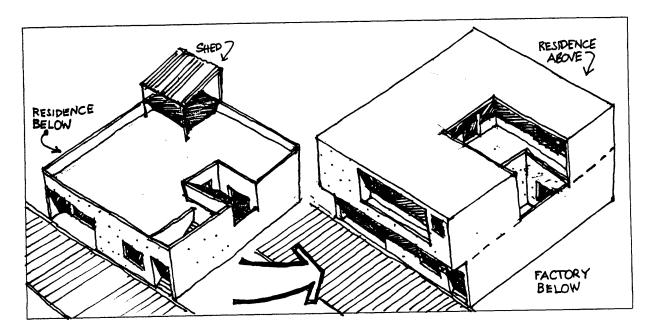


Figure 9 Case II Direct and some intermediate flows.

latter³⁸. This is also helped by his growing interactions with entrepreneurs and foremen he meets on a daily basis. He gets into a partnership with two other persons: a ex-foreman turned entrepreneur and a ex-sales person with access to a market in small towns. They decide on a factory manufacturing 'twin flat' cables as well as flexible cable cords. Here, as in the previous case, the land owner of the plot is a 'sleeping' partner in this venture. To accommodate the factory, he builds an apartment on the upper floor, leaving a working space below of about: 87 sq.yd., after deducting space of 12 sq.yd. required for a stairwell and a courtyard.

³⁸ Some access to capital, from the family or other sources are necessary for this choice, since to build an apartment upstairs costs about Rs.150,000 to Rs. 175,000 for a two bed room apartment with reasonable finishes. In case he cannot afford to do so, he would have to rent or sell half of his plot and use the rest of the money to build upstairs. These kinds of situations are very common in unauthorized colonies. See foot note 35 in this chapter.

In this cable manufacturing unit, the total investments required are as follows:

Capital Machinery Investment : Rs.150,000 Electrical power 40HP : Rs.80,000

(White + Black @ Rs.~2000/HP bribe)

 Working capital
 : Rs.30,000

 Total
 : Rs.260,000

The contributions of the various partners is as follows: The landlord in this partnership, contributes his plot. Assuming land values of a secondary location to be about Rs.3000/sq.yd., the landlord's contribution forgoes a rental of Rs.3000 per month and a security deposit of Rs.30,000/. 3000 * 12= 36,000. This is 15% of a capital value of Rs.240,000. In addition, he incurs a loss of 15% on the security deposit of Rs.30,000 or Rs. 4,500. Thus, land lords total contribution is: Rs.244,500 The other two partners in this case would most likely contribute in the following way. The foreman would invest Rs. 60,000/, and Rs.20,000 as an investment from his exemployer. The sales person, apart from his savings of about Rs.100,000/, would put together another Rs. 60,000/ borrowed from his market contacts to make up totally Rs.1,60,000/.

Landlord: Rs. (----) + Rs.244,500 (Implicit in Plot)

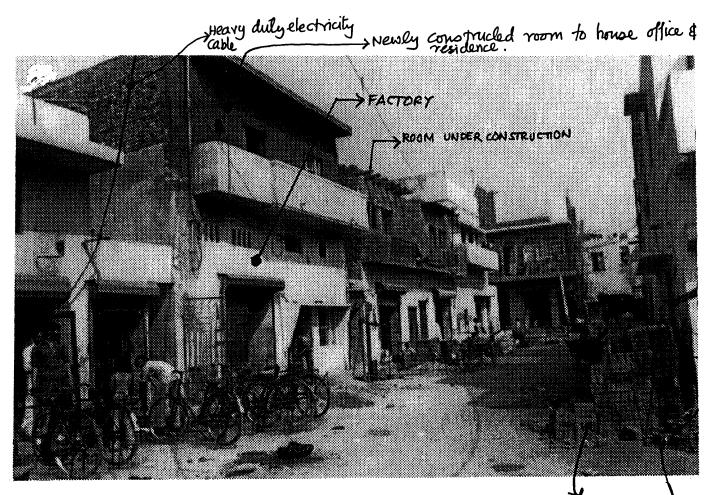
Foreman: Rs. (60,000 + 20,000) Sales Person: Rs. (100,000 + 60,000)

Total Funds: Rs. 240,000

In addition, Rs. 20,000 will be needed to replenish their working capital on a recurring basis. For this, all three would participate in one of the many personalized Committees in their locality to ensure that cash flow. The landlord contributes about 50% of total capital required, but would command about 25% of the profits as a sleeping partner in this three person firm.

Thus in this case we see a much more complex case involving <u>Intermediate</u>

<u>Financial Flows</u> in the way of the personalized Committees. This also complements the use of <u>Direct Financial Flows</u>. These figures are only to get a flavor of the financial dealings involved. An actual cases would be likely to have more personalized details



PILE OF BRICKS FOR UPGRADUNG

PILE OF SPINDLES FOR COPPER WIRE DRAWING .

like relatives borrowing money when land is sub-divided or sold, and in some cases, lending money as investors in the enterprise. Another issue is that most plots in Viswas Nager are 200 sq.yd. plots. This means that many land owners, if need be, can sell out half their plot to re-invest their surpluses into manufacturing, or building/upgrading their apartments³⁹.

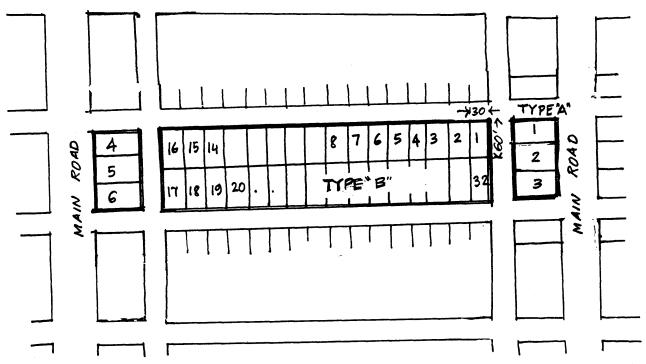


Figure 11: A typical industrialized block in Viswas Nager

CASE III: AN INDUSTRIALIZING BLOCK

To get a sense of the block level financial flows between the real estate market and its investment of surpluses into manufacturing, I consider a industrialized block in Viswas Nager's core industrial area. This is shown in Fig.11. The block has a total of 38 plots and fronts two main roads on either ends. Of these plots, 6 front the main road with an area of 250 sq.yd. (Plot type "A"), and 32 are of 200 sq.yds (Plot type "B") which are located along the side streets. Land values vary between the main and inner

³⁹ One of the important advantages of Visw**a**s Nager is that it was originally sub-divided into 200 sq.yd. pi**d**s, compared to 100 sq.yd. in most other unauthorized colonies. It is easier to sub-divide a plot for a particular purpose than consolidate it at a later date.

roads. On the former they are Rs.9000/ sq.yd. and on the inner one they are about Rs.7000/ sq.yd.. Being a block in an industrial core area, most properties have their ground floors used for industrial and to an extent commercial activities. In all these cases, transactions are commercialized -- involving property agents.

With this background, I first focus on the generation of property surpluses, and then consider their investment.

Total No. of 250 Sq.yds Plots : 06 of Type "A" (Main road)
Total No. of 200 Sq.yds Plots : 32 of Type "B" (Inner cluster)

Land value on main road : Rs.9000/sq.yd. Land value on inner road : Rs.7000/sq.yd.

Transaction relating to plot type "A"

Landlord of plot type 'A' sells the lower floors to an entrepreneur, and builds an apartment for himself above. Because this plot fronts the main road, three floors and a small roof unit *barsati* can be built here⁴⁰. By selling the lower two floors he gets 75% of the total plot value:

```
Area * Land value * 75% = Gross profit
or 250*9000*75/100 = Rs 1,687,500 ....(A)
```

Area of a 3 bed room apartment on third floor and one barsati unit: 1685 sq.ft

```
Cost of construction @ Rs.300/sq.ft:
1685 @ Rs. 300/Sq.ft. = Rs.505,500 ......(B)
Thus, the surplus for landlord after transaction (A-B):
```

=Rs.1,182,000/.....(C)

One can see that there is a considerable surplus left even after investment into the construction of the apartment above. This surplus can be used in different ways.

[&]quot;Barsati" is a roof top unit. See photo accompanying text. For a large plot like the Type 'A' fronting the main road, three floors with a small rooftop unit, and a basement are possible. Given this arrangement, the floor wise distribution of sale prices are as follows: Basement: 10%; First floor: 40%; Second floor:25%; Third floor and roof top unit: 25%. Thus in this particular illustration, I have assumed that the landlord gets 75% of the total plot value. This is only a schematic idea since particular cases will vary depending upon the extent of existing building, its form in the context of its future use, as well as if the lower floors are being used for manufacturing or for retail.

While there are no exact figures available, discussions with entrepreneurs land owners and property agents suggest the following schematic distribution⁴¹.

45% invested into neighborhood Committees, and Lucky Draws : **Rs.531,900/..(D)** 25% invested into factory partnership : **Rs.295,500/.(E)** 30% for savings and consumer purchases : Rs.354,600/

In this sales transaction, the property agent (and financier/Committee organizer), also makes a profit of 1 to 1.5% <u>each from the seller and purchaser</u>. This amount comes to: {1*2=2% to 1*1.5=3%} of 1,687,500 ('A') = Rs.33,750 to Rs.50,625. A simple average of this comes to: Rs.45,187. Apart from other operating investments, the property agent further invests half of this money into professional Committees or local financing (in this case of industry) coming to **Rs.22,593/...(F)**

Total real estate funds invested into production from one transaction of plot type "A" (D+E+F) would be about :Rs.849,993......(G)

Plot type "B"

Just as in case of plots on the main road, (type "A"), let us consider the case of the 200 sq.yd. plots along the inner road (Type "B"). Here again, the landlord of plot type 'B' sells the lower floor to an entrepreneur below, to build an apartment above. Following the same logic as argued in Plot type 'A', the landlord gets 67.5% of the total value of the plot⁴².

This investment can be affected in the way of opportunities within the neighborhood (the relative mix between investing in committees and lucky draws) as well as investing into external ones like the share market. While the share market does at times provide higher returns, one issue that emerges is that investing locally also helps to set up relationships where one can borrow locally. This is more likely to be in neighborhoods such as Viswas Nager as compared to neighborhoods with residents working in clerical jobs.

⁴² Type 'B' is on a smaller plot area and on an inner road. In almost all cases, buildings in Viswas Nager have a *barsati* (roof top unit). Most units are either three storied with a barsati or two storied with a basement. There are a few which have a basement and a second middle floor together. Since this is a 'core' industrial area and highly industrialized, the lower two floors (either first floor and basement, or first floor and second floor are taken up for manufacturing). while the upper floor and barsati are used for residence. The distribution of the total plot sale price would be as follows: Basement=15%; First floor=50%; Second Floor=25%; Barsati=10%. Thus, the entrepreneur will pay the land owner 65% of the total plot value. Alternately the distribution in the non-basement case would be: First floor=45%; Second floor (used for light manufacturing like computer cables etc and office space)= 25%; Third floor 20%; Barsati=10%. Thus the landlord in this case would get 70% of the total plot value. For a conservative estimate I assume an average between 65 and 70 to arrive at: 67.5%.

The area of the plot is 200 Sq.yds and the cost of land is Rs.7000. Thus, the sale price of the entire plot would be 200*7000 = Rs.1,400,000

Landlords gross profit would be 67.5% of 1,400,000 or Rs.945,000(H)

The landlord however, needs to build an apartment above. Assuming a area of 1640 Sq.ft.⁴³its construction cost @ Rs.300/Sq.ft.= Rs.492,000(I)

This leaves the landlord a surplus of **Rs.453,000/....(H-I)**.

Just as in the previous case, a part of this surplus is invested into Committees via property agents, and various 'lucky draws'. We can take this as about:

45% invested into neighborhood Committees, and lucky draws: Rs.203,850/....(J)

25% invested into factory partnership : Rs.113,250/(K)

30% for savings and consumer purchases : Rs.135,900/

In this transaction, the property agent too makes a profit (1 to 1.5% from <u>each</u> party) from the total sale price of the plot (Rs.945,000). As before, this comes to between Rs.19,080 to Rs. 28,350. Taking a simple average we get Rs.23,715. As before, half of this is reinvested into local Committees or financing: **Rs.11857/...(L)**

Thus, the total real estate funds invested into production from one transaction of plot type "B" (J+K+L): Rs.328,957/ ..(M)

With this basic working calculation, the total funds invested into manufacturing from types "A" and "B" plots are as follows. We can safely assume that all six of main road plots (type "A") are commercialized or industrialized. If so, that the total funds available for investments from

type "A" are: 6* 849,993 (G): Rs.5,099,958(N)

In the case of Type "B" plots located in the industrial core, we can assume that about 75% plots (24 out of 32) are industrialized. If so, then the total funds available for

⁴³ This could either be a large four bedroom flat spread over one and half floors used by an extended family or a two room flat below and a one room barsati above which is rented out. To be conservative in my calculations, I am discounting the rental incomes from the latter case. The built-up area is 1640 sq.ft. as compared to 1685 in Type "A" because the plot is 200 sq.yd. compared to 250 sq.yd. Also, in Type "A", there is a convention of leaving a 10 ft. setback while this is not done in the type "B" plots.

investments = 24* 328,957 (M): Rs. 7894968 /..(O)

Total funds likely to be available for investment (N)+(O) into manufacturing of various categories of enterprises: Rs.12,994,926.....(P)

To get a sense of what this figure of Rs. 12,994,926 means for the manufacturing economy, it is useful to come back to the investments (both capital and running) of firms in the neighborhood. Unfortunately an accurate physical survey of the break-up of the different categories of enterprises is not available due to the extensive use of un-accounted cash. However, based upon a break-up on a listing of firms in the brochure of the federation, as well as discussions with the office bearers of the association, I have a reasonable estimate. In general, the top end highly specialized firms like PVC processing, and Enamelling, constitute only about 2.5 % of all the firms in the neighborhood and within this specialized industrial block, not more than 15%⁴⁴. Thus, out of a total of 30 industrialized plots, about 5 or less would be of this category, requiring an investment of Rs.1,385,000. About 10 of the 30 would belong to upper middle level investments of Rs.673,333/ each. The remaining 20 of the lower middle category would require investments of Rs.300,000/ each. Very few, if at all, would be of the lowest category due to the high cost of land here in this core area. All together, this distribution gives a rough idea the requirements for manufacturing investments:

5* Rs.1,385,000/ + 10* Rs.673,333/ + 20* Rs.300,000/ = Rs.19,658,330/.....(Q).

Thus, the total surpluses available from real estate transactions

Rs.12,994,926 (P) is more than half of the total manufacturing investments

required. Although these calculations are schematic, this is a substantial figure even if more accurate data could be available. I have also been conservative in all of my estimates.

⁴⁴ Even this in fact, is likely to be on a higher side.

As a prologue to this discussions on these figures, I had specified a caveat that these are very sensitive issues, and came out of discussions with property agents, and indirectly with entrepreneurs, and property owners. Thus, if these numbers are indeed reasonable as they are likely to be, then the above analysis illustrates two important things:

First, they show the substantial financial amounts being transacted between two parallel but inter-linked markets: Land and manufacturing;

Second, it also shows that the financial environment of neighborhoods like Viswas Nager is differentiated in complex ways, parallel those of the manufacturing industry as well as land markets.

These are important because this suggests that the evolution of a local economy of neighborhoods like Viswas Nager to be understood accurately, need to consider these complex relations in their evolutionary sense. This point is emphasized in the concluding section of the chapter that follows. Here, I hypothesize that the financing environment of Viswas Nager has important systemic aspects which relate to the particular organization of production characterized by linkages, and the incremental settlement of land by poor groups. This obviously needs more specific research. However, given the existing evidence, it is useful to consider to understand the financing environment in terms of these social dynamics outlined.

THE SYSTEMIC ASPECTS OF FINANCING MECHANISMS

In my description of the various financing mechanisms in the first part of this chapter, I had tried to highlight the social dimension within which these mechanisms operate. This was particularly explicit in the case of the *dalal*-based financing used by *Marwari* and *Bania* entrepreneurs in Viswas Nager. However, these aspects are equally true in the case of the Committee and the Lucky Draw. I shall now specifically focus on their systemic aspects, to suggest that both the organization of work, as well as the process of land development affects their operations in important ways^f. To understand the issues more clearly, it is useful to briefly return to the economics of each.

The Chit Fund is not popular in Viswas Nager, since all its transactions are by cheque. However, that is not the only reason. An analysis of the cash flows, discounted both at 36% and 11%, that for those members facing higher opportunity costs (30% and above) it is more profitable to bid in the very initial stages of the chit (See Figure 2, and Table 1 in Annex 5-II). This is primarily due to the rapid depreciation of the bid amounts and installments at a higher rate of interest, complimented by the recurring cost of transactions in terms of the commission that has to be paid to the foreman during every round. For those members with lower opportunity costs or operational interests -- 11% taken for analysis, it is more profitable to bid in the later part of the chit. The only way this group could gain by returns is by having an even lower operational interest -- which seems highly unreasonable given the real rate of inflation faced in metropolitan cities including Delhi. The main economic advantage is taken by the organizer of the chit. This is explicit when we consider the foreman's share as a percentage of the total funds disbursed (See Table II, Annex 5-II). While all members get (not including outflows) between 4.3% to 4.9% of funds at @ 11% the foreman, at the same rate, gets 11.71%. At the @ 36% which is more likely for any professional financier, returns are even higher at 12.32 %, while that of members varies from 4.22% to 5.06%.

In contrast to the chit fund, the lower costs of transaction in a Committee makes a substantial difference. Even with the organizer getting the second round (rather than the foreman getting the fifth or seventh) the profits in a Committee are much more evenly distributed between its members⁴⁵. Table IV in Annex 5-III shows the low ratio of the organizer share of the total funds as compared to the members. At a bank discount rate (between 5-11%) the organizer gets about 6.13% of the total funds while the members get between 4.30% to 5.2%. At the market discount rate of

⁴⁵ I was recently told that in Delhi, the current (mid-1995) market rate of interest for a known party is between 24% and 26%, and in more risky cases, up to 30% per annum. Beyond 30% would be only for very risky investments. Taking this (rather than 36% as previously assumed) as the discounting rate for our comparison of percentage of surpluses allocated to Foreman of the Chit Fund Company compared to the Organizer of the Committee, the discounted value of the 5th (or 7th) round taken by the Foreman would be much higher, pushing up the Chit Funds profits even higher.

36%, the organizer gets about 7.09% of the total funds while the members get between 5.05% to 4.5%. Figure 3 in the same annex, shows that for a substantial period, almost till the middle rounds, members at a 36% discount rate, make profits, to be rapidly taken over by those with a lower opportunity costs at 11%. It is little surprise the Committee is so popular. If the economic benefits are so poor in the case of chit funds, it is possible that the main incentive to participate in a chit fund seems to be the access to 'white funds' in a consolidated form^g.

The official safeguards against defaults in chit funds by way of the fixed deposits made by the Foreman, may, in reality, have little meaning for small entrepreneurs. They are already excluded from institutional finance due to the bureaucracy involved⁴⁶. It is interesting when entrepreneurs were asked about their opinion about these issues, it generated an animated and interesting discussion. On legal contracts, most responded (in different ways) that they would not trust contracts made only in writing. For almost all of them, the 'word of mouth' was more important. This viewpoint, however, has to be seen in its context of a neighborhood like Viswas Nager with strong social circuits, emphasized by the inter-relation of production. Almost all stated that the most critical asset was 'goodwill', followed by luck and then monetary assets. Two small scale copper wire drawers were more explicit:

"...With goodwill one can hire a machinery, form stable partnerships, get a space, procure work orders and raw material on credit and consolidate oneself. With only money, but no goodwill, even the money one has, will all be lost."

The more experienced entrepreneurs, as well as some of the more perceptive younger ones, explicitly linked 'goodwill' to the close production networking in Viswas Nager. One candidly put it that due to this, goodwill was the easiest to form, and even easier to break in Viswas Nager. His partner quipped that this was because the name of their neighborhood is 'Viswas', which translates as 'trust'. One entrepreneur was

 $^{^{46}}$ Instead, it is quite possible that funding specified to the **n**eeds of particular groups complemented by localized regulatory mechanisms might have a more positive impact -- much like the SEWA experience in Ahemdabad (See SEWA 1988;1992).

Chapter 5: Financing the Neighborhood as Factory

more perceptive:

"... Trust' between people in a place like Viswas Nager, was not question of 'loyalty' but rather (inter) dependance. Everyone has to maintain a good reputation since everyone comes to know (of cheating). One cannot do undercutting. I get my products through a 'chain'. Suppose there is a problem between two firms over rates or cheating, I would immediately find out because it will affect my own production in four hours, due to the disruption in supplies. We (the other members of the chain) would all try to find out what has happened -- if the problem is of raw material, electricity, we can help, or some thing else like cheating. The entire group comes to know as a result..'⁴⁷

Another entrepreneur gave another perceptive illustration. He said that in government developed industrial areas, one usually sent one's product to an entrepreneur located in another city. Thus, any fraud or cheating would be take time to be known locally, and not affect the 'goodwill' enjoyed by the guilty party. With the close linkages between entrepreneurs, news of such an act would spread like a wildfire. Membership to a common *camaraderie* of manufacturing in a Neighborhood as Factory like Viswas Nager forms an important part of its social dimensions.

It is possible that these responses may be too extreme, and people being carried away by the animated discussion. However, it does point out the importance of localized regulations based on the systemic aspects of the way work is organized, rather than an apparently fool-proof bureaucratic mechanism. If the issue of fraud is resolved through systemic as well as personal relationships, than it helps explains why the Committee is so extensively used in Viswas Nager and other industrial areas. Production networking promotes 'goodwill,' which forms an important internal check against fraud for Committees.

If Viswas Nager had few systemic and non-systemic regulations, and power

⁴⁷ It is interesting to note that 'trust' does not **n**ecessarily relate to ethnic background, or market relations as some authors argue. The quote shows that the organization of work also has an important impact (Schmitz 1996).

relations between firms were more polarized, raw material more difficult to access by smaller firms, demolitions more frequent, then the Committees there might offer very high rates of interests to one end of the circuits and 'milk' the other end (See Annex 5-VI for a discussion of this issue).

The Committee (or even the Chit Fund in cases) is often seen as the cause of deprivation and fraud. By highlighting the local regulatory environment, both its systemic and non-systemic components, one focuses not only on the official rules as part of the legal framework, but more specifically on the conventions adopted. These seem more fundamental to the operational environment, as it is these that decide which rules are actually followed and which are manipulated, or ignored -- depending also on the variety of external circumstances. Adoption of particular conventions also, in turn reflect power relations between the various actors involved. This suggests that systemic aspects governing financial mechanisms not only affect risks associated with financial flows and costs of transactions, but also the power relationship between actors.

Issues raised in the next chapter also build upon another theme, the seed of which was sown in this one. In the broader perspective of this dissertation, one can draw parallels between the local economy of a 'Neighborhood as Factory' like Viswas Nager, and that of the highly efficient *Dalal* system. Both depend substantially on their social environment, where trust and goodwill play an important role. While this is emphasized by the ethnic relationships in one, the organization of work has a similar effect in the other. Both systems revolve around movements of capital between various markets. While the *Dalal* system does this at a macro level and with minimal transaction costs, we see a gradual evolution of inter-related financial circuits between its various markets in Viswas Nager. It is possible that with greater consolidation of economic and social relationships, these transactions costs also reduce.

Another interesting issue, also hypothetical at this stage, is the trend towards renting of land for housing and manufacturing as such neighborhoods consolidate

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over time⁴⁸. Conventionally, especially from the housing perspective, the reasons for this to happen has been attributed to the rising cost of land making plots unaffordable to groups especially poorer ones. While this might be true, it is very likely that in the case of enterprises and especially local economies like Viswas Nager, renting is a way to tie into the various financing networks which operate on moving smaller amounts of capital with greater rapidity. The name of the game in such neighborhoods, seems to be to exist and grow using different financial circuits. To do this effectively, it is important to shift costs as recurring cost rather than a lump sum values. This also has other advantages. The rental option gives more flexibility to the entrepreneurs in testing markets, as well as lowers entry costs for foremen to enter into production.

I had argued in Chapter 3 and 4 that incremental consolidation was useful for manufacturing costs to be spread out in time. This allowed entrepreneurs like foremen to start off enterprises even though they had moderate or low levels of capital. Here in this chapter, we see another important advantage. Incremental consolidation also allows for the financing of 'setting' to happen in an incremental way. Part of the plot can be built, future rooms 'booked' by prospective renters for use as shops or factories. The security deposits taken as 'advances', can then finance construction. This means that financing rather than being a 'one shot' process, comes out of a process of evolving property markets in parallel to a transformation of the local economy. This is also reflected in the capital consolidated via the operation of the 'Lucky Draw'. Table 6 in Annex 5-IV shows this to be quite substantial and available for potential re-investment especially in the last 12 months of a twenty month cycle.

All these issues suggest that rather than only narrow economic perspective, we need a broader approach towards financing mechanisms, and to view them in two perspectives: First, the way land markets can be a powerful stimulus to the economy

⁴⁸ Other researchers have shown in the case of housing that rental markets play **a**n increasingly important role (Mohan 1994; Strassmann 1982). My discussions with property agents in Viswas Nager say that this is true even for industrial use.

by generating surpluses to be invested in production; Second, that the economic organization via a network of inter-linked system in conjunction with the social environment, has important regulatory effects on the operation of financing mechanisms.

Poor groups by being able to getting access to land, are able to thus get a foot hold in the neighborhood economy⁴⁹. The fact that land plays such a important role in determining the economic future of the local economy, means that when external funds are attracted here for investments, they are doing so within a social reality governed largely by the claims of various groups to land. Since local groups, especially poorer ones, were able settle in at the initial stages of development, they develop a pre-existing claim to land. It is very likely that this helps local groups to exercise greater control over incoming capital⁵⁰.

This perspective on the world of local economy finance is closely inter-meshed with a variety of issues: The organization of work, its relation to the land and property markets, and perhaps most important, for complicated and highly local social relations and obligations. Local financial flows, as we have seen in this chapter, also relate to complicated national level financial flows. In this context, finance for small firms have to be seen from this wider perspective. In the next chapter on the organization of work is shown to have important social and political aspects, rather than be only being functional in nature.

⁴⁹ The settlement process, as explained in chapter 4 and discussed in greater detail in chapter 6, is influenced by the process of 'being there.' Here, the length of stay helps incoming groups to consolidate their claims to that location, and a 'social address' as other groups get to know them and incorporate them in local society. This is easier for incoming groups who have ownership to plots, and renters if they have established a claim by payment of a security deposit or 'pugree,' or alternately by being settled there for a long period of time.

⁵⁰ It is also very likely that there are three other factors which promote more local control: a) First, the interlocking manufacturing processes link investments to the performance of the neighborhood economy as a whole; b) Second, most capital is invested in family or very tightly controlled management by the operating purtners. Most transactions being cash based, legal documentation is often kept to the minimum. This creates a particular investment environment that is highly personalized, linked with social and ethnic obligations that run both between the investor and the entrepreneur.

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End Notes

a.

I list some of the main rules that govern the operation of Chit funds.

- i) To start a company, the organizer needs to have it registered with the Registrar of Companies under the relevant state level acts derived from the Madras Chit Fund Act, and get a registration number.
- ii) The company needs to deposit a certain amount as a Fixed Deposit (FD) with a nationalized bank, and produce the relevant bank statements to this end. Against this deposit, the company can start a chit fund totaling ten times the value of the FD.
- iii) Out of the deposit amount, about half can be withdrawn towards investment in office and fixed investments etc. The other half has to deposited with the Registrar of Chit Funds as a security. At the end of the chit fund, this amount will be returned with interest as per bank FD rates.
- iv) All transactions have to be by crossed cheque, and pass books maintaining accounts provided to the members, with entries updated from time to time. The company has to gets its accounts audited like any other company.
- v) The maximum discount allowed is 30% of the chit value. This is to reduce speculative investing and the risks that go with these.
- b. When this does happen, it is a custom that the *Dalal* informs the introducer that he will charge a slightly higher rate of interest to the new borrower. In some cases, the introducer may insist that the same (low) rate of interest is charged as he knows the new person very well. Another check the *Dalal* does is to split the amount into a short term and long term lending. The borrower's credit-worthiness is judged by his/her punctuality in paying back the short term deposit, as well as a host of subtle indications: Was the amount paid back exactly on the due date and time? Was the *Dalal*'s representative made to wait when he went for the collection?

c.

One entrepreneur related how he is bringing up his children to inculcate family values intermixed with business skills. His daughter, a recent undergraduate, has been trained to analyze company accounts and deal with stocks and shares. His son, in high school, is also inculcated with financial accountability, and encouraged to work at his uncle's shop to observe business dealings and get a hand on things. In this household, there is no restriction if the son wants to borrow some money. However, the next evening over dinner, he will be asked about his investment, the returns and, in particular, how that will benefit the family.

Another illustration of the stress on co-operation was narrated by my informant on committees in Viswas Nager. He says that in the few cases when *Marwari* entrepreneurs organize committees among themselves, there is a strong co-operative spirit. The bidding is less drastic, and is modulated by the relative need of each of the members for capital. The second round, which would normally accrue (as per convention) to the organizer of that committee, instead goes to a common pool. The entire group will decide whether this should be used for a community purpose like a donation to **their** temple or a social organization, or alternately to sponsor a holiday trip for all the members and their families by hiring a bus and a cook, and to pay for other holiday expenses. If one of the members faces a financial difficulty, than a part

or the whole of this amount may be given to that member.

One *Marwari* industrialist from Coimbatore told me that most *Marwari* children are brought up with a sense of business ethnics, and a concept of 'interest' or the 'cost' of money ingrained in them from childhood. Another quality was that of frugality -- also reinforced by the philosophy of Jainism. Frugal living was inculcated to allow maximum surpluses to be reinvested in the family business. The problem, according to this entrepreneur is that today's younger generation is guided by 'MTV' and the powerful advertising of consumer goods. This creates contradictions in the values being handed down the older generations.

d.

The evolution of the *Marwari* system probably relates also to the fact that apart from an efficient financing system capable of pulling together community capital, the *Marwari* entrepreneur has little else to begin with when he moves into a new area. Constantly moving into fresh economic and social territories, he lacks assets of land, local 'rootedness' by length of stay, and is an outsider in a society which has an ethnic structure which is very deeply ingrained in a society. As one non-*Marwari* trader commented on the emergence of *Marwari* entrepreneurs in Viswas Nager:

"..in the beginning they walk down the streets looking down at the roads with their shirts buttoned up. Two years later when they have taken over the place, they walk with their head in the sky, shirts un-buttoned, and chest showing.."

This statement illustrates the obvious rifts between ethnic groups over economic territory, when new groups move in.

e.

In the previous chapter, we had seen how extensive the real estate market is a well consolidated Neighborhood as Factory. As manufacturing sets off a variety of services and trade activities in the neighborhood, what was previously a simple residential market evolves into a variety of sub-markets catering to different needs. Most transactions are carried out through 'professional' property agents who, in most cases, are local residents with a 'feel' for the place and who have well established personal contacts. For the sellers, this assures a good price and, equally important, the agent's advice on a 'good' party. For the buyer -- often an outsider -- going though a locally reputed property agent is critically important. This is not only for a competitive price, but more for advice on which are 'disputed' properties, or those dogged with court cases. The disputes can be because of rifts in the family in the settling of conflicting claims of inheritance.

More serious, these conflicts could relate to notices of public acquisition. This is especially important because the DESU will not give an electric power connection to a plot under an acquisition order. For instance, in the southern central portion of Viswas Nager, the DDA demarcated an 80' wide strip running at an acute angle to existing blocks as a future main road. While some part of this is de-notified, the rest still exists in the official records. As such, many properties fall partly or totally within this invisible strip and are barred from full tenure, registration and consequently a regular electrical power connection. Property prices in this area are a third lower than adjoining properties -- depending upon the extent of conflicting use. An outsider, not knowing this detail, may discover after a purchase, that he has to pay a third extra and has to incur extra expenditure to wrangle a power connection from the Delhi Electric Supply Undertaking.

f. By 'Systemic aspects' I refer to the larger set of circumstance that affect individual relationships. These could be social, political, as well as technological. For instance, caste can be seen to have systemic aspects: Governing how a upper caste Brahmin will sit next to a lower caste person. It could be legal, in terms of how a tenant and

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a landlord will build extensions to their residential structures. It could be political, in the way a squatter during election time build up their houses. Systemic aspects form an over-arching umbrella governing individual relationships. Not that this is rigid nullifying space for individual action. Mahatma Gandhi helped at an individual level to change the form of this umbrella, backed by a social force (or riding on it some may argue). In other spheres however, he did confirm to traditional hindu conventions regarding his relationship to his wife.

My argument in this dissertation is that the organization of work in a Neighborhood as Factory, as compared to a mere clustering of un-related industries in a industrial park, develops systemic aspects which govern individual behavior. Thus, one hypothesis would be that Marwaris in Viswas Nager would behave differently to other ethnic groups, as compared to situations where there is little or no Neighborhood as Factory characteristics. This could be due to the inter-relating production, as well as the need to unify politically in times of regularization.

Related to 'Systemic aspects' is the concept of the 'neighborhood'. Conventionally, the physical planning focus on physical form and territory as the way to distinguish one neighborhood from another. I prefer to take a more complex view, focusing on the relationships between economic processes, in this case, defined by the Neighborhood as Factory, as well as that related to the politics of civic development. In the latter, the definition related to the regularization of particular blocks or administrative territory. If Viswas Nager was characterized by the ethnic concentration of social groups centered around a particular local economy (as in some Indian Cities like *Aligarh* -- famous for its lock industry), then one definition would have incorporated this aspect. The precision of definition helps us to frame issues more accurately. This is argued in an interesting way in Bowden & Kreinberg (1981) who argue that with the neighborhood economy disbanded over time, neighborhoods in some parts of that city are misnomers and only in the mind of the planners and architects concerned with the physical form rather than the social content.

g. The alternative of getting such funds from banks may not be viable due to the <u>real rate</u> of interest one has to pay (over the official 20%), considering the bribes, inflexibility of operations, and the bureaucratic paperwork involved.

One entrepreneur, who had a garment export business, mentioned to me that when faced with a serious financial loss due to delayed consignments, the only group who bailed her out was the organizer of the Chit Fund, and not the banks. Today, about 15 years later, she owns a general purpose store in an up-market shopping center in South Delhi. She still participates in the same chit fund company's schemes as a reciprocal gesture, as well as to retain the possibility of availing funds when required. Since she is a valued member with a good reputation, her participation brings credibility to the company, who can attract additional clients because of this.

One informant told me that there are ways of using un-accounted wealth via undisclosed bank accounts to generate chit fund investments. This, however, is not that popular nowadays, since the income tax authorities have started targeting Chit Fund Companies to trace such cash flows.

CHAPTER 6: THE POLITICS OF SETTLEMENT TO LIVELIHOOD.

Previous chapters have highlighted different themes of the 'Neighborhood a Factory': The importance of functional linkages between firms to make up a diversified local economy and the mechanisms of finance as affected by the organization of work and the development of land. All throughout these detailed descriptions, I have referred to the political context where these relations develop. This chapter specifically emphasizes the political processes that underlie the local economy to make two inter-related arguments: The first is to show that the political aspects of clustering firms form the very basis of their existence, since this politics largely addresses issues of land and infrastructure. The second, is to highlight role of the local state in this politics. This politics, although complicated, is essentially of poor groups pressure the Local State to be responsive to the neighborhood economy.

There are four dimensions of these political processes:

- 1) First, and foremost, the processes affecting the economy of neighborhoods like Viswas Nager are not embedded in the official bureaucracy of the local governments along clear cut administrative or legal-illegal boundaries. Nor are they part of a random and un-predictable political process. Instead, while being fluid, they have evolved out of an accumulation of bureaucratic and political experience since the early nineteen sixties, in the course of which more than 900 neighborhoods like Viswas Nager have undergone legalization. Over this time, the local governments and a variety of local groups have had to come together on issues of water, sewage, some form of legalized tenure, electricity, site filling, and roads. These discussions have thus evolved norms and administrative procedures to structure this political process.
- 2) The politics is largely about civic development, centered around issues of the nature of legalization, to extend services and infrastructure. It is not however between labor groups and the management with a mediation role of the state -- although that might exist in some industrial clusters, nor is it about access to credit or training and technical aid.
- The political process is sustained not by a homogenous group with a single minded interest, but rather, represented by a complex alliance of local interests. Similarly, the local state, is represented by a combination of different public institutions, or different institutions at different times. This also means that as the neighborhood economy changes, as we see in Viswas Nager, the issues being discussed change affecting the 'mix' of both public and private actors. However, since land is developed with infrastructure and service improvements following in reasonably well established sequence, this does bring in some order in the transition of issues being sorted out. The important thing is that the local state does provide a forum to discuss these issues, even if the process is a

complicated one.

This politics can at times be critically important for local groups when they are faced with a form of governance that threatens their life-sustaining economy, and as part of it, a regressive administrative and planning process. This can be a two way process. Since these crises often involve national level planning and administrative institutions within a larger political agenda, the local political process sponsored by neighborhoods like Viswas Nager becomes useful for the local state to safeguard its autonomy. Thus the politics of Viswas Nager can at these times, be part of a much wider political arena.

In many ways this chapter ties in the themes laid out in previous chapters. In that sense, it is perhaps the most important chapter of this dissertation. It is also important because it frames the issue of the local economy in a larger political perspective, leading us to question how to think about local economies, and the implications for local governance for cities to work for poor groups. It can be seen above that this politics is a complicated one, covering a variety of issues and scales of actions. In this context, I deviate from my micro-level discussion of the local economy of Viswas Nager. To introduce this chapter, and to develop a conceptual framework to gain a more accurate understanding of the politics involved, I take a broader perspective on the larger institutional politics of planning. This however, is not the main focus of this dissertation.

This chapter has four sections:

Section A is a brief sketch of the politics of planning. After this introductory section. I differentiate between three political processes described below:

Section B describes the politics of regularization at a general level. This is relevant, because many firms of a cluster, especially those involved in services activities, are served quite adequately if the neighborhood or the block they locate in, is upgraded as a residential one. Their demands for civic development would be relatively un-distinguishable from that of other residents. Thus, the political process centered around conventional regularization, also implicitly represents economic interests. This is illustrated by two case studies.

Section C focuses on the situation when firms have specific demands that go beyond conventional regularization. In the case of Viswas Nager, this centers around access to higher electrical loads for industrial purposes, again a highly politicized process. The main focus here is on the politics of licensing.

Section D ends this chapter by illustrating case studies of crisis situations. The Jurst case of electricity load regularization develops into a crisis because the local government is superseded. Thus avenues for policy change are seriously constrained.

The second case, of shifting more than 8000 industrial establishments out of Delhi, shows that when the political process is drawn into an arena involving national level organizations and influences, with little local representation, the very survival of local groups is at stake.

SECTION A: THE POLITICS OF PLANNING.

Chapter 4 highlighted the fact that most industrial clusters have evolved in 'unauthorized colonies,' and provided a description of the land development process, and regularization procedure. This regularization policy, evolved in 1978, is reasonably extensive incorporating efforts for public participation and site realities, and aims to integrate these neighborhoods into the mainstream process of civic development and life¹. In many ways, if this policy were followed, many of the deficiencies of infrastructure and services in neighborhoods like Viswas Nager would generally be resolved. This, however, is not to be. Despite the 1978 policy, and that too under the 1962 policy of regularization, only five colonies out of 900, and possibly 1200 neighborhoods, have been fully regularized (DDA 1985; Banerjee 1994)^a. Unlike popular perceptions (mostly complaints from elite groups) about this status of regularization, it is also not true that residents of un-authorized colonies have been unwilling to pay for the services that are extended to them, and therefore stalled the regularization process. Under the 1978 and 1962 policy, residents did pay up for development of civic amenities². In fact, the key point of the negotiations in 1978

¹ It is worth noting the observations of a working group of the DDA itself in 1979, who argued for a more responsive policy and noted:

[&]quot;.. The group noted that the development plan for those sub-standard areas will ultimately serve over 3/4th of the (Delhi's) population.....The working group has also unanimously agreed that the Delhi administration must earmark a very substantial portion of all incremental plan funding for the upgrading of sub-standard areas so that they have an accelerated rate of development. This means that as a matter of policy, Delhi administration should transfer the thrust of development from existing development areas to the underdeveloped areas within the Union Territory of Delhi..' (DDA 1985:97-98)

² The 1978 DDA report on regularization, quoted in DDA 1985, with detailed minutes of meetings provides an interesting insights into this case:

^{:..(}Pt.9) Some doubts were expressed whether the beneficiaries could be made to pay the

under the new government, reported by the then CEO of the DDA, was to convince the residents that the DDA was serious to undertake improvements once development charges were collected³. I argue that to understand clearly this situation, one needs to understand the politics of regularization in terms of a broader politics of planning.

Perhaps the most explicit indicator of the politics involved in the regularization is that these almost always happen around election time -- highlighting their importance as political capital⁴. The second indicator relates to the nature of policy formulation. In general, administrators have consistently pushed for negative measures centered around techno-legal arguments, and morally justified by those of planning centered around urban form, and city beautiful⁵. The most explicit and

(DDA 1985:6).

development charges. The specific examples of Gautam Nagar, Krishna Nagar, Arjun Nagar, Sant Nagar were quoted by the DDA to indicate that, where the authorities were firm, and the people were convinced that the development funds would not be mis-used, the beneficiaries were prepared to pay the full amount... is indicative of the willingness of the people to pay on condition that tangible results are obtained.'

⁽DDA 1985 Annexure 26:95). A more accurate reason for non-payment is perhaps, the unilateral and bureaucratic policy and procedures for non-recovery of development charges.

^{&#}x27;.The major problem is that all un-authorized colonies are treated (unilaterally) in policy even though (they display) a wide range of physical and socii-economic characteristics. This could be also the reason for the resistance to payment of regularization charges. It is un-reasonable to expect that low income families would demand and pay for the high level of services provided..' (Banerjee 1991:47).

³ Residents in these cases, were given an assurance that the money collected as development charges, would be used for civic development in their own neighborhoods according to a strict time frame. The successful operation in one neighborhood brought many more associations to the DDA asking for similar ventures to be initiated. (Buch 1985:46-52) The DDA report of 1985 elaborates on that experience noting:

[&]quot;...Experience of the last two decades shows that we are not able to collect development charges except in 1978-79 an amount of Rs. 47 lakh (Rs.4,700,000) was collected (details given in annexure 27) but later on the system (of public participation) was changed and since then collection of amount was meager..'

⁴ The most explicit example of the latter, are the timing of the 'cut-off' dates to coincide with that of national or local level elections. For instance, these were announced in 1962, 1967, 1972, 1977, 1978, 1982, 1988-89, 1994 -- in all cases coinciding with election announcements, and in one case, after a major cholera epidemic.

⁵ See Jagmohan (1978) for a very explicit articulation of this perspective. See in particular pages 184 -185, and pg7. Popularly known as the 'Indian Hausmann', Jagmohan as the Vice Chairman of the DDA during the emergency years, was notorious **for** the forced resettlement of more than 1.5 million poor squatter into massive site and service camps at the periphery of the city. All this, largely supported by elite groups, was seen to restore the city to its pristine glory as it had been at the times of the Raj.

extreme illustration was the state of internal emergency in the country between 1975 and 1977 when the country was essentially governed by the bureaucracy and political dictatorship. This period saw the extensive demolition of un-authorized colonies, squatter settlements, the subjugation of civil rights, press censorship including jail for local and national level politicians, activists, and journalists. A more recent example, in 1989, was legislation pushed by national level politicians (while the local government remained superseded) making un-authorized construction a cognizable offence in Delhi. Viswas Nager, among other neighborhoods too, was affected by these larger trends, as discussed later in this chapter.

In contrast, almost all positive measures with regard to un-authorized colonies have originated from political sources **under** pressures from local politicians (Banerjee 1992:14). For instance, the 1978 policy for regularization was developed at the end of the country's state of emergency, when the previous Congress (I) government was voted out of power for its repressive policies during the previous one and half years. Other more recent changes proposed in 1990-91 relate to the master plan incorporating the 'Informal Sector' implicitly deal with un-authorized colonies. These too, came from political sources rather than planners or administrators.

The politics of regularization is complicated, relating to a broader politics of planning. To define this more clearly, I discuss this politics in terms of three broader themes. Within each, I make a brief mention about how this relates to the development of Viswas Nager. These are discussed in a more detailed way in later sections in this chapter.

a) Conflicts between social groups: The politics of planning, in its fundamental sense originates from conflicts between different social groups in society. For example, unauthorized colonies are commonly seen by elite groups as the seed bed of local politics, and strike at their very heart^b. Not only do these neighborhoods encroach on planned development, but their see the residents of these 'slum areas' perceived as messing up the city, defecating in parks, breeding disease, drugs and

crime⁶. For these elite and upper middle class groups, living in master planned neighborhoods, un-authorized colonies are a blatant illegality protected by 'vested interests.' This refers to the political patronage that manifests itself around election time, and news reports of local politicians stopping demolitions or going on hunger strikes every time the authorities try to ensure planned development. Perhaps this is why regularization is often treated as an 'illusion' to pacify different groups, but also in turn, driving a conservative approach⁷. The illusion argument applies therefore, as to the masses of population in unauthorized colonies and squatter settlement, as much to the elite in housed in legal neighborhoods^c.

Some more perceptive ones also see these neighborhoods as the breeding ground of politics, which when stripped from its ideology is mostly accurate. For instance, some scholars have argued through detailed empirical analysis, that DDA has not been able to develop adequate land for poor groups due to the very process of land banking, reinforced by institutional greed (Jha 1984; Datta et.al 1981). Poor groups have received as a result, only 5.5% of the allocated land, and at times came down to 0.8% (Ibid:19-20). This in effect, pushed people into private subdivisions. The policy of large scale land acquisition at below market rates pushed owners of agriculture land to sell out to colonizers. The latter aimed to counter the threat of demolition by authorities by getting these neighborhoods settled as rapidly as possible, and consolidating the political strength of the inhabitants. Many colonizers through this essentially political strategy, became local politicians, or close to one. For instance, almost all the local politicians in Viswas Nager, although not involved in Sarvaria's subdivision of the land in 1935, were closely involved in thwarting

⁶ For a vivid illustration of these view, see 'Bombay Our City' a documentary film by Anand Patwardhan made about the eviction of pavement dwellers in Bombay Patwardhan (1985).

⁷ Banerjee writes that regularization implies that:

[&]quot;..the illusion is kept up that full regularization would take place according to the regularization plan prepared by the laid down procedure...the illusion is also kept up that all upgrading and improvement measures of squatter settlements are temporary measures... (Ibid:48-49).

For a more detailed discussion on this issue in the case of rich countries, see: i) Bowden et.al 1981 For a discussion on social movements around civic action see Davis 1991.

demolitions, initiating regularization and the extension of services, all of which built up their political credibility.

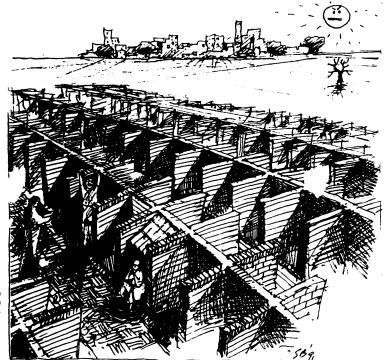
It is this growing political clout of un-authorized colonies that threatens higher income groups and their special access to (subsidized) land, services, infrastructure, that they have enjoyed all this time⁸. Thus, a key issue is of the conflict between groups over access to resources. This however, as I discuss below, has important institutional dimensions.

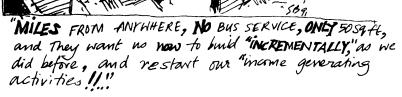
b) Conflicts between institutions at the local level: Institutions play a central role in the conflicts between groups. Rather than viewing them as neutral mediators, I see various institutions being used by different income groups in society through particular bureaucratic and administrative channels to ensure access to public investments. This differential control of public institutions is most explicit when we look at the area of planning and urban development. In many ways, this is not surprising. Planning institutions, and Development Authorities in particular, control scarce commodities like serviced land and affect regulation and developmental policy in general. We have seen in previous chapters how access to serviced land is fundamental both for residence and employment.

In this arena, the aim of any group is to keep the competition to the minimum by overt and covert means. Here, corporate and upper income groups find Development Authorities and centralized agencies more supportive of their interests. It has been well documented by some scholars that these institutions have been notorious to protect the interest of the elite^d. A more implicit and diffused influence on

⁸ Buch writes:

[&]quot;..in actual operation, all development authorities have been forced into a spiral of making huge profits which are channelized into high visibility ventures such as parks, and other schemes of city beautification, city highways which bear little traffic, expensive housing, commercial complexes, and stadia." (Buch 1984:5).







The photograph shows a neighborhood in South Delhi a week after more than 2000 house here were demolished. This particular family has been more lucky than others in that they were able to protect their sewing machine. This is used by the woman to take on part time work of stitching garments. Most others were not that lucky. The neighborhood was demolished in the middle of a weekday without notice, when most men were away at work. The authorities took the help of 16 trucks of armed police. The reason for the demolition was that the land was required for the construction of a university and sports complex.

public agencies is that of the elite of the city with close connections at the senior bureaucratic and national political circuits. The DDA and the Delhi Administration, and the New Delhi Municipal Committee (all under central government control) are used in to formulate housing policy which essentially helps them to corner publicly serviced and developed land (Jain 1986:73-74; Also see Buch 1984). This chapter will show that in contrast, poor groups find the more municipalized agencies of the local government more accessible and more inclined to accommodate their interests.

The control of scarce resources by elite groups comes from their centralized management, with little possibility for popular representation or participation (Buch 1984). Master plan allocated land, which in turn justifies public investments for its servicing, gives direct access to corporate groups. It is this planning process that reserves plots for commercial centers, 5 star hotels, and designated high class housing. The Master Plan in turn is used to justify the subsidies that are built into their pricing in an effort to 'attract development'. It is also the Master Plan that is used to justify the demolition of squatter camps, draw on land designated as urban green spaces, and in many cases. ensure its supply by outright manipulation⁹. Once these planned developments are set in motion, they rapidly draw on scarce public resources (Buch 1985), often from allocations made initially for the improvement of poor areas (Mishra 1982). It is little surprise, that the publicized announcements of regularization are guarded, laced with the rhetoric of 'planned development' and 'city beautiful'e. The regularization of unauthorized colonies is often seen as a way to safeguard the legal residents from the disease and squalor of the slums, at a minimum costs¹⁰. It is little wonder that it is treated as aberration in institutional

⁹ One common strategy to allow these corporate activities is to allocate them space as 'community centers'. Others blatantly build underground so that the grass grown above qualifies as an urban green space. For a detail account of corruption in the DDA see <u>India Today</u> April 1984.

¹⁰Banerjee writes:

^{:..} (Regularization) is seen as a necessary means of maintaining conditions of health & hygiene of the city, c :d therefore to be tolerated. In any case, squatters occupy a ver_{\cdot} :small percentage of city land, and that too left over spaces.. and public housing (for this group) need not be taken :up.. :(Ibid:47)

working, a concession and favor (Banerjee 1994:22), rather than as a strategy for political empowerment and economic development^f. In fact, given the politics of the situation and the co-optation of centralized planning institutions by the elite, it would be difficult to expect otherwise.

In recent times, this co-optation by corporate economic groups of the development authority is reinforced by an ominous trend in the current policy climate of public-private partnerships. This is by new forms of cartels (although not without conflict between themselves) between corporate real estate and corporate industrial groups aiming to get a piece of the capital's real estate action¹¹.

In this conflict between social groups played out on the institutional terrain, one fundamental issue is that of the nature of public representation. This perspective opens the door to a much broader politics: The issue of political control between national, state and local government as discussed below:

C) Conflicts between national and local institutions: 12

Institutional politics at the local level is intrinsic to conflicts between centralized and localized political structures around the key issue of political autonomy. One of the important way this politics is played out, is via the operations and policies of land management and resources for urban development. Thus, it is hardly surprising that

¹¹ See Dalal Street 1995. Since 1989 and especially since 1992, together corporate groups are pushing the DDA and the Delhi Administration to land bank thorough its acquisition powers, and as important, to license developers remove the competition provided by the myriad of small colonizers presently developing unauthorized colonies. The latter, have used the judicial system with some success to pass orders on the DDA to release compensation within a two year period, but little on the amount of compensation, or the definition of 'public use'.

¹² Urban India is governed as a three tier political system. At the federal level is the National or Central government. At the regional level, there are the State governments, and at the local level, there are the various Municipalities and Municipal corporations, and Legislative Assemblies. The case of Delhi is a special one in the sense that being the capital, many of the development institutions like the Delhi Development Authority are controlled by the Central Government. In this text, since the case of Viswas Nagar is located here, I refer for the case of communication, to two levels of government: The National level and the Local government. By the latter I imply the Central Government, and by the latter, I mean the municipal government and the Legislative Assembly.

Delhi Govt, Centre likely to lock horns

Press Trust of India

NEW DELHI, December 25. A tug-of-war between the Centre and the Delhi government is on the cards over the former's threat to reduce the Plan outlay of Delhi to pay for DESU dues and the BJP government's plea for the reation of posts and determining 'mass awakening campaign" for full statehood.

The Centre's decision to cut Delhi's Plan allocation of Rs 1560 crore by Rs 314 crore towards arrears of Delhi Electric Supply Undertaking (DESU) led to the sudden spurt of exchanges of communication between the two governments in recent weeks.

Apart from deducting this huge chunk of resources, the Centre has also proposed to cut another Rs 60 crore towards state provident fund.

The tussle over these proposals focusses on the larger issue of Centre-state relations. While the Delhi assembly, overwhelmingly dominated by the BJP, has unanimously resolved to protest against any Plan reduction, the party also planned to launch a fortnight-long campaign to de-mand more powers under full

Statehood. However, Parliament was recently informed by minister of state for home, P M Sayeed that the Centre had not received any protest from the Delhi government on curtailment of its powers.

The Delhi assembly was constituted under the 69th amendment of the Constitution and the Government of Delhi Act 1991 under which the local government does not have powers to deal with land, law and order and police.

The Delhi government has been harping on issues like regularisation of unauthorised colonies. public order and police, punishment to those involved in the 1984 riot, and transaction of its Susiness as subjects which are lying with the Centre. Figure 2: News Report from The Times of India 26th. Dec. 1995

the city government, the Centre has conceded delegation of certain financial powers to the Delhi government by hiking its expenditure limit from Rs five crore to the service conditions of Group B, C and D employees.

In a recent communication to

the Delhi government, the Centre has opined tha even the central ministries and departments de not have powers to create posts

Lamenting that the Delhi gove ernment could not be treated like a "department of the Central go ernment", chief minister Madai Lal Khurana said that certain rules were contrary to the authority bestowed upon his government by the Constitution.

Though the Delhi government should have been vested with powers of a deemed state in respect of subjects figuring in the state and the concurrent lists of the Constitution, the Centre's attitude "at every stage has been unhelpful" and the Delhi governe ment was being treated as "subordinate body to the Central government", Mr Khurana has stated.

The Delhi government has also aired its concern over a number of matters pending with the Centre for a considerable time. Mr Khurana said.

While the principle of consult tation in matters concerning public order, police and land, as recommended bу the Balakrishnan Committee, has been "assiduously avoided" by the Centre, the jurisdiction of Delhi government over NDMC has been "totally taken away". Mr Khurana said.

The chief minister said his government had sent a list of 600 unauthorised colonies and another list of 257 colonies to the Centre for regularisation with view to providing bare minimum of civic amenities like water Dower and sewerage. However, no esponse has so far been received. he said.

The Delhi government also demanded suitable amendment to Delhi Development Act 1957, to provide for the representation of three members from legislative assembly in DDA in place of members of erstwhile metropolitan council.

Likewise, suitable amendment should be made to the Road Transport Corporation Act 12 provide for representation of one member from the legislative as sembly on the board of directors in place of metropolitan council. it said.

development authorities in almost all states come under the control of state governments, and in the case of Delhi, come under the control of the central government. As such, these institutions are often used by national or state governments to de-stabilize local governments (municipal or legislative bodies) especially when the latter are led by opposition parties (Reddy 1989). Not surprisingly, the strategies used in this politics often fall in the arena of land, and tools of regularization of un-authorized colonies, and zoning¹³. A more substantive tool is that of supersession of the local municipality itself -- removing an opposition led government and replacing it by administrative functionaries.

This political game is not confined to a single example. Local government all throughout the country, but especially those in North India, provide an extensive landscape of dissolution[§]. Parallel to this political dissolution is the emergence of development authorities, starting with Delhi as the model. Some scholars specifically argue that with the use of master planning methodology in the 1970s as a form of urban management, the role and status of local bodies suffered a serious setback (Biswas 1981:10-16; Reddy 1989:37-46). In the case of Delhi, the control of land development is a central subject (via the DDA and the Delhi Administration). The continuing refusal of the union government to either transfer control of land development to the state or local government or allow elected representatives as members of the DDA governing board has meant that regularization in its substantive form of policy change (listing, as well as approvals) is totally controlled by central level politicians and bureaucrats (Buch 1985). With this comes increasing dependence upon central funds, restricting their ability to be responsive to local needs¹⁴. More

¹³ For instance, while the Delhi government lists out un-authorized colonies to be regularized, these have to be cleared by the national government via the Delhi Development Authority. By not revealing this list, the local government faces public anger at the polls because civic development has been slow. Even when local governments are controlled by the same party as in the center, political control is essential to ensure strict compliance to national interests.

¹⁴ Jha states that the share of municipal sector in the total public sector expenditure has declined from just 8% in 1960 to 4.5% in 1977-78. In some states, lucrative and elastic sources of revenues like the *octroi*, professional taxes have been abolished, and even property taxes in others (Jha 1989:3-5). In addition, the average municipal income is just Rs.13/capita/month, and in some municipalities, it is as low as Rs.8!

important perhaps, with dissolution, avenues of popular representation especially by poor groups, are severely restricted, tilting the balance towards development authorities, methods of master planning, and as a consequence, towards corporate groups and the elite. All the cases mentioned in this chapter suggest that this is a serious issue, with both residential and industrial associations complaining about the lack of representation when municipalities cease to function as elected bodies.

This however, does not mean that local governments are totally incapacitated. Case studies from Viswas Nager also show that the lower bureaucracy, commonly perceived as a inefficient group responsible for delays and wrangling, is in fact critically important for these groups. Local groups through these channels, backed by political influence of supportive local politicians, do manage to be at least partially successful in getting public interventions to be responsive. The Viswas Nager cases also show that when additional avenues do open up, via the elections to the legislative assembly, we do see some important developmental issues beginning to be resolved. When public policy and implementation is open to popular representation via a elected government, and under the control by local government, we can expect that poor groups will benefit.

3) SUMMARY

I have argued in this introductory section that planning is not a straight forward mechanical process. It is embedded in a complicated world of conflicts between groups in society which also includes planners and policy makers.

Second, this political process has important institutional aspects, especially relating to the planning process. Institutions concerned with these are themselves not neutral but represent different alliances in society. This political context forms the basis for policies, as well as their form of implementation: non-implementation, symbolic measures, or implementation.

(MulkRaj 1989:145).

Third, it is not only local but relates to a much larger political sphere. A key issue for poor groups in this situation, is the nature of representation in the local government. All this sets a larger political context within which regularization takes place.

In this political scenario a key issue is if the growing economic clout of neighborhoods like Viswas Nager can provide municipalized authorities with more financial and political autonomy to force a more representative planning process.

With this discussion of broader level issues, I now examine the local political processes of Viswas Nager in the next three sections of this chapter.

SECTION B: THE LOCAL POLITICS OF REGULARIZATION

In this section, I focus on the politics of regularization of un-authorized colonies. There are two intentions behind this discussion. First, in order to understand the specific issues of regularization of those neighborhoods which house industrial clusters, it is necessary to first understand the form of politics that has established itself over the last 35 years -- the time when the numerical growth of such neighborhoods prompted the government to develop a policy. As I have discussed earlier in chapter 4, more than 900 of a possible 1200 neighborhoods have been through the 'regularization' process. This has built a combination of political and administrative experience, helping to turn this from a ad-hoc political process to that which has become part of a growing administrative politics centered around defining new procedures, modifying and over ruling existing ones, conventions governing the negotiations between local associations and municipal authorities.

The second reason for this discussion is one closer to the mechanics of manufacturing. Chapter 3 and Chapter 4 showed that many of the smaller manufacturing processes of the Viswas Nager production system do not locate in the core industrial areas. These activities, including a large component of support manufacturing and services, find a place within the general residential environment. Of these activities, most, at least for a substantial part of the time, utilize the infrastructure and services that are commonly available to their surrounding residential plots¹⁵. For this large group, the conventional regularization policies which seek to upgrade these neighborhoods from the bare minimum levels of infrastructure and services are themselves of tremendous importance. Besides, when all this comes about via mass action, it is more important to join with residents in

¹⁵ Although they might prefer to ultimately have a more expensive 3-phase electricity connection, at that time, their priorities might be more to stabilize their production by seeking out a stable market niche.

consolidating political clout¹⁶. With this brief introduction, I now focus on the regularization process.

1) The Social Organization of Un-authorized Colonies: Most un-authorized colonies have essentially two levels of community organizations. At the most local level, there are 'block committees' usually representing residents of 30-50 households on a street. Issues here are fairly specific: To pressure authorities to upgrade the common road in front of their plots to minimize flooding during the monsoon, or the construction of a common drain in a co-operative way on a Sunday. Further up the scale, associations represent larger groups on more public tasks. In a few cases, associations from various un-authorized colonies come together to form Federations usually when a development issue threatens their very survival.

Both associations and federations can be both residential and industrial, although both categories can have members who are residents and entrepreneurs. Block committees are usually residential, although this too is not fixed. A smaller sized un-authorized colony (200-400 plots) would normally have a single association to represent it, and several block committees. A larger neighborhood like Viswas Nager, would have several residential associations, although their territory would not usually overlap. They can also have several industrial associations representing the interests of various entrepreneur groupings. The other significant aspect is that residential associations usually stay operational as long as there are issues that bind them together-- usually centered around regularization and extension of civic amenities.

Since this process is spread over many years, and sometimes covers different

Another reason is that most small entrepreneurs locating in the midst of residential plots are keen to maintain 'co-operative' relationships with their neighbors. The latter can easily, via public pressure and political support, push the entrepreneur out to move to more expensive locations. Thus, an entrepreneur, especially if the surrounding residents are much poorer, would be expected to contribute money to help in general neighborhood development.

portions at different times, it is usual to see in large neighborhood associations active in some sections, while others less so in adjoining blocks. In the latter case, many are transformed into smaller maintenance committees -- managing civic upkeep, and some occasional 'politics' to ensure that the municipal garbage removal does its regular visits.

In addition to these neighborhood groupings, there are two more important actors. The first are land developers of the neighborhood, many of whom are also residents here or in close physical proximity and have a stake in terms of property. The second are local councilors. These, in many cases, might be the same. Alternately, they are often residents, and in many cases also entrepreneurs or owners of small commercial services locating in the neighborhood.

2) The Vote Bank: All these groupings of residents, entrepreneurs, retailers, workers in their various Block Committees, Associations, and in a few cases Federations, form what are popularly called in Delhi, "Vote Banks". The logic is of political representation: Local politicians, or party workers aspiring to gather political power, see residents of these neighborhoods as a political base¹⁷. The more residents local politicians can garner, represents their growing political clout within the party. The residents in effect, become a potential "vote bank" to be relied upon in the next election.

However this is a two way process. In return for their political support, local politicians have to respond to the groups' common need. This could be in the way of promising regularization of the areas they live in, promises or actual protection against demolition by civic authorities, and the implementation of infrastructure and services schemes. However, this is a two way relationship. Residents know their power during election times, and also play a complicated game between politicians from

¹⁷ This is especially true in the case of squatter colonies where more residents have not yet been legally made citizens by mean of a "ration card" -- providing them with an urban identity.

different parties-- probing their past performance, balancing what each may have to offer, appraising their relative position in the party hierarchy, as well as the prospects for the party as a whole. This is not to say that all residents are united on these issues. It is only to suggest that the equation between the two is a complex one -- but tied around issues that affect local development in the short term perspective. As we shall see in different parts of this chapter, the vote bank equation surfaces in different ways, affecting the implementation of planned development.

The following case study of an unauthorized colony in the southern part of East Delhi, Shashi Garden, brings to life these political struggles for regularization in parallel to the settlement process. All this also affects the evolution of the property market in that neighborhood.

3) The case of Shashi Garden and the FOAPEC (Federation of All Patparganj Extension. Colonies)¹⁸

Shashi Garden was developed in the mid-60's as a result of the large scale land acquisition promoted by the government. The government was paying compensation of only Rs. 0.75 to Rs.1.25 per sq.mt., lower their market rate for agricultural land, and moreover only received after a long delay. As a result, four villages in the area, Shakarpur, Patpargunj, Kotla, and Chilla combined to form a common 'Gram Panchayat' to get more powerful politically. In the March of 1970, the area was linked by a road, but in the following month, it was declared as a master plan green area. This increased the risk of its acquisition by the Delhi Administration for planned development under the master plan. Farmers facing this situation, decided to sell a couple of 'bhigas¹⁹' to a developer. The developer however, sensing their desperate situation, offered a low price. The farmers then decided to form a consortium and become colonizers themselves. They initially collected payments from residents at the price of Rs.2 sq.yd. for the total land of 10 bhigas in June of 1970. After the developers built some basic roads, the cost of land was increased to Rs.3/ sq.yd., which was sold to more incoming residents between Rs.6-7 per sq.yd.. This amount included a commission of Rs.1/ per sq.yd. to the property agent. Thus, the overall profit was between Rs.2-3/sq.yd..

 $^{^{18}}$ Personal communication with Mr. V.K. Sinha, general secretary, FOAPEC. October 1985.

 $^{^{19}}$ A 'Bhiga' is a measure of land usually for agricultural subdivisions. Although it varies slightly from state to state, in the case of the state of Uttar-Pradesh and Delhi, this amounts to about 4 1/2 acres.

In January of 1971, the price went up to Rs.6-Rs.8/ sq.yd. and about 50 plots were sold. These sales were registered with a fee of 10% as a registration charge. By then between five and ten houses were built on plots. The DDA (Delhi Development Authority) in contrast, paid the farmers for their acquired land @ Rs. 1.60/sq.yd. and sold the developed the land values at Rs.40/sq.ft., in addition to recurring charges in the future.

By 1974, Shashi Garden had about 120 houses. Residents here had given the DDA Rs.25,000 per plot (a size of 200 sq.yd.) as an initial 'development charge'. The neighborhood was surveyed and residents were asked to pay Rs.5/mt². Shashi Garden was among the seven other neighborhoods here that paid up this amount. Having personal contacts in the DDA, the residents managed to get their colony included in the government regularization list. This proved their existence, and was some form of tenure. Land values at this time were between Rs.20 to Rs.40/sq.yd. depending upon the area where some payments had been made to the public authorities and those where none had been made.

In the following year however, the declaration of the state of Internal Emergency was particularly significant in Shashi Garden and other neighborhoods here. During the emergency, the DDA attempted thrice to demolish the neighborhood. Part of the neighborhood adjacent to Shashi Garden did get demolished -- to get land required for the resettlement of squatters moved here from central city areas. Also, most of the areas demolished had openly supported the opposition party prior to the emergency. Shashi Garden seeing these events, got organized politically with other neighborhoods there. Luckily, the slow process of demolition allowed residents to muster up some form of political support. All this affected land prices, which fell to Rs.20/ sq. yd. in those areas where they had previously been Rs.40 sq.yd.

The experience of the emergency left a deep impression on the residents and their associations. To counter such threats in the future, they decided to form a federation called FOAPEC (Federation of All Patparganj Ext. Colonies). Bringing together the sixteen neighborhoods gave made them perhaps the single largest 'Vote Bank' in East Delhi at that time. As the General Secretary of the FOAPEC commented:

'...no one can afford to ignore us now..'

The office bearers of the federations also decided to develop some 'ground rules' for the common political action of the federation. This was to ensure that a single member association would not get the benefit of their accumulated political capital at the costs of other members -- leading to rifts and a breakdown of their relationships. Thus, on special events, where senior administrators and politicians were invited as chief guests, the event would be hosted in the various neighborhoods by rotation between each of the participating member associations. In case of such public meetings, the cost would be shared half and half between the association on whose home territory the function was held, and the federation in general. The other rule related to politics. After the near demolition experience during the emergency, they decided that it was important to stay neutral, rather than explicitly aligning with any party. However,

it was important to use the party in power to initiate civic improvements. At the same time, it was also important to get the opposition to raise 'questions' in the Lok Sabba (Lower house of Parliament) about difficulties or delays in implementation of civic improvements, or corruption in civic works. This would keep the 'administration on its toes²⁰.

The other important advantage of bringing all the associations together under a common umbrella was that among all the residents. There were many who were employed in the bureaucracy of various local government institutions.

This was a valuable information network to know in advance any decisions that would affect their common good.

The General Secretary, recalls with humor, how his position as a draftsmen in the Public Works Department and status as the General Secretary of the Federation representing 15 colonies contrasted each other. At work as a draftsmen, he was a

Dear Shri. Khanna,

2-9-82

Please find enclosed an application of Federation of Patparganj Complex Colonies Associations. These are old colonies and as per the policy it should be regularized soon. The condition of the colonies is very unsatisfactory and civic amenities are required very urgently. Some drainage outlet is (also) required urgently. I am forwarding the replies to the Parliament Question No. 825 dated 17.3.80 & (No.) 219 dated 9.7.82 in which the list of 612 (is mentioned). This colony is among (the) regularized colonies, but in the second list of 612 these colonies are not included. Irrespective of this situation, these six colonies of the complex should be regularized urgently.

With regards, (Signature) (H.K.L. Bhagat)

1 Details of letter from Mr. H.K.L Bhagat MP to Mr. Harish Khanna, Vice Chairman DDA, on official letter head of Member of Parliament, Lok Sabba (Lower House of Parliament

subordinate employee doing 'yes sir' to his bosses -- the planners and engineers. On Sundays however, the situation was reversed. This time, the same bosses used to trail meekly behind the politicians on inspection tours of the civic development work in their neighborhoods. Now, the planners, administrators and engineers end up paying their respect to him, and he would talk 'over them' directly to the politician.

Being an employee in the government, and especially connected to the planning

²⁰ Since Delhi has not had an elected municipal government, the strategy used by local groups was to get their national level elected representatives to ask parliamentary questions in the lower house of parliament. These are of two types: "Starred" questions which are submitted to the government a week in advance to frame a reply, as well as un-starred questions asked on the spot during an open hour. A reply to the latter is expected to be a comprehensive reply running into several sub-sections. Different days of the parliament sessions is devoted to different topics taking up star questions on that topic. The opposition can also ask details to be provided on the spot, to a star questions from the minister in charge. During this time, both politicians and their bureaucrats are put on a sort of firing line, and the latter especially are supposed to come prepared with replies to possible attacks from various quarters. Getting a question raised is considered therefore, a political accomplishment.

department, he had access to information and decisions via his friends and un-official networks. about the regularization process which could in many cases be critical in the development of their neighborhoods. During the regularization of Shashi Garden, the residents discovered through sources in the government that a master plan road was to pass through the neighborhood, cutting through many plots.

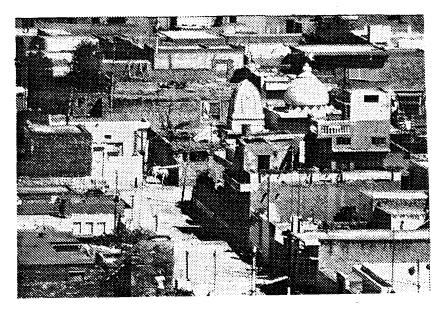


Figure 3: This temple was built to stop the demolition of houses.

Since the residents had

good contacts in the lower rungs of the bureaucracy of the DDA, they constructed a 'temple' overnight in this location and installed a priest²¹. To further lend legality, old bricks were used exposing their "frogs" (and date of manufacture), as part of the walls. One resident also related that one strategy was, via the lower bureaucracy, to get the file "missing", thus creating a minor distraction in the bureaucratic process. All this was also complemented by political force to divert the road to one side of the neighborhood and save the built up houses.

With all this accumulation of political capital, Shashi Garden, among other neighborhoods in this area, saw substantial civic development. By 1977 (June 30th. being the 'cut off date), the 120 houses here prior to the emergency had increased to 300. The ending of the emergency, brought about national level elections to the Lok Sabba in March 1977, followed by local elections in July of that year. All this saw extensive regularization of un-authorized colonies. At this time, 612 colonies were regularized. In the same year however, due to the restrictions imposed by the modified Land Transfer Act, the sub-division was carried out on the basis of power of attorney, with a fee of 3% of the official land transaction cost. This was later stopped and land

²¹ This is common place knowledge with any architect or civil engineer connected with the government. However, there are locally acknowledged 'experts' who act as 'consultants' or 'liaison' in these matters for a fee of course. Often, these may be technical staff in the public agency, whose official jobs is to investigate into these matters, while an unofficial job is to advise on how to 'prepare the case', 'present it', and 'when' and to whom. The DDA in recent years has got wise to the temple trick, but one of the latest strategy to secure land under public acquisition is to build a 'samadhi', or a memorial for ones long departed relative, including embedding partly some of their belongings. Everyone knows that this is only a ploy, but it is quite likely that the DDA has issued an office order which covers the demolition of a temple in disputed areas, but missed out the possibility of a samadhi.

deals were done on the basis of 'gifting' on a Rs.2 stamp paper.

Even so, with the return of political stability and more secure tenure in the neighborhood, the neighborhoods here were regularized, and most of their portions and 'fitted' into the overall zonal plan. Land prices went up to Rs. 50 sq.yd. to Rs. 100 sq.yd. in 'approved portions and Rs.40-50 sq.yd. in 'unapproved portions. This was even though there were only hand pumps, no permanent road or bus facility. Most plots were small: There were 4 plots of 400 sq.yd., 2 of 200 sq.yd.s, and the rest of 100 sq.yd.s totalling by this time, about 350 plots in all. At that time only 25% of the houses had septic tanks, while in 1988, more than 80% have their own septic tanks. Electricity was connected in after the emergency in 1978, initially in the form of street lighting. For the latter, residents had to pay Rs. 3.50 sq.mt. as charges while individual connection were extended as per departmental charges -- depending upon the distance of the house from the main line.

In January 1981, the general (national) elections again witnessed extensive regularization, with between 250 to 300 additional neighborhoods in Delhi being listed for regularization. In 1983, around the time of the local election, Shashi Garden saw more upgrading, and land values went up to Rs.400/-- especially because the DDA regularized the layout plan in this year. By February 1984, the DDA charged a development charge of Rs.12 sq.mt. to the residents. As per the rule, 50% of residents paid up, and the Authority initiated development works there. In some areas 'left over' from the previous time the neighborhood was considered for the zonal plan, water and sewage were connected without taking charging any fees from the residents. This was due to Rajiv Gandhi being voted into power. The residents also partly 'politically' organized this by arguing that since the DDA had developed a mass-housing nearby, the residents did not have to pay for developmental charges for off site infrastructure since these would in any case be paid for by the residents of the mass housing projects.

By 1987, land values here had reached between Rs.800-1000 /sq.yd.. By this time, the neighborhood looked like any other well consolidated regularized unauthorized colony. It had one primary school, another private nursery school, shopping and commercial facilities. These were in response to demand here as well as from the middle class DDA mass housing projects next door. The latter also helped to initiate several bus services connecting this neighborhood with the rest of the city. Shashi Garden today has about 600 houses with 20 double stored ones.

Although Shashi Garden is an unauthorized colony, many middle income persons choose to settle here because of its advantages to the DDA public housing alternative. In part, this is because the initial costs for the public housing are higher and the long drawn allotment process, with the initial price of the flat being increased by the time the allotment is made often 10 years later and in locations where the applicant has little control. In contrast, a resident of Shashi Garden needs an investment of Rs.100,000/ Jor a 100 sq.yd. plot, and Rs.35,000 for a small room, shed and toilet. The plot of land also holds possibilities of future addition and alteration,

and if in a good location, possibilities for economic activities. The deficiency of services however, is a drawback in the initial stages. In contrast, in 1987-88, a DDA LIG (low income group) flat officially cost Rs.75,000/ a Middle Income Group (MIG) flat costing Rs.125,000. These have however a waiting period that can stretch up to 15 years, and a 'Black' value of Rs.50,000 on the former and Rs.75,000 to 100,000 on the latter. Often, the costs escalates about 2.5 times over the allotment time pushing up the black values. With these new groups settling here, come changes in values. Many residents, including an office bearer of the resident association and federation, complain that a park on the northern side of the neighborhood has been encroached by squatters who 'spoil' the environment.

There are few factories here, partly because most chose to locate in the four villages nearby where electricity connections are more easily available. The few that locate here are not power intensive. One, located near a park, makes water proof canvas. Another is involved in block printing. Both of these are powered by coal, -- used to heat liquids used in the process. Another factory, in the adjacent neighborhood of Archraya Niketan, makes mosquito proof netting-- which is a totally manual based process. The basic advantage here is the large plots available at low prices, and residence of workers in close physical proximity.

The case of Shashi Garden is useful to consider because it shows the ingenuity of local groups in getting civic development, and also the politics involved. The formation of the FOAPEC illustrates the workings of the 'vote bank' to safe guard these neighborhoods against demolition. Parallel to using their power as a vote bank, the residents use their links within the bureaucracy. I will discuss similar strategies used by associations in Viswas Nager later in this text. For now, however, I will introduce a useful concept which helps us understand the nature of the local state as it is transformed by these pressures from local groups.

4) The Porous Bureaucracy

The vote bank and the use of the bureaucratic system are closely related. Conceptually, this suggests that the bureaucracy is not an impenetrable monolith. Rather, it is characterized by a porous institutional structure made up of various internal groupings. These have an official role, but also in parallel, roles that align with external interests. These external interests can be of many types. Some can be groups like FOAPEC, attempting to get advance information of development schemes,

keep track of implementation programs, and in some cases, even stall development schemes until more substantive political and civic opposition can be built up. However, in contrast, it often happens in Development Authorities with the relative lack of elected representation, that these pressures come from elite groups of the city, using their close bureaucratic contacts.

In both cases, but especially the municipality, a large numbers of employees at the middle and lower rung live or have close relatives living in un-authorized colonies. These groups have evolved into valuable channels for information about development proposals which affect the fate of slum areas like un-authorized colonies. The important difference between the municipality and the development authority is that in the former, even when the local government is superseded, elected representatives still have an influence over senior bureaucrats. This turns out to be a valuable ally for poor groups. The second important aspect of the 'porous bureaucracy' is that the zonal (or neighborhood district) offices have some discretionary powers in the implementation process. In many cases, the lower and middle level staff working here, usually live in the same area. This situation accentuates the possibility for local groups to develop a greater influence over the implementation of programs²².

The third important institutional aspect to appreciate is that the 'porous bureaucracy' is not intended to convey a 'free for all' situation within local governments where the fate of local groups totally depends on their ability to muster up political support and cultivate good contacts in the bureaucracy. As mentioned earlier, more than a thousand un-authorized colonies have gone through this politics. While each case has its particularities, most share many general attributes. **Thus, although this process of negotiations is not strictly within administrative procedures, there have evolved bureaucratic conventions and procedures to deal**

²² Even though technically any employee can be posted to any of the city offices, there are administrative pr**oced**ures to allow them to spend a large time of their working career in an office near to their residence if the position exists at that office. It is usually the senior officers who are moved to locations away from their residence due to seniority reasons.

with these issues of claims based on the settlement of land, rather than strict legal documentation. While there are rules laid out, the local government bureaucracies have also established notification which help in the interpretation of the rules-- added on from the wealth of bureaucratic experience.

With these three aspects I provide a schematic definition of the 'porous bureaucracy': This is a structure of government which by its loose internal bureaucratic structure allows local groups to influence the implementation of developmental programs, and in some cases, even the initial planning of them. Implicitly, the local developmental process becomes more participatory, than if the bureaucracy was able to internalize decision making. The porous structure is helped by three factors:

- a) If elected representatives have a functional role to decide policy and implementation;
- b) More discretionary and development powers to district and neighborhood offices;
- c) Use of administrative procedures as a guideline to interpret the implementation process.

In many ways, local governments via their porous structures are battlefields, where the influence of elected representatives makes a big difference for poor groups²³. Thus, for a neighborhood like Shashi Garden to be regularized, excepts for the 'hiccups' faced during the emergency, its regularization is fairly 'orderly' in the issues: Tenure, water, sewage, roads, basic electricity, followed by telephones, taxes. This process of negotiation, in many ways, relates to a long tradition of local government in India going back to the late eighteenth century.

²³ This is not to suggest that elected representatives are all pro-poor. The point is that without them in the system, poor groups would have to rely on an occasional benevolent administrator know to be 'clean'. This is quite rare, and are often transferred by central political or administrative authorities because they would soon enough take a controversial stand. Some administrators have become almost public heros because they decided to fight it out. Such a breed is rare and poor groups cannot afford to depend upon chance.

To reinforce the concepts of the vote bank and the 'porous bureaucracy', I shall now discuss a similar case from Viswas Nager, where regularization happened without the aid of a federation. This was most likely because Viswas Nager was relatively safe from the kind of extensive demolitions faced by Shashi Garden and its adjoining neighborhoods during the emergency. This is a case study from Western Viswas Nager, of an area called "Block 28-29." This case study, like the one of Shashi Garden, brings to life the settlement process. It is, in many ways illustrative of what most other blocks in Viswas Nager went through.

5) The Case of Blocks 28-29 in west Viswas Nager

Blocks 28-29 in the western part of Viswas Nager has been settled later than other parts of the neighborhood. This is because, until the last 15 years, this area formed a low lying area adjacent to a major drain and hence was prone to flooding. Although the regularization of these blocks has only recently happened, plots were first sold here around the mid-seventies. The two blocks have a combined total of 411 plots, most of which are small and medium sized ranging from 50 to 200 sq.yd., with most being 100 sq.yd. The low lying area lowered land prices to about Rs.50/ sq.yd. at that time in contrast to other parts of Viswas Nager which had land values ranging about Rs. 200 - 300/sq.yd..

Initially residents here formed a "Block Committee" in 1982 in response to the forthcoming metropolitan elections. Prior to that period, this part of Viswas Nager had very rudimentary infrastructure & services with only rough plot sub-divisions, no roads, frequent water logging from the drains on three sides. The only electricity line was on the main road of Viswas Marg to the north of these blocks. However, direct access to the power line was cut off by an already settled part known as the 'Richpal' colony housing 'Harijans' (un-touchable), who had occupied this land after the emergency ended in 1977.

The association here is not a registered one. This is for many reasons. One office bearer explained that due to the low incomes and their small size, they cannot meet the government requirements of scheduled meetings, elections, and accounted expenditures. Thus, their structure is more informal, with seven office bearers and three 'patrons' or elders. The president of the association, a retired school teacher, gave another reason:

'fine (Good) development happens thorough politics, so we did not see the need to get it registered'.

Since these blocks have only recently been regularized, the residential association is still active to co-ordinate the community efforts to get civic services like water, sewerage, electricity and most recently, telephone connection in. Other

associations in Viswas Nager, who had got these services much earlier on, have since ceased to be operational.

a) The filling of the low lying area: The first communal efforts which brought residents as an association, was the filling of the low lying area to reduce the recurring flooding of this area. This was done on a contributory basis, with residents charged differentially according to their plot sizes: Those with plots with areas between 200 sq.yd. and 100 sq.yd. had to pay Rs.20 a month, and those with plots less than 100 sq.yd. had to pay Rs.10/ a month for the time of the filling which stretched over a couple of months. This was a basic cost to get the process going. In the eastern sections of the blocks, the association has collaborated with Block No.30, but apart from this, it has worked alone. In part, this is due to the fact that development of Blocks 28-29 has been later than other parts of Viswas Nager. Another reason is because the residents of Richpal colony being 'Harijans', consume meat (and commonly believed to 'drink') going against the sensibilities of most of the residents of 28-29 Block²⁴.

Filling the low lying area was not an easy task. The residents were helped in this venture to an extent, by the head of the local youth congress unit and another senior party worker based there. This was important, because when they approached officials for the Municipal Corporation of Delhi to get them to fill this area, they refused to give them even waste construction material (malba) which they ultimately had to purchase from the Municipal Corporation of Delhi (MCD) for Rs.28/ per truck, and an additional Rs.8/ Truck for transportation to fill this area. To prevent disease, the association arranged to have mud spread over the construction waste. All this filling of the neighborhood took a year to complete.

b) Conflict with master planned use for Block 28-29 Apart from the filling of the low lying area, the other major event which galvanized public action here was a conflict with the master plan threatening some of the houses here. Until 1968, this part of Viswas Nager was shown in the official maps as a 'Talab' or a pond. However, the exact location was wrongly shown in a map prepared by the Central Public Works Department (CPWD) map for the area. Since the CPWD map was used as a base map to prepare the master plan, the pond here was confused with a much larger one located in Krishna Nager, a neighborhood a couple of kilometers further east. As a consequence of this mistake, a large portion of an already settled area was declared as a green belt. To add to the confusion, a 1981 survey by the DDA showed no construction existing in the area since few houses were completely built or settled due to malaria and the

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²⁴ The issue is not the consumption of meat per se, but rather consumption of meat and drinks in the open and dumping of waste products in the empty plots creating a sanitary problem. There is a cordial relationship for instance, between different religious groups: In the event of a festival in Muslim houses, all the Hindu families are invited. The food is cooked separately for them in a Hindu house with materials supplied by the Muslim household.

difficult civic conditions. Like many other such cases, a substantial portion was declared as 'left out' pocket. In 1984, the residents, a year after they had finished the filling of the low lying parts, and people could be convinced to settle here, the association began to press the MCD that since they were a 'left-out' pocket, they should now be given civic amenities.

However, the government issued a notification for acquiring many areas in East Delhi including parts of Block 28-29. As per rules, one important pre-requisite for regularization, was that 60% of the area to be regularized should be 'in existence' before the last declared 'cut-off' date, to be recognized as 'habituated'. According to the association, they had 80% of the plots already inhabited at the time when the notification was issued. To counteract any possibility of forced acquisition and demolition, the association immediately mobilized political help by contacting the elected councillor for the area, the head of the Youth Congress wing and other political workers. Through this group, along with representations from the area MP, they obtained the necessary documentation that the plots in Block 28-29 were in existence before 1981 using water bills, electricity bills, and house tax receipts that some residents (located in the periphery with access to these services) had been paying to the authorities from that time. The court case, filed in the Tis Hazari District courts, was resolved in favor of the residents here. As an additional safe guard, one of the original land developers of this area donated money to be 'used' in the bureaucracy, and to also build a temple to secure the neighborhood against demolitions. This also served a double purpose. The temple, and a 'dharamsala' (overnight shelter for pilgrims) also served the purpose of restricting the harijans staying nearby from throwing non-vegetarian waste products and using the empty plots here as a dumping ground.

c) The Struggle to get water and electricity: A couple of years later after the court case, the MCD, under political pressure generated by residents, initiated the provision of basic services of water, sewage, and the levelling of roads in the neighborhood. According to the rules of the various public authorities responsible for these services, connections can be provided to those residents who live within a certain distance from these trunk services without paying for additional development charges and the bureaucratic procedures involved in initiating basic infrastructure works. The distance norm varies from service to service. For instance, in the case of electricity, only those residents living up to 50' away can apply for a direct connections. Water lines in contrast, can be drawn to a maximum of 100' away from a main line.

Blocks Nos 28-29 not being directly connected to major roads faced a serious disadvantage in their access to water, electricity and sewage trunk routes. Initially, things moved slowly. The association, worried about the state of affairs, thought of paying a bribe to the Junior Engineer (JE) to get a connection for street lighting from the Delhi Electric Supply Undertaking (DESU). However, the elected representatives as well as a DESU official, suggested that they should submit a plan specifying empty plots, and the electrified plots and existing electricity and water lines. This application initiated an inspection, and by the end of the eighties, the DESU framed an estimate for 86 poles with the cost of Rs.400,000. Twenty five percent of this cost was to be paid in

(West Vious Nager improvement Association) 2207476 27/124, गली नं० 6, विद्यास नगर शाहदरा, दिल्ली 110032 Gain 194 Feb 1991 कमांक ०० 16 ५ The Commissioner. DISIV

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Figure 4: Letter from Gen. Secretary Blks. 28-29 to Commissioner MCD regarding Street lighting.

developmental charges.

Initially, before the actual construction started in 1991, an electricity connection was extended to the house of one of the office bearers, whose plot was closest to Viswas Marg having the main feeder line. This was taken as a temporary connection on 'medical grounds'. In turn, he extended wires to the houses on the basis of a single bulb connection to all the houses in his lane. The DESU came to know of these illegal extensions and threaten to cut off supply. This was however repealed via the help of the local councillor. Ultimately it took the residents six years between 1982 to 1988 of approaching officials and the lower bureaucracy to get the neighborhood's electrification done. However, this involved building two sub-stations and feeder lines. In 1988-89, out of 411 plots, 366 have been electrified. However, only 162 plots have paid the developmental charge of Rs.100./

There were other benefits of organizing. As the association began to get involved in the regularization process, they were also able to develop a close working relationship with the DESU administration -- helped by local politicians. This proved to be useful in many ways. For instance, when the electricity lines were laid, plots were spaced at various distances from the main feeder lines -- within the 50 feet limit for 'free' access mentioned before. Thus, within 50 feet, many houses were located 10', 20' and 30' feet away. On paper however, it was shown that cable lengths of 50 feet were drawn leaving a surplus with the JE. Initially this was being sold off and the cash profits pocketed by the JE. The association, with political backing, pointed this out to the DESU officials at the head office and was able to reduce the contributions by their member residents towards development charges.

However, this also had a backlash from the DESU field officers. To celebrate the newly arrived civic development in Blocks 28-29, the associations organized a public meeting inviting the main MP, and other local politicians. However, just as the MP was to make his speech, the power went out and the sound system was cut off. The association alleges that the field staff cut off electricity supplies deliberately in an attempt to 'sabotage' the function. This was despite the fact that the association had informed DESU in advance. Similarly, a road paid for and built by the residents, was dug up by the DESU to install cables. On completion of the job however, the DESU field staff refused to fill the hole they had made despite repeated requests by the association.

<u>d)</u> <u>Use of the 'porous bureaucracy' in the Blocks 28-29 controversy:'</u> The president mentioned that this kind of local politics is part of the process and one has to take the risks if one wants to gain from the system. In general however, the association has developed a cordial relationship with the DESU and the MCD. Personal links play an important role in this process just as strategic use of political pressures. For instance, the association has enrolled the help of useful contacts, even residents in other blocks of Viswas Nager, as 'elders' or patrons of their association. One such person is a wiry 76 year old, experienced in dealing with the government. His own personal interest is that his son, an employee in the telephone department, has a plot in these blocks.

Since this elder played such an important role, he became the general secretary of the association, even though he himself stays in another part of Viswas Nager. Almost single handed, he does almost all of the dealings with bureaucrats and politicians -- including writing masses of letters, representations, personal visits to engineers at senior levels in the DESU and MCD, meeting senior politicians -- all to keep a close tab on how development work is proceeding. Through these efforts, he was able to procure copies of internal notes revealing decisions taken, job-tenders and estimates of civic development.

All this is critically important, and comes out of selective and strategic support of local politicians. The elder believes that the main point is to know the administrative system well to know when and where to apply pressures, whom to talk to, and at what stage of the 'file' movement though the bureaucracy. He writes letters to officials in an unsteady long hand, but is not bothered about his faulty English. The main point, he feels, is that letters must be to the point and ask for specific action within their powers of the officials. Political pressure, according to him, should be used strategically and with discretion -- only used to 'guide' and rarely to 'force' the issue, unless it is absolutely necessary (See figures 4,5 as an illustration).

These insights and experience, have been very useful to hasten the regularization process and get services in. Normally, this is a long drawn process often lasting decades. In the case of their blocks, this was faster. Although they pressured the authorities in the early eighties, the major push for services came in the late eighties and things moved quite fast between 1989 to 1991 when Blocks 28-29 witnessed hectic development activity. They were also able to resolve minor and major crises.

For example, the residents had paid Rs.170,000 (US\$ 4722) to the MCD for individual water connections. Although the authority required only Rs. 140,000 they claimed that there was no proof of these deposits.

The association, via the main councillor for the area, who was also the chairman of the water board, was able to ensure that the original

(On letter head) Urgent

No.00125 dated

23rd. Dec. 1990

To: Sh. R.C. Bhatia A.C.E. DESU Karkar Dooma Shahdara

Dear sir,

Kindly for your information, we have to say that there will be a hunger strike on 26th Dec. 1990 Wednesday by Youth Congress(I) block Shahdara.

Among other subjects, this (is regarding) Street lighting loading from sub-station in Block 28-29 Viswas Nager Shahdara.

Thanking you,

Deoki Nadan Aggrawal General Secretary.

2: Text of a letter by Gen.Sec. Blocks 28-29 to Additional Chief Engineer DESU informing him of an impending hunger strike.

receipts were traced in the bureaucracy saving the residents from paying bribes to the lower level bureaucracy to locate the 'misplaced' receipts. Similarly, the residents' contribution of Rs.83,000 for street lighting, is now being adjusted from the Councilors fund -- Rs. 200,000 per year.

e) Issue of industrial production: Since this part of Viswas Nager has only recently been regularized, and received infrastructure and services, there are fewer industrial units here than in other parts of the neighborhood. The few that do locate here are not power intensive. Nevertheless, residents here have mixed opinions about the possibility of industrial units locating here. On one hand most agree that these units do provide jobs, especially when government jobs are difficult to get, and when available an exhausting almost three hours of travel time every day in crowded public buses. Others also point to the advantage of better services and faster regularization since entrepreneurs generally know the 'strings' better and are better organized and capitalized to pay the bribes. In addition, their property values certainly rise. In contrast, some residents point out that the social values and welfare are affected by the 'labor' coming in, and also when residents move out. They also argue that the attraction to start a factory is often short term, and in the longer term people suffer since it is difficult to control the pollution. Also, there is no quarantee that 'bad elements' do not harass the families of residents especially when the male members are away at work.

Even with these contradictory viewpoints, most residents agree that if there were municipal elections, there would be a better control of negative effects of industrialization. The experienced general secretary introduced earlier in this text, says that the red-tapism in the bureaucracy would be reduced and administration tightened up. At present, with no municipal elections, the government functions with little accountability. He also says that in the absence of local elections, the role of the association is a particularly critical one. This is especially so in the efforts to reduce industrial pollution.

For instance, the Assistant Secretary relates a case of his adjoining plot with access to electrical power, which the landlord rented to a electroplating factory. The manufacturing process was however very polluting with a daily consumption of 10 Kgs of concentrated sulfuric acid. The waste by-products were dumped in the common drain. Since the owner of the factory did not live on the plot, he and his family were not directly affected by the pollution. The neighbors made individual appeals to both the landlord and the entrepreneur. These did not have any affect. After these initial attempts, the association got involved and made it clear to both the landlord and the entrepreneur that they would complain to the Central Pollution Control Board and follow up the case with political backing. Facing this onslaught, the entrepreneur decided to shift to another location.

After this tenant, the landlord rented out his plot to another factory making brushes. Being non-polluting, it was 'approved' by the neighbors with three conditions were put on the factory owner:

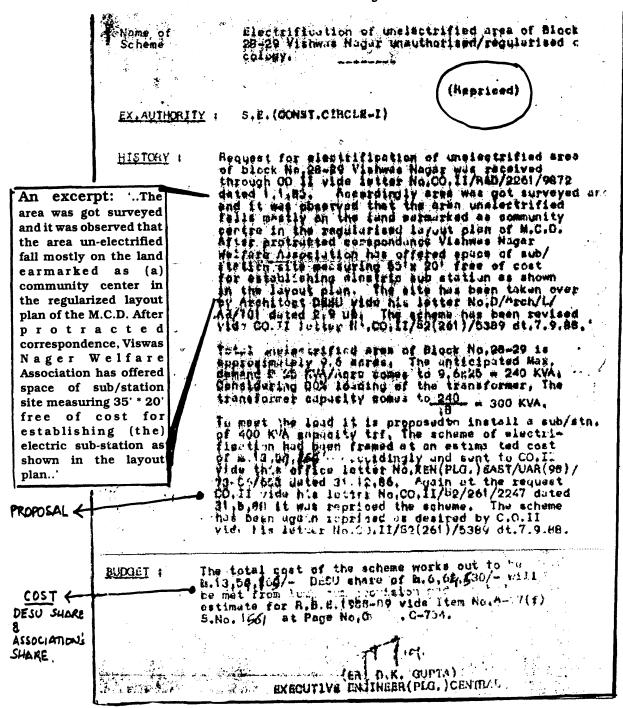


Figure 5: Copy of an internal note procured by the association

- a) No pollution of any kind including noise and air;
- b) The workers, who are often dressed in underwear during working hours, should not be seen on the streets. The landlord should construct a gate which is kept closed during working hours;
- c) To avoid workers urinating and defecating in the streets and in empty plots, the factory should have its own internal bath and WC facilities.

All these conditions were compiled with. According to the Assistant Secretary, one way of regulating pollution is by ensuring that the resident associations only include those members who actually reside in the block. Thus, if a landlord rents out all of his plot, and does not stay there, he should not be allowed to remain as a voting member. In this way, votes cannot be 'split' and community harmony can be maintained. He feels that the unity of the association is very important for proper civic development. Second, both he and the president feel that the settlement of all plots is very important for the proper and fast civic development. Residents can contribute and often have personal contacts in the bureaucracy which is useful in the regularization process.

To highlight this issue, these office bearers recollect that in the initial stages of development here, the large number of empty plots posed a serious problem for several reasons:

- i) The fewer residents resulted in a thinner political base to push for regularization;
- ii) The empty plots were used as a garbage dump by the neighboring residents of Richpal Colony who dumped left over meat and pork products. These in turn attracted pigs and created a serious sanitation problem;
- iii) This situation was further worsened by the absence of drains and roads alongside these empty plots;
- iv) The scarce development in this part of the neighborhood developed into a crime problem as roads were deserted in the evenings and night;
- v) It was difficult to build up a local community with a social organization when all the plots were not occupied;

One sensitive issue was that some of these empty plots belonged to one of the local political leaders who was also a property agent. He had bought some of these plots to speculate upon. Since, the same person was also instrumental in getting them services and dealing with the bureaucracy, the residents approached his political senior, the local MP. The MP in a subtle way, put pressure on the local politician to sell these plots so that they could be occupied.

Today in 1996, two and a half years after this case was written up, Blocks 28-29 is coming to look like other parts of Viswas Nager. Houses have got electricity and some, even telephone connections. A couple of more factories have started off, but there are many more who have developed their upper floors as apartments for rent.

All this suggests that the concept of porous bureaucracies, along with that of "vote banks" is important to consider when planning and administration systems are regressive to poor groups. Vote banks, in this case, are critical to get political support to stop these schemes or to subvert them. The "porous" bureaucracy is critical for associations to directly seek information and be able to act. This is not an argument to maintain a repressive system. It merely argues that till changes actually come about (assuming they do), these are important mechanisms to keep regressive planning and administration at bay. With this discussion of vote banks and the political process initiated by associations, I now focus more closely on the role of the councillor. The councillor is a key agent of the local political process and a more accurate understanding of his place in local society is necessary to understand the influence of politics on the local economy and vice versa. I do this in two ways. The discussion below highlights the main issues which are directly relevant to the local politics of neighborhoods like Viswas Nager.

6: COUNCILLOR & NEIGHBORHOOD ECONOMY

A neighborhood like Viswas Nager which houses home based enterprises, has many different interest groups staying and working here who are concerned with the neighborhood's development. While some of these interests conflicts there are also points of convergence: The residents here, and this includes entrepreneurs and workers, are interested in improving their living conditions. Those connected with the local economy, residents, entrepreneurs and workers, are keen for better infrastructure since this improves production. Workers too, are indirectly interested, since most have aspirations of starting their own enterprise hopefully in close physical proximity to where they already work. The developers know very well that legalization infrastructure & services, will shoot up property values of plots that they have kept in reserved and they would be assured of continued business once the land market transforms into property and rental markets.

The local political process is complicated because while different local interests converge for public interventions in long lasting infrastructure and physical assets,

the interests and alliances which drive these interventions could be specific to their particular association territories -- blocks where they live. This can also be conflicting with adjoining neighborhood associations. Furthermore, this politics is also shaped by the intensity of human relationships -- colored by personal animosity and affinities, blood relations, ethnic groupings, trade relations and caste based considerations.

The councillor, as a local politician representing a larger ward area, is interested in establishing a political future, and can work to bridge these differences. He is also in a particularly important position to influence the civic development of the neighborhood and to consolidate or galvanize political pressure. He is unique due to his relation to a variety of political and administrative functionaries: other councilors from neighboring wards (including those from opposition parties), lower level party functionaries, members of Local Legislative Assemblies (MLAs), members of the Metropolitan Council, Members of Parliament (MPs), ministers of relevant ministries, the Chief Minister. In this larger political picture, his credibility is primarily determined by how well he can establish his party, and as important, his personal worth in case at a later date he decides to contest as an independent. Thus, in many ways, Councilors are important to bring residents together through these various groups on a common platform. Oldenburg, one of the few scholars who has worked specifically on this issue²⁵, writes about the councillor as a agent of change. Oldenburg notes that the Councilor is significant because he is perhaps the closest and most direct link between citizen groups and the administration, as well as with higher level politicians:

There is a extensive literature on public administration dealing with issues of local governance. However, most of this is from a narrow administrative /management perspective, and to that extent only partially relevant. The discussion on local politics is certainly useful to consider. Here, perhaps the most comprehensive work (although dated) of local politics especially with reference to civic development in Delhi, is that of Oldenburg (Oldenburg 1976). The Indian Institute of Public Administration New Delhi, and in particular the Center io: Urban Studies there, has published a extensively in this are z. The Institute journal *Nagarlok* is particularly useful. For a detailed bibliography on urban local government administration, see the select bibliography compiled by Sunita Gulati (1989:173-190).

"..The Delhi councilor is concerned, in the arena of the ward, with the administrative process directly and, operates in close relationship with specific administrators.. (they) are essentially intermediaries between the public and the municipality in routine administrative matters. It is at this level that the citizen has greatest access to the government process, but largely because the councillor brings the government to the citizen..." (Ibid:71-73)

Furthermore, he notes that the constituency fund and his access and influence in the bureaucracy, help the Councillor do a fair amount for his constituents in term of material benefits (Ibid:72)²⁶. The other important aspect of this link with the local government is the knowledge of the bureaucratic procedure for civic development. Oldenburg writes:

"...Since the councillor frequently is at least as familiar with the rules and regulations of the corporation as the officer, he can tell the officer what he is "required" to do; the councillor keeps the officer up to the administrative mark. An officer can generally be transferred out of a ward at the instance of the councillor, either by direct request or through influencing the officer's superiors, perhaps via the party leadership. Conversely, his recommendation is very important. (ibid:73)

Finally, a major point especially relevant in the context of the consequences of master planning, as discussed in the first part of this chapter, is that councilors play an important role in 'tightening' up the administration and ensuring public accountability. As Oldenburg quotes different councilors: 'The councillor is the link between the administration and the public. If the link is broken, the administration won't do their work.' (ibid:198) and more specifically,

'Without councilors, no work can go on. Otherwise the administrative wing will make trouble for the public. Without elected members, officers would spend all the money on their own bungalows and on big roads..'(ibid:199) With this introduction to the councillor as one of the important agents in the developmental process, I now specifically focus on the civic politics of industrial clusters like Viswas Nager²⁷.

²⁶ At the time of Olderberg's writing, the constituency fund was Rs.50,000/, reserved from the zonal budget for projects designated by the councillor. Today, the amount is Rs.100,000, apart from his recommendations to allocate gas, and telephone connections in the 'out of turn' way.

 $^{^{27}}$ For a general essay which provides an overall description of the councillors role in civic development, see Annex 6A.

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SECTION C: The Civic Politics of Viswas Nager

A neighborhood economy strongly centered around <u>local</u> manufacturing, like that of Viswas Nager, creates its own particular civic politics. At one level, this is due to its' urbanization and localization economies that support vast numbers of entrepreneurs, workers and residents. These groups are voters (or potential ones), bonded by trade and manufacturing links. Due their significant numbers, these also carry substantial clout as an industrial interest²⁸. While this clout is significant, the regularization process forms the second important locus around which local politics is riveted. The third binding factor are the diverse and complicated manufacturing linkages between firms (illustrated in Chapter 2), the link between the development of land and enterprises (illustrated in Chapter 4), and the intricate financial mechanisms underlying the neighborhood economy (illustrated in Chapter 5)²⁹.

Here, we see a complex situation arising. On one hand, the needs of groups to come together to press for public investments which would otherwise accrue to higher income groups via the planning process. On the other hand, there are differing interests involved generated by the differences in infrastructure requirements. While one can generally say that the binding aspects over ride the latter, the main point is that the local state in its relationships with associations provides a forum to sort out priorities. As I showed in my case studies of Shashi Garden and Block 28-29, the

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For instance in Viswas Nager, the voter list of 1994 has about 20,000 residents registered as voters. A conservative estimate of the total employment related to manufacturing there in 1992 was between 35,000 to 50,000 persons. This does not include residents benefiting as landlords of rented factories or rental housing for entrepreneurs/ workers, or those who sold part of their plot to industrial related uses (factories, supply shops, machining shops, housing for entrepreneurs/workers). A rough estimate if these interests are included, would mean that about 2/3 of the population is connected (or have been connected) either directly or indirectly with industrial activities. Other less industrialized neighborhoods might have a lesser degree of attached population but, discussion with the political workers suggest that these groups are more likely to vote than upper income groups who have economic activities external to the neighborhood. This clout is especially powerful with the shift in Delhi's economy from being centered around the bureaucracy to that around service and manufacturing.

²⁹ All this might also explain in part, why the legalization process is so politicized and stirs up such great public passion.

porous bureaucracy forms a key feature to incorporate local needs in the developmental process. In this part of the chapter, I have suggested that this process also relates directly to the local economy. Thus, for the residents of Viswas Nager, the politics to make possible a local state is critically important. This is where development comes from, can be manipulated, negotiated, and cajoled to be responsive to the neighborhood's economy. Its bureaucratic structure here is anything but a monolith. The endless cups of sweet tea in the shack next to the public office is also a important meeting place -- with contacts, and of finding 'approaches³⁰' -anything to get information about where the next electric transformer is going to locate, when the water line estimates will be passed and what will it take to get the job done. There are also conflicts between different local groups -- over electricity or the next sewage scheme. But this is also where they get sorted out. Local groups need to sort out these issue fast. If they do not act fast enough, or take advantage of elections, public funds usually disappear rapidly into 'planned' development like the wide clean roads of South Delhi and their new expressway to the international airport³¹. More critical, local groups need to come together in case Viswas Nager like neighborhoods of homes, workshops, and factories, are slated for demolition because they fall in the way of planned development. In this context, it is not at all surprising that election times consolidate these interests together to a crescendo, and constitute a special time in the developmental history of neighborhoods like Viswas Nager.

Election time, the birthdays of un-authorized colonies.

This is the time when un-authorized colonies like Viswas Nager come of age and get developed. This is the time, when its residents, especially older ones, remember past ones: of promises kept and unkept, and as mile stones of what infrastructure got built when.

Viswas Marg, the main road here, is strung up with streamers made up of various party flags in different colors. The saffron lotus, a current rage of the times, is

 $^{^{30}}$ An 'approach' in local terminology is one suggesting a bureaucratic 'contact'. This may be via past associations, relatives, friends, or even children studying at the same school. As is self-evident, 'contacts' are critically important in all public dealings.

³¹ Not surprisingly, it is only after local elections to the legislative council, that issues of unequal public investments have become issues of public debate. It is most likely that with municipal elections, councilors representing different wards, will further emphasize these issues.

of the right wing Bharitya Janata Party. The Congress of Indira Gandhi. supposedly somewhere in the middle of the ideological spectrum has its hand placed between strips of saffron and green. The green one with the wheel is of the Janata Dal, a coalition of a more left wing parties. There are a couple of independents too. One has a bicycle as a symbol, another has a lantern, a third with a book.

With all its loud proclamations, Viswas Marg leads to a large "maidan" or open park on its eastern end. This is the



Figure 6: Upgrading of telephone cables in Viswas Nager during the 1989 national level elections.

site for large congregations. Many of these during the rest of the year relate to the festivals that punctuate the passing of seasons in the Hindu calendar. Today's, however, punctuates the neighborhoods' legalization, and development of civic infrastructure and services. For these public meetings, a "shamiyana" — a huge canvas tent— is hoisted up, carpets laid out over the uneven grass, colored tube-lights strung up, and a four feet high stage set up. In a smaller side tent, there are tables with tea and light refreshments. Most important are the loud speakers. The system is tested well in advance and its blare can be heard as a clatter throughout the neighborhood till late at night.

A month or so before the election though, there is another peak of activity. This is to do with decisions about who gets on the party ticket, and then to file their nominations. For this, crowds, especially those financing the campaign, gather around the offices of the Delhi Pollution Control Board just south of Viswas Nager. This has been set up temporarily as the nomination center. A large number of these sponsors are entrepreneurs from the neighborhood, and they wait patiently for their candidate to arrive as the 12 noon deadline draws closer. The murmuring is broken by shouts and one of the entourage draws near. Soon the crowd comes bustling in, squeezing through the doors and to be blessed by their priest for a successful victory. One group openly talks of one of the independent candidates being propped up to split the vote.

In the weeks prior to the elections, public meetings by candidates in such locations, form important occasions in their political campaign. Party workers tour the

neighborhood in jeeps, and auto-rickshaws. These are joined in cases, manually drawn cycle rickshaws, and even an occasional cow adorned in the party colors drawing on the religious sentiments of the orthodox Hindus. All, except the cow, have loudspeakers attached. These are usually powered by a motor car battery, and loudly announce the venue, date and time of their particular candidates' meeting.

The electoral candidates too travel around. One moves around in an open van decorated with the party colors and larger than life size posters of him alongside national leaders folding hands to beckon votes. While this van tears down with an entourage of party workers and sponsors following close behind, the group makes ritualistic stops at key points. Here, their sponsors make a short thank you speech, and greet the waiting crowd. The groups here, have arranged fresh lime juice, and sweet relishes. Another stop is for an occasional blessing at a nearby religious building.

On the day of the public meeting, they are all there. The office bearers of the various associations with their colorful identification badges pinned prominently, the lighting of the religious lamp signifying good luck, the welcome speech and introduction to the chief guest -- the politician. The speeches are punctuated with a break for refreshments, and a heady mix of religious devotional music, and film songs in the latest disco-rap beat take over.

Behind this glitter, the politician's speech is not a one way process. For the politician, its not an easy occasion. The audience, for one, is mixed and wanting to hear varied priorities. It has residents, entrepreneurs, workers & foremen, renters and landlords, the opposition party, and college-going youth. The organizers of the event too, beneath the red carpet laid out, come prepared with their own agenda for the speaker to respond to in public: What's the latest with the power situation, and what are his promises in case he wins this ward; When is their block due for legalization?; When is the road and drainage scheduled for improvement? For the politician, this is the forum, along with the personal door to door visits, that can often make or break an election.

Street scape Viswas Nager thus, is one of proclamation, advertisement, celebration, and of protest. In most cases, families and entrepreneurs alike need to be confident about the civic development in their neighborhood. They need to be secure that their plots and investments are not demolished because planning norms do not recognize these. They need to have their services upgraded, roads well drained, regular water supply and electricity. They need to be assured that the power they use is regular. All this confidence comes, in many ways, by pressuring the public authorities by organizing associations to make representations -- basically being involved in politics.

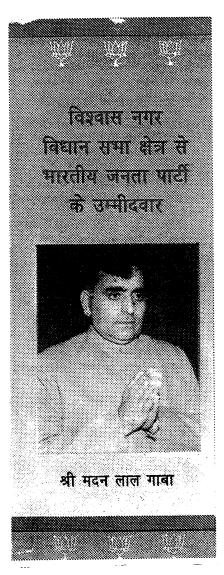
In case this politics does not work out, or address issues affecting the survival of local groups, the street and the maidan is the focus of public protest which can take many forms. A violent form is that of damaging public property like buses and public buildings with stones. In extreme cases, locally made 'molotov cocktails' with petrol are thrown. On the other end, public protest can assume a peaceful procession through

Translation of this candidates 21 main points given in their actual sequence below:

1) Problem of electricity is foremost

I would strive to get Viswas Nager declared as a light industrial area and the existing 33 KVA line upgraded to a 66 KVA line. This will provide electricity to all.

- 2) Drinking water and sewerage
- 3) Roads, storm water drains to solve the problem of stagnant water
- 4) Pollution to be solved by planting trees
- 5) Upgrading of squatter areas
- 6) Upgrading of urban villages
- 7) A new university campus
- 8) Under-bridge under the railway line to reduce accidents
- 9) Extension of the city's 'ring' bus service
- 10) Railway station at Anand Vihar
- 11) Improvement of 'Law and order'
- 12) Women's hostel and child-care center
- 13) Declaration of Gazipur as a 'commercial area'
- 14) Speedy construction of the Viswas Nager CBD as a district center with a multiple cinema complex, a five star hotel, and commercial offices
- 15) Parks
- 16) 80 bed mini hospital
- 17) Anti-corruption drive
- 18) 10 year deadline for the auto-transfer of leasehold to freehold status
- 19) Stopping harassment by officials of the house tax department
- 20) Education for children
- 21) Mid-day meals and free health checkup for children



(Note: The Viswas Nager election constituency is a vast area covering almost a fourth of East Delhi. Viswas Nager is in physical dimension, only a very small part of it)

Figure 7: Election manifesto of candidate for legislative assembly of Delhi.

the streets with banners and the shouting of slogans. Another peaceful way is a "dharna" -- a public 'sit-in' a small sized shamiyana. usually set up in a place of high public visibility. But there are many in between ways between the two extremes. One such method used by retailers or manufacturing groups is 'bundh'. Literally translating as 'to stop' a bundh means to stop work. Factories are shut down, shops close with their shutters down, and if at a city wide level, attendance in public office is thin. At times, this can take a violent form when the protesting group attempting to 'enforce' a bundh, will break the windows of a shop refusing to close down. In between extreme violence and a dharna. is a "gharao" where a protesting group would 'storm' a public office. The building once surrounded, the protesting group will not allow any senior public official (and the public sometimes) to leave or enter, till an official representative of the organization or a senior government official makes a statement on the issue of protest. A protesting public can also gharao a public official's car. Viswas Nager, as we shall see in the next section of this chapter, has also had its share of public repression and protest.



LAND SALES BRANCH (INDUSTRIAL) UNAUTHORISED REGULARISATION OF INDUSTRIAL PREMISES: SUB-LETTING OF

It has come to notice that some of Industrial units have sublet their premises without obtaining prior permission of the Lessor. If a lessee/allottee sub-lets the premises without prior permission of the Authority, he violates the terms of lease. The Authority has now decided to regularise unauthorised sub-lettings of industrial premises provided the manufacturing being carried on by the sub-lessee is permissible under the provisions of Master Plan and functional analysis.

2. All such lessees as have sub-let their premises without permission or who want to sub-let their premises, should submit their application in the prescribed form, obtainable at Form Sales Counter, Vikas Minar, to the Delhi Development Authority latest by 15-5-84 to get the letting/sub-letting regularised, failing which no further opportunity will be given and action to cancel the allotment/determine the lease for breach of terms of lease/allotment will be initiated.

Delhi Electric Supply Undertaking

ಹಿಲ್ಯಾಯಿ Attention Consumers ೆ

As per master plan 2001, certain roads/areas which were originally residentia as per layout plan, are being declared commercial by M.C.D. on payment of Conversion Charges. Further, Delhi Govt. has approved the ad-hoc registration of Industrial and Commercial units in non-conforming area.

In this context, development of as per details (it is notified for the info harges for different cate given below :-	egories of elect	tric connection s	hat the shall be
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No.		date	Single Area of	* - 7
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Residential areas subsequently 23.06.1994

notified as comml. by the civic body & comml. connection has been asked for.

Rs. 1100/- per K.W

Figure 8: Public announcements by the DDA, DESU during 'election years'

SECTION D: CRISES IN LOCAL POLITICS

Local politics, illustrated by the previous sections, has been an important undercurrent of Viswas Nager's developmental history, affecting both the organization of work and its' setting. In this chapter I reinforce this issue by focusing on two crises which confront Viswas Nager in present times. The first case, relating to a electricity load regularization, illustrates the importance of an elected government in matters of a structural policy change. Although local associations are willing to make substantial financial and management contributions to the public authority to improve the electrical infrastructure and services, the lack of a elected body to direct policy and the operations of local government institutions creates a major stumbling block over a two year long period of negotiations. The second case shows that when politics relating to the organization of work is lifted beyond where the affected party have any access, their survival can be at stake. Both cases re-emphasize the issue of the local state, of land issues, and the politics that binds these together as being important determinants of the future of the neighborhood economy.

1) The DESU raids of 1990.

Chapter 3 showed that by 1990, Viswas Nager's industrial structure was well consolidated spurring the manufacture of a wide range of cables, conductors, ancillary products, capital machinery and a host of support services. The neighborhood's increasing prosperity, the opening up of the market for cables and conductors on a nation wide basis, as well as real options to start off business with the availability of plots to rent and finance on credit attracted increasing numbers of small and some medium sized entrepreneurs. Most of these were foremen starting off taking on production from their previous employers, renting space and machinery. Many existing entrepreneurs upgraded their operations within their factories or took on new plots on rent and taking on additional production. Viswas Nager of 1990, was for all practical purposes, a boom town.

All this industrial activity increased the demand for electrical, especially

3-Phase power. Fig. 15 in Chapter 3 shows the substantial increase in the number of transformers during this period. However, existing licenses and procedures did not allow much scope for entrepreneurs to upgrade their electrical loads, and with new ones coming in to get access to electricity above domestic loads, firms were forced into drawing power illegally. Delhi local government was superseded thus reducing the possibilities for political representatives to push for a re-opening of the ad-hoc license scheme or to declare new areas of Viswas Nager as 'Local Commercial Areas', and thus providing higher electricity loads to all who located there.

As a result, over-loading and illegal connections became more & more extensive, leading to frequent transformer burn-outs, fires, and the 'tripping' of supply. Although affecting productivity, the lower costs for electricity attracted even more entrepreneurs with increased competition forcing margins of profits even lower³². This in turn promoted the evasion of electricity payments even further. Almost entrepreneurs all were involved (forced into in most cases) in some form of illegal drawing of power. This was however a two way process. Also involved were the zonal employees of the DESU, as it was they who also had to cooperate to install new transformers much higher the norm, heavier feeder lines, newer connections on the side, and in some cases, play an active part in under-reporting meter readings³³. Entrepreneurs in return, provided the DESU staff with a well organized system of gratification. Most of this was in terms of entrepreneurs settling a 'group' rate, paid by the associations to simplify the process of accounting, reduce individual

Margins of profits reduced to 3% from 12-15% in the early eighties. However, even with such low margins, production was still profitable since, as discussed in Chapter 2, the market for Viswas Nager had become a national one. Some entrepreneurs estimate that for domestic cables, the cost of manufacturing in Viswas Nager are anywhere between 20-35% cheaper due to the close clustering of firms, availability of local machinery, land, and low investment in stocks and working capital. (Interview with B.L.Nahar, Mukesh Pandit, factory owners, 27 July 1995)

One of the Assistant Engineers told me that the field staff did all the planning of new lines, how they were to be taken through the neighborhood, organized thorough the associations space for transformers, as well as push their higher ups for additional feeder lines. For instance, a new 11 KV feeder was brought in specially for Viswas Nager. The 'official' planning staff from the headquarters only gave their signature on this, sometimes even avoiding a site visit.

CAPII MCD factory licences only a tout away

By Yashwant Rai

NEW DELHI, September 29. T Te sneaked up as if on a cue flashed from behind the counter. "Kaun se area ka hai (which area)?" asked Krishan Pal Sharma, one of the many alleged touts swarming the MCD's factory licensing office at Kashmere Gate.

Sharma knows everybody and for him nothing is difficult. He can easily procure a licence in the local commercial category, — of — even in prohibited areas such as Alaknanda, Saket DDA flats and Vasant Kunj.

He merely wanted to know if the flat/building to house the proposed commercial unit is on the licence." Except this one "impossible", he can swing anything.

Sources in the factory licensing department agreed licenses could be obtained in the local commercial category for any area.

despite an official policy clearly segregating "allowed areas" from "prohibited areas".

This policy exists only for those using the tedious and prohibitive official channel. But it can be easily circumvented. — just wait for that tap-on-the-shoulder from a tout, who will use the use the officials to cut the red-tape short.

"Touts pull a lot of clout here," and "the more resourceful of them can get the licence made permitted local household units. And issued to the applicant the same day," sources said. The site is not inspected, it was alleged, but a report is made out, anyway.

Sharma indicated as much. "Come tomorrow," he said, "and I will introduce you to the area inspector." But will he inspect the the ground floor. "Otherwise," he proposed site? "You don't said sagely, "they will not grant worry," "I'll pay him," he stated grandly.

> Though, the MCD's vigilance branch has not vet stumbled upon this network, it is aware of other irregularities. During a scheme of ad hoc registration of illegal com-

merical units last year, "four-five the municipal election comlicensing officials were suspended".

The vigilance branch director M • P Sharma said over 200 files (each of an applicant) were investigated on receipt of specific complaints. For the on-going ad hoc registrations, the vigilance wing is keeping a close watch.

The DC factory licensing, Mr S S Harit, admitted the involvement of his office staff with the copies of the three operative touts. In fact, Sharma advised this reporter to ask Mr Harit's peons "for his whereabouts". 'They all know me," he added.

Mr Harit was both surprised and disgusted that the touts were operating in the main hall. He said: "I have tried hard to keep them out of the premises." But every time they were chased out by the police, they returned.

For their eviction, he has also written to MCD's additional deputy commissioner for head quarters, in charge of the building housing the licensing department, education department offices and mission.

In fact, Mr Harit said, the most recent letter was sent last week. "Even if the entry to the premises was regulated," he complained, "the touts will get in on some excuse." These middle- men look keen and resourceful enough.

"File ban jayegi," Sharma assured this reporter. A 'file' has a filled-up MCD application form, pages of the ration card, a copy of the lease-deed and the building plan of the flat/house.

He did not foresee any problem over the proposed 'photostats shop' which was to be housed in a DDA-built flat. Though Mr Harit was not very sure, he said "as for policy it was not permitted in planned colonies with earmarked shopping areas."

But trust Sharma and his friends. They can swing even this, for a price. Rs 500 is his flat rate for every licence. And Rs 3,500, he said, was the processing charge.

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harassment, as well as lower rates. Even so, one general secretary of one of the associations told me that he estimated that in 1990, all the associations put together paid up about Rs.120,000,000 (US\$ 3,333,333) a year to the various inspectors that visited Viswas Nager, out of which RS. 80,000,000 (US\$ 2,222,222) were given to the DESU itself. Thus the boom in manufacturing saw a parallel boom in bribery to the DESU to keep the system going. The 'well oiled' availability of electrical power outside the legal system, in turn attracted new entrepreneurs to locate here from more individual locations and existing ones to consolidate their production³⁴.

In the third week of May 1990, officers of the Enforcement, Vigilance, Special Investigating cells of the DESU conducted raids in Viswas Nager. There was a violent confrontation between residents and entrepreneurs, with the police³⁵. This resulted in entrepreneurs agitating in reaction. These raids, over the next six months, resulted in frequent shut-downs ranging between 10-15 hours as a routine, complemented by low voltage supply, even when power was available. All this disrupted production severely.

<u>a) The negotiation process:</u> The various associations which had until now largely played the role of organizing the bribery for the DESU and consolidating land

³⁴ In 1990, one entrepreneur, while recollecting the story of his life, rather mournfully told me about he how lost so much money. He had first located in South Delhi, shifted to West Delhi, and then to Viswas Nager. Each time he had made substantial investments in land but was forced to leave due to harassment because of a lack of a proper 'setting' with the local electricity office. Here in Viswas Nager, that worked well because the associations had established a good setting. He said that if he had moved here earlier in the first place, he would have had a much better place and better machines, rather than the dark and gloomy space that we sat in.

³⁵ Officially, DESU maintains that theft of current overloaded the system and threatened to 'trip' the entire system, requiring 'severe action'. Another opinion by residents in the neighborhood is that the bribes being paid to the public authority were not being 'distributed' through the system, and the raid was promoted by one upper section of the bureaucracy against their local office and field operators. Another variation to this account is the bribes were not being distributed evenly across departments. The 'bribery' hypothesis seems creditable, as one entrepreneur told me that the senior management of the DESU used their negotiations with the federation essentially to calculate (on basis of the declarations of actual power used) how much bribes were coming in at the lower end, and thus try to extract a larger proportion of it.

to install transformers, now got organized for more political activity: representing the members problems to officers of the DESU and the MCD with the help of local and national level politicians. To further consolidate their position, they formed the Shahdara Manufacturer's Federation representing 8 (and later 10) industrial associations located in Viswas Nager. The head of the local youth congress wing, whose two brothers manage one of Viswas

Protest against DI

NEW DELHI, Aug 7 - More than 3000 irate supporters of Shahdara Manufacturers Federation broke parts of the main gate at the DESU office in Karkardooma in East Delhi while protesting against the 'intermittent harassment' by the undertaking's officials. The small industrial units situated in Vishwas Nagar, Jwala Nagar and Bhola Nath Nagar struck work on Wednesday for an indifinite period to highlight their plight.

The manufacturers of copper wires and PVC compounding units in this part of East Delhi have locked horns with the DESU bureaucrats over the issue of 'regarea. The Federation supporters: alleged that the local DESU staff

had 'already received enough illegal gratification in the past and manexcess load in an unauthorised manner.

As such the meters in these industrial units' in the residential area in Vishwas Nagar are fully covered under the law. Only a 7.5 horse power (HP) capacity meter has now been caliberated to withstand load upto 40 HP, courtesy DESU.

The general secretary of the Federation, Mr Nawratan Mal Bangani told ENS that they have committed to the DESU General Manager to bill them at a higher capacity than what is sanctioned after condoning the 'misuse charges' of past three ularisation of excess load in the years. Mr Bangani says that over this issue the DESU had backed out.

Figure 10: News Report from the Indian Express August 7 1990

Nager's largest factories was chosen as the president. Being politically connected was very important -- an influence they were able to use across party lines.

The general secretary was another important and educated entrepreneur again from one of the larger firms. Being technically educated, he was the chief negotiator on behalf of the Federation with an excellent knowledge of the technical issues at stake. As a factory owner, he had supplied cables to state electricity boards in eastern India, as well as the Eastern and South-Eastern railways. Thus, the general secretary of the Federation was very familiar with the ways of the bureaucracy, and had many personal friends and relationships developed there.

The negotiation between the Federation and the DESU started in a tense atmosphere, preceded by hundreds of entrepreneurs and workers protesting outside

the DESU zonal office, threatening a hunger strike, and even resorting to stoning the DESU building and breaking window panes. This negotiation was to last almost two years inter-spaced by periods of silence (See Annex 6B, 6D for a detailed account of this process). The negotiation centered on three basic issues:

i) Calculation of misuse charges: The calculation of the amount of mis-use charges centered around the electricity load consumed by an entrepreneur. The Federation argued that there are three kinds of loads to be taken into account:

- * First was the 'licensed load'. This was the load stated on the license;
- * Second was the 'connected load', or the sum total of the power ratings of all the machines/ motors in the factory connected to one meter.
- * Finally, there was the 'actual load', or the load given by the machines during a 24 hour production cycle, depending upon the sequence of use since not machines all were used at the same time. The Federation argued that the third category should be calculated, and taken as the basis to charge individual entrepreneurs for power consumption.

The DESU argued that since there was a mis-use, they would use the total connected load as the basis for calculation.

ii) Issue of misuse changes calculated with retrospective effects: The second point of contention was that the DESU wanted to slap on a misuse charge of 100% of the billing amount with retrospective effect over the last three years. The Federation argued that this was totally unacceptable as all the entrepreneurs were poor and would not be able to afford the high amount. Also, the DESU would also have to recognize that even if the entrepreneurs had drawn power illegally, it was with the connivance of the zonal staff, whom the entrepreneurs had paid up in heavy amounts of cash to ensure the continuity and availability of electrical power.

iii) The implicit recognition of industrial area status by collection of charges: The third point was that if the DESU did take money from the entrepreneurs for their

actual consumption, it would by default amount to a implicit regularization of the industrial use in a 'non-conforming area'.

To prove their eagerness to negotiate with the DESU, the Federation made an unprecedented and bold offer: They offered that on behalf of the all the associations, the Federation would get a declaration signed from all the members mentioning the type of license under which they were operating their factory, the licensed loads, the connected loads, and the actual loads use (See Annex 6D). The DESU in turn, could use this as the basis for regularizing the electrical connection of the participating entrepreneurs. In case any entrepreneur gave a false declaration in this form, then the DESU would be free to initiate criminal prosecution under its powers, and that neither the Federation or the associations would intervene. Any inspections however, would have to be carried out on a joint basis, with representatives of the Federation/ Association present to ensure that no harassment happens or demands made for bribes.

To further confirm the load declarations of the entrepreneurs, and their compliance, the Federation suggested that the undertaking install digital *tri-vector*³⁶ meters as had been done in Bhiwadi, a town in Rajesthan with a similar arrangement between entrepreneurs and the local administration. Since these are expensive instruments, the Federation suggested that the cost be shared and the component of the entrepreneurs be spread out over time as part of the billing process. The Federation argued that this declaration of actual loads, by not only Viswas Nager, but other industrial clusters in Delhi, would bring in substantial revenues, more than wiping out the recurring losses that the Electricity Undertaking faced year after year.

³⁶ These are referred to as 'C.T. Meters in the correspondence between the DESU & the Federation given in Annex 5B. Tri-vector meters can calculate loads differentially: area wise, and in a dynamic way in time zones. They are linked **to** a computerized data base for the electricity undertaking. This .vould allow for more accurate peak usage pricing and better power management. Also, these instruments cannot be manipulated easily and can identify with great accuracy, sources of illegal drawl.

MADAN LAL KHURANA MEMBER OF PARLIAMENT (LOK SABHA). PRESIDENT.

Bharatiya Janata Party, (Delhi Pradesh)

BOP/01/4493-6/40



Phones: 594445 533096

F-104, KIRTI NAGAR, NEW DELHI - 110 015

Dated: 8th June, 1990.

Bear Shri Kapoor ji,

I am sanding herewith a letter of Shri W.A. Sungani, General Sugretary, Shahdara Fanufacturer's Federation, 519/2A, Vichuss Magar, Shahdara, Delhi-32 regarding regularization of sucess connected load to the existing industries. The letter is self-explanatory.

I shall be highly obliged if you look into the matter personally and do the meedful.

With kind regards,

Yours sineersly.

(KADAR LAL KRURANA)

Shri R.D. Kapoor, Commissioner, F.C.D., New Delhi.

C.c. Sh. N.M. Bengani, Gen. Secy., Shahdara Manufacturer's Federation, 519/2A, Vishwas Nagar, Delhi-32 for information.

Figure 11: Letter from Mr. Madan lal Khurana (Present Chief Minister of Delhi) to Commissioner MCD. (1995)

b) Using the Porous bureaucracy: In a way to create a pressure within the DESU, the Federation, through their bureaucratic connections in the DESU itself managed to get the finance wing to undertake a internal report on this proposal and explore its feasibility and implications for the DESU. The finance wing, in an internal and confidential note, agreed that the Federation's proposal was indeed of a substantive nature, and the opportunities for revenue generation were quite substantial. Working estimates suggested that prior to the raids in May, the DESU with some difficulty could only collect between Rs 4,000,000 to 5,000,000 (US\$ 111,111 to US\$ 138,888) per month from Viswas Nager. If they agreed to the Federation's proposal for load regularization, this would increases to Rs. 15,000,000 (US\$ 416,666) per month -- more than three times over. These figures were only a basic feature and did not include a security deposited with the undertaking, normally taken as a 6 month amount of the monthly bill. The DESU report also showed that with this policy change applicable to other such industrial areas, the Undertaking would not only pull up the organization from being in the red, but also reap substantial profits.

c) Impact of political dissolution: These issues raised questions of fundamental policy, which would affect not only the future of manufacturing in Viswas Nager, but also all the other industrial clusters in Delhi. Furthermore, it would also affect the institutional structure of Delhi, providing financial, fiscal autonomy and power of a authority to a body under the MCD. This would be a drastic change from the present position of the direct monopoly control of the Central Government via the DDA and the Delhi Administration. Another important factor complicating the outcome of the negotiation, was the instability of the then union government headed by Prime Minister Chandrashekar. This national level in-stability in turn, prevented local elections to the Legislative Assembly and the Municipal Corporation of Delhi. At the administrative level too, the capital experienced frequent changes in senior government officials including that of its Chief Administrator, the Lt. Governor. Finally, the General Manager of the DESU (its CEO) also got transferred, apart from other senior officials. This too made negotiations difficult, especially when these center

on extensive verbal agreements and building up of relationships before anything is finalized in writing. For the general secretary of the Federation, as their chief negotiator, this was a trying time as he had to also ensure that he could carry the support of the larger group of eight associations. Some of their members, being fed up with these delays, were prone to unruly behavior wanting to take 'direct action'-- more stone throwing and violent protest.

In absence of a elected local government at that time, the electricity issue proved to be a difficult issue to resolve. The Federation drew support from wide ranging political quarters including several national level politicians and Members of Parliament (MP) across party lines. Through these political channels, they also managed to meet the Chief Secretary, since he, in absence of an elected government, had the authority to change policy and legislative changes.

All this hectic work did bring some results. The DESU agreed to an additional feeder line to bring additional power; the entrepreneurs agreed to stick to time zoning to avoid peak load hours. However, no decision was taken on the basic issue of load regularization due to general political instability and non-functioning of local government. As an office bearer of Federation commented:

"...With no political representatives at the moment, bureaucrats are free to take whatever decisions they want. They (Bureaucrats) go by the rule books, in which they also take decisions but only to maintain the status quo and let things stagnate...politicians amend laws according to the need of the people and the need of the hour..".

d) Local Elections & renewed initiatives: With elections to the legislative assembly in 1991-92, the Bharitya Janata Party came to power. The issues of industrial policy and access to electricity in particular, became a major policy plank with candidates standing from East Delhi advertising what their approach would be to help small firms. After election changes did start to happen. The first event was the announcement of a registration scheme for small firms in non-conforming areas (See

Non-domestic power connections allowed one kilowatt load

By A Staff Reporter -

NEW DELHI, May 4.

The city government has decided to allow one kilowatt load to non-domestic, power connections in residential areas. It is believed scaling up the load to 2 KW is under consideration; the Master Plan may be changed (it presently says 1, kw is the limit).

City government officials said: "If the land-use specified in the Master Plan can be changed - the same can be done about non-domestic connections in residential areas". For the moment 1 KW has been allowed.

Only the decision to do so has been taken. It will come into effect after clause 4(D) of the Delhi Electricity Control Order (DECO), 1959, is suitably amended. That shouldn't take too long considering the government is keen.

Besides, it is in line with the recommendations of the four-member Vasant committee report which has stressed the need to regularise connections now considered illegal due to violations of building byelaws or the Master Plan

A large number of small comnercial establishments are opertting in areas declared residential. They draw electricity much in excess of the sanctioned load. DESU routinely slaps misuse charges on them and bills them for the units consumed.

But the theft-beleagured undertaking is not able to charge these consumers commercial rates, much higher than the domestic ones, and for laying and maintaining lines to carry higher power-load. Once the decision is effected, these consumers will be charged development-cum-regularisation charges with a "minor penalty". The sanction, however, will not give the consumer any right to claim commercial-status for the premises concerned.

The consumer will be given an undertaking to this effect on a non-judicial stamp paper. This will ensure the civic bodies, MCD, DDA or NDMC, can go ahead and prosecute the consumer for violating landuse and building rules.



DELHI ELECTRIC SUPPLY UNDERTAKING PUBLIC NOTICE

It is notified for the information of general public that in accordance with the decision taken by the Govt. of NCT of Delhi, non-domestic connections shall be permitted in all residential areas subject to fulfilling the following conditions:

- Load upto 2KW in a part of residential premises in all areas on single phase system of supply without applicability of any documents / clearance from the civic body.
- 2. The area for which the commercial (non domestic) supply so allowed shall be confined to the ground floor of the premises concerned and shall not exceed 50 sq. mtr.
- Recovery of development-cum-regularisation charges are leviable from time to time. The current rate of such charges are Rs 1100/- per KW or part thereof.
- Completion of commercial formalities and payment of charges are required for providing non domestic connections.
- 5. The provision of this commercial (non domestic) connection will not confer any right to the consumer for demanding declaration of the premises as commercial and a written undertaking in the prescribed format on a non judicial stamp paper of Rs 2/- will be obtained from the consumer at the time of accepting the application.
- In case of excessive consumption of electricity than normative to 2KW, surcharge shall be levied as per provisions in the tariff schedule.

Chief Engg. (Commercial)

577/95-

Figure 12: Declaration by the DESU after elections in 1995. News report from the Times of India 5th May 1995

accompanying news cuttings in annexes). The government made it clear though, that the registration would not amount to legal recognition -- to avoid unnecessary conflict with the central government in charge of land policy and development through the DDA. As part of this, specific mention was made of access to power supply and legalization of existing connections as well as an opportunity for entrepreneurs to declare their connections and avail themselves of loads up to 40 HP. Later this was raised to 100 HP. These issues nevertheless set off conflicts between the local government and the central government when the latter decided to cut-off grants sanctioned to the DESU (See news report of 25th. Dec. 1994). In the beginning of 1995, the Vasant Committee looking into the issue of theft of electric power, came up with a frank report highly damaging of the DESU management³⁷. One of their recommendations was that irrespective of the legality of small units as they relate to the MCD or DDA regulations, the DESU should regularize their connections and charge them for electricity as per rules. This was picked up by the Chief minister and in May 1995, a new scheme was announced which allowed residents in regularized un-authorized colonies to get access to 2 KW (of electric load for non-confirming uses³⁸, even if they did not have a industrial use license.

Entrepreneurs in Viswas Nager, as those in other industrial areas, were obviously happy at the re-opening of the licensing schemes giving them access to a 100 HP connection. For residents, the 2 KW connection would allow them simple activities but also stop harassment by the field staff of the DESU, the MCD, and the police asking for bribes³⁹. In many senses, the power situation seemed to have been resolved. This optimism turned out to be short lived as even a more serious threat to

³⁷ The Vasant Committee report is a detailed documentation of the way electricity is accessed by small entrepreneurs in various types of settlement areas and the issues particular to them. See in particular pages 15 to 29.

 $^{^{38}}$ A 2 KW connection can run a small motor, or a single industrial heater used for very simple manufacturing purposes.

³⁹ In many cases, they were in any case using such power connections. Declaration of the scheme only legalized an extensive activity.

Ad hoc registration for units opens

By A Staff Reporter

NEW DELHI, April 20.

BEGINNING tomorrow, ownmercial units in non-conforming
mercas can apply for ad hoc regismation at the civic body's office
in Old Hindu College building,
mashmere Gate. Last date is May

11.

The owners of factories run on steam, electricity, water or other mechanical power in non-conforming areas can contact the additional deputy commissioner (factories), Old Hindu College building, Kashmere Gate.

And the owners of shops, workshops, warehouses and other trades using manual labour in MCD-run areas can contact the additional deputy commissioner/zonal assistant commissioners of their respective areas. Application forms will cost Rs 50.

An announcement to this effect was made by the MCD today. The policy decision on ad hoc legistration of units violating the Delhi Master Plan guidelines was announced by the chief minister, Mr Madan Lal Khurana, on April 14.

Mr Khurana had said all such units, other than the hazardous and polluting ones, started before December 31 last year can apply. A registration, however, would not mean regularisation of any non-conforming use or any unauthorised use or construction.

Registration would, however, facilitate electricity and water use. The MCD would fix the ad hoc registration and annual renewal fees; but the registration fee may be charged only after conversion charges have been paid. NO PROVISION: It is not clear if some of these units would be relocated. As per the New Master Plan, also the official policy, some will be given a chance. But a later announcement on electricity for these units says such no provision has been specified.

The scheme applies to units in the Walled City, other built- up areas, Delhi improvement trust schemes, schemes executed by the ministry of rehabilitation between 1947 and 1957, resettlement colonies, urbanised villages and regularised slums.

It does not extend to NDMC

and Delhi Cantonment board areas, planned colonies and housing schemes developed after 1957, unauthorised colonies, slums, staff housing colonies and rural settlements.

Some of the terms are — units employing nine men may operate where they are; the position would be reviewed after 10 years; for light and service industry units their present location would be reviewed after five years.

Polluting industries and those not in the approved Master Plan list will not be registered. For power, units employing five persons, occupying 30 sq metre on ground floor may get one kilowatt; some specified ones may get upto 30 kw.

Commercial units in areas identified as mixed land use in the DDA's draft zonal development plans may be registered if they meet the specifications in these plans.

Figure 13: Announcement for Ad hoc registration of industrial units. News Report of 21 April 1995 Times of India

their livelihood loomed up in the horizon.

2) THE SUPREME COURT POLLUTION CASE

a) The Court Directive:

The Supreme Court of India on February 17th. 1986, had urged the Delhi Government, in hearing the case of the Oleum gas leak from the Shri Ram Foods & Fertilizer Industries (a large corporate industrial concern), to save Delhi's population from inherently dangerous and hazardous industries to avoid another Bhopal type of disaster. Then, there was little follow up action. On the 24th. of March 1995, the Supreme Court of India, on the basis of a public litigation filed by M.C. Mehta (writ petition no.4677/85 M.C. Mehta Vs. Govt. of India) directed the Delhi Administration to shift

ARE YOU INTENDING TO SHIFT OUT OF DELHI?

(CONSEQUENT UPON SUPREME COURT'S ORDER)

HARYANA HAS THE PLACE TO OFFER. COME & MEET US

On 2nd & 3rd June, 1995 From 10.00 A.M. to 5.00 P.M. at

HARYANA BHAVAN, COPERNICUS MARG, NEW DELHI

Haryana Government is organising 'ONE TO ONE BUSINESS MEET' to discuss your specific requirement regarding allotment of plots/ sheds, financial assistance, change of land use, power load sanction etc.

It will be attended by Director of Industries, Managing Director of HSIDC, HFC, Haryana Agro Industries Corporation; Representatives from HUDA, Town & Country Planning Department, HSEB, Pollution Control Board etc.

P.S.: Other entreprenuers willing to set up their industrial units are also invited to discuss their proposals in the above meet.

For further details, please contact our Delhi office at Industrial Assistance Group, Haryana
C-8, Baba Kharak Singh Marg, New Delhi - 110 001
Tel. No.343628, 3732801, 344822 Fax 344548

Figure 14: Announcement inviting displaced entrepreneurs from Delhi to move their business to the neighboring state of Haryana. Note the representation of the various departments in the meeting.

8,378 polluting industries out of the capital in an effort to reduce pollution in the capital⁴⁰. In subsequent hearings on the case on November 30th 1995, the court also directed the Commissioner, Municipal Corporation of Delhi, not to renew ad-hoc

^{40 (}p3, para 1 of the petition).

licenses to any unit after its license has expired, and that a violation of this order will be a contempt of court. The court also directed the MCD not to register, apart from hazardous and obnoxious industries, any industries in non-conforming areas.

As part of the relocation process, the National Capital Region (NCR) board, a amalgamation of territories from Delhi's three surrounding states, Rajesthan, Haryana, and Uttar Pradesh, identified 5000 acres of land for the firms that would shift out, and was in the process of acquiring another 3000 acres (Economic Times 1 Dec. 1995). The Secretary of the NCR Board also told the Court that the Board was developing eight satellite towns and five small towns within the area of 100 KM for the 'speedier' economic development of the region, and the relocation of hazardous industries from Delhi (Hindustan Times Dec. 1 1995).

b) Impact on small firms: The Supreme Court order threw almost all small firms in the capital into a state of insecurity, spurring intensive political activity. Associations gathered together, called emergency meetings, and connected up with each other across the city in an effort to review the seriousness of intent, and the administrative consequences. The DESU swung into action attempting to cut off electric connections of listed firms. This spurred violence in some areas and the Supreme Court issued a clarification saying that their order did not direct the immediate closure of the notified industries, but allowed the affected industries to state two things:

- a) Where they would like to shift in consonance with the Master Plan; and,
- b) What facilities they would require from the government agencies and authorities.

However, if the notified industries missed this opportunity, they would invite police power to shut them down.

c) Political Initiatives: Some local politicians through elaborate press releases as well as in letters to affected entrepreneurs, attempted to caution entrepreneurs about

the seriousness of the court order⁴¹. They also pointed out discrepancies and serious mistakes in the information provided by the Delhi Administration to the Court. The latter was essentially along four points:

- a) The contradiction between the way different government authorities designated polluting, obnoxious, hazardous production processes.
- b) The survey of 21,000 firms used a faulty methodology and was undertaken by novices. Thus, the survey identified petty entrepreneurs like auto-mechanics, small welding shops, carpenters, tailors, furniture makers instead of targeting 121 major polluting industries, many of which are publicly owned. This was despite the fact that the government did have access to more detailed listing of polluting firms made out by senior and respected commissions.
- c) The listing of the errant firms was submitted just one day before the day of judgment not allowing it to be considered, discussed or even verified by the court itself.
- d) Industries in the capital emit only 10% of the total pollution, with two thirds of the pollution being from vehicular traffic. The listed firms contribute only 2% of the capital's pollution.

Reinforcing this criticism listed above, spokes-people from associations, local politicians, and environmental groups argued that the basic point was to stop pollution and not shift it out. Such an indiscriminate shifting of industries would affect the employment of almost a tenth of the capital's population and not only 100,000 persons as the government had claimed. This was because of the production linkages between firms who almost always worked in the cluster way. In addition, a third of Delhi municipal revenue come from industrial enterprises, and every 10th. job directly and many times that indirectly are from industrial units in the city. Furthermore, if the government was serious, they already had a listing of some 200 odd factories (including many government owned ones) which were the major contributor to water and air pollution, and that they should be the first to go.

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⁴¹ See letter by Ajay Maken MLA in Annex 6E.

d) Impact on firms in Viswas Nager: Like firms in other industrial clusters in the capital, factories in Viswas Nager were seriously affected by the court order. Here, between 358 factories were notified for shifting, of which most were medium sized sharing many production linkages in the cluster. When the order was initially passed in March of 1995, most entrepreneurs did not realize the seriousness of the issue. They assumed that like most government orders, this could be subverted by petty bribery or by day to day political influence. Later it became clearer to the more educated of them, especially after local politicians pleaded helplessness to subvert the Supreme Court, that this was a serious issue. To emphasize the gravity of the issue, the associations and Federation in Viswas Nager called an emergency meeting and explained the point that neither administrators or local politicians could help directly or make statements as that could amount to contempt of the Supreme Court. Also invited in the meeting was a office bearer of Anand Parbhat, a major industrial cluster in North Delhi. Based on previous experience, he emphasized the need for cooperation and collective legal and political action. The head of the various associations were also convinced of the need to advise their member entrepreneur of the need to reply to the court order and not ignore it or disclaim it by petty bribery of the postal department. This action would only remove whatever claim to compensation they had, or if things did work out well, to get a legal license. Some large and medium sized firms who had been contacted, did file replies, but it is not know to what extent small firms also followed suit.

Two days later, the office bearers of associations and the Federation met with those of other industrial associations in the Shahdara Industrial district. The Secretary of Environment, Govt. of India, who had filed the government listing in the Supreme Court was also invited and had promised to come. However, he did not turn up. The group, after much contemplation, decided to contact a well known economist, lawyer turned politician to defend them in the Supreme Court. In the meanwhile, individual associations made representations to senior politicians including the Chief Minister of Delhi (See letter by Shahdara Manufacturer's Association to Chief Minister dated 20th.April 1995).

For almost all firms in Viswas Nager, a deep sense of insecurity prevails. In real terms, this is reinforced by the erratic power supply by the DESU, with little chance for representation. Many of the larger firms considered shifting production to the neighboring state's industrial departments, several of which placed advertisements in Delhi papers inviting entrepreneurs to locate there offering special incentives. For most, even for large firms, this possibility was a last resort due to the high costs of displacement, reduction in margins due to less efficient manufacture due to the lack of the cluster way of working in the new surroundings. The demand for industrial plots went down and a general sense of gloom has prevailed in the conductor and cable industry of Viswas Nager.

e) The real estate angle to the pollution case: Office bearers, some officials in the DESU, and a high court lawyer argue that the real motivation behind the case are the real estate issues involved. They feel that the court order is odd, because it makes little mention of the main issue, i.e., to control and reduce pollution. Given the seriousness and wide ranging impact of the issue, they argue that this seems unlikely to be a 'technical slip'. Second, it is also very odd that the 8378 firms were identified in such a haste and with so poor methodology, when the Delhi Administration (under the Central Government) did have more accurate listings of 200 firms which were the main cause of pollution, some of which also had a record of serious environmental disasters. According to them, this notification of these industries was bound to create confusion in the public and result in prolonged litigation. This climate would be an ideal one for a few large corporate groups to frame their case centered around real estate interests.

This angle is specifically argued by Vijay Chaudhri, a senior advocate of the Delhi High Court, fighting the case on behalf of one of the industrial Federations in West Delhi. Chaudhri claims that the major interests behind this court case is a powerful corporate alliance of nine large industrial and real estate groups: *The Swantra Bharat Mills, DCM Silk mills, Birla Cotton Mill, Sri Ram Food & Fertilizer Industry, Britannia Foods, Modern Foods, Kwality Ice-cream, Sylvania & Laxman, Pure*

Drinks. The supreme court order for shifting, would in effect allow them to use the land they presently occupy for commercial and high class purposes. At present, their factories are located in central city areas on large plots of land. With the expansion of Delhi, these are today a real estate gold mine. The main issue is that these plots had been allocated to them on a leasehold basis for a specific public purpose (of employment), and listed under 'industrial' use in the master plan. Chaudhri argues that the court case would allow them to effectively frame a case where as an compensation for the losses they supposedly suffer due to shifting their industrial units, they should be allowed to recapture the commercial values of the plot they now occupy. This argument will carry even more weight since the corporate group can easily inflate figures and in any case the Delhi Administration lacks the funds to compensate them adequately. Finally, while most other smaller firms would obviously not be interested in shifting out of Delhi, the fact that this group of industries chooses to do so, increases their public visibility, as well as score well politically.

This real estate angle to the pollution case is not easy to confirm. However, there is circumstantial evidence to suggest that it might be a useful area for investigative journalism and followed by a more detailed research into the nature of conflicts in the terrain of real estate.

For instance, on November 30th, 1995 for instance, during one of the hearings of the pollution case, the DDA informed the court that it had already framed a scheme for the use of the land occupied by the industry (on leasehold basis) including commercial, residential, low income housing and space for public facilities. Under this scheme, the owners of the land could construct residential houses and office buildings, but maintain a certain portion of their plots as a open space or green area. While owners who had up to 2000 sq.mts. of land need not keep any open space, others would have to maintain between 30-33 % of the plot area as such. Such a development could release substantial profits. Significantly, during the November 30th hearing at the Supreme Court, the judges asked the counsel for Birla Textiles, Shri Ram Industries to discuss the plan with the Commissioner of lands DDA, and give

their comments to the court. In this context, the representative from the Ministry of Urban Development submitted before the court that the scheme of land use for existing lease hold plots would 'encourage the industries to move out of Delhi'. Another indicator of the real estate angle is that since 1989, the DCM mills had already been involved in an extended litigation in the Delhi High court with the DDA over their huge plot of land at Kashmiri Market, a very central part of

REPORT IN NAVBHARAT TIMES New Delhi 25th.Nov. 1995 In response to the public litigation filed by MC Mehta Vs Government of India, the Supreme Court will not take back the notice issued to the polluting industries. Since they are aware that the order of shifting polluting industries will cause great disruption to the public, they have directed that various government departments extend all possible help to the affected people.

In response to the order by the Supreme Court, the Delhi Administration has submitted a list of 1964 industries to the court which should be shifted according to the master plan. Out of these, 1557 industries in nonconforming areas. The latest directive by the court specifically says that these industries must be sent out of Delhi.

On the other hand, four large industries: The Swantra Bharat Mills. DCM Silk mills, Birla Cotton Mll. Sri Ram Food & Fertilizer have filed their own replies in the court. Apart from this four industries, the rest are being sent out of Delhi. (Translation from original report in Hindi)

North Delhi. This plot was initially allocated to the industrial group in the early Thirties on lease hold basis for industrial activity. The DCM was ultimately allowed to develop a mega-project with high class housing and commercial uses on this land.

More recently, an article in the Economic Times reinforces the real estate thesis explicitly (Rajan 1996). Quoting the model followed by Singapore in the development of its 'golden shoe', the author argues that with the shifting of industry, in Delhi, several thousand acres of land will be available for urban renewal. However, the Delhi Government is short of funds—requiring Rs.60,000,000,000 (US\$1,666,666,666) for a urban design masterpiece, to mirror the one in central Singapore. Thus, the industries have a good case to develop the land themselves to recover the costs of shifting — with subsidies not forth coming from the government. As Rajan writes:

'Part of the money that these industries make out of this development and sale would go towards meeting the cost of their shifting out. But even by conservative estimates, they will make much more out of this real estate than the cost of re-location.'

The role of the state, according to Rajan in this situation, would be a one of assistance. It would provide, by way of a 'single window clearance', land acquisition for their new sites and power and water connections. Chaudhri also explains that the

attractiveness of the real estate opportunities intrinsic in these large plots located in central city areas is further emphasized by factors relating to technological obsolescence^g.

This strategy of corporate groups (both public and private) capitalising on central city locations of large land plots housing defunct industries is not a new one. These have been a growing trend in Bombay (and to an extent in Ahemdabad) in recent years⁴². The Bombay case is most clearly documented in the press and business weeklies. In the previous decade, such initiatives were more individual based with the corporate groups acting in a singular way. In recent times however, the fuel for these ventures has achieved a higher 'octane' within Bombay (and with other cities following suit). This comes from the congruent interest of three actors. First are investments by NRI or Non-resident Indians. Business analysts estimate that close to one billion US\$ have been invested in real estate in India by NRIs, especially in Bombay, Bangalore, and more recently in Delhi(ibid: 16)⁴³. The second important actor in this process are the quasi-state authorities controlling public capital. These are the housing finance companies like the Housing Development Finance Corporation (HDFC), as well as sections of the nationalized banks⁴⁴. The third set of actors are bodies controlled by the central and state governments (DSJ 1995:28-32). Here, their main resource is either a monopoly over developmental rules and regulations (often argued on the basis of 'cross-subsidy'), or as the Dalal Street Journal puts it most clearly, control over land:

⁴² See 'The Real Estate Corporate Bonanza' cover story in Dadal Street Journal (DSJ) 1995. In particular see 'Godrej: Elbowing for Space' p18-19; and 'Bombay Dyeing: Exploiting Mill Land'. The cover story provides a detailed account of the major corporate groups, their interests and huge sums of capital involved. Not surprisingly, especially in Bombay, the most controversial political events and those which have toppled the State government relate to building by-laws, land use and developmental restrictions like the Floor Space Index (F.S.I), which are the key issue governing the capitalizing process.

⁴³ The DSJ (1995:31) cover story claims that 40% of South Delh: (its elite part) is owned by NRIs.

 $^{^{\}rm 44}$ See 'Housing Finance Companies: We Too' p:35 in DSJ (1995).

There is another factor which needs to be examined. The myth regarding paucity of land is particularly galling. It is believed that in Bombay alone, nearly 33 per cent of the city's land area is frozen. State government landlord like the National Textile Corporation, Bombay Port Trust, Bombay Metropolitan Region and Development Authority (BMRDA), City Industrial Development Corporation (CIDCO), Salt Commissioner's Authority, the Railways and the Indian Navy own vast tracts of land.'(DSJ 1995:28)

The control over land becomes even more critical when private corporate groups themselves control substantial land. This critical issue is not well documented. Patwardhan's film on squatter removal in Bombay had indirectly argued that corporate groups in that city controlled vast amounts of empty land in the central parts of the city. This was provided to them by the government on lease to develop industry in an effort to promote employment and economic growth. The film questioned the popular belief that squatting by poor groups was a result of a shortage of land. The DSJ article, is more specific in their interviews with various corporate groups about their real estate ventures. It becomes apparent that the land at their disposal (often kept in the form of 'trusts' to avoid taxes and the Urban Land ceiling Act) is a major issue governing corporate economics and its politics. Thus, in the case of Bombay, we see a heady mix of public and private corporate bodies with access to land, subsidized capital, and centralized planning agencies -- all brought together by the heady economics of real estate.

Finally, there is also a larger political conflict involved centered around two issues. At the time of these events, the Government of Delhi was headed by the main opposition party in India, the Bharatiya Janata Party. This party had traditionally been supported by small business, while most corporate groups have backed the Congress (I) party heading the central government. The first issue relates specifically to land policy, via the 4000 acres of land reserved in the master plan for the development of industry. This is presently under the DDA, controlled as discussed before, by the

Chapter 6: The politics of Neighborhood as Factory

Ministry of Urban Development under the Central Government⁴⁵. Unless this land is transferred to the Industries Department of the Delhi Government, the latter is seriously handicapped to move forward in the re-settlement process, and also barred from extending any real support to the industries stagnating under the court order. Second, by shifting out small firms, or at least destroying their economic base, the central government could remove an important political base of the Delhi Government. All these arguments, although speculative at present and beyond the scope of this dissertation, are worth investigating in more specific research. The issue remains that the Supreme Court case has some very interesting real estate issues inter-meshed with legal ones.

Viswas Nager in the Winter of 1995

Viswas Nager, reeling under these events, suffers from a sense of gloom. It is not that industrial activity is totally suspended, but more that most entrepreneurs are in a 'wait and see' frame of mind. One offshoot of the pollution case as mentioned earlier, is changing industrial character in response to the growing garment industry. This is still too recent to make any judgement. However it is likely that while some economic groups like unskilled workers, rickshaw pullers, transport companies, landlords, and to an extent financiers are able to adapt to these changes, the vast bulk of Viswas Nager's population is most likely to find it difficult to adjust and develop a cluster way of working in case opportunities for the cable & conductor industry here further decline.

3: Insights from real estate politics

In this discussion, two issue with direct relevance to the major theme of this dissertation are: Urban employment creation and the kind of governance and politics

⁴⁵ Debate between H.S. Balli, Minister for Industry, Govt of Delhi, & R.K.Dhawan, Urban Development Minister, Central Government, in a forum organized by Delhi Factory Owners Federation on Jan.21st 1996.

that accompanies it. Here, the case of Viswas Nager has clearly demonstrated what a powerful employment, economic, and technological effect a non-corporatized economy (either through centralized public institutions or private ones) can have. The second issue is an institutional one. It also demonstrates that the local state -- municipal institutions centered around a public process -- and a politicized civic society are an integral part of this process. In this context, trends towards a corporate controlled economy and a political process are likely to seriously harm prospects for employment generation, the urban economy, and the ability of the state to stay responsive and accountable to the needs of poor groups.

I feel that the complicated political history of neighborhoods like Viswas Nager illustrates several important points:

i) Just as land issues were structural in the evolution of the local economy centered around manufacturing, the neighborhood as factory of Viswas Nager is threatened because of the conflicts over land. The undoing of a small firm led economy comes not necessarily from their technical backwardness or in-efficiency, but rather from their failing clout in a political environment centered around real estate corporate interests. The importance of real estate issues in influencing the local economy might be underscored by the understanding the evolution of manufacturing from 1971 to 1991, (explained in Chapter 3) in responding to a growing market, in terms of the real estate arena. Here, more frequent elections, as happened in the late Seventies and early Eighties had a positive impact on the local economy because they helped bring about a positive context for local groups to establish and reinforce their claims on land and get infrastructure. In contrast, the one and half year emergency which saw an extreme of authoritarian land interventions in the form of demolitions, subjugation of civic rights, as well as the recent crises around the pollution issue have had devastating effect on the local economy precisely because they undermine the local political process in they way poor groups can get access to land, infrastructure, and once they have it, protect their

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claims to it. Although these processes are often seen by academicians as being centered around "housing", these are in effect centered around the local economy and thus the livelihood of poor groups.

ii) The cases discussed here raise the importance of an institutional space for local groups to be able to negotiate civic issues with public authorities -- irrespective of the legality of the issues. We saw three situations. In the first, with regard to the regularization process, both in the case of Shashi Garden and Block 28-29 in Viswas Nager, these negotiations happen within conventions that have evolved out of similar such cases over the last two and half decades and thus in a relatively orderly manner -- in a low key and controlled negotiation mode. This in many ways fits in within the strong tradition of local government that India has evolved since the end of the Nineteenth Century. In the second case, of the DESU licensing raids, this too got down to a process of negotiation after initial hiccups of demonstrations and stone throwing. Although more 'special' in the sense that a federation of association had to be formed to press for a major policy change, this again generally fits in within the local government tradition. The third case however, is significant because the arena of negotiation is uprooted and replaced by a legal environment centered around planning norms and institutions which have little public representation. The arguments going strictly by the book, obviously favor corporate interests. Thus, it is the last case, pushed out of the domain of the local government, that leaves it impotent and threatens the survival of the local economy of Viswas Nager⁴⁶. The issue still remains conflict over land, although camouflaged by environmental issues.

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⁴⁶ Another such case is relevant to mention. In 1993, the Supreme Court of India on the basis of a public litigation petition directed the Delhi Development Authority, Delhi Administration and the Municipal Corporation of Delhi not to extend any permanent services or infrastructure to any 'illegally formed neighborhoods'. This petition was filed on the behalf of citizens living in legally planned neighborhoods (which house less than 25% of the city's population). With this order, the normal regularization process and the conventions that have evolved are obviously disrupted. Several local politicians told me that to subvert this ruling, they justify civic developments in parts. Some investment in roads is passed on the grounds that it is useful to fill low lying areas which are 'life threatening' at times of the monsoons. In a similar way some very minimal water supply cane be extended. However, the court ruling also gives a way out to local politics to get away with less, thus diverting funds to schemes that benefit the planned and wealthy sections of society.

iii) This dissertation has shown the complicated linkages between the industrial and the general neighborhood economy. These include the development of its various rental and real estate markets, commerce, local transport, financial arrangements used by many residents not directly connected to manufacturing, and a variety of social services. Thus, when we are discussing the civic politics of industrial clusters of neighborhoods like Viswas Nager, we in many ways are discussing the politics of a much wider conflict. As cities experience increasing conflicts over serviced land, drawing in institutions of varied nature and agendas, this politics becomes complicated but even more important to understand and unravel. The possibility and importance for local groups to negotiate in dealing with these issues, reinforces the role of local politicians and the local state via its municipalized structure. Planning via these forms of negotiation is bound to be "messy" but more likely to identify priorities than master plans lost in colors, numbers, or sectors.

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END	NOTES

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This point is significant when we consider that in the five fully regularized colonies (under the 1962 policy), the neighborhoods could be considered for full regularization, because their developers did take care to provide for planning norms (open space facilities & roads) and development control rules, in relation to a more responsive public policy at that time. Not only that, the developers in one of them introduced an installment mode of payment for the cost of the plot, tied to the City Improvement Trust's approval process of the neighborhood layout -- 25% at the time of booking; 25% after one month, 25% after metalled roads and drains, 25% after the provision of electricity / regularization -- keeping initial costs lower. The developers helped out not only in the provision of infrastructure and services, they also joined the resident association when the neighborhood was notified for acquisition, and to helped de-notify it (Banerjee 1994:59). In an overall sense, this relationship between the public authority, the developers and the residents, also put at least part of the burden of regularization on the developers, rather than only depending upon the resident's political unity and strength, and the public authority's willingness to act.

Not surprisingly, this was the only neighborhood of the three case studies by Banerjee in which residents were actively consulted by the DDA on what should be planned for them (ibid). This neighborhood is also one of the group of five fully regularized un-authorized colonies in the capital. Today, these five neighborhoods are at par with any legal neighborhood with good construction and services. In fact, plots here are valued even higher than surrounding legal neighborhoods, since the land here is free hold (ibid). In contrast, in almost all of the regularization carried out since the early Eighties, public participation or publication of the survey is unknown. In most of these cases, the regularization process is a long drawn one, and residents are happy if they can get individual services at the end of 25 years.

Chapter 6: The politics of Neighborhood as Factory

b.

Perhaps this also explains why irregular settlements are included in 'Perspective Plan for Delhi' (1981-2001) in a most cursory way. Normally one would have expected that in keeping with the methodology of the physical planning approach, the neighborhoods would be listed according to different categories, be located spatially with regard to trunk infrastructure and services, their resident population enumerated as per the latest voting lists, levels of infrastructure and services within the neighborhood, and civic investments within the neighborhood specified, including perhaps, a schematic idea of the land use. M.N. Buch notes, this information would be highly explosive -- questioning the very existence of planning and administrative organizations and their ability to live up to their mandate.

c.

In cases, even politicians in policy papers grudgingly justify their support of regularization programs, toned down from statement made on site. An example is the statement made by the Chief Executive Councillor in the Metropolitan Council:

"...At the very outset, I would like to make it clear that the Government are very keen to rid this ancient and glorious City of Delhi of the menace of unauthorized and generally ugly-planned constructions...to curb illegal activities with a firm hand, ensure planned development of Delhi, and make it a beautiful and worthy capital of a great nation.."

But in the same statement:

"..On the other hand, the government has been receiving, from time to time, representations from residents of un-authorized colonies, and they have urged the authorities to consider the problem in the light of human considerations.." (Annexure 3, DDA 1985:9)

d.

The arguments announced publicly in favor of regularization are not to integrate these areas into the mainstream, but rather to act on humanitarian grounds, and more specifically, to reduce the threat of 'disease' and maintain the health & hygiene of the city. In a couple of cases, regularization was initiated <u>after</u> epidemics hit the city due to the deterioration in civic amenities in slum neighborhoods For example, after the 1988 cholera epidemic in the capital, many squatter settlements and unauthorized colonies were provided with individual water connections and public stand-posts with contaminated water were painted red. The concern with 'public' health as threatened by these areas, runs deep in the psyche of the administrators as well as the elite of the city, and is an important basis of the approach for developing regularization procedures. The 1985 DDA report on regularization procedures, in-spite of being the most responsive as compared to later approaches, discusses approaches to deal with the problems of un-authorized colonies with an explicit analogy to a diseased human being:

"..The entire system of regularization of colonies is similar to the treatment of the human body. In the curative method, the disease has to be cured, maybe by the method of surgery or medicine...the area surveyed and pockets beyond repair should be demolished. This method is very painful as experienced in the case of the Turkman Gate in 1976...In the preventive method, due care and sufficient measures should prevent the disease..(Here,) zoning regulations, building bylaws, land acquisition act, Urban Land Ceiling Act, public premises act)levy and charging of heavy damages), making un-authorized construction a cognizable offence, should be applied to stop illegal construction.. In the developmental method, the body should be developed to sufficient resistance to face the attack of the disease.. (Here,) supply of residential, industrial, and commercial accommodation should be adequate and somewhere equal to the genuine demand of the people.. DDA 1985 pp: 19,20

e. Delhi has fared not any better. It had its last municipal election in 1983, but its municipal body was suspended in 1985, and elections to its legislative assembly have only recently taken place in 1994. There is no action as yet, on elections to its municipal corporation which would bring it back on the track. In Delhi, the control over public administration, especially in vital issues like land, police and finance (directly via development grants) is taken over by the union government (at both a political and administrative level) and a subject of much political strife between the union government and the state government. In other cities, the state government

assumes the upper role, pressuring the local government especially when the latter is not of the same party (Jha 1989; MulkRaj 1989)

f.

Buch squarely blames the evolution of unauthorized colonies on the land policy of the DDA:

"..It is in Delhi that a beginning was made with the concept of socialization of urban land and the creation of an urban land bank. About 32,000 hectares of land were notified for acquisition and about a half of this was actually acquired...The artificial pegging of prices at the level prevailing on the date of notification under section 4 of the Land Acquisition Act and a denial to the land owners of the benefits of even legitimate price escalation also greatly facilitated acquisition on this scale...Development Authorities were established all over (the country) and told to go ahead and acquire land, almost as monopolists. Thus the Jabalpur Development Authority, for example, notified 6000 hectares for acquisition, actually took over about 1200 hectares and developed less than 400 hectares. What it effectively achieved, however, was the blocking of developments by individual initiatives and, therefore spawned a multitude of unauthorized colonies. Even Delhi has as much land under these unauthorized colonies (as distinct from squatter colonies) as under DDA development schemes..' Buch 1984:4-5.

A broad based criticism of the land acquisition approach can be found in Doebele 1976.

g. Chaudhri suggests several factors:

- i) First, these industries are burdened with obsolete technology having high replacement costs. The large corporate groups have resorted to these tactics because over the years they have not made any attempt to modernize their production. Three of the four factories, manufacture of textiles, have machinery that is mostly three decades old. As large corporate group with (till recently) monopoly control over local markets, they gave low priority to R&D. In fact, according to Chaudhri, even when R &D has been invested in, these are only symbolic in the accounts books to reduce taxes:
- ii) With the liberalization of the economy, they are facing increasing competition from multi-national companies who have flooded local markets with goods;
- iii) Some who intend to get into foreign collaboration, see this as a way to retrench workers with minimal compensation. With their main intention of a strong bargaining position with the government authorities, a fall out of this negotiation process, is that they hope to not only get financial and fiscal benefits, but also an easy way to retrench labor.
- iv) Another issue relevant to consider here, was mentioned by a businesswoman in Bangalore. With the liberalization of the economy, the share market has become a major source of investment. The high returns and comparatively low taxation rate (10% on capital gains Vs. 40% on firm tax) has attracted capital but also lead to extensive frauds due to the un-developed regulatory mechanisms. One way of fraud by large corporate groups is to show profits from real estate activities as grouped with returns from manufacturing. Others lump returns from financing with returns from manufacturing. This misleads investors, with share prices being artificially raised for that year when real estate returns are clubbed together.

CHAPTER 7: CONCEPTUALIZING LOCAL ECONOMIES IN ARENAS OF URBAN CONFLICT

This dissertation started with an apparent paradox: How is it that an industrial cluster in a slum setting of a mile long by a quarter of a mile could be so productive? I have shown in this dissertation, that if anything, the slum setting can provide fertile ground for such high productivity. I have suggested five underlying features which have made industrial clusters like Viswas Nager productive. These were:

- a) A group of firms locate in close physical proximity to share production linkages under individual management. This distinctive organization Neighborhood as Factory may be contrasted to a situation where these firms are sub-contractors to a large firm, or components of a single large centrally managed firm.
- b) An incremental developing unregulated land market which helps make a neighborhood setting that allows firms to start production easily, and upgrade it over time;
- c) Real estate surpluses fund the manufacturing process, while industrial productivity spurs real estate markets;

And a politics characterized by the following:

- d) Firms transform the Local State into a 'porous bureaucracy' to incorporate needs of local industry via routines of administration and bargaining. This ensures the provision of infrastructure that drive both industrial and land development.
- e) Finally, local politics also responds to the competition, especially over land, posed by corporate capital and institutions operating at larger level of national politics.

The outcome of these five points is the <u>Neighborhood as Factory</u> which has a complicated industrial system and a equally complicated political system. The following summary of the main chapters of this dissertation show how these themes come together.

Firms hooked on to the electrical cable and conductor industry which was rapidly diversifying with new products emerging in the market. These niches attracted other firms, both large and small, to join in production. Here, in partnership with skilled labor, access to semi processed materials, and the ability to tap the skills of local mechanics to re-engineer old machines, they were able to first copy samples of these new cables, and later improve on them.

Parallel to industry, has been the transformation of land markets. In many ways, it is this that has made it all possible. Small entrepreneurs can start off in many ways: buying or renting plots and even rooms to house their machines, and within days start production. When it does pick up, and it usually does, the still developing land markets allow many options: plots can be modified, extra rooms built on vacant space, or on terraces, or an adjoining one taken over for more machines or to start a family. The differentiated land markets also mean that incoming entrepreneurs are in close proximity to more established ones located in more expensive core production areas. From their relatively low valued plots, they can procure stocks on credit, and develop social contact and business relationships. All this is to latch on to the system, the technology, skilled workers, sales persons that industrial clusters bring together.

The neighborhood setting has important consequences on financing production. This is driven by an important cyclic process:

First, land values rise as groups settle in the incrementally developing neighborhood. A growing part of these land values are capitalized for production, as an important source of finance;

Second, living and working in the same area brings about close relations between entrepreneurs. These are further reinforced by the continually inter-locking production processes, resulting in both peer and economic pressures ensuring a very low rate of fraud in transactions. All this makes for a very fluid capital market;

Third, the efficient capital market draws in external finance based on ethnic sources, for investment in manufacturing and land allowing for

Chapter 7: Neighborhood as Factory in arenas of urban conflict

more capital intensive enterprises. These more capitalized enterprises, by focusing on more sophisticated products, attract other smaller firms and service activities to locate in close physical proximity;

Fourth, these new enterprises, and investments into manufacturing and land, further spur real estate markets and land values.

The transformation of land is important in an overall sense: The system is initiated by poor groups being able to settle in a flexible land system and more or less define its growth trajectory. Second, the fact that this economy is centered around the transformation of land and investment into capital for machinery, ensures to an extent that external funds are invested on local terms and for longer term periods.

The transformation of land however, does not happen by itself. It is driven by getting better infrastructure and services from the local government. Provision of these, along with flexible developed land and loose regulations is the fundamental apparatus of any industrial enterprise. This is important for the residents too. Often, these are entrepreneurs and workers attracted by the growing industry. This sets off a powerful alliance at two levels. The residents and workers form a substantial vote bank, while the managers of the factories consolidate themselves to take on a role of political negotiation. Together they exert pressure on the local state. Just as the newly laid power lines will drive motors in many more factories here, local elections consolidate a politics that drives for even more investment into power lines -- reinforcing the cycle between production and land markets.

As these industrial-residential conglomerates gain in technological sophistication in responding to newer products and markets across the country, their interactions with the state to provide the infrastructure and services becomes a matter of daily routine. The local state by now, has become closely integrated with local society. Administrative procedures, instead of being treated as rules, are discussed with local groups (in the way they can get things done). The local state, influenced by land and industry, is transformed into a functionary of local society, and porous to its influences.

All these local economic and political complexities do not remain local or happen in isolation. The evolving nature of the local state and that of the local economy are part of a struggle in a larger political domain. Opposed to them are different kinds of economic organizations also competing for economic, political and institutional terrain, especially over access to land. In contrast to the local groups and the local state, these have political connections at the national state and powerful influences in the centralized planning agencies like Development Authorities and administrative agencies. The arena of this conflict is land. The limited public investments for civic development means that they can be drawn into super highways to airports, five star hotels, and plush housing. Or, under influence of local groups and the local state, they can fund infrastructure and services for areas like Viswas Nager.

Thus, the story of industrial districts like Viswas Nager is about the transformation of industry and land together spurring a vibrant local economy. It is also about the transformation of the institutions that are pressured to make this happen. Finally at a societal level, it is also about a political transformation of civil society spurred by conflicts. Local groups, settling here with almost nothing and defacto recognition, build up an economy, form a local society, and a way of life. Parallel to the struggles over daily existence, they learn the importance of political clout. First this is over highly localized issues. Later, they use it to safeguard their interests in larger urban conflicts.

Implications for Policy:

This detailed story of Viswas Nager presented in this dissertation has much to say for policy. I will however, focus on two specific areas which are the most critical, and if neglected, are likely to seriously undermine other interventions.

The first policy area relates to the form of governments that can be responsive to situations like Viswas Nager. It is very evident from the dissertation that for public investments to reach poor groups and be responsive to their situation, the main thrust should be on a municipality-led development process. As important,

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municipalities should be headed by elected bodies to ensure that local groups, especially poorer ones, have effective ways to influence policy making and implementation. This is essential for poor groups to be able to consolidate their political capital. This planning and implementation process is obviously going to be messy and highly politicized. However, it is in this politicized climate that poor groups do manage to get things out of the system. For local governments to carry clout, they must be responsible for substantive issues and that specifically means being responsible for land development and its management. In parallel, they must be able to raise finance and decide on financial policy.

The second policy area, closely following from the first, relates to land. The dissertation has highlighted the key importance of land markets that can evolve incrementally, and under relatively un-regulated conditions. This again reinforces the important role for the local state. The main policy implication is that the local state has to develop institutional procedures which allow for local groups to define the kind of development they want in terms of infrastructure, services or its staging.

The key point underlying these policy implications is that of promoting economic development via land policy. Conventionally, these two areas have been seen as separate. In my conceptual framework of the Neighborhood a Factory, these are seen as intrinsic to each other. Grouping them together is also important in the context of larger politics between neighborhood economies like Viswas Nager and more corporate forms of economic organization and institutions. It is in the latter's interest to have land development and economic development be dealt with separately under a master planning process that views land development for poor groups devoid of its economic content, while allocating well serviced urban space to corporate groups. Interestingly, this important division is also reflected in the literature as I shall discuss below.

Perspective from the literature:

In the first chapter of this dissertation, I had briefly reviewed the two sets of literature, on perspectives on local economies, and on the local setting. These looked at three categories: The unit of analysis, the local state, and land issues. At the end of this dissertation, it is useful to once again review these perspectives and see what the Viswas Nager case tells us.

My research has specifically focused on the cluster as the unit of analysis. At one level, this looks at the organization of work from a functionalist point of view similar to Nadvi & Schmitz (Nadvi et.al 1994), Morris & Lowder (1991), and Marshall (1880). However, concentrating in detail on the evolution of one particular cluster allows me draw attention to three specific things:

First, the close relationship between diversifying economies and differentiated land markets:

Second, a more accurate understanding of the financing of enterprise, where surpluses from land development plays an important role and acts as a powerful stimulus to the local economy;

Third, the importance of local politics.

In each of these categories, I use the 'cluster' as a unit of analysis in a different way.

In the literature on the local economy, starting from the classical theory, down to the "informal sector", a consistent feature is the lack of a discussion of the political aspects of the local state¹. The literature on Flexible Specialization, and specifically on the industrial clusters in Italy, did mention the importance of the communist municipalities in promoting the local economy there (Cappechi 1989, Piore 1984). However, most of the literature moves rapidly across to focus on concerns of

While Marshall (1880: 268-271) looks at clustering under the auspices of a royalty, it was only recently that Mumford (1938:145) and Jones (1971), in the case of London, look more closely on the politics of the devolution of the guilds and the takeover by finance capital. Lenin (see 1977a) is more concerned with the larger movement of history brought about by the modes of production. In the debates on the informal sector, both proponents and the opponents argue on the basis of a de-politicized or non-existent local state. There is little mention of the local state in specific. See Hart 1972; Sethuraman 1981; and Bromley 1979, MacEven Scott 1979.

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differentiating and competitive markets at a global level (see Sable et.al 1984; Nadvi et.al 1994), and seen as an advanced stage of capitalism 'Post Fordism' (Amin 1989; Lovering 1990). Nadvi and Schmitz (Nadvi et.al 1994) do suggest these political aspects when suggesting that associations could align themselves with the National State in getting access to markets, and training to upgrade skills to produce higher quality products. However, this is not spelled out and one does not have a sense of why the National State should be interested in helping out small firms when more corporate groups have easier access to centralized sources of power. In fact, Nadvi & Schmitz dismiss the importance of the Local State on grounds of its financial dependance on National State, which in fact reflects an important political conflict.

For the residents of Viswas Nager, we have seen that the local state is critically important. In the context of the Local State, this dissertation has suggested the concept of the <u>Porous Bureaucracy</u>. This terms captures its particular institutional structure that is the outcome of local groups putting pressure on the Local State to be responsive to their needs. Here, rather than a bureaucratic monolith, the local state is more accurately understood as a heterogenous grouping of various social groups -- bound together both by official rules, as well as conventions. All this contributes to a fluid interpretation of rules and regulations, as well as to politicize issues that are unresolved, or unattended by policy or administrative procedures. Associations, in this case, often align themselves with the representative parts of the Local State, to protect their interests from such actions.

Finally, this dissertation lays particular emphasis on the theme of land and how it affects the economy of neighborhoods. It is in this arena, that the National State, contrary to what most of the literature assumes, is anything but benevolent to local groups. Local groups, in trying to get access to infrastructure that improves their local economy, come in conflict with more elite groups in society competing for the same resources. This is also an institutional conflict played out in a larger political arena between the Local and National State. One of the ways this conflict is played out is via planning institutions, where demolition of neighborhoods like Viswas Nager

in effect destroy the vote base of local governments in order to de-stabilize them. Thus, the assumption of the benevolence of the nation state is highly suspect, -- especially when society is characterized by wide disparities in resources, ethnic grouping and conflicts, with a highly uneven democratic landscape. It is also in the perspective of this larger conflict, that we see the shortcoming of viewing land from a much narrower and benign perspective of housing, and not from the that of conflicting modes of economic development.

There are two very important sets of recent literature which need to be considered in terms of the political and institutional issues of the urban economy and how these practically impact the daily life of poor groups. The first is the conceptual developments in the literature on the operation of real estate markets of un-planned settlements²; The second is a growing literature in public administration, focusing squarely on the issue of political representation and urban management (Nagerlok 1989, Reddy 1989). Here, the specific focus is correct, in identifying the lack of representation in organizations like development authorities and the political supersession of local governments (Biswas 1981, Jha 1989). However, discussion unfortunately remains centered on issues of legal and constitutional matters.

This dissertation, in proposing the concept of the <u>Neighborhood as Factory</u> begins to tie in these various streams of literature from a more political perspective. One key issue that comes from these discussions relates to the wider applicability of the Viswas Nager case. If the issues like those identified here are relevant in other urban settings, than the policy implications sketched above would be relevant to a much wider set of conditions in cities like Delhi, and also in other countries where metropolitan cities are increasingly driven by small firm economies.

² For example, most discussions on issues of tenure, relate to claims to property, what constitutes a property transaction (see: i) Krast et.al 1973; Smart 1985; Akbar 1985; Razzaz 1992, 1994; Doebele 1983; Peattie & Rein 1981). These discussions emphasize the social, cultural and political dimensions of this issue as they interface with legal frameworks. While this discussion is very important conceptually, it would be very useful to also focus on their economic consequences.

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THE WIDER APPLICABILITY OF THE VISWAS NAGER CASE

Is the Viswas Nager case relevant for other clusters in Delhi, and for other cities in India, and perhaps other countries? I argue that it is true along three grounds. My essay in Annex 7A shows that Delhi has numerous industrial clusters, many of which are specialized in particular products: plastics, auto parts, garments, metal parts to name a few. More interesting, perhaps, from the perspective of this argument, is that many of these clusters are located in settlement types very similar to that of Viswas Nager. In fact, the municipal licensing system, and many of the administrative procedures discussed in Chapter 5, are based upon these same land sub-systems. Since land (especially well serviced, or in good locations) as well as manufacturing licenses are both highly politicized issues it seems very likely the politics seen in the Viswas Nager case is part of a larger citywide political process. Part of my essay in Annex 7A also shows how many such clusters exists in different towns and cities in India, and that many cities there also have similar land sub-systems (although the nomenclature and specific legal situation varies). Both of these would be useful to research in greater detail.

However, there is a more substantive argument for the wider applicability of the Viswas Nager case. This relates to the very production logic relating to small firm clusters: The propinquity of small firms, developing business in increments, and, the incremental development of plots to respond to economic change. These are the characteristics that make it possible for firms to develop a range of support services and a supportive environment. The very complexity of the relations between firms documented in this dissertation, suggest that it would be very difficult to imagine a cluster of small firms which do not have these characteristics. It thus seems very likely that the Viswas Nager case presented here does have wider applicability in Delhi, India, and perhaps other cities of poor countries which face similar conflicts over land and infrastructure, as well as their local economies characterized by small firm clusters. It is not very difficult to think of cities with these two characteristics. In fact, it is more difficult to think of cities that do not have them.

Future Research

However, to be more grounded on these issues, it will be useful to focus on the following areas in future research:

The first relates to the local state. The driving force behind the economic growth in Viswas Nager has been politics. In highlighting the various themes, and especially in Chapter 6, the institutional structure of the Local State as it accommodates local groups has been emphasized. This sets off a very important research agenda to specifically focus on the Local State from this perspective, in exploring its relevance for economic development. To be accurate, this research will have to be rooted in the day to day working of the bureaucracy, and undertaken in close collaboration with 'insiders'. This could help define the institutional mechanisms used by associations to make demands and those evolved by administrations and local governments in response to these pressures.

A similar operational research effort could relate to regulation. Since it is most likely that civic issues are relevant to the evolution of industrial districts across the country, it would be useful to compare the kinds of regulations concerning industrial use in residential areas used by different municipalities. Also useful would be an accompanying discussion of the political issues involved³. In a similar vein, it is very likely that administrators and local politicians in other local governments in negotiation with resident groups have already evolved innovative ideas and procedures. At a different level of research, it would be useful to trace in great detail a couple of cases of negotiations through an election period, when political aspects are heightened. A third sub-research area could be to specifically focus on the question if the local state should be involved in the sub-division of land or allow private developers to undertake this task. This could be in the context of the political interface in this process, and its implications on the local economy.

³ For instance, one example useful to research was related by a commissioner of Factory Licensing in Delhi. He said that one of the rules in Bangalore for a industrial unit locating in a residential area, is that the entrepreneur needs the permission of the adjacent plot owners. It would be useful to know how effective this is in actual implementation, and a sense of the politics involved.

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The second broad area of research relates to the issues of labor. My research in Viswas Nager has been from the entrepreneur's perspective rather than from the perspective of workers. I do however recognize that it is as useful to undertake a similar grassroots research from the worker's perspective. However, these lines are not so clearly divided, and must be seen in the context of the specializing cable & conductor industry. Many workers become (and almost all aspire to become) entrepreneurs in main stream manufacturing, retailing, machine manufacture or consultants on specialized processes. This affects power relations between the 'employee and employer', resulting in some conditions, in rapid 'mobility' along with better wages & working environment. Alternately, it can be that workers, and in many cases the entrepreneur too, are sweated in miserable working conditions facing few prospects of change.

This dissertation by emphasizing, the issue of the setting of production and land markets, also brings another dimension in this exploration: Whether the possibilities for workers to locate in the close proximity to the industrial cluster, allowing them to make multiple contacts, affects their relationships with employers. The issue here therefore, is not only about wages, but of labor mobility. This would help specify both the <u>explicit</u> and <u>implicit</u> basis on which bargaining for wages, or sub-contracting relations, or the terms for specialization, take place within a industrial cluster.

Then there are a whole bundle of issues related to land. One prominent one is exploring in greater detail the link between surpluses from land development and their investment into manufacturing to spur the local economy. Secondly, the cable and conductor industry brings together production which requires a great variety of plot sizes, infrastructure levels and electrical power requirements. This diversity has affected the kinds of land markets evolving. Do other industrial processes, which do not have such diversified activities, affect the land market differently? Another set of important themes within this area relates **to** tenure, and the way groups claim title to land. Do inter-connected economic activities affect social relationships that underlie

this claiming process? The fourth area of research relates to the nature of markets. As I have mentioned, the cluster described in this dissertation depended upon a product market that was rapidly expanding and diversifying. It would be useful to look at other industries and the kind of industrial clusters they bring about.

Finally, research activity could relate to the link between ethnic groupings and the politics of capital formation. While ethnic issues have played a critically important role in Viswas Nager's financing system, I have shown that inter-dependent production also has had an overall influence in the different local financing mechanisms. It would be interesting to research these two aspects in parallel, as to their relative roles in cases of other industrial clusters. Alternately, have other clusters, that were not settled by groups with strong ethnic business traditions -- the Jains and Banias -- but whose organization of work and economy did have similar characteristics to the Viswas Nager case, develop capitalized manufacturing processes? Within these broader themes, the issue of 'trust' could be explored in greater detail. At present, the concept is seen to be subservient to ethnic characteristics or to that of the market. The Viswas Nager case suggested that the organization of work is important and may in fact structure how ethnic or market relations influence trust in transactions⁴.

In many ways, looking at the economy and politics of Viswas Nager in great detail raises a larger philosophical issue -- that of the social meaning of urban environments, the nature of urban conflict and of change, and how these relate to the organization of work. It is interesting to draw attention to Engel's description of the 19th century London urban scape:

"..The district is cut through by certain main thoroughfares upon which traffic concentrates, and in which the ground level is lined with brilliant shops...and are so kept in the hands of the middle and lower bourgeoisie..(that) they suffice to conceal from the eyes of the wealthy men and women of strong stomachs and weak nerves the misery and

⁴ For instance, I have pointed out in Chapter 5 that economic dependance makes contracts enforceable with or without 'trust'.

grime which form the complement of their wealth..'(Engels 1845:95).

This issue of economic contrast is not irrelevant to Delhi's own urban scape. Its South Delhi neighborhoods of high life, do house many wealthy men and women of strong stomachs and weak nerves. Their children roam. the newly constructed recent shopping malls, discussing their routine shopping trips in New York's Fifth Avenue. However, there are many more neighborhoods like Viswas Nager in East and West Delhi. Daily life here faces a industrial-residential landscape of complex alliances between income groups to get the local state to improve civic

Innocents bearq 9H the bruntid a 193 of

WHAT have we done to deviserve this? I had gone out to buy food with my two-yearold son. Suddenly, firing began and I got hit on the foot. I fell down and my son got trampled in the stampede during the lathi-charge. I still haven't found him, sobbed 27-year-old Meena of Sri Ram Colony.

A 15-year-old boy, Shabir, was in shock after seeing his brother injured in the police action. After much coaxing by the other residents, he showed

his own lathi wounds. He said, "My brother and I had gone to meet my cousin. When we came back we found this trouble had started. I saw my brother fall and I ran away". He pointed to the blood stains on the grass and sobbed.

Most residents of the colony are junk dealers and push cart vendors. The women eke out a living from embroidery and tailoring. M. V. Khan, a tailor said: "The police has come many times and extorted money from us but this time they seemed determined to evict us. Where will we go? We are totally unwanted people. My wife was injured in the lathicharge and the police have taken her away. She was bleeding from the head and they just dragged her away. I don't know where".

say my father being all by policeman. When I intervened, the police opened fire and I was hit on the colonic are and away from the colonic are and dragged me away and brought me here he said pointing to the bed he was lying on outside his shack. His mother reduced to say anything but me armor pointed to the injuries on here

Several residents of the area said the police had threatened them sarlier and the shreat assumed reality today as the devastated residents looked on and the "police just opened fire" of Am eye witness said. They had given us no prior notice of the demolition and the police along with the Delhi Development sauthority officials came at 11 am, and told us to leave when we protested they lobbed tear-gas shells and started a lathic height said started a lathic height said they opened fire. We were defenceless,

Figure 1: News report of a demolition by the Delhi Development Authority

amenities. Life here cannot wait for the long term perspective of ultimate betterment, but revolves around daily conflicts -- for instance, over water that flows unevenly through the public taps. It is also, however, about agreements: getting together to join in public protest against the lack of drinking water during a hot 48°C summer, or against the electricity authority playing truant.

The classical Marxists saw social change (implicit in the organization of work) as coming from the formation of a central organization. This dissertation suggests that the larger canvas of social change is not smooth when we look close enough at the brush strokes of neighborhood development. The complexity of the organization of work at the local level is in part brought about by a technological rationale shaped by prices. However, the organization of work is also shaped by the structure of political power, its institutions, and thus by a process of social choice. This politics, and the institutions it draws in, is



Figure 2: Stranded after mob fury: A bulldozer with a deflated tyre stands at Khajuri Khas, where it was taken for a demolition of unauthorized constructions on Saturday -- News report from The Statesman

centered on the nature of control. Groups like those in Viswas Nager, through their organization of work and their politics, are attempting to define their autonomy, and control over their lives at their terms. The technologies they have assembled together, also reinforce, in a Gandhian sense, their autonomy. Their politics attempts to force and then define a State that protects such neighborhood economies from corporatized ones.

This raises an interesting question: Does this detailed research of the economic development of a tiny part of East Delhi tells us anything about situations of local

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Figure 3: Public protest and blockade outside Viswas Nager's electricity office to protest against lack of electric power

economy in cities of rich countries? To answer this question is obviously beyond the scope of this dissertation. However, a series of recent news articles (Annex 7B) captures conflicts between corporate groups and local economies over urban economic turf that echo very strongly those we have seen in this dissertation. All this suggests that increasingly, dividing the world into rich and poor countries may be a conceptual road block.

Finally, this dissertation also questions the social commitment of planners and other professionals in their conventional role. Policy formulation happens twice over: Once in the air-conditioned computerized offices, and the second in a highly politicized implementation process when local groups get to know what is being planned for them. Planners, to be useful to society, have to participate in these political realities, rather than keep themselves confined in the high tower of a policy

environment.

This is important. As cities in poor countries like India get more complicated, rifts or opportunities in their local economy of such industrial clusters (especially over issues of land) will seriously influence the situation of poor groups. The issues raised in this dissertation, although focusing on a single case in detail in Delhi, have a more generalizable applicability. Conceptualizing the organization of work as it relates to local land markets **and** the political process will help us to ask the right questions in future research in this area. As important, by stressing the political aspects of the organization of work in neighborhoods as Viswas Nager, I suggest that those concerned with employment issues have to reorient themselves towards a more political role and perhaps, a more politicized research process. Conceptualizing neighborhood economies more accurately is the first step to inform action.

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ANNEX 1

This essay discusses the existing institutional perspectives on small firms in general, and especially those in the cable and conductor industry. The essay is in two parts. The first section looks at institutional support to small firms, looking at access to finance, and the experience of employment and poverty alleviation programs. The second section of this essay looks more specifically on small firms in the conductor and cable industry in India. In the first part I intend to show how problematic the implementation experience has been. This forms a sharp contrast to what cases like Viswas Nager suggest.

In the second section, I have two intentions. The first is to highlight the main concerns of experts of the cable and conductor industry, being that of the increasing number of small firms entering into this line. This at first glance seems paradoxical, since first section highlighted the poor performance of institutional programs. The discussion on the cable and conductor industry also helps to locate the productivity of Viswas Nager, and demonstrate its important position there.

SECTION A: Institutional support to small firms.

Exclusion from institutional finance:

Government policy distinguishes between two kinds of small firms: Firms in the 'Small Scale Industry' (SSI) category and their poorer cousins, the 'Tiny Enterprises.' This classification is done on the basis of capital investments, number of workers and turnover¹. The office of the Development Commissioner Govt. of India, estimates that 96% of all firms belong to the 'Tiny enterprise' category (Development Commissioner SSI 1994).

Government reports admit the failure of institutional finance in reaching most Small Scale Industry firms (SSI firms) (RBI 1992)². Very little, however is discussed on the specific

¹ An <u>SSI</u> firm has an investment in plant and machinery of up to Rs. 6,000,000, while Tiny Enterprises have investments of up to Rs. 5,00,000. There is also a category of <u>'Ancillary Industrial Undertakings'</u>, those with an investment limit of Rs. 7,500,000, and at least 50% of whose output goes to other industrial undertakings. For an excellent compilation on the SSI sector and government policy regarding SSIs, see: Development Commissioner SSI 1994; For a detailed discussion of the issues faced by the SSI sector see Vijh 1995.

 $^{^2}$ The Nayak Committee report points out that the SSI sector received a level of working capital assistance of 8.1% of its output. Smaller firms could get only 2.7% of output, while the larger units of the SSI category, get 18.8% still under the working norm of 20%. Medium and large industries are not only able to attract substantial finance, but at lower costs, and banks are keen to do business with them (pp 24, 31).

issues faced by Tiny Firms even though more than 96 % of all firms belong to this category (L.C Jain in Shirali & Mishra 1995). The assumption has been that the latter fall into the 'unorganized sector' or the so called 'Informal Sector.' In the case of Delhi, by being made illegal according to the Master Plan, tiny firms officially surface in such vague references making for less useful policy analysis. These studies, usually float small firms in a fuzzy grey area between categories of street hawkers, vegetable vendors and machine repair shops³. This is especially true for small firms in Delhi. Here, industrial policy is biased towards larger firms by master planning frameworks reinforced by municipal regulations. The latter deny the large majority of small firms from institutional support by delegitimizing them. In this context framed by divides of legal and illegal, it is not surprising that while there is extensive discussion on the access to institutional support by firms in the SSI category, very little attention is focused on Tiny Firms.

Nevertheless, this discussion on the neglect of the SSI firms is useful to consider since it reveals issues that are even more relevant in the case of Tiny Firms. A large part of this debate revolves around the protectionist policies. Almost all policy makers, including those promoting the cause of the SSI, consider Tiny Firms to be a form of technological underdevelopment. Some even feel about the SSI category the same way, implicit in the argument that the SSI sector is being artificially propped up by reservations and state subsidies (See Ahluwalia in Shirali & Mishra 1995; Also see Palaha 1995). The broader development notion is that if these were removed, the efficient among the SSI would be accommodated by corporate manufacturing. The rest, reduced to 'informal sector' activities, would need social investments in education, re-training for the corporatized industry to absorb them as development trickles down.

The proponents of the SSI firm argue that these policies have in reality provided little support and have been fudged by broader level industrial policy (Kalra 1994). Krishan Kalra Chairman of the SSI Committee at the a National chamber of commerce, reports that even though large industries owe financial institutions substantially more than the SSI sector in bad debts, they can avail preferential allotment of raw stock on credit and a host of other advantages (ibid). He also highlights the poor bargaining power of the SSI with the most of the planning, financial and bureaucratic system pitted against it. This is specifically reflected in high cost of finance paid by the SSI sector. Large corporate industries have access to various kinds of funds: public equity, institutional finance, Euro-issues and the banks. With these options, they can move rapidly across credit markets to secure the most favorable of terms. In fact so 'distorted' is the institutional system in favor of large firms, that these companies even

³ There are however **a** few studies of small firms which look into their structure, organization, economic relationships and the institutional politics that colors their society and economy. See SEWA 1988; Bhatt 1989; Sarin 1976.

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subject banks to a bidding process to provide the most favorable terms for short term loans (ibid). If large firms can subject financial institutions to such arm twisting, it is not surprising that the common investor is hooked to shares, and 'trapped' by subsequent 'rights offers' (ibid).

Most proponents of small firms, like Kalra, focus their attention on finance. They point out, and rightly so, that for mostly partnership and proprietorship firms in the SSI, the bureaucracy involved in availing institutional finance is killing. Getting funds from banks is even more harrowing, requiring all partners to provide personal guarantees (all jointly and severally responsible) extensive documentation and paper work to secure loans (ibid). Even these loans have a much higher interest rate as compared to what is provided to large firms. They have no recourse to equity -- severely limiting their resource base. Kalra goes even further on the issue of current assets. Corporate houses can dictate strict terms to customers and clients to get money on short notice. SSI entrepreneurs in contrast, shouldering the responsibility to keep the firm alive, is often at the mercy of the buyer. Government directives on delayed payments to improve this situation are not easily implemented. The increase of current assets along with bank ratios raise interest rates to form a vicious circle trapping the small entrepreneur (Kalra 1994). As a result, it is not surprising that financial problems result and are the cause for sickness in the SSI sector. Chattopadhayay goes further to suggest that in this financial arena, large corporate capital aligns itself with financial capital to force industrial sickness onto small firms(1995). The SSI, according to Kalra, is usually treated by planners, bureaucrats, and economists as an 'orphan child'. Kalra thus, argues for a level playing field for small firms with medium and large firms. One can see that if the situation is so bad for the much larger SSI firms, Tiny Firms out of any sort of institutional or policy purview, are even more neglected by the public system in real terms. They have to depend on raising their own resources (which however, is not clearly specified)⁴.

These make industrial development organizations and financial agencies even more cautious -- often resulting in more bureaucracy. The complete lack of institutional recognition also means that even banks have few branches in Delhi's neighborhoods where small firms are located⁵. Their managers are given limited powers to sanction loans, turning these more into collection branches, rather than play a developmental role (ibid). Entrepreneurs can only operate savings accounts, limiting the flexibility that is critically needed in managing a business. Banking procedures too are not responsive to the circumstances of small

⁴ In chapter 5, I show that land development is a key source of local financing. Thus, in chapter 6 of this dissertation, I suggest a different perspective on this conflict between corporate and small firms. There I argue that land issues play a critically important part, possibly even more important than access to institutional finance.

⁵ Personal communication with Nawratan Bengani, General Secretary, Shahdara Manufacturer's Federation July 1993.

entrepreneurs. Since firms in these areas operate as 'non-conforming uses' and thus illegal from the planning framework, Banks too despite seeing increased demands, cannot respond. Thus, entrepreneurs have to depend upon sympathetic managers (who might be transferred from one branch to another), or if numerically strong, use their group strength to force attention on their needs though formal and informal practices (ibid). With small entrepreneurs pushed into a situation of forced illegality, the field is open to the big fish who use ingenious manipulative methods.

Some academicians like L.C. Jain however, do consider the issues facing the smallest firms. He argues that although Government policy has reserved items to be manufactured by the SSI on paper, the actual implementation experience of these policies has had little real support for these units (See Jain in Shirali & Mishra 1995). According to him, the reservation system has already been obliterated in many ways. While the government raised the number of 'reserved' items from 200 to 834, in reality, no new items were added to the list. Only parts of already reserved items were included. Ahluwalia for instance, points out that at present, only 5% of the reserved items are produced by 80% of the SSIs in the country⁶.

Rather than this 'face dressing', Jain suggests the main strategy should be to target credit to avoid poaching by large units. He argues that if this was achieved, there would be little need for product reservations. The main issue according to Jain is the highly polarized access to finance in a world where small firms are really very small: 90% of units have investment less than Rs. 500,000 with 80% of units below the Rs. 200,000 level. All these firms raise funds from primarily their own resources (ibid) due to the lack of institutional credit, as reported by the Reserve Bank Report (RBI 1992). Even where institutional finance does percolate to the SSI level, larger units in that category capture most of these resources. In many cases, these include units set up by larger firms to poach on resources -- availing of the guaranteed credit of the SSI. Responding to people who argue for increasing the minimum investment levels of the SSI to get economies of scale and improve the quality of products, Jain stresses that many of the smallest units with less than 200,000 investment actually meet the demand for low priced products for low income people (Jain 1995).

The lack of access to institutional finance brings up another area of public intervention: Employment and poverty reduction programs. It is generally agreed that most small entrepreneurs of tiny firms belong to the lower income groups of society. In many cases, there is a fine line between the workers whom they employ, and their own economic and social condition. From this perspective, it is relevant to consider the impact of public policy to

⁶ See response by Ahluwalia in Shirali & Mishra 1995 Op.cit.

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improve employment opportunities, and remove poverty.

B) The performance of employment and poverty removal programs:

A stinging critique of the implementation experience of employment programs comes from J.D. Sethi, a retired Secretary in the Government of India. He cites the lack of necessary institutional infrastructure, and political manipulation as being at the root of the problem (Sethi 1991). Sethi argues that employment training programs are targeted wrongly, and stipends are used as hand-outs to ensure political clientelism (ibid). Recent reports by parliamentary committees have also explicitly acknowledged the failure of poverty alleviation programs (MOUD, GOI 1994; HT 1993). For instance, the Urban Basic Services Program (UBSP) was visualized as a comprehensive set of strategies linking civic development and community participation with inputs from non-governmental organizations. However, the local bodies in charge of implementation lacked the necessary autonomy, financial and administrative to undertake such exercises. As a result, new administrative procedures, staffing arrangements, and inter-institutional linkages, fundamental pre-requisites for their implementation, could not be initiated (Ibid; Dubey & Benjamin 1991).

There have been bright spots though. Interestingly, these have been in slum upgrading programs in which the local inhabitants were an intrinsic part of the process. For instance, the upgrading programs in Hyderbad and Indore have generally been acknowledged to have been successful. In these schemes, the emphasis was on defining control over land with some level of tenure⁷. However, in most cases, this level of success has not been easy.

Thus, in summary, institutional support has not been forthcoming for the small entrepreneur. Employment and poverty removal (or even alleviation) programs have not been successful. In this rather gloomy institutional context, it is surprising to see what experts have to say about the performance of small firms in cable and conductor industry.

⁷ While land was a key issue of debate in these negotiations, the interesting part is that the arguments were to establish a 'working or operational tenure' to establish the claims of residents and public authorities to undertake improvements, rather than attempt a full range of tenure rights. Also, the kind of physical buildings came up out of a participatory decision making piecess which against normal wisdom, resulted in the squatters preferring to have four story walk up apartments.

SECTION B

The cable and conductor industry at the national level⁸

The corporate sector: The 'organized' or corporate sector in the national cable and conductor industry consists of about 15 to 25 medium and large units, functioning as public and private limited companies (Katoti & Kurup 1990). Of these, 21 manufacture winding wire (Ibid.; Ganguli 1994). Investments in plant and machinery vary significantly even in large and medium enterprises. Those manufacturing power cables and winding wire invest between Rs 1 Crore and Rs 10 Crore (Ibid; Also see 'Linking Fortunes...ET 1995). Some firms who also manufacture telecom-cables invest between Rs. 15 Crore to a high of Rs. 25 Crore (ibid).

The 'unorganized sector': Very little is known about the contribution of the SSI sector's contribution in the cable and conductor industry, and almost nothing is documented about the role of tiny firms⁹. However, market and industry analysts agree that both these together account for a substantial portion of the market (Katoti & Kurup 1990; ET June 1995). Some put this figure as high as 60 % of the total market (ibid). Others suggest around 50%, if not higher (Srichand 1994). In the winding wire segment too, production is divided equally between the organized (Large, medium and SSI) and unorganized tiny firms (Ganguli 1994; Viswanathan 1994). Due to the lack of information, some analysts speculate that there are 500 units in the SSI sector (Kamath 1990). These invest up to Rs. 35 Lakhs in plant and equipment. Units producing household cables and wires would require investments to the extent of Rs. 10 Lakhs (ibid). The breakup between the number of SSI and tiny units and their respective contribution has not been documented. In the case of winding wires researchers speculate that apart from the 500 units in the SSI sector, there are almost 5000 tiny units producing low grade winding wire (Ganguli 1994; Viswanathan 1994). They argue that this mushroom growth in the non-registered sector is due to the low entry costs (Kasbekar 1990). Market analysts agree that there is a marked difference in the kind of products manufactured by the corporate sector as compared to the small and tiny units. The former concentrates on power and telecom cables, the smaller units concentrate on light tension (LT) cables for domestic, light industrial uses, overhead conductors, enamelled wires, and winding wires (Katoti & Karup 1990; Kamath 1990). Small firms also tend to dominate in the AAC/AAAC

⁸ For the ease of presentation, I have maintained the Indian system of financial nomenclature of 'Lakhs' and 'Crores'. As written in the preface, Rs.1 Lakh= Rs.100,000 or US\$ 2,777 (@ 1US\$=Rs.36). 1 Crore = Rs. 100 Lakhs or Rs. 10,000,000 or US\$ 277,777.

⁹ Personal communication with Mr. Ravi Dutt, President Cable and Conductor's Manufacturer's Association of India (CCMAI) December 1994. Mr. Dutt suggests that this is part due to the highly diverse range of firms involved in the manufacturing of this product, as well as due to the accounting categories used by the government.

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market due to the excise concessions provided there (Ibid; Kasbekar Pereira 1994). With half of the production diffused among small and tiny producers, their products are marketed to local markets in a equally diffused way (Ganguli 1994).

Excess capacity in large enterprises and the role played by small firms: All analysts highlight the severe excess production capacity in large firms, -- especially in those manufacturing power cables and winding wires (Duvedi 1994; Ganguli 1994). Most large firms have not even reached 50% capacity utilization, especially during the later part of the eighties (Kurup & Katoti 1990; Kasbekar 1990). In 1980 while 14 large firms manufacturing PVC, among other cables, had a total installed capacity of 41.2 thousand core KM (CKm), only 61% of their capacity was utilized to manufacture 25 Thousand CKm. In 1985, the number of manufacturers increased to 23, with a total installed capacity of 57 thousand CKm, but production improved to only 26.2 thousand CKm -- capacity utilization falling to 41%. In 1988-89 overall production was only 24.4 thousand CKm. A survey of the 25 largest firms manufacturing PVC/PILC/XLPE cables revealed that they had a capacity utilization of only 35 % (Ibid). According to the Ministry of Industries, in 1992-93 production of 24 reporting units manufacturing PVC, PILC, and XLPE power cables, was only 8285 CKm. This was down by 60% from 20,894 CKm in 1991-92. Capacity utilization was thus a poor 14% -- down from 35 % the previous year (Srichand 1994). Another survey for 33 reporting units manufacturing PVC/ VIR cables revealed that while 2.23 Lakh CKm were produced in 1991-92, only 0.90 Lakh CKm were produced in 1992-93. Capacity utilization being a poor 17% in 1991-92, which further declined to a record low of 7% in 1992-93. Compared to 1980 for the corresponding period, capacity utilization then was a relative high of 40% (Ibid).

A similar trend occurs in the case of ACSR/AAC conductors and winding wires with large and medium sized firms facing a severe recession (Ganguli 1994). During the first half of the 1980s', production of ACSR/AAC conductors was generally above 50,000 tons and that of winding wires was about 25,000 to 28,000 tons. The second half of the decade however, witnessed a severe decline with conductors plunging to 34,300 tons and winding wires to 13,900 tons in 1988. Between 1990 and 1991 this part of the industry recovered, but production again fell in 1992 (ibid).

The industry producing winding wires & strips also suffered from great fluctuations (Kasbekar 1990). Production rose from 0.18 Lakh tons in 1984 to 0.28 Lakhs tons in 1985 but declined to 0.24 Lakhs tons in 1986. Capacity utilization was between **34.4 to 48.4** %. In 1989 however, production fell to 0.15 Lakhs tons (ibid). Ganguli reports that during 1992-93 capacity utilization in the DGTD and SSI sectors was in the region of **55-60**% for paper covered strips and winding wires, but down from **70**% in 1978-79 (Ganguli 1994). Of ten major firms surveyed, almost all witnessed a steep decline in their gross margin (gross profits as a percentage of sales) between 1988 to 89 till the writing of the report (Kasbekar 1990).

Reasons for excess capacity:

Almost all analysts blame the precarious financial position of State Electricity Boards (SEBs) as one of the primary reasons for over capacity (Katoti & Kurup 1990; ET June 1995; Srichand 1994). Their losses are startling: Rs 12365 Crs in 1985-90, an estimated 10686 during 1990-92 (Srichand 1994). Larger corporate manufacturers, supplying cables to the electricity boards, experience non-payment of bills for extended periods, most often without interest, in effect supplying materials on credit for long periods of time. Most analysts also blame the poor credit policy of other bulk purchasers like the railways, as well as the erratic execution of power projects (ibid).

The second most important reason attributed by analysts to over capacity in the large firms is the 'indiscriminate' addition to capacity by small and tiny firms who 'jump into the field' (Ibid; Ganguli 1994; Duvedi 1994). This results in intense competition between these firms. Analysts give several reasons for the rapid entry by small firms. Most blame the reservation system of the government and its protectionist policy (ET June 1995; Duvedi 1994). Others argue that low entry costs, compounded by poor quality control, has attracted smaller firms who under cut the prices of large firms sometimes by as much as a third (Duvedi 1994).

Some analysts suggest that fluctuating world prices of copper and aluminum accentuate the problems faced by large firms ('Raw material prices..; ET 1994; Roy 1990). This makes it easier for small and tiny firms to move in more quickly. Most copper stock is imported, and the raw material intensive nature of the industry, makes it particularly prone to such fluctuations (Ibid; Viswanathan 1994). In the end of 1993 for instance, international copper prices crashed by almost 20%. Such fluctuations wrecks havoc with the economic planning of large firms, drastically affecting their credit relationships with raw material suppliers. With copper stocks taken on higher prices and stored for production (sometimes for a year), large firms find themselves out priced by smaller firms who have been working with smaller batches more responsive to fluctuating markets. In September 1992, for instance, the landed price of copper charges by Hindustan Copper Limited (HCL) was 146.20/Kg. In January 1994, this dropped to 110.33 per Kg (Ganguli 1994). Enamelled wire manufacturers for instance, had to constantly adjust the prices of finished product. Such fluctuation also created a sense of uncertainty in users. Large fan and motor manufacturers, usually lifting stocks of winding wire for a minimum of two years, were lifting stocks for a maximum of 20 days (ibid). This in turn affected their market planning, which was traditionally accustomed to bulk purchasing by clients¹⁰.

 $^{^{10}}$ It is interesting to note that in the case of small firms, the larger ones involved in PVC and cables, lift stocks between two weeks to a month. In the case tiny firms, especially those involved in wire drawing, this is reduced to even two days. This is possible in large part due to the

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The 'take over' by smaller firms has been un-even across the industry. Telecommunication and heavy duty power cables cannot be easily manufactured by small and tiny firms. Thus, while the power cable sector has faced the onslaught of small firms, telecommunication cables are still under the domain of large firms due to the sophisticated manufacturing equipment, high investments and R & D required (Kasbekar & Pereira 1994). The significant issue to consider is that since the mid-eighties, while units manufacturing power cables showed a generally depressed trend as described above, units manufacturing telecommunication cables (beyond the capability of small firms due to their high investments) showed an encouraging outlook (Srichand 1994). Capacity utilization in these firms was more than **80**% in dry core and jelly filled cables (ibid). In contrast, the winding wire segment of the industry has been particularly taken over by small firms. Again, some analysts blame poor quality & undercutting as the main reason. Ganguli writes:

"...the uncontrolled growth of tiny units which are eating in to their (large firms, organized sector) markets, offering their products with no check on quality, at one third the price of the DGTD units...(Ganguli 1994).

Some analysts are even more drastic, suggesting that large and medium firms face extinction with the entry of small firms, and the support by government SSI policy to avail fiscal incentives and reduction in central excise duties (Duvedi 1994). The late eighties for instance, saw the production of the SSI sector exceeding that of the DGTD sector, and in the early nineties, government policy raised the investment limit of small firms to 70 Lakhs, and allowed concessional rates of clearance. This changes, argued analysts, would result in 25,000 tons of winding wire officially accessible to the larger of the SSI firms ring a death knell for the DGTD and large firms (ibid). At the lower end of SSI category, self employed repairers and rewinders account for more than 50% of the output of the winding wire industry. Another argument for the takeover by small firms is that whatever is produced jointly by the organized and un-organized sectors, is consumed internally. Since most the producers and the consumers are un-registered, concessions under the MODVAT scheme is of little help to the DGTD registered firms -- rendered them un-economic and non-competitive (ibid). Ganguli adds that sometimes, even reputed fan and electric motor makers buy inferior grade winding wires from these un-registered units (Ganguli 1994)¹¹.

clustering of firms in close physical proximity.

Other reasons for excess capacity are specific to particular segments of the industry. For instance, the market for PILC (paper covered lead insulated) cables suffered a serious decline due to technological obsolescence of the product. Although there are only six large firms manufacturing this item, severe decline in demand has led to the poor capacity utilization. Other reasons relate to highly over-estimated projections of demands. This is illustrated by the case of XLPE (cross linked polyethylene) cathes. Although there are only eight manufacturers in the organized sector, their capacity was always far more than the demand. This situation resulted from the large firms pinning its hope on the increased power generation as part of the

In all these discussions though, none of the analysis explains as to how it is that small firms are able to evolve in the first place to develop such a major threat to more established ones with access to state subsidies.

Problems faced by SSI and Tiny Firms: As we have seen above, most analysts portray the threat by small firms to the organized sector as being due to the protectionist policies of the government, poor quality goods which out price larger firms. However, a few analysts also highlight the problems that confront small firms in this industry, compounding those that SSI firms face in general, discussed earlier in the text.

Kamath argues that small firms in the cable and conductor industry find it difficult to get access to raw materials due to the formation of cartels by the organized sector (Kamath 1990). They are forced buy from the open market and ride over its fluctuations. Large firms with access to government supplies of raw materials (especially copper which has a high 'black' price), are in a position to use political pressure for changes in administrative procedures and policy and special trading concessions. Small firms do have access to these mechanisms to soften fluctuations in supply. Those SSI firms supplying to government agencies are often caught in between market prices and declared prices because these differences cannot be passed on the final products being supplied on a tender basis (ibid). The position of tiny firms is even more precarious since they lack the necessary legitimacy to influence govt. policy.

Public policy is also biased against the SSI sector in this industry (ibid). For instance, a recent government notification required SSI manufacturers of winding wires to register 40% of their raw material requirements with the Mineral & Metal Trading Corporation (MMTC), and the rest with the Hindustan Copper Limited (HCL). Large manufacturers continued to source copper stock from the MMTC. Since product quality is different from the two sources (MMTC imported stocks being superior) the additional processing costs pitting another disadvantage against SSI firms. Another hidden cost in time and money, is the paper work for this registration and the formalities to procure stocks. This is especially for the small entrepreneur who cannot afford the administrative and clerical infrastructure available to large companies (ibid). Frequent changes in policy regarding import and supply means that the already pressurized SSI entrepreneurs have to keep abreast of changes -- often via bureaucratic channels to adjust their own rates(Roy 1990).

liberalization program (Katoti & Kurup 1990). Due to liquidity and financial problems with power generation companies and the SEBs, this has yet to take off (ibid).

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The lack of testing facilities for small and tiny firms is another dis-advantage (ibid)¹². Even if small firms want to improve their products and to seek better markets, private testing equipment is too expensive for individual firms. This deficiency leads to inferior quality of cables being produced. Fires caused by inferior products seriously affect the credibility of all small firms (Kamath 1990). This maligning of reputation causes large clients to undertake on the spot inspection of units prior to bids¹³. Large manufacturers get the easy way to government contracts by ensuring pre-qualification requirements for the bidding process which eliminate SSI manufacturers (Kamath 1990). As a result, the lack of real options to improve quality (even when firms are interested) restricts the growth of small firms, and makes the market more exclusive and products expensive. In 1988 there was an effort by Government to initiate a modernization program by offering technological support and subsidies for the SSI including those of the cable and conductor industry¹⁴. There is little information on the actual experience of these efforts, but similar central government programs based upon a bureaucratic disbursement of aid have not been very successful.

While analysts argue that large firms are badly hit by the poor financial position of the SEBs and power corporations (Duvedi 1994; Also see Kasbekar 1990), this turns out to be a critical issue for the SSI who sub-contract job-works from them to face tighter cash flows. This can often result in a three to nine months delay in payments without interest (Kamath 1990). Since many SSI units further sub-contract job works to tiny firms, the delay in payments shifts the risks to the smallest of the firms due to their fragile financial circumstances (ibid). To accentuate the problems faced by small firms, delays in supply by cable units to government undertaking or SEBs is penalized to the extent of 1/2 % of the values of the order order.

With these industry specific institutional difficulties for small firms, it is unlikely that

¹² Personal communication with N. Bengani, General Secretary, Shahdara Manufacturer's Federation July 1993.

¹³ Bengani reports that many small firms (like his) of the SSI categories, are forced to locate in illegal 'slum' areas for a variety of reasons (mentioned previously in the text). Here, however, the lack of civic development affects their reputation when clients visit them in their offices -- irrespective of the quality of the product being produced. ibid.

¹⁴ Mr. Ravi Dutt, personal communication.

¹⁵ Kamath Op.cit. Bengani reports that since 1993, his firm's dealings with State Electricity Boards in Eastern India suffered serious losses due to delayed payments. These were compounded by the non-recognition of Government of India issued Industrial Development Bonds (IDBI) by the nationalized banks. This led to extensive paperwork, personal visits to represent his case. Till today, the issue has not been fully resolved.

the SSI sector is as pampered as proponents of large enterprises make it out to be. In this context, the fact that the cable and conductor industry in the LT and winding wire segments is characterized by a rapid take over by small and tiny firms is an interesting issue. It is possible that this takeover contributes in good measure to the excess capacity in large firms. In this context of the rapid intrusion of small firms, analysts see future prospects of this industry as following two paths. For large firms, they see the opportunities provided by the process of liberalization of the tele-com and power industry, the removal of reservations and 'protectionists policies' towards the SSI, and new demands for sophisticated products like fiber-optic, and fire retardant cables (Katoti & Kurup 1990; ET 1995). For small and tiny firms, the recent boom in building construction and the building industry is expected to generate new demands for the 'lower' end of the market (Kamath 1990). This is especially due to the withdrawal of the 'Copper Control Order' which restricted the use of copper in public housing and promoted aluminum conductors (Viswanathan 1994). In any case, in almost all private construction, the bulk of which forms the housing market, copper wire for LT conduction is almost exclusively used. The LT market will also grow because of extensive rural electrification, as well as increasing demands by other small manufacturers (Kamath 1990).

This lack of success of institutional programs aimed at small firms in general and those in the cable and conductor industry, contrasts with the performance of rapid take over of the L.T part of the industry. This dissertation with its focus on the setting of these firms (rather than a industry focus) has laid out the complex factors which have allowed firms to evolve in such a proficient way. In a way to link the two, I now turn to Viswas Nager's position in this industry.

Viswas Nager's contribution in the cable and conductor industry:

Almost all entrepreneurs one meets in Viswas Nager claim that this is the largest cluster of firms in the cables and conductor industry in India. At first, this seems to be a boast. However, these entrepreneurs are involved in marketing their goods at a highly decentralized way all over the country as well as neighboring ones of Nepal, Bhutan, Burma, and Bangladesh. Partners sometimes spend more than half their time travelling to these distant markets by train, to keep in contact with their relatives or business contacts who market their products. Also, in recent times many entrepreneurs from other locations are shifting their firms here, and in some cases, entrepreneurs here tie up with local firms in other cities. All this suggests that there indeed might be some truth in their statements.

To locate Viswas Nager in the cable and conductor industry is not an easy task for several reasons. As mentioned before, issues of illegality cloud any sort of empirical research on small firms. In the case of small and tiny firms manufacturing conductors and cables, it is even more so because of four factors:

First, copper, an important raw material, has a high market price due to

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its scarcity and is linked to a large underground economy. This makes almost all those involved in the business reluctant to talk about it since they are often forced to source it from non-government supplies;

Second, the production of conductors and cables is a particularly power hungry process. Given the restrictions in getting power connections in general . in Delhi, almost all firms are forced into many shades of illegal connections ¹⁶. In recent times, this large scale 'theft' of electrical power has become an important political issue. This makes entrepreneurs hesitant to reveal any quantitative information which either gives an indication of their turnover, or their power consumption;

Third, as mentioned before the manufacture of cables and conductors lends itself to a variety of types of dis-aggregated firms, making any economic estimation a difficult process. Many firms are so small, that even associations directly representing their interests can only give a rough figure to avoid harassment from income tax and inspectors, and public authorities¹⁷;

¹⁶ For example, one can illegally tap power from the main line without a meter. This is mostly happens in squatter areas; Another situation is to use a connection for a purpose other than what the license specifies. For example, a domestic connection being 'mis-used' for manufacturing. In effect, the 'Land-use' of the plot is changed from residential to industrial; The third situation is when a license specifies a particular load -- say 7 HP, and a much higher load is actually utilized. This situation is complicated because there are three possibilities: i) The 'Connected load' -- or official rating of the connection; ii) The 'Installed' load -- the sum of all loads of the power consuming item in that place, for instance, the sum of all the motor HP ratings; iii) The actual load consumed -- since not all electricity consuming items are utilized at the same time; The fourth situation is when the license is the name of a person other than that of the user; The fifth situation is when the nature of manufacturing process does not correspond with what is mentioned in the license. These last two situations are quite common because licenses are not transferable between individuals or manufacturing purposes, and in many cases upgradable. Chapter 6 illustrates these situations with a case study from Viswas Nager.

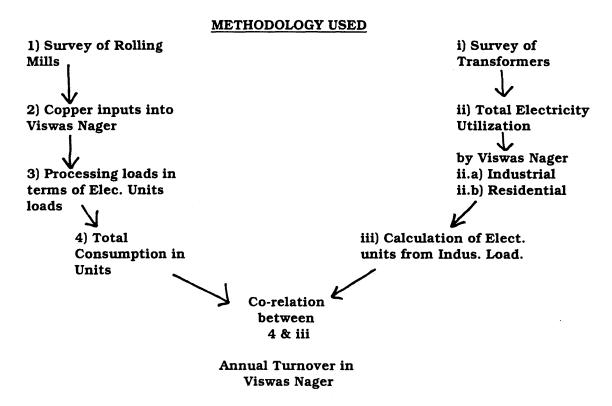
¹⁷ There is another reason for this. One of the primary roles of an association is to save any member firm from harassment from inspectors. One way of doing this is to centralize any 'dealings' -- the amount of bribe to be given. Thus, a group rate is negotiated and collected by a representative of the particular inspector department from the representative of the entrepreneurs at a fixed time and place. If inspectors visit factories, they are sent to the association office. This forms another important reason for clustering, apart from the advantages for flexible manufacturing. Entrepreneurs as a group form a formidable force to deal with what they see as unreasonable bribes or harassment. At times, they can even get together and beat up a inspector visiting them. Many entrepreneurs proudly say:

[&]quot;...They dare not step in (enter **th**ose blocks where factories locate) without prior notice.."

This arrangement also leads to a mutually useful relationship, as association members develop

Finally, as mentioned previously, data on the national level conductor and cable industry (both "organized" and "un-organized" sectors) is just as unclear in terms of centralized compilation of data¹⁸.

Even so, one can get quite a good sense of the productivity of Viswas Nager from two indicators: The consumption of electricity, and the input supply of raw copper wire rod into this neighborhood. I first outline my methodology used to arrive at these figures in the form of the following chart.



(Source Benjamin survey 1995)

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personal links with individuals in important public bodies like the electricity undertaking. These links are useful to get transformers repaired, install new ones, negotiate additional power lines, their routing and the contribution (both black & white) from the entrepreneurs for these public works. From the authorities' point of view, this also 'systemizes' the bribes for its easier distribution within the becaucracy.

¹⁸ Mr. Ravi Dutt, Op.cit.

LIST OF TRANSFORMERS IN THE VISWAS NAGAR AREA Power ratings & date of installation

Loc Street/Area	Transformers Rating + (Dates of installation)	Total No	<u>KVA</u> (95)
Halkara Kauan #1	1: 400 kVA ('78-'80)> 1000 kVA ('90); #2: 630 kVA ('90)> 1000 kVA ('92)	2	2000
Jwala Nagar #3 (Tikhona Park) #4	8: 630 kVA ('89 with 11 KV line converted); 8: 630 kVA ('90)	2	1260
18 Quarters #5	5: 400 kVA ('90)	1	400
Patel Gali #6	5: 400 kVA ('86-'87)> 630 kVA ('92)	1	630
Shastri Gali #7	': 1000 kVA ('88) #8: 400 kVA ('85)> 630 kVA ('90)	2	1630
Bazaar Gali #9	9: 1000 kVA ('91) #10: 400 kVA ('85)> 630 kVA ('91)	2	1630
Karan Gali #1 Near School Build		1	400
#1	2: 400 kVA ('78-'80)> 630 kVA ('85) 3: 630 kVA ('88) 4: 1000 kVA ('90)	3	2260
#1	.5: 400 kVA ('92-'93) .6: 400 kVA ('88)> 630 kVA ('92) .7: 630 kVA ('87)	3	1660
Ram Gali #1	.9: 400 kva ('90)	1	400
Yudhisthira #1 Gali #2	.9: 630 kVA ('91) 20: 400 kVA ('90)	2	1030

Loc Street/Ar	ea	Transformers Rating + (Dates of installation)	Total No	KVA
Karkari Road	#21:	630 kVA ('90)	1	(95 630
Commercial Block		1000 kVA ('87-'88) 1000 kVA ('87 -'88)	2	2000
Tash factory	#24: #25:	300 kVA ('78-'80)> 630 kVA ('85)> 1000 kV 1000 kVA ('90)	A ('90) 2	2000
Gali No. 5	#26:	630 kVA ('93)	1	630
DCP Office		630 kVA ('90) 1000 kVA ('90)	2	1630
Mahavir Block	#29:	400 kva ('91)	1	400
Chaar Khamba	#30:	400 kVA ('80)> 630 kVA ('90)	1	630
Shalimar Bagh	#31:	400 kva ('92)	1	400
Baburam School	#32:	1000 kva ('87-'88)	1	1000
Gali No. 8	#33:	630 kva ('95)	1	630
Galo No. 10		1000 kva ('87-'88) 400 kva ('85)	1	1400
Bhikam Sgh Col	#36:	630 kVA ('91)	1	630
28-29 Block	#37: #38:	630 kva ('90-'91) 630 kva ('90-'91)	2	1260
TOTAL for Viswa	s Nag	Jar Jar	38	26,540

Note:a) Location on map is shown as Loc & #___:KVA rating(Year of Installation) b) Transformer are normally rated at 400 KVA, 630 KVA, 1000 KVA.

COPPER ROD PRODUCTION IN DELHI

In 1995, there were 8 rolling mills manufacturing copper rods in Delhi. One more is located in NOIDA, just across Delhi border with its neighboring state of Uttar Pradesh. In interviewing five of these nine rolling mill owners as well as a detailed discussion with the one time secretary of their association, one key point comes up: Almost all these rolling mills have evolved or expanded production in response to increasing demands from the Shahdara and in particular, the Viswas Nager area. To illustrate this, they point to the close physical proximity as shown below:

<u>Name</u>	Locat	<u>tion</u>	<u> </u>	Distance from Viswas Nager in KMs
1) Mahatri Steel Rolling Mill	Shah	dara		2
2) Ganapati Rolling Mill	G.T.	Road Sha	ıhdara	2
3) Shahdara Steel Rolling Mill	G.T.	Road Sha	hdara	2
4) Vimla Rolling Mill	Jhiln	nil Indust	rial Area	1.5
5) Bharitya Tar Rolling	"	"	"	"
6) K.C. Electricals	**	••	"	u .
7) S.G. Mfg. Co.	**	**	"	"
8) Goel Steel	G.T.	Karnal Ro	oad (North Del	lhi) 8-10
9) Devi Dayal Rolling Mills	NOID	A (Uttar	Pradesh)	8

While it is true that the industrialization of Viswas Nager was spurred by the development of the Jhilmil industrial area and the location of the first few rolling mill there, the converse is equally true.

ELECTRICITY UNIT CALCULATIONS

Industrial Vs Domestic utilization in Viswas Nager:

Numbers of Voters in Viswas Nager (VN) : 20,590

" Jwala nager and Mahavir Block : 6000

Total numbers of Voters in VN industrial area : 26,590

Total Numbers of Voters in Bihari Colony : 5500

5500 Voters in Bihari colony utilize = 2*630+20% KVA

= 1512 KVA

Therefore 26,590 Voters would utilize = 26,590/5500 * 1512 = 7310 KVAActual KVA used in Viswas Nager = 26,590/5500 * 1512 = 7310 KVA

Industrial Load P(i) calculations:

KVA to Units

KVA: <u>Line Amps * Line Volts * 3 * P.F</u>
1000

To convert KVA into line Amps =
$$\underline{\text{Kw} * 1000}$$

Input Volts * 1.732

However, a 1000 KVA transformer actually provides 1500 Amps due to overload range etc.

= 58,5000/1000 per hour P(i): 1500 * 200 * 3 * 0.65

Number of Hours per day = 14

Total units per day 585*14 = 8190 Units per day. In a month of 25 days = 8190*25 = 20,4750 Units

Load in Viswas Nager: 19,288 (-) 20% (To avoid double counting of adjustments made during Bihari colony calculations = 15,430

If 1000 KVA gives 20,4750 units per month

then 15,430 KVA will give 3,159,292 Units per month on a 14 hour day.

Alternative II with a 12 Hour supply

Industrial Load P(i) calculations: KVA to Units

KVA: Line Amps * Line Volts * 3 * P.F

1000 KVA provides 1500 Amps actually drawn due to overload range etc (as per calculations made above)

P(i): 1500 * 200 * 3 * 0.65 = 58,50001000 1000 per hour

= 12

Number of Hours per day
Total units per day 585*14 = 7020 Units per day. In a month of 25 days = 7020*25 = 175500 Units

Load in Viswas Nager: 19,288 (-) 20% (To avoid double counting of adjustments made during Bihari colony calculations = 15,430

If 1000 KVA gives 175500 units per month

then 15,430 KVA will give 2,70,9369 Units per month on a 14 hour day.

COPPER PROCESSING CALCULATIONS:

A) Copper Inputs in Viswas Nager

Total daily production from the 9 rolling mills : 270 MT
Total monthly production : 6750 MT
Share of copper & cable units : 3375 MT

Share of Delhi (70) : 2362 MT

Share of Shahdara (75-80%) : 1771-1890 MT

Share of Viswas Nager (85%) : 1505-1593 MT..(A)

B) Inputs of PVC in Viswas Nager:

Per day 8-10 trucks of 10 tons each: 100 MT

Number of Days/ month: 22 (Tuesday and Sundays off)

Total PVC availability: 1760 to 2200 MT a month.....(B).

C) Ratio of Copper Vs PVC in gms in cables:

	Coppe	r	: PVC
1/18 =	0,900	:900	
3/22 =	1,250	:1,250	
3/20 =	1,600	:1,400	
4/22 =	2,800	:2,000	
<u>7/20 = </u>	<u>3,600</u>	:2,400	
	10150	7950	
Ave:	2030	1590	

1.2767 unit of Cu: 1 unit of PVC..... (C)

2 Sizes of flexible cable:

Copper :PVC 800 :1400 2830 :2990 3630 4390 Ave: 1815 2195

0.82687 unit of Cu: 1 unit of PVC.....(D)

Grand average of (C)+(D)= 1.05 unit of Cu: 1 Unit of PVC

Taking 25% sorting wastage in PVC but no wastage in Cu. Any wastage in Cu would be recycled since its an expensive material.

The PVC however, is both fresh and re-cycled stock so needs sorting. we get:

1.05 units of Cu : 1.25 units of PVC **0.84 units of Cu : 1 unit of PVC**

To do a small cross check let us take the input range figures of copper rod (A) given above, and use this to see the range figures of PVC (B).

Thus 1593 tons of Copper would use 1896 tons of PVC...(X)

or 1505 tons of Copper would use 1791 tons of PVC....(Y)

This seems within a reasonable range. In fact it is possible that the consumption of copper could go up to even **1800 tons** -- co-relating to the **2200 tons of PVC** inputs into Viswas Nager...(**Z**)

CALCULATION OF PROCESSING LOADS IN POWER UNITS

To calculate the electricity processing loads we consider the number of steps (or stages of major processing) and the electrical loads required for each of those processes.

Copper:

To process one ton of copper: 500 units.

Copper is processed twice.

1 ton of copper consumes: **1000 units**.

PVC:

To process 1 ton of PVC the following is the unit breakup:

StepsUnitsCompounding200Insulation200Recycling Cutting250Total Units650

In option (X):

Copper : 1593 * 1000 = 1593000 Units PVC : 1896 * 650 = 1232400 Units

= 2825400 Units.....(X)

In option (Y)

Copper : 1505 * 1000 = 1505000 Units PVC : 1791 * 650 = 1164150 Units

= 2669150 Units.....(Y)

In Option (Z)

Copper : 1800 * 1000 = 1800000 Units PVC : 2200 * 650 = 1430000 Units

= 3230000 units.....(Z)

This three options co-relate quite well with the industrial loads calculated on the basis of the numbers of transformers. A figure between Option \mathbf{X} and option \mathbf{Z} seems to the most likely level of unit consumption, relating to the annual turnover as calculated below:

ANNUAL TURNOVER

To get the turnover, we again take the options (X), (Y), and (Z) Here we get:

OPTION X

Copper : 1593 Tons.

50% of Cu is in 'white' @ Rs 157/Kg = 157000/Ton 50% of Cu is in 'Black' @ Rs 160/Kg = 160000/Ton

157000* 796.5 = Rs 125050500 160000* 796.5 = Rs 127440000

Total Cu value = **Rs 252490500** or Rs.25.24905 Crs

Copper = Rs25.24905

PVC : 1896 Tons @ Rs 45/Kg = Rs8.532 Steel & Al costs @15% of Copper Costs = Rs3.787357 Total (Cu+ PVC+ Steel & Al) = Rs37.5684

Or Rs 37.5684 Crs * 12 months = Rs. 450.82088Crs

Adding 20% Value addition for 1.33 shifts

+ 15% (Excise + Octroi) = Rs. 157.78730Crs = Rs. 608.60818Crs.

OPTION Y

Copper: 1505 Tons.

50% of Cu is in 'white' @ Rs 157/Kg 50% of Cu is in 'Black' @ Rs 160/Kg

157000*752.5 = Rs 118142500 or Rs 11.81425 Crs. 160000*752.5 = Rs 120400000 or Rs 12.04 Crs. **Total Cu value** = **Rs** 238542500 or Rs 23.85425 Crs.

Copper = Rs. 23.85425 Crs.
PVC :1791 Tons @ Rs 45/Kg = Rs. 8.0595 Crs.
Steel & Al costs @15% of Copper Costs = Rs. 3.578137 Crs.

Total (Cu+ PVC+ Steel & Al) = Rs. 35.49188 Crs.

Or Rs. 35.49188 Crs * 12 months = Rs. 425.90264 Crs.

Adding 20% Value addition (for 1.33 shifts)

+ 15% taxes (Excise+Octroi) = Rs. 149.06592 Crs. = Rs. 574.96856 Crs.

OPTION Z

Copper: 1800 Tons.

50% of Cu is in 'white' @ Rs 157/Kg 50% of Cu is in 'Black' @ Rs 160/Kg

157000* 900 = Rs 141300000 or Rs 14.13 Crs 160000* 900 = <u>Rs 144000000</u> or Rs 14.4 Crs **Total Cu value** = **Rs** 285300000 or Rs 28.53 Crs

Copper = Rs. 28.53 Crs PVC : 1896 Tons @ Rs 45/Kg = Rs. 8.5320 Crs

Steel & Al costs @15% of Copper Costs

Total (Cu+ PVC+ Steel & Al) = Rs. 42.7095 Crs

Or Rs.42.7095 * 12 months

= Rs. 512.514 Crs

= Rs. 4.2795 Crs

Adding 20% Value addition for 1.33 shifts

+ 15% taxes (Excise + Octroi)

= Rs. 179.3799 Crs = Rs. 691.8939 Crs.

Given the electricity units as per the transformer calculations, the turnover is probably between Rs. 608 to Rs. 691 Crs. While these include excise and Octroi taxes, these do not include sales taxes (about 4%).

The above detailed calculation arrive at an estimate of Viswas Nager's annual turnover as Rs.608 - 691 Crore. In this context, it is useful to get a sense of volume of sales of some of the large firms in the industry 19 .

	Sales '89	GP	Sales 92-93	94-95
 Cables Corporation: 	128.5	(157.1)	157.62	180
2) Asian Cables:	81.86	(53.6)	97.60	187
3) Finolex:	109.82	(95.13)	243.69	
4) National Insulated	52.35	(2.12)		
5) Universal	129.33	(9.81)	176.76	
6) USHA Beltron	31.08	(3.03)	108.82	
7) Vidhya Telelinks	54.02	(8.39)	141.57	
8) Guj. Tele. Cables			30.42	
9) Incab Inds			67.07	
10) NIcco Corp.	_		272.06	
11) RPG Tele.comm	_		178.84	
12) Sterlite Ind.	_	_	312.00	
13) Tele Cables Ltd		,	90.02	
14) Torrent Cables			34.05	

There is however, an important caveat which makes an accurate analysis of the total national level cable and conductor market difficult. Some firms like Sterlite industries listed above, have also set up copper smelting plants. Thus, their figures might include these investments. Some members of the industry feel that some of these figures of turnover are over

¹⁹ I have used various sources to compile this information: For 1989: Kasbekar 1990; Source for 1992-93: Kasbaekar & Pereira 1994; Source for 1995 projected: Varghese 1990.

estimated²⁰.

Accurate estimating is also difficult because of the multiplicity of government organizations responsible for this industry making data collection difficult (ibid). Perhaps due to these reasons, there are contradictory reports by market analysts or declarations by firms: In 1994, production of PVC cables by the Cable Corporation of India accounted for 65 % of the companies turnover of Rs. 180 Crore, with a market share of 25%. Universal cables controlled another 26% of the market (Varghese 1995). Going by these figures, the total large firm segment of the market would be Rs. 720 Crore per year. Since market analysts agree that this is supposed to be 40% of the total market, the small and tiny segment of the market would work out to be about Rs. 1080 Crore year, out of a total market of Rs. 1800 Crore a year. Srichand suggests that the power cable market in 1994 was between Rs. 1000-1500 Crore.

However, these estimates of the total market do not fit with the gross sales of the 14 firms listed above. Based upon discussions with members of the industry, the cable and conductor market is more like between Rs. 3500 Crore to Rs. 4000 Crore, of which Rs. 2400 Crore is the share of the unorganized firms²¹. Even with this broad based and conservative analysis, Viswas Nager's turnover of Rs.608 to 691 Crs. is a sum to reckon with, making it probably the biggest cluster in India manufacturing a wide range of conductors and cables in the LT category.

²⁰ Mr. Ravi Dutt, Op.cit.

²¹ Dutt Op.cit; Bengani Op.cit. The diversity of cables and conductors makes data reporting and analysis even more difficult.

ANNEX 4A

Industrial Estates and entrepreneurs in Delhi:

Delhi, as part of a national program to help the small entrepreneur via promoting Small Scale Enterprise (SSI), has embarked on an extensive program of developing industrial estates (Saigal 1994; DC.SSI 1994, 1994a; DDA 1989). How effective have these been? Accurate data is not available due to difficulty of surveying the wide multitude of firms, who have been pushed underground by illegal status. Even so, existing information shows that few of these plots are utilized by low income entrepreneurs. While the main text of this chapter and the dissertation discuss more structural reasons, in this essay I focus more specifically on the issue of affordability.

Most factories in Delhi are small partnerships or proprietorships. A DSIDC survey in 1981 shows that 77% of the firms in the capital employed less than 10 workers and a further 16% between 10-20 (DSIDC 1994). Another survey by the work center unit of the Perspective Planning Wing in the DDA reveals that in 1981, 33% of the firms had between 1-4 persons, and another 43.5% had between 5-9 persons (DDA 1989; CSE 1994:Table IX). Furthermore, 2/3 of entrepreneurs are tenants (Ibid:2), and thus disqualified from public assistance programs which assume ownership. 40% of the firms had a plot size of 50 sq.yd. or less, another 20% in less than 100 Sq.Yards(ibid:3-4). While in most areas, a single firm operated in a single plot, in some dense clusters, more than 2 firms operated out of one sub-division.

Not surprisingly, these firms cannot afford the market value of plots in industrial estates developed by public authorities. To develop the 800 m² plot here, an entrepreneur would require any where between Rs. 6,000,000 (US\$166,666) to 8,000,000 (US\$ 222,222). to start production. Land and building would cost anywhere between Rs. 3,000,000 (US\$ 83,333) to 4,000,000 (US\$ 111,111) (See Text Box 1).

Very few small entrepreneurs can even afford the 200 mt². sheds offered by the Delhi Small Scale Industries Corporation with a official price of Rs. 500,000 (US\$ 13,888). The few that are developed, command a market value ranging from Rs.1,500,000 (US\$ 41,666) to 2,000,000 (US\$ 55,555). With machinery and running capital, a minimum of at least Rs. 2,200,000 (US\$ 61,111) is required, before production can be started in this industrial shed. Indirect costs move up the affordability level even further. The allocation of plots in industrial estates does not easily allow for factories involved in similar production lines to locate here. As a result, there are few opportunities for factories to reduce expenditure on stocks by practicing 'just in time' methods. The reality is that the official options only cater to the industrial elite, who use their position in society to corner even more subsidies, financial help, and markets (RBI 1992; India Today 1995; Kalra 1994).

The Patpargunj Industrial Estate first proposed in the early seventies, and plots allocated in the early eighties. Many factories here, are still the process of starting production. In the summer of 1994, more than 70% plots were still vacant.

Economics of Development: The plot sizes here are 450 sq. mt. The FAR (Floor Area Ratio) is 125 i.e., the total built up area of the building is 1.25 times the site area. Of this, 75 FAR is free, while 50 FAR is officially charged additionally @ Rs.300/sq.mt as a development charges, to be given at the plan approval stages. This usually amounts to about Rs 80,000/. Ground coverage allowed is 50%. Set backs are 15 ft. in the front and rear, 10 ft on either side. At present, the market value of a plot ranges between Rs.2,000,000 - 2,200,000 (US\$ 61,111).

The plots were originally allocated on a lottery basis. However, almost always, only those entrepreneurs who have factories in other industrial areas, are established and familiar with the rules, regulations & bureaucratic systems, have capital and stability, manage to get access to these plots. Some set up a second unit here, with their first unit in unauthorized areas, or under a different name in another other industrial estates. Others, as local factory owners complain, have bought in to speculate on the plot's 'black' value, and are not interested in serious manufacturing.

The main advantage of locating here is the legitimacy which automatically also gives access to electric power, bank & industrial finances, subsidies, and other state help. Another Rs. 1,500,000 (US\$ 41,666) to Rs.2,000,000 (US\$ 55,555) are required for construction -- basement, ground and first floor. Normally, entrepreneurs cover the basement across the entire plot width, leaving the front and rear portions. The cost of machinery depends upon the production process but usually ranges between Rs.1,000,000 to Rs. 1,500,000. Working capital would be range between Rs.500,000 to 1,000,000, again depending upon the production process involved. For a temporary electricity connection, the sum of about Rs.3000/ (unofficial) would be required, on a official receipt of Rs.650/. A permanent connection (3 phase, 20 Hp), would take un-official amounts anywhere between Rs.40,000 to 50,000/ depending upon the negotiations. For plan approval from the Delhi Development Authority, a bribe ranging between Rs.10,000 to Rs.15,000/ is required. The office of the chief inspector of factories would take another Rs.3000/. Other inspection rates are in addition to those mentioned above. Possibly the entire costing could easily work out to around Rs. 6,000,000 (US\$ 166,666) to Rs. 8,000,000 (US\$ 222,222). The lower category industrial sheds built by the DDA, command a market value of Rs.2,000,000 (US\$ 55,555), instead of the official rate of Rs.500,000 (US\$ 13,888). Other rates mentioned above are a bit lower.

All conversions @ Rs. 36= 1US\$. Information by Mr. Dilbagh Singh 15/3/95

1 Starting costs in a typical industrial estate.

Thus, it is hardly surprising that in Delhi, all of the firms in the 'Tiny Enterprise' category (and many factories of the SSI category), locate in non-industrial estate areas. In contrast, starting off options in an un-authorized colony are much cheaper. For instance, at a lower level of investment, a foreman with access to job works, can start production by renting a small 50 sq-yard plot by investing Rs. 35,000 (US\$972) to Rs. 50,000 (US\$ 1388) in a typical industrial cluster in a un-authorized colony or an urbanized village. More experienced ones in partnerships operate with budgets in the range of Rs. 125,000 (US\$ 3472) to Rs. 400,000 (US\$ 11,111) using the numerous local 'committees' to get running capital. The lowering of capital expenses allows most of the investment to be used in a productive way. In contrast, entrepreneurs in industrial estates have to sink a large proportion of their investments in fixed

¹ The Committee is a form of pooled saving. Chapter 5 provides a detailed description of the Committee and other financing mechanisms used by small entrepreneurs.

costs. Secondly, while plots in industrial estates specify 60% coverage of plot area, and a separate office, the entrepreneurs here can use almost 200 % of the plot area by building on the first floor, and be more flexible in their use of office space.

Finally, the clustering of firms manufacturing products in similar or related product lines allows them to practice 'just-in time' techniques, reducing space and money devoted to stocks². Most important, as discussed in the main text, the industrial cluster opens up a variety of opportunities to get access to credit, contacts, markets information, and to develop a political clout to pressure governments to be more responsive of local needs.

ANNEX 4B

Land sub-systems in Delhi, housing industrial clusters

Apart from un-authorized colonies, two other sub-systems house industrial clusters in Delhi. These are:

a) Urban Villages: These are villages engulfed by the rapid urbanization of the city. Plots here tend to be smaller than those of unauthorized colonies. The real constraint however, is the narrow and winding roads from the village, which make it difficult for supplies to come in by truck or vans. Even so, it is easier to get heavy duty electric power connections, as compared to un-authorized colonies. Hence, almost all urbanized villages are highly industrialized, especially with those activities which can be adjusted in tight and non-rectilinear spaces (for instance, plastic moulding and garments). Another reason for their extensive industrialization is their central city locations brought about by the Capital's rapid expansion. This provides factories locating here with easy access to central city wholesale markets for raw materials, and to enjoy easy dispatch of finished products.

b) Shahjahanabad, and its surrounding neighborhoods: Traditionally Delhi's economic core, this walled city still remains so in many ways. This is especially with its extensive wholesale markets located here. In an industrial survey conducted by the DDA in 1981, the Shahjahanabad housed almost a fifth of the capital's enterprises (DDA PPW 1989). The very dense clustering of firms brought about by possibilities to sub-divide land to micro levels and the loose regulations over land use, all spur powerful urbanization and localization economies. The disadvantage for factories here is however, the severe limitation of space due to the super high real estate values, which make commercial enterprises more viable. Furthermore, even

² For instance, a large firm in an industrial estate manufacturing cables usually maintains an inventory of three to six months, and some times even up to a year. In contrast, smaller firms operating in the cluster way maintain inventories ranging from one to two days stock for the smallest conductor manufacturer to a weeks stocks by larger firms involved in plastic compounding (used as insulation for conductors) and cable manufacture. The cost is not only in money tied up, but also space devoted to storage and its security management.

Annex for Chapter 4 Unauthorized Colonies Shahjahanabad (Walled City) **Urban Villages**

Figure 1: Neighborhood typologies in Delhi where industrial clusters concentrate

Public Industrial Estates

more accentuated than the case of urban villages, streets here are very narrow, many barely more than 8 feet. The high population density and intensive economic activities make vehicular access difficult, but transportation of both humans and goods in smaller batches via the numerous cycle rickshaws possible.

Secondary Locations:

To a lesser extent, smaller firm clusters also locate in four other types of neighborhoods:

- c) Resettlement Colonies: These are massive site and services projects developed in the midseventies as part of the government's program for the resettlement of squatters. However, the small sizes of the plots is a constraint, which prevents everything other than very simple jobwork activities.
- d) Refugee Housing Blocks: The refugee housing areas consists of two storied blocks and small plots of 50 square yards, built for refugees from Pakistan during the partition of the country in 1947. Today with the Delhi's expansion, many of these are located in central areas of the city, near important commercial and in some cases, adjacent to industrial areas. Due to the loose regulations about land use and plot sub-divisions, almost all of these blocks have been upgraded and densified by their residents to incorporate additional living space, small shops, and fabrication activities. However, due to space constraints, as well as lack of access to heavy duty electric power connections, most of these firm clusters can only undertake simple job-work activities and business expansion is limited. The central city locations of these areas however, provide even small sized units with good economic advantages, and many changes are for commercial and retail uses.
- e) 'EWS' apartment blocks: The EWS (Economical Weaker Section) apartment blocks were built to cater to the lowest income groups by the DDA. Due to the city's growth, some of the older residential blocks are located in central city areas. Like the refugee housing neighborhoods, but on a lower scale, many residents here have made extensive additions to incorporate commercial and fabrication activities. Again however, constraints on space and electric power loads restrict economic activities to simple job-work activities.
- <u>f) Private sub-divisions in industrial estates:</u> A few firms also locate within sub-divisions of larger plots in industrial estates. Although these are technically illegal, these sub-divisions provide valuable locations for small firms undertaking maintenance or ancillary activities to larger industries. However, there are limited possibilities for such sub-divisions.

ANNEX 4C

The regularization process³:

This is a process whereby un-authorized colonies are legalized and their services & infrastructure upgraded. Since these neighborhoods are deficient in these, they are categorized as 'slums' under the Slum Improvement and Clearance Act of 1937. At this stage, there are two options available to public authorities: Either demolition and re-settlement as per public norms, or alternatively, these areas are upgraded to improve infrastructure, services and to secure tenure -- all on payment of specified 'development charges'⁴.

One important point, which we shall discuss later, is that un-authorized colonies are not automatically considered for regularization. Resident associations, and often the developers try to get their neighborhood on a government listing of Un-authorized colonies in existence on that particular date. The government, from time to time, announces 'cut-off dates' which specifies that all those colonies which existed before a particular date, would be considered for regularization. Also, I shall discuss later, the listing and cut-off date are not decided according to specific technical or demographic criteria, but on an ad-hoc basis. After a neighborhood has been listed for regularization, the process of improving services, tenure legalization, and public management of services and facilities begins, but it can stretch over many years--often to three decades. The improvement of these areas happens in stages, starting with street lighting, common water stand posts, basic drainage and levelling. Later, residents pay up development charges to the municipality's various departments. These are followed with individual sewerage and electricity connections, as well as metalling of roads. The responsibility for regularizing un-authorized colonies is with the DDA and the MCD. Fig.3 above, provides a listing of their responsibilities. Funds for this purpose are drawn from variety of sources: The central government, financing institutions like HUDCO, the Delhi Administration, internal resources of the DDA and MCD and regularization charges paid by the residents who live in these neighborhoods (Banerjee:37 Table 8).

The regularization process starts with the announcement of unauthorized colonies to be <u>considered</u> for regularization. The DDA has worked out a comprehensive regularization

³ For a comprehensive description and discussion of the regularization process of illegal settlements in Delhi see Banerjee 1992, DDA 1985.

⁴ The decision in reality is not as straightforward. Many 're-settlement' colonies are also called 'slums' by the very authorities that have developed them. For instance the presentation by R.G.Gupta (Op.cit) clubbed re-settlement colonies along with other 'slum' areas. Second, in many cases, even after basic infrastructure is put in, and residents pay municipal taxes, these neighborhoods can face demolition without notice.

procedure with 23 steps as given below⁵.

THE REGULARIZATION PROCEDURE

A) Pre-planning

- 1) Physical surveys by DDA/MCD/Consultants for the settlement plans, property lines, water line sewer line, electricity, building condition, use of building., etc.;
- 2) Collection of survey charges @ Rs.5/m2 of plot areas by the DDA / MCD from associations.
- 3) Socio-Economic Surveys to know the population density, land use, ownership of land, date of purchase of plot, nos of households, tenant/landlord, details of taxes paid

Role	Institution
Demolition	DDA/MCD
Prevention of encroachment	Land owning public agencies, Delhi Police, DDA/MCD via Land Protection cell
Prevention of Transfer	Delhi Administration, Revenue Dept., Dep. Registrar of Properties
Regularization (overall charge)	MCD from 1961 to MCD and DDA from 1969-1988; MCD from 1988 onwards.
Regularization and plan preparation	MCD and DDA
Water Supply, sewerage	MCD (DWS&SDU)
Roads, drains	MCD.DDA
Electricity	MCD (Delhi Electric Supply Undertaking DESU).
Open spaces, community halls, facilities	DDA, MCD from Plan funds.

Based on Table 4 pp20 Banerjee Op.cit.

Figure 2 Institutional responsibilities in the regularization process.

B) Planning

- 4) Preparation of Draft regularization plan: Super-imposition of master plan/zonal plan proposals on the base map and finalization of alignments of infrastructure and major roads.
- 5) Finalization and approval of the layout plan from the competent authority (the Technical Committee headed by the Lt. Governor)
- 6) Placing the Draft plan before the DDA/Standing Committee of MCD for approval.
- 7) Publishing Draft plan for inviting objections and suggestions from resident associations.
- 8) Modifying draft plans and placing before competent authority for approval.
- 9) Publication of the final plan.

⁵ This procedure was worked out in 1978, after the Janatha party had come into power and promoted large scale regularization. See DDA 1985 Op.cit. Page 28-29 Chapter 3. Also see Annexure 14,15,16,17,21,24. Banerjee (1992:33) also specifies these at an overall level in Table 5. I have combined these two sources of information.

C) Pre-Implementation.

- 10) Demarkation of plots required for facilities and rehabilitation proposal for the affected families in built-up flats nearby.
- 11) Acquisition of pockets required for community facilities and infrastructure.
- 12) Preparation of detailed estimates of works, administrative approval, calling for tenders etc.
- 13) Collection of first installments of regularization and development charges.

D) Implementation

- 14) Electrification by DESU on payment.
- 15) Water supply and sewerage on payment by DDA/MCD & DWS&SDU
- 16) Roads and drain construction by the DDA/MCD.
- 17) Parks, open space, community facilities.
- 18) Sanction of building plans
- 19) Issue of certificate of regularization and collection of final installment of charges
- 20) Connection of services viz. water supply, sewerage

E) Post Implementation

- 21) Transfer of maintenance to MCD (if not already under MCD)
- 22) Registration of lease deeds of plots holders
- 23) Collection of premium by DDA in case of properties on govt. land
- 24) Disposal of commercial and other properties and funds credited to the total scheme.
- 25) Collection of rest of stages of development charges as per fiscal policy.

Implementation Aspects:

Although the regularization procedure is reasonably comprehensive in conception, its actual implementation is beset with operational/institutional problems which have important political aspects. First, the planning and administrative procedures of the regularization process are based upon a complex set of laws and regulations (Banerjee 1992:20-21, Table 4). While most of these give substantial powers to the DDA over the MCD, they also build in conflicting roles between them. This also happens between the DDA/MCD and other important local government institutions. Till 1983, for instance, the DESU provided electric connections on demand, irrespective of legal status of neighborhoods in the Master Plan. With the dissolution of the local government in Delhi, this stopped. However, this has been recently reintroduced, and connections up to 2KV can be provided irrespective of Master Plan land use and legal status.

There are other operational problems. Although the DDA and the MCD have special cells for regularization, these are understaffed, and resulting in delays in the regularization process (ibid:21-28). Another cause of delay is the lack of an overall policy and implementation framework. This results in a case by case consideration, causing further delay especially since many organizations are involved (ibid). Another problem is that the Master Plan does not incorporate un-authorized colonies in sufficient detail. The lack of priority accorded to the preparation of zonal plans means that these are not prepared until much after the Master Plan

is published and publicized for public objections.

All this means that public interventions in these areas fall outside the mainstream planning process and depends upon ad-hoc decisions (ibid:22). Related to the master planning process, the policy of land acquisition, results in the notification of large tracts of land⁶. Since the compensation given to land owners is much lower than market rates and after considerable time, they prefer to sell the land to developers who develop un-authorized colonies.

Another set of serious problems relates to the mobilization of resources. Banerjee writes:

'.According to DDA officials, the lack of fiscal planning to back physical planning not only holds up development but also makes physical planning a redundant exercise.'(ibid:38).

This is even with the lowering of standards for public works in 'slum' areas, and thereby minimize investments⁷(Banerjee 1992:38). This lack of administrative and political will results in time delays which push up cost due to escalations. Furthermore, the time gap between the policy announcement and its actual implementation results in operational details of the regularization procedures being worked out <u>after</u> the announcement of the overall policy. This also makes any studies and surveys redundant (ibid 48). Another fiscal problem relates to the inability of the MCD, on the basis of its statutes, to charge advance recovery of development charges from un-authorized colonies under its charge. This restricts the ability of the corporation to spread out development costs in un-authorized colonies under its jurisdiction.

While the mobilization and allocation of funds involves certain problems, the recovery of funds spent is equally difficult. Most often, politicians and lower level administrators are blamed for low recovery (Banerjee:22,39). So poor is the recovery, that the government thought of treating these as plan grants rather than plan loans. Banerjee argues that this puts a heavy burden on the exchequer and results in an ad-hoc piecemeal approach. However, as discussed below, there is more to it than this.

⁶ The land acquisition authority (in the case of Delhi, the Delhi Administration), notifies agricultural land for acquisition by it under eminent domain. When notified, the land owner is not allowed to sell the property to another person or undertake any permanent building activity.

 $^{^{7}}$ Also see that documents's Annexure IX pp:137 for a comparison between master plan standards and those proposed for un-authorized colonies.

The letter below from the Director Planning to the Lt.Governor of Delhi, illustrates the administrative issues relating to declaring a 'cut off' date of 15th. June 1972:

No.13037/113/74/UDI/IIB
Government of India.
Ministry of Works and Housing
New Delhi, the 16th. February, 1977.

To,

The Lt. Governor, Delhi.

Subject:- Unauthorized colonies in Delhi -Approval of.

Sir,

Government appointed a Committee on 26th August 1974 to make a case by case study in respect of all un-authorized colonies which have come up in Delhi from time to time in part particular before 15th. June 1972 with a view that the Government could take a decision in regard to the future of such colonies. The Committee submitted its report on 26th February, 1975.

- 2. The report of the Committee has been examined by Government and it has now been decided that the various un-authorized colonies which have come up in Delhi including those around villages outside the "Laldora" and also the un-authorized extensions of approved colonies, from time to time will be regularized on the terms and conditions set out below:-
- i) Both residential and commercial structures will be regularized.
- ii) Structures will be regularized after fitting them in a layout plan and after keeping clear space for roads and other community facilities. To the extent land is already available for roads and other community facilities in the immediate vicinity or neighborhood, such land should be utilized for this purpose.
- iii) Development charges as determined by DDA/MCD will be payable by the owner of the properties in such manner as may be laid down by these bodies.
- iv) The families which are displaced in the process of providing space for roads and other community facilities will be rehabilitated in the following manner:-
 - (a) Owners of houses, who or any of whose family members do not own a plot/house in Delhi will be provided alternative land/flat.
 - (b) The tenant will be allotted alternate accommodation provided they or any of their dependent members of family do not own a house/plot in Delhi.
- v) In the process of regularization, wherever necessary changes of land use will be considered with reference to the provisions of the Master Plan Zonal Plans.
- vi) Colonies which have been notified for acquisition will also be considered for regularization and wherever necessary other consequential steps will be taken.
- vii) DDA/MCD will take up the work of completing the case by case study of all the colonies in accordance with the policy laid down by the government. The DDA and the MCD will be the implementing authorities.
- viii) A High Level Implementation Body will be set up to which the progress of regularization and development of un-authorized colonies in accordance with the policy laid down by the government. The DDA and the MCD will be the implementing authorities.

- ix) The civil services which will be provided in future in the colonies to be regularized, as also those which may already existing, these colonies will be maintained by MCD.
- x) The MCD will take immediate steps especially to provide water and electricity connection in all the unauthorized colonies. Those who had already deposited the dues would be given preference.
- 3. Constructions already done in areas earmarked for roads and other community facilities in the colonies which have been regularized earlier, will also be regularized provided land for such facilities is available in the immediate vicinity or neighborhood. Otherwise, they will be given alternative sites/flats.

While deciding upon the regularization of unauthorized colonies in the manner indicated above, it is also to be emphasized that the government will not countenance any activity or actions on the part of any individual or body to put up fresh structures whether in the existing unauthorized colony or outside urbanized limits of Delhi. Any attempt in this direction will be viewed seriously and defaulter will be dealt severely.

Yours faithfully

s/d (K.Biswas) Director Tel. No.372854

Copy forwarded to:-

- 1) Shri. Jagmohan, Vice Chairman, DDA Vikas Minar, New Delhi.
- Shri. B.R. Tamta, Commissioner, MCD, Delhi for information and necessary action.

s/d (K.Biswas)
Director

Copy for information only to S.S.Shafi, Additional Chief Planner, TCPO, Vikas Bhavan, New Delhi.

(K.Biswas)
Director

22.7.77

ANNEX 5-1

Compounding values of Rs.100 and Rs.400 @ i= 36%, and Bank Rate (Sliding at 5%-9%-10%-11%)

Number of Months "n", Winning Members (_)	Principal of Rs.100. Discount at 36% PV	Bank rate at 5% to 11%	Principal of Rs 100 Discount at 5-11% PV	Principal of Rs.400 Discount at 36%
0 (A)	100	5	100	400
1 (B)	97.47	5	99.59	398.37
2 (C)	95.00	9	98.57	394.29
3 (D)	92.60	9	97.86	391.44
4 (E)	90.27	10	96.87	387.48
5 (F)	87.97	10	96.10	384.40
6 (G)	85.74	10	95.34	381.38
7 (H)	83.66	11	94.12	376.48
8 (I)	81.46	11	93.27	373.08
9 (J)	79.40	11	92.47	369.88
10 (K)	77.39	11	91.67	366.68
11 (L)	75.43	11	90.87	363.48
12 (M)	73.52	11	90.09	360.36
13 (N)	71.66	11	89.31	357.24
14 (O)	69.85	11	88.53	354.14
15 (P)	68.08	11	87.77	351.08
16 (Q)	66.36	11	87.01	348.04
17 (R)	64.68	11	86.25	345.00
18 (S)	63.05	11	85.50	342.00
19 (T)	61.45	11	84.76	339.04

Formulae of discounting used:

PVc=

Where C_i = Capital future value i = Rate of discount/annum or time period

n = Number of years or time period

From: Lerner & Carlton 1966

ANNEX 5-II

OPERATION OF THE CHIT FUND

Since the chits are usually spread for about 20 months or so, this financing mechanism is centered around the concept of 'Present Value', and the interest rates of alternative investments. To understand the operation of a Chit Fund more clearly, given below is an example of a chit, using elements of the example mentioned previously: Like most chits, this chit is for Rs.100,000, and has 20 members. This gives a liability of Rs.5000/ installment per member per round. To make the mechanics clearer, the bids are adjusted to follow a more linear sequence. Even so, these are based on an actual cases. In reality, there would be more 'un-evenness' in bidding. Attached are copies of a Pass Book showing the bids and discounts in a real case. The innovations of 1% floor and ceiling are also incorporated in the example as they progress from the first round (Round 0) to the last (Round 19). An important issue is that of the selection of interest rates to discount bids to arrive at their PVs. I have chosen two sets of interest rates: 36% reflecting largely the interest on capital in current market. The second is a sliding scale of 5% for the first bid, 9% for the second and third, going up to 11% for the rest. This follows interests given by banks on FDs. This differentiation is important because it suggests varying profitability at alternative interest rates. Not only does this affect the timing of the bids, but also reflects the varying priorities of different members which is discussed later in the text.

For convenience, members are listed in sequence 'A' to T', with the Foreman being member 'E' because (s)he takes the fifth round. Detail calculations of profit/loss, share of overall capital is undertaken for the following fifteen members: A, B, C, D, E, F, H, J, M, O, P, Q, R, S, T. These are chosen to get a wide spectrum of bids and especially those around transition points as is seen when the bid, profit/loss lines are plotted.

PASS BOOK OF A TYPICAL CHIT FUND

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Paid to the subscriber this. Dec 19 A day of 19 A sum of Incursor Rs. 50.000 (Rupees 57 4 12 8) Vide Ch. No. dt 12 8) drawn on Carrotte Banks in respect of Chit No. 90 37 6 Valuation of Rs. 100.000 Valuation of Rs. 100.000 Managing Director Confirmed	No transfer of pledge subscriber will be valid union	of the chit made by the Prior approval of the
Subscriber	company is obtained	

Inner pages of a pass book

Figure 4: Bid lines for a Chit fund at 36% discount and 5-11%

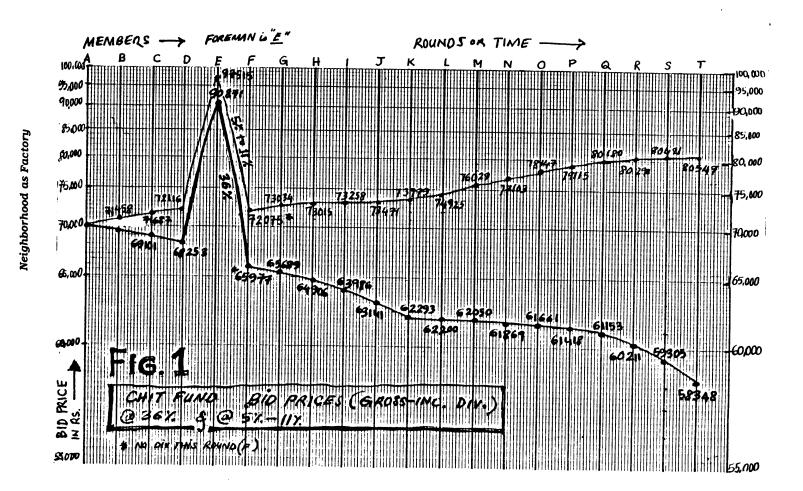


					Table 1:	Overall Cash Flor	w of Chit fund		-			
Rds	Installment	of	Members	Winning	Bids of mem:	(A-T)	Foreman's	Comm	Dividend			
Mem	Un-dis Val	i = 36%	Bank %	Un-dis Val.	i = 36%	Bank %	36%	Bk%	Un-dis.	Dist./2	36%	Bk%
0 A	5000	5000	5000	70,000	70,000	70,000	5000	5000	25,000	750	7 50	750
1 B	3750	3655	3734	71,000	69,203	70,708	4,873	4979	24,000	720	701	717
2 C	3800	3610	3745	72,000	68,400	70,970	4,750	4928	23,000	690	655	679
3 D	3850	3565	3767	73,000	67,598	71,437	4,630	4893	22,000	660	611	645
4 E	3900	3520	3777	100,000	90,260	96,870	4,513	4843	(-)	(-)	(-)	(-)
5 F	5000	4398	4805	75,000	65,977	72,075	4,398	4805	20,000	600	527	576
6 G	4000	3428	3813	76,000	65,162	72,458	4,287	4767	19,000	570	488	543
7 H	4050	3388	3811	77,000	64,418	72,472	4,183	4706	18,000	540	451	508
81	4100	3339	3824	78,000	63,538	72,750	4,073	4706	17,000	510	415	475
9 J	4150	3295	3837	79,000	62,726	72,996	3,970	4623	16,000	480	381	443
10 K	4200	3250	3850	80,000	61,912	73,336	3,869	4583	15,000	450	348	412
11 L	4250	3205	3861	82,000	61,852	74,513	3,771	4543	13,000	390	294	354
12 M	4350	3198	3918	84,000	61,756	75,675	3,676	4504	11,000	330	242	297
13 N	4450	3188	3973	86,000	61,627	76,806	3,583	4465	9,000	270	193	241
140	4550	3178	4028	88,000	61,468	77,906	3,492	4426	7,000	210	146	185
15 P	4650	3165	4081	90,000	61,272	78,930	3,404	4388	5,000	150	102	131
16 Q	4750	3152	4132	92,000	61,051	80,049	3,318	4350	3,000	90	59	78
17 R	4850	3136	4183	93,000	60,152	80,212	3,234	4312	2,000	60	38	51
18 S	4900	3089	4189	94,000	59,267	80,370	3,152	4275	1,000	30	18	25
19 T	4950	3041	4192	95,000	58,330	80,522	3,072	4238	(-)	(-)	(-)	(-)
		E68,800	E80,520		12,95,969	15,21,055	79,248	92,291			6419	7110

Profit Analysis for various members including the Foreman (member E)

Table II: Foreman Profit Analysis

1) Analysis for Foreman (Member 'E') Round (5) or item (4) in listing.

At funds discounted @36%

Output: Rs. 5000 Commission on all rounds

:Rs.0079,248 + Rs. 100,000

:Rs.0090,260 + Rs. 25,000 interest from Dividend

:Rs.00000750

Gross Profit

:Rs.1,70,248

Input: Rs.68,800 Net Profit

:Rs.1,01,448

At funds discounted @5-11%

Output:Rs. 5000 Commission on all round

:Rs.0092,291 + Rs. 100,000

:Rs.0096,870 + Rs. 25,000 interest from Dividend

:Rs.00000750

Gross Profit

:Rs.1.89,911 Input: Rs.80,520

Net Profit :Rs.1,09,391

2) Analysis for member "A" (Round 1) or item (0) in

Undiscounted Bid Value

:Rs.70,000

At funds discounted at 36%

Winning Bid

:Rs.70,000

Dividend: None (accrued to Foreman)

Installments

:Rs.68,800 Profit

(+)

:Rs.001200

At funds discounted at 5%-11%

Winning Bid

:Rs.70,000

Dividend: None (accrued to Foreman)

Installments

:Rs.80,520

Loss (-)

:Rs.10,520

3) Analysis for member "B" (Round 2) or item (1) in list.

Undiscounted Bid Value

:Rs.71,000

At funds discounted at 36%

Winning Bid :Rs.69,203

Dividend Interest

:Rs.000701

Gross Profit

:Rs.69,904

Installments Net Profit

(-) :Rs.68,800

:Rs.001104

(+)

At funds discounted at 5%-11%

Winning Bid

:Rs.70,708

Dividend Interest

:Rs.000717

Distribution of Foreman's profits as % of gross funds.

Total funds @ 36%

= Rs.13.81.636 (Y36)

Total funds @ 5-11% = Rs.16,20,456 (Y11)

member	x @ 36%	x/y • 100	x @ 11%	x/y* 100
A	70000	5.06%	70000	4.31%
В	69904	5.05%	71425	4.40%
С	69055	4.99%	71649	4.42%
D	68209	4.93%	72082	4.44%
E	170248	12.32%	181911	11.71%
F	66504	4.81%	72651	4.48%
н	64869	4.69%	72980	4.50%
J	63107	4.56%	73439	4.53%
М	61998	4.48%	75972	4.50%
0	61614	4.45%	78091	4.81%
P	61374	4.44%	79061	4.87%
9	61110	4.42%	80127	4.9%
R	60190	4.35%	80263	4.95%
s	59285	4.29%	80395	4.96%
т	58330	4.22%	80522	4.96%

GROSS PROFIT: 11.71%

NET PROFIT CALCULATIONS:

@36% Foreman's Net Profit: Rs.1,01448

Total Funds

: Rs.13,81636

% of total funds : 7.34%

@ 5-11% Foremans' Profit: Rs.1,09,393 Total Funds : Rs16,20,456

% of Total funds : 6.75%

Gross Profits

:Rs.71,425

Installments **Net Loss**

(-) :Rs.80,520

(-)

:Rs.009077

4) Analysis for member "C" (Round 3) or Item (2) in listing.

Undiscounted Bid Value :Rs.72,000

Winning Bid Rs. 69055 See See See See See See See See See S	At funds discounted at 3	6%		Net Loss	(-)	:Rs.3931
Divided Interest Fis. 0655		0,0	·Rs 68400	1100 2000	()	.16.6661
Fig. 8800 Fig.	9	·Rs 00		At funds discounted a	+ 50%_110%	
Next Profit (+) 18.6.88800 Profit 18.6.00508 Res 2.00508					070 1170	·Ps 72472
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Installments					.RS.00	
Met Loss 1.1% 1.1	Net Pront	(+)	:RS.UU255		4.)	
Whining Bid Rac 70970 Round log litem 9 on list with Undiscounted Bid Value Rac 79,000 Rac 80,520 Rac 1048 Rac 1049 Rac 80,520 Rac 1048 Rac 1049		0/ 110/				
Dividend Interest Rs.00679 Rs. 1649		%-11%	D =00=0	Net Loss	(-)	:Rs.7540
Second	C					
Net Loss -		:Rs.00				
Net Loss (-) Rs.008671	Gross Profits		:Rs.71649	with Undiscounted Bio	d Value :R	s.79,000
Minning Bid Rs. 02726 Dividend Interest Rs. 00381 Gross Profit Rs. 0381 Rs. 63107 Installments Rs. 63107 Installments Rs. 63107 Installments Rs. 6309 Net Loss Rs. 63107 Installments Rs. 6309 Net Loss Rs. 72996 Dividend Interest Rs. 00611 Dividend Interest Rs. 00611 Dividend Interest Rs. 00611 Dividend Interest Rs. 00443 Rs. 73439 Installments Rs. 73439 Installments Rs. 73439 Installments Rs. 00443 Gross Profit Rs. 88209 Gross Profits Rs. 73439 Installments Rs. 88209 Ret Loss Rs. 73439 Installments Rs. 88209 Ret Loss Rs. 88200 Installments Rs. 88200 Net Loss Rs. 73439 Installments Rs. 88200 Net Loss	Installments	(-)	:Rs.80,520			
Dividend Interest Rs.00381 Rs.63107 Installments Rs.63107 Installments Rs.63107 Installments Rs.63107 Installments Rs.63030 Rs.73,000 Rs.68800 Rs.6598 At funds discounted at 36% Rs.73,000 Rs.68800 Rs.73,000 Rs.68800 Rs.73,000 Rs.68800 Rs.73,000 Rs.72996 Dividend Interest Rs.00443 Rs.72996 Dividend Interest Rs.00443 Rs.72996 Dividend Interest Rs.00443 Rs.73439 Installments Ps.68800 Installments Ps.688800	Net Loss	(-)	:Rs.008871	At funds discounted a	t 36%	
S Analysis for member "D" (Round 4) or item (3) in listing.				Winning Bid		:Rs.62726
Installments C :Rs.68800 Net Loss C :Rs.68296 Net Loss C :Rs.72996 Dividend Interest :Rs.00413 Cross Profit :Rs.68209 Cross Profit :Rs.68200 Installments C :Rs.68800 Installments C :Rs.68800 Net Loss C :Rs.73439 Installments C :Rs.73439 Installments C :Rs.7081 Net Loss C :Rs.68500 Net Loss C :Rs.68502 Net Loss C :Rs.68502 Net Loss C :Rs.68502 Net Loss C :Rs.68502 Net Loss C :Rs.68500 Net Loss C :Rs.68502 Net Loss C				Dividend Interest	:Rs.00	0381
Installments -	5) Analysis for member	" D " (Rou	ind 4) or item (3) in	Gross Profit		:Rs.63107
At funds discounted at 36% Fig. 687598 At funds discounted at 5%-11% Fig. 687598 Fig. 6875				Installments	(-)	:Rs.68800
At funds discounted at 36% Winning Bid		:Rs.73	3.000	Net Loss		
Winning Bid Rs. 67598 Winning Bid Rs. 72996 Dividend Interest Rs. 0041 Gross Profit Rs. 68209 Installments (-) Rs. 68209 Installments (-) Rs. 68200 Installments (-) Rs. 80520 Rs. 7081 Rs.			.,		• • •	
Winning Bid Rs. 67598 Winning Bid Rs. 72996 Dividend Interest Rs. 0041 Gross Profit Rs. 68209 Installments (-) Rs. 68209 Installments (-) Rs. 68200 Installments (-) Rs. 80520 Rs. 7081 Rs.	At funds discounted at 3	6%		At funds discounted a	t 5%-11%	
Dividend Interest Rs.0061 Cross Profit Rs.68209 Gross Profits Rs.773439 Installments Profits Rs.773439 Installments Rs.773439 Installments Rs.773439 Installments Rs.773439 Installments Rs.773439 Installments Rs.77081 Rs.7081 Rs.60820 Rs.600242 Rs.60024		.070	·Rs 67598		070 1170	·Rs 72996
Installments		·Pe Of		9	•Pe 00	
Installments (-)		.163.00			.105.00	
Net Loss (-) :Rs.00591 Net Loss (-) :Rs.7081 At funds discounted at 5%-11% Winning Bid :Rs.71437 Winning Bid :Rs.7082 Cross Profits :Rs.00645 :Rs.60520 Winning Bid :Rs.61756 :Rs.61756 Winning Bid :Rs.61756 Winning Bid :Rs.61756 Winning Bid :Rs.61756 Winning Bid :Rs.61988 :Rs.61988 :Rs.61988 :Rs.61988 :Rs.61988 :Rs.61988 :Rs.61988 :Rs.61988 :Rs.6800 :Rs.6977 Winning Bid :Rs.75675 Winning Bid :Rs.00297 :Rs.68500 :Rs.6976 :Rs.6800 :Rs.75972 :Rs.6800 :Rs.75972 :Rs.6800 :Rs.75972 :Rs.6800 :Rs.75972 :Rs.6800 :Rs.75972 :Rs.6800 :Rs.75972 :Rs.69504 :Rs.69505 :Rs.77006 :Rs.69504 :Rs.69505 :Rs.77006 :Rs.69505 :Rs.77006 :Rs.69505 :Rs.77006 :Rs.69505 :Rs.77006 :Rs.69505 :Rs.69		()			()	
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Winning Bid :Rs.00457 Dividend Interest :Rs.00645 Gross Profits :Rs.72082 At funds discounted at 36% Installments (-) :Rs.08438 Dividend Interest :Rs.00242 Goross Profit :Rs.61998 :Rs.61998 :Rs.61998 6) Analysis for member "F" (Round 6) or item (5) in listing. Installments (-) :Rs.6800 Undiscounted Bid Value :Rs.7,000 At funds discounted at 5%-11% At funds discounted at 5%-11% At funds discounted at 36% :Rs.65977 Dividend Interest :Rs.75675 Winning Bid :Rs.66504 Installments (-) :Rs.75972 Gross Profit :Rs.68800 Net Loss (-) :Rs.4548 Net Loss (-) :Rs.4548 (-) :Rs.80520 Nat funds discounted at 5%-11% with Undiscounted Bid Value :Rs.61668 Net Loss (-) :Rs.72075 :Rs.72075 Dividend Interest :Rs.72651 Winning Bid :Rs.61468 Installments (-) :Rs.61668 Net Loss	Net Loss	(-)	:Rs.00591	Net Loss .	(-)	:Rs.7081
Winning Bid :Rs.00457 Dividend Interest :Rs.00645 Gross Profits :Rs.72082 At funds discounted at 36% Installments (-) :Rs.08438 Dividend Interest :Rs.00242 Goross Profit :Rs.61998 :Rs.61998 :Rs.61998 6) Analysis for member "F" (Round 6) or item (5) in listing. Installments (-) :Rs.6800 Undiscounted Bid Value :Rs.7,000 At funds discounted at 5%-11% At funds discounted at 5%-11% At funds discounted at 36% :Rs.65977 Dividend Interest :Rs.75675 Winning Bid :Rs.66504 Installments (-) :Rs.75972 Gross Profit :Rs.68800 Net Loss (-) :Rs.4548 Net Loss (-) :Rs.4548 (-) :Rs.80520 Nat funds discounted at 5%-11% with Undiscounted Bid Value :Rs.61668 Net Loss (-) :Rs.72075 :Rs.72075 Dividend Interest :Rs.72651 Winning Bid :Rs.61468 Installments (-) :Rs.61668 Net Loss	At funds discounted at 5%-11%			9) Analysis for member "M" (Round 13) Item 12 on list		
Dividend Interest Rs.00645 Rs. 80520 At funds discounted at 36% Installments (-) Rs. 80520 Rs. 08438 Dividend Interest Rs. 00242 Gross Profit Rs. 61998 Installments (-) Rs. 68800 Rs. 65977 Rs. 65977 Dividend Interest Rs. 00297 Rs. 75675 Rs. 6504 Installments (-) Rs. 6500 Rs. 75675 Rs.			:Rs.71437	•		
Second	<u> </u>	:Rs.00				
Installments (-) :Rs.0520 Winning Bid :Rs.01756 Net Loss (-) :Rs.08438 Dividend Interest :Rs.00242 Cross Profit :Rs.61998 Installments (-) :Rs.68800 Net Loss (-) :Rs.6802 Installments (-) :Rs.6802 At funds discounted Bid Value :Rs.75,000				At funds discounted a	t 36%	
Net Loss (-) Rs.08438 Dividend Interest Rs.00242 Gross Profit Rs.61998 Rs.6800 Ret Loss (-) Rs.6500 Ret Loss (-) Rs.6500 Ret Loss (-) Rs.6500 Ret Loss (-) Rs.6500 Ret Loss (-) Rs.65977 Ret Loss (-) Rs.6500 Ret Loss (-) Rs.6500 Ret Loss (-) Rs.6500 Ret Loss (-) Rs.6500 Ret Loss (-) Rs.80520 Ret Loss (-) Rs.80520 Ret Loss (-) Rs.4548 Ret Loss (-) Rs.6458 Ret Loss (-) Rs.61468 Ret Loss (-) Rs.61468 Ret Loss (-) Rs.61468 Ret Loss (-) Rs.61614 Ret Loss (-) Rs.61614 Ret Loss (-) Rs.6800 Ret Loss (-) Rs.61614 Ret Loss (-) Rs.6800 Ret Loss (-) Rs.6800 Ret Loss (-) Rs.6800 Ret Loss (-) Rs.61614 Ret Loss (-) Rs.6800 Ret Loss (-) Rs.77906 Ret Loss (-) Rs.78001 Ret Loss (-) Rs.7906 Ret Loss (-) Rs.7906 Ret Loss (-) Rs.80520 Ret Loss (-) Rs.80520 Ret Loss (-) Rs.80520 Ret Loss (-) Rs.80520 Ret Loss (-) Rs.2429 Ret Loss (-) Rs.2429 Ret Loss (-) Ret L		(-)			2 0070	·Rs 61756
Cross Profit Cros					·Rs O	
Installments Company	Net Doss	()	.113.00100		.165.00	
Isiting.	6) Analysis for member	"F" (Rou	and 6) or item (5) in		(-)	
Undiscounted Bid Value	· · · · · · · · · · · · · · · · · · ·	r (Nou	ind o) of item (5) in			
At funds discounted at 5%-11% Winning Bid	0	·Dc 7	5 000	Net Loss	(-)	.Rs.0002
At funds discounted at 36% Winning Bid :Rs.75675 Winning Bid :Rs.65977 Dividend Interest :Rs.00297 Dividend Interest :Rs.00527 Gross Profits :Rs.75972 Gross Profit :Rs.66804 Installments (-) :Rs.80520 Installments (-) :Rs.68800 Net Loss (-) :Rs.4548 Net Loss (-) :Rs.4548 (-) :Rs.4548 At funds discounted at 5%-11% with Undiscounted Bid Value :Rs.88,000 Winning Bid :Rs.72075 Winning Bid :Rs.688,000 Dividend Interest :Rs.00576 At funds discounted at 36% Winning Bid :Rs.61468 Installments (-) :Rs.80520 Dividend Interest :Rs.00146 Net Loss (-) :Rs.68800 Net Loss (-) :Rs.68800 7) Analysis for member "H" (Round 8) Item 7 on list with Undiscounted Bid Value :Rs.77,000 At funds discounted at 5%-11% Winning Bid :Rs.7806 At funds discounted at 36% Dividend Interest :Rs.00185 Winning Bid :Rs.77906 At funds discounted at 36% Dividend Interest :Rs.78091 Dividend Interest :Rs.80520	Olidiscoulited Bid value	.NS.73	3,000	At funds discounted a	+ 506 1106	
Winning Bid :Rs.00527 Dividend Interest :Rs.00297 Gross Profit :Rs.66504 Installments (-) :Rs.80520 Installments (-) :Rs.68800 Net Loss (-) :Rs.4548 Net Loss (-) :Rs.2296 11) Analysis for member "O" (Round 15) Item 14 on list with Undiscounted Bid Value :Rs.88,000 At funds discounted at 5%-11% with Undiscounted Bid Value :Rs.88,000 Winning Bid :Rs.72075 Dividend Interest :Rs.00576 At funds discounted at 36% Gross Profits :Rs.72651 Winning Bid :Rs.61468 Installments (-) :Rs.80520 Dividend Interest :Rs.00146 Net Loss (-) :Rs.68800 Net Loss (-) :Rs.68800 Net Loss (-) :Rs.68800 Net Loss (-) :Rs.7186 7) Analysis for member "H" (Round 8) Item 7 on list with Undiscounted Bid Value :Rs.77,000 At funds discounted at 5%-11% Winning Bid :Rs.00185 At funds discounted at 36% Dividend Interest :Rs.00185 Winning Bid :Rs.64418 Gross Profits :Rs.78091 Dividend Interest :Rs.64869	A + E	CO/			1 370-1170	.D. 75675
Dividend Interest IRs.00527 Gross Profits IRs.75972		0%0	D- 05077	9	·D- 0	
Section Sect	9	D 00			:Rs.00	
Installments (-) :Rs.68800 Net Loss (-) :Rs.4548		:Rs.00				
Net Loss (-) :Rs.2296						
At funds discounted at 5%-11% with Undiscounted Bid Value :Rs.88,000 Winning Bid :Rs.72075 Dividend Interest :Rs.00576 At funds discounted at 36% Gross Profits :Rs.80520 Dividend Interest :Rs.00146 Net Loss (-) :Rs.80520 Dividend Interest :Rs.00146 Net Loss (-) :Rs.7869 Gross Profit :Rs.61614 Installments (-) :Rs.68800 Net Loss (-) :Rs.7186 7) Analysis for member "H" (Round 8) Item 7 on list with Undiscounted Bid Value :Rs.77,000 At funds discounted at 5%-11% Winning Bid :Rs.77906 At funds discounted at 5%-11% Winning Bid :Rs.64418 Gross Profit :Rs.00185 Wingend Interest :Rs.00185 Oross Profit :Rs.80520 Net Loss (-) :Rs.78091 Dividend Interest :Rs.0520 Net Loss (-) :Rs.80520 Rs.782429				Net Loss	(-)	:Rs.4548
At funds discounted at 5%-11% with Undiscounted Bid Value :Rs.88,000 Winning Bid :Rs.72075 At funds discounted at 36% Gross Profits :Rs.72651 Winning Bid :Rs.61468 Installments (-) :Rs.80520 Dividend Interest :Rs.00146 Net Loss (-) :Rs.7869 Gross Profit :Rs.61614 Installments (-) :Rs.68800 Net Loss (-) :Rs.68800 7) Analysis for member "H" (Round 8) Item 7 on list with Undiscounted Bid Value :Rs.77,000 At funds discounted at 5%-11% Winning Bid :Rs.77906 At funds discounted at 36% Dividend Interest :Rs.00185 Winning Bid :Rs.64418 Gross Profits :Rs.78091 Dividend Interest :Rs.80520 Gross Profit :Rs.64869 Net Loss (-) :Rs.2429	Net Loss	(-)	:Rs.2296			
Winning Bid :Rs.72075 Dividend Interest :Rs.00576 At funds discounted at 36% Gross Profits :Rs.72651 Winning Bid :Rs.61468 Installments (-) :Rs.80520 Dividend Interest :Rs.00146 Net Loss (-) :Rs.61614 Installments (-) :Rs.68800 Net Loss (-) :Rs.68800 Net Loss (-) :Rs.7186 7) Analysis for member "H" (Round 8) Item 7 on list with Undiscounted Bid Value :Rs.77,000 At funds discounted at 5%-11% Winning Bid :Rs.77906 At funds discounted at 36% Dividend Interest :Rs.00185 Winning Bid :Rs.64418 Gross Profits :Rs.78091 Dividend Interest :Rs.80520 Gross Profit :Rs.64869 Net Loss (-) :Rs.2429				· •		
Dividend Interest IRS.00576 At funds discounted at 36%		%-11%	D =00=5	with Undiscounted Bio	d Value :R	s.88,000
Cross Profits :Rs.72651 Winning Bid :Rs.61468						
Installments (-) :Rs.80520 Dividend Interest :Rs.00146		:Rs.00			t 36%	
Net Loss (-) :Rs.7869 Gross Profit :Rs.61614 Installments (-) :Rs.68800 Net Loss (-) :Rs.7186 7) Analysis for member "H" (Round 8) Item 7 on list with Undiscounted Bid Value :Rs.77,000 At funds discounted at 5%-11% Winning Bid :Rs.77906 At funds discounted at 36% Dividend Interest :Rs.00185 Winning Bid :Rs.64418 Gross Profits :Rs.78091 Dividend Interest :Rs.80520 Gross Profit :Rs.64869 Net Loss (-) :Rs.2429						
Installments (-) :Rs.68800 Net Loss (-) :Rs.7186	Installments	(-)	:Rs.80520		:Rs.06	
Net Loss (-) :Rs.7186	Net Loss	(-)	:Rs.7869	Gross Profit		:Rs.61614
7) Analysis for member "H" (Round 8) Item 7 on list with Undiscounted Bid Value :Rs.77,000 At funds discounted at 5%-11% Winning Bid :Rs.77906 At funds discounted at 36% Dividend Interest :Rs.00185 Winning Bid :Rs.64418 Gross Profits :Rs.78091 Dividend Interest :Rs.00451 Installments (-) :Rs.80520 Gross Profit :Rs.64869 Net Loss (-) :Rs.2429				Installments	(-)	:Rs.68800
with Undiscounted Bid Value: Rs.77,000 At funds discounted at 5%-11% Winning Bid: Rs.77906 At funds discounted at 36% Dividend Interest: Rs.00185 Winning Bid: Rs.64418 Gross Profits: Rs.78091 Dividend Interest: Rs.00451 Installments: Rs.64869 Net Loss (-) :Rs.2429				Net Loss	(-)	:Rs.7186
Winning Bid :Rs.77906 At funds discounted at 36% Dividend Interest :Rs.00185 Winning Bid :Rs.64418 Gross Profits :Rs.78091 Dividend Interest :Rs.00451 Installments (-) :Rs.80520 Gross Profit :Rs.64869 Net Loss (-) :Rs.2429	7) Analysis for member	" H " (Rοι	ınd 8) Item 7 on list			
At funds discounted at 36% Winning Bid Cross Profits Dividend Interest Cross Profits Cross Profit Cross Prof	with Undiscounted Bid V	alue :Rs	s.77,000	At funds discounted a	t 5%-11%	
At funds discounted at 36% Winning Bid :Rs.64418 Dividend Interest :Rs.00185 Gross Profits :Rs.78091 Installments :Rs.80520 Gross Profit :Rs.64869 Net Loss (-) :Rs.2429				Winning Bid		:Rs.77906
Winning Bid :Rs.64418 Gross Profits :Rs.78091 Dividend Interest :Rs.00451 Installments :Rs.80520 Gross Profit :Rs.64869 Net Loss (-) :Rs.2429	At funds discounted at 3	6%		9	:Rs.0	0185
Dividend Interest :Rs.00451 Installments (-) :Rs.80520 Gross Profit :Rs.64869 Net Loss (-) :Rs.2429			:Rs.64418			
Gross Profit :Rs.64869 Net Loss (-) :Rs.2429		:Rs 00			()	
***************************************		.10.00				
1115tainnetits (*) <u>175.00000</u>		(_)		1100 2000	(*)	.1.0.2 120
	mstamments	(-)	.10.0000			

12) Analysis for member "P" (Round 16) Item 15 on list with Undiscounted Bid Value :Rs.90,000

At funds discounted at 36%

 Winning Bid
 :Rs.61272

 Dividend Interest
 :Rs.00102

 Gross Profit
 :Rs.61374

 Installments
 (-)
 :Rs.68800

 Net Loss
 (-)
 :Ps.7426

At funds discounted at 5%-11%

 Winning Bid
 :Rs.78930

 Dividend Interest
 :Rs.00131

 Gross Profits
 :Rs.79061

 Installments
 (-)
 :Rs.80520

 Net Loss
 (-)
 :Rs.1459

12) Analysis for member "9" (Round 17) Item 16 on list with Undiscounted Bid Value :Rs.92.000

At funds discounted at 36%

Winning Bid :Rs.61051 Dividend Interest :Rs.00059

 Gross Profit
 :Rs.61110

 Installments
 (-)
 :Rs.68800

 Net Loss
 (-)
 :Rs.7690

At funds discounted at 5%-11%

Winning Bid :Rs.80049 Dividend Interest :Rs.00078

Gross Profits :Rs.80127
Installments (-) :Rs.80520
Net Loss (-) :Rs.393

13) Analysis for member "R" (Round 18) Item 17 on list

with Undiscounted Bid Value: Rs.93,000

At funds discounted at 36%

Winning Bid :Rs.60152 Dividend Interest :Rs.00038

 Gross Profit
 :Rs.60190

 Installments
 (-)
 :Rs.68800

 Net Loss
 (-)
 :Rs.8610

At funds discounted at 5%-11%

Winning Bid :Rs.80212

Dividend Interest :Rs.00051

 Gross Profits
 :Rs.80263

 Installments
 (-)
 :Rs.80520

 Net Loss
 (-)
 :Rs.257

14) Analysis for member "S" (Round 19) Item 18 on list

with Undiscounted Bid Value :Rs.94,000

At funds discounted at 36%

Winning Bid :Rs.59,267

Dividend Interest :Rs.00018

Gross P.c⁶t :Rs.59285
Installments (-) :Rs.68800
Net Loss (-) :Rs.9515

At funds discounted at 5%-11%

Winning Bid :Rs.80212

Dividend Interest :Rs.00025

 Gross Profits
 :Rs.80395

 Installments
 (-)
 :Rs.80520

 Net Loss
 (-)
 :Rs.125

15) Analysis for member "T" (Round 20) Item 19 on list

(-)

:Rs.10470

with Undiscounted Bid Value: Rs.95,000

At funds discounted at 36%

Net Loss

Winning Bid :Rs.58,330

Dividend Interest :Rs.00000
Gross Profit :Rs.58330
Installments (-) :Rs.68800

At funds discounted at 5%-11%

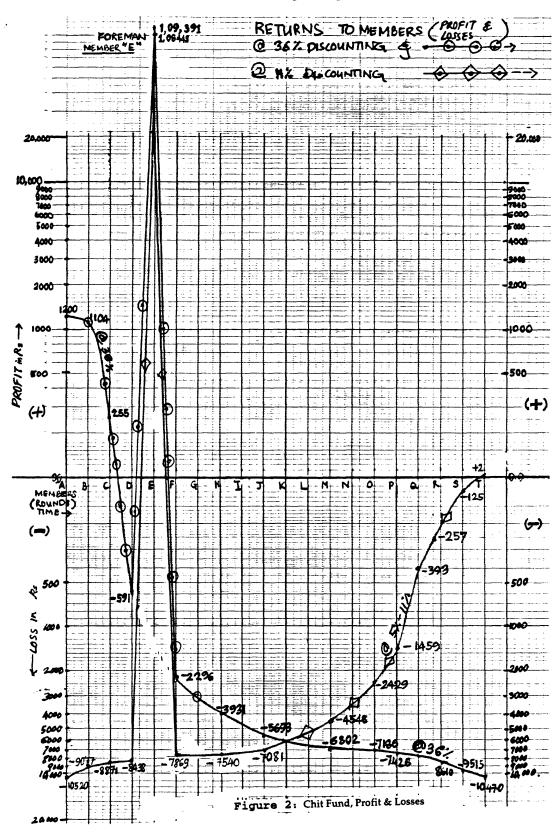
Winning Bid :Rs.80522

Dividend Interest :Rs.00000

 Gross Profits
 :Rs.80522

 Installments
 (-)
 :Rs.80520

 Net Profit
 (+)
 :Rs.2



ANNEX 5-III: The Committee

Operation of the Committee As mentioned in the main text, the Committee is almost the same as the Chit Fund in its operation, except that the absence of the commission provided to the Foreman. To illustrate its operation, as well as to get a sense of the distribution of surpluses, I have taken selected a committee details of which have been given by my informant in Viswas Nager. This is a Committee of Rs.100,000 with 20 members each contributing Rs.5000 each. As in the case of the Chit Fund illustration, I have listed the members from 'A' to 'T'. Member 'A' takes the first committee bidding Rs.70,000 with a discount of Rs.30,000. As before the cash flow is discounted at two interest rates:36% and a sliding rate of 5-8-11% which I refer to in the text as 11% for simplicity. In this case, the organizer is member 'B' unlike member 'E' of the Chit fund. Thus, 'B' takes the second committee without a discount at Rs.100,000/. Table C provides a detail cash flow for all 20 members. This forms the basis for the Profit/ loss analysis for the following twelve members: A,B,C,D,F,H,J,M,P,R,S,T (marked by "*"). As before, these are selected to capture the trend of bids, and transition points along the bid and profit/loss lines (2)

Table III: Cash flow for rounds for members A to T in a Committee.

Members	COMMITTE E	AMOUNTS		Inst.	over	20	rounds
/Rounds	Un.dis. Val	i=36%	i=Bnk. rate	Dividend	Un.dis. Val	i=36%	i=Bnk.rate
0 A *	70,000	70,000	70,000	()	5000	5000	5000
1 B *	100,000	97,470	99,594	1500	3500	3411	3486
2 C *	72,000	68,402	70,970	()	5000	4750	4929
3 D *	76,000	70,376	74,380	1400	3600	3334	3523
4 E	78,000	70,408	75,558	1200	3800	3430	3681
5 F *	80,000	70,376	76,885	1100	3900	3431	3747
6 G	82,000	70,315	78,178	1000	4000	3430	3813
7 H *	84,000	70,274	79,060	900	4100	3430	3858
81	86,000	70,061	80,220	800	4200	3421	3917
9]•	88,000	69,872	81,373	700	4300	3414	3976
10 K	90,000	69,651	82,503	600	4400	3405	4033
11 L	92,000	69,395	83,606	500	4500	3394	4089
12 M *	93,500	68,741	84,234	400	4600	3381	4144
13 N	94,000	67,360	83,951	325	4675	3350	4175
14 O	95,000	66,357	84,103	300	4700	3283	4161
15 P *	96,000	65,356	84,259	250	4750	3234	4169
16 Q	97,000	64,375	84,399	200	4800	3185	4176
17 R *	98,000	63,386	84,525	150	4850	3136	4183
185*	99,000	62,419	84,645	100	4900	3089	4189
19 T *	100,000	61,456	84,769	50	4950	3042	4196
		1,386,050	1,627,212			69,543	81,442

Profit/Loss Analysis for Selected Members.

Pront/Lo	oss An	alysis for Selec
1) Analysis for l	Member	· 'A'
(Round 1) Item		
Bid: Rs.70,0		•
First Bid remain @36%		scounted
Output		:Rs.70,000
Input	(-)	:Rs.69,543
Divid. Interest	(+)	:Rs.()
Profit		:(+) Rs.457.
@ 11%		
Output		:Rs.70,000
Input	(-)	:Rs.81,442
Divd. Interest	(+)	:Rs.()
Loss:		:(-) Rs.11,442
2) Analysis for l	Member	"B"
(Round 2) Item		
Full Committee:	:Rs.10	00,000
@36%		
Output		:Rs.97,470
Input	(-)	:Rs.69,543
Divid. Interest	(+)	:Rs.877
(Rs.30,000 for o		d)
Profit	SCOUTTE	:(+) Rs.28,804.
@ 11%		(1) 163.20,004.
Output		:Rs.99,594
Input	(-)	:Rs.81,442
Divid. Interest	(+)	:Rs.273
(Rs.30,000 for o	ne	
month @11%, d	iscounte	
Profit:		:(+) Rs.18,425
3) Analysis for	Member	"C"
(Round 3) Item		
Committee:	:Rs.72	
@36%		
Output		:Rs.68,402
Input	(-)	:Rs.69,543
Divid. Interest	(+)	:Rs.798
(Rs.28,000 for o		ع)
month @36%. d:	scounte	:(-) Rs.343.
@ 11%		.(*) K 5.040.
Output		:Rs.70,970
Input	(-)	:Rs.81,442
Divid. Interest	(+)	:Rs.252
(Rs.28,000 for o	ne	
month @11%, d	iscounte	
Loss:		:(-) Rs.10,220
4) Analysis for	Member	"D"
(Round 4) Item		
Committee:	:Rs.76	5,000
@36%		
Output		:Es.70,376
Input	(-)	:Rs.69,543

Divid. Interest

(+)

:Rs.666

```
(Rs.24,000 for one
month @36%, discounted)
Profit
                          :(+) Rs.1499.
@ 11%
Output
                          :Rs.74,380
Input
                 (-)
                          :Rs.81,442
Divid. Interest
                          :Rs.215
                 (+)
(Rs.28,000 for one
month @11%, discounted)
Loss:
                          :(-) Rs.6846
5) Analysis for Member "F"
(Round 6) Item 5 in Listing.
Committee:
                 :Rs.80,000
@36%
Output
                          :Rs.70,376
Input
                          :Rs.69,543
                 (-)
Divid. Interest
                 (+)
                          :Rs.527
(Rs.20,000 for one
month @36%, discounted)
Profit
                          :(+) Rs.1360.
@ 11%
Output
                          :Rs.76,885
Input
                 (-)
                          :Rs.81.442
Divid. Interest
                 (+)
                          :Rs.176
(Rs.20,000 for one
month @11%, discounted)
                          :(-) Rs.4380
Loss:
6) Analysis for Member "H"
(Round 8) Item 7 in Listing.
Committee:
                 :Rs.84,000
@36%
                          :Rs.70,274
Output
Input
                 (-)
                          :Rs.69,543
Divid. Interest
                 (+)
                          :Rs.401
(Rs.16,000 for one
month @36%, discounted)
Profit
                          :(+) Rs.1132.
@ 11%
                          :Rs.79,060
Output
Input
                 (-)
                          :Rs.81,442
Divid. Interest
                 (+)
                          :Rs.137
(Rs.16,000 for one
month @11%, discounted)
                          :(-) Rs.2245
Loss
```

7) Analysis for Member "J"

Table IV: Distribution of total funds

@36%, Y=1,386,050 @5-111%, Y=1,627,212

M e	i=36%		i=5-	11%
br	x	x/y %	x	ж/у %
A	70,000	5.05	70,000	4.30
<u>B</u>	<u>98,370</u>	<u>7.09</u>	99,876	6.13
С	69,150	4.98	71,222	4.37
D	71,042	5.12	74,595	4.58
F	70,903	5.11	77,061	4.73
н	70,647	5.09	79,206	4.86
J	70,157	5.06	81,474	5.00
M	68,884	4.96	84,287	5.17
P	65,437	4.72	84,291	5.18
R	63,424	4.57	84,543	5.19
s	62,437	4.50	84,652	5.20
T	61,456	4.43	84,769	5.20

Profits of Organizer:

At i=36% as Discounting rate
Total funds revolved: Rs.13,86,050
Total returns =Rs.98,370 (Gross Profit)
Net returns= Rs.28,804
(Gross Profits/Total funds)*100 =7.09%
(Net returns/Total funds)*100=2.07%

At i= 5-11% as Discounting rate Total funds revolved: Rs.16,27,212 Total returns =Rs.99,867 (Gross Profit) Net returns= Rs.18,425 (Gross Profits/Total funds)*100 =6.1% (Net returns/Total funds)*100=1.1%

(Round 10) Iten	9 in Lis	ting.		
Committee:	:Rs.88,0			
@36%				
Output		:Rs.69,872		
Input	(-)	:Rs.69,543		
Divid. Interest		:Rs.285		
(Rs.12,000 for or				
month @36%, di	scounted)			
Profit		:(+) Rs.614.		
@ 11%				
Output		:Rs.81,373		
Input	(-)	:Rs.81,442		
Divid. Interest	(+)	:Rs.101		
(Rs.12,000 for or				
month @11%, di	scounted)			
Profit		:(+) Rs.32		
8) Analysis for I	Member "	M''		
(Round 13) Item	12 in Li	sting.		
Committee:	:Rs.93,5			
@36%				
Output		:Rs.68,741		
Input	(-)	:Rs.69,543		
Divid. Interest	(+)	:Rs.143		
(Rs.6,500 for one				
month @36%, di	scounted)			
Loss		:(-) Rs.659.		
@ 11%				
Output		·Do 94 024		
Input	(-)	:Rs.84,234 :Rs.81,442		
Divid. Interest	(+)	:Rs.53		
(Rs.6,500 for one		.1.0.00		
month @11%, dis	scounted)			
Profit		:(+) Rs.2845		
9) Analysis for N	fember "	יים		
(Round 16) Item	15 in Li	sting.		
Committee:	:Rs.96,0			
@36%				
Output		:Rs.65,356		
Input	(-)	:Rs.69,543		
Divid. Interest	(+)	:Rs.81		
(Rs.4000 for one				
month @36%, dis	scounted)			
Loss		:(-) Rs.4106.		
@ 11%				
Output		:Rs.84,259		
Input	(-)	:Rs.81,442		
Divid. Interest	(+)	:Rs.32		
(Rs.4000 for one				
month @11%, discounted)				
Profit		:(+) Rs.2849		

10) Analysis for Member "R" (Round 18) Item 17 in Listing.

Committee:

:Rs.98,000

@36%

Output :Rs.63,386 Input (-) :Rs.69,543 Divid. Interest (+) :Rs.38

(Rs.2000 for one

month @36%, discounted)

Loss :(-) Rs.6119.

@ 11%

Output :Rs.84,525 Input (-) :Rs.81,442 Divid. Interest (+) :Rs.15

(Rs.2000 for one

month @11%, discounted)

Profit :(+) Rs.3101

11) Analysis for Member "S" (Round 19) Item 18 in Listing.

Committee: :Rs.99,000

@36%

Output :Rs.62,419
Input (-) :Rs.69,543
Divid. Interest (+) :Rs.18

(Rs.1000 for one

month @36%, discounted)

Loss :(-) Rs.7105.

@ 11%

Output :Rs.84,645 Input (-) :Rs.81,442 Divid. Interest (+) :Rs.7

(Rs.1000 for one

month @11%, discounted)

Profit :(+) Rs.3210.

12) Analysis for Member "T" (Round 19) Item 18 in Listing.

Committee: :Rs.100,000

@36%

Output :Rs.61,456 Input (-) :Rs.69,543

No Divid. Interest

Loss :(-) Rs.8087.

@ 11%

Output :Rs.84,769 Input (-) :Rs.81,442

No Divid. Interest

Profit :(+) Rs.3327.

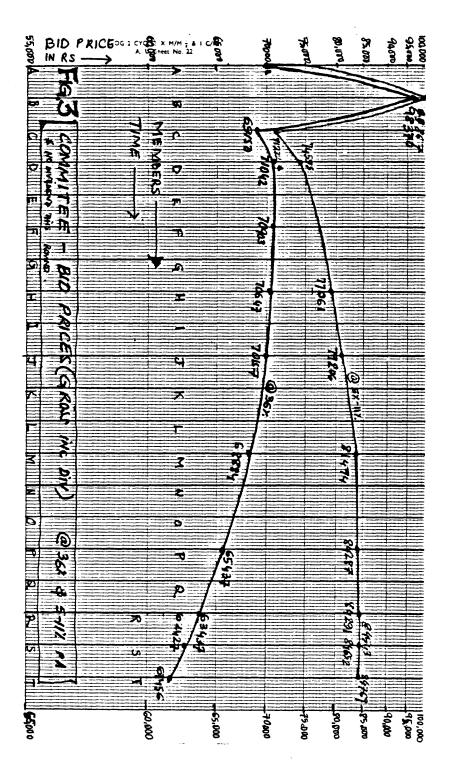


Figure 3:Bid lines in a Committee discounted @36% and 5-11%.

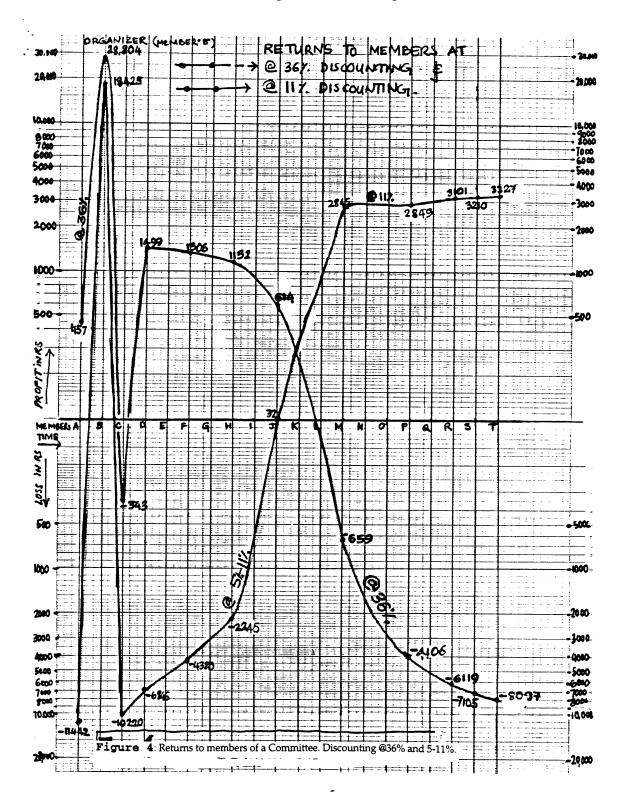


Figure 4: Returns to members of a Committee. Discounting @36% and 5-11%.

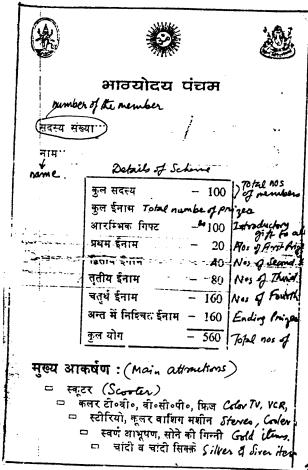
ANNEX 5-IV: The Lucky Draw Brochure of a Lucky Draw from East Delhi

Operation of the lucky draw

I have selected a Lucky Draw which has 20 rounds (similar to the number of rounds in a chit fund and Committee) and with 100 members. This is a actual case from *Geeta Colony*, a lower middle income neighborhood about three Km east of Viswas Nager. *Geeta Colony* has many home based enterprises many of which are involved in three-wheeler motorized taxi repair as well as houses a extensive printing industry. In general, its residents would be of a similar income background as Viswas Nager, and thus this lottery is representative of the ones there.

To maintain a uniformity of nomenclature the first 20 members are termed 'A' to 'T'. The rest of the eighty are termed U(80-100), since their returns are the same. Given below is a re-production of pamphlets from a Lucky Draw schemes. The first of these is used for analysis. Table 6 gives the cash flow between various members in un-discounted, and discounted terms. I have taken, as before, two rates for discounting: One of 36% and the other of the 11% sliding rate. Figure 5. shows the varying profits for all the members A - T. Table 4 gives the distribution of surplus funds at the two discount rates as well as the financier's profit. Table 6 & 7 shows the cash flow for the Financier discounted at 36%/ for each of the 20 rounds and his/her profit at the end of the scheme. Also exhibited is a membership card given out to each member advertising the prizes to be won in the various rounds.

BROCHURE OF A LUCKY DRAW FROM EAST DELHI



Front Brochure

Total number of members: 100
Total number of Prizes:
100 introductory gifts to all
20 First Prizes
40 Second Prizes
80 Third Prizes
160 Fourth Prizes
160 Ending Prizes for all
560 Total number of Prizes

Main Attractions:

Scooter (Vespa Two Wheeler) Color TV, VCR, Washing Machine Gold Coins Silver coins

Annex for Chapter 5

INNER ACCOUNTS PAGE

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माह	प्रथम ईनाम	द्वितीय ईनाम	तृतीय ईनाम	चतुर्थं ईनाम	कुल ईनाम	राशि	दिनांक
上	फ़िज 165 लीटर केल्विनेटर		4x10g.सिक्के	8×5g.सिक्के	15~	400/=	- /h
2	सोने के टॉप्स (6 gm.)	"	,,),	15	سر	2->44/
3	फिलिप्स स्टीरियो (2-in-1)	"	"	"	15	,,	7-8-94 14.
4	1/2 Kg. चांदी		"	,,	15		49-94 12
5	सोने की गिन्नी	"	.,		15	ىد	- Ai
5	सोने की चेन (10¹gm.)	,,	"	7,	15	4	- A
7	सिम्फनी कुलर	"	"	1)	15	,,/	11/2/92 32
8	फिलिप्स स्टीरियो (डेक सहित)	"	"	·,,	15	1	- 7-
9	विडियोकोन वाशिंग मशीन	"	',		15	سد	DAY K
Ю	फ्रिज 165 लीटर केल्विनेटर	"	,,	"	15	حد	5.3-05 A
11	फिज 165 लीटर केत्विनेटर	"	,,)1	15	"	
12	सोने की चेन एवं अंगुठी (18 gm.)	,,	,,	,,	15	1)	
13	सोने के कंगन (18 gm.)	. "	"	"	15	"	
14	सोने का हार (20 gm.)		,	. "	15	1)	
15	वी० सी० पी०	"	. "	"	15		
16	वीं० सीं० पीं०		7,	"	15	11	
17	वी • सी • पी •	,,	,,	"	15	"	
18	कलर टी० वी० विडियोकोन	"	17	11	15	11	
19	कनर टी० वी० विडियोकोन	11	11	"	15	11	
20	स्कूटर	"	;,	1)	15	,,	
				कुल ईनाम	300		

विशेषताएं : - (MAIN POINTS)

वीनना के आरम्भ में प्रत्येक सदस्य को आकर्षक गिपट।

2. योजना के समापन पर शेप 80 सदस्यों को प्रत्येक की दो निश्चित ईनाम, एक सदस्य के द्वारा दी गई कुल राशि 8000/- रु॰ व दूसरा 100/- रु॰ -

प्रथम ईनाम निकलने वाले नम्बर को और कोई किश्त नहीं देनी ।

नियम : - 🖊 🗝

- 1. यह दोजन 100 सदस्यों, बीस महीने व 400/- प्रति माह है।
- प्रथम ईनाम विजेता ड्रा में फिर शामिल नहीं किया जायेगा और प्रथम ईनाम ही हर तरीके से फाइनल होगा अर्थात न तो उन्ते आगे की किश्त ली जायेगी और न ही उन्हें कोई और रकम देय होगी।

Translation:

- 1) Attractive gift for all members at the beginning of this scheme
- 2) At the end of the scheme, the remaining 80 members will definitely get two prizes: The total contribution made by each member amounting to Rs.8000, and an extra Rs.100.
- 3) The first prize winners do not have to pay any additional installments

Rules:

- 1) This scheme has 100 members. It will run for 20 months, and each member's contribution will be $Rs.400\ per\ month.$
- 2) The first prize winner of any round will not participate in subsequent rounds. The first prize will be final in all respects, i.e., neither will this winner have to pay any subsequent installments, nor will he get any further money / gifts.

Neighborhood as Factory

LIST OF PRIZES IN A LUCKY DRAW

Table V: List of prizes in a Lucky Draw. (Translated from Brochure exhibited).

Sn	First Prize	2nd. Prize	3rd. Prize	4th. Prize	Total Prizes	In st.	Sig n
1	Keliventor Firdge,165 Lt. (Rs.5000)	2 Nos. of 20gm Gold Coin (Rs.100)	4 Nos. of 10gm Gold Coin (Rs.50)	8 Nos. of 5gm Gold Coin (Rs.25)	15	40 0	
2	Gold Tops (6gm) (Rs.2500)	11	11	**	15	"	
3	Philps Stereo (Rs.4500)				15	"	
4	1/2 Kg Silver (Rs.3000)				15	"	
5	Gold Guinea 10 gm (Rs.5000)				15	"	
6	Gold Chain (10g) (Rs.5000)				15	"	
7	Symphony evaporative room cooler (Rs.6000)				15	"	
8	Philps Streo Deck (Rs.8000)				15	11	
9	Videocon washing machine (Rs.12,000)				15	11	
10	Keliventor Fridge, 165 Lt. (Rs.5000)				15	"	
11	Keliventor Fridge, 165 Lt. (Rs.5000)				15	.,	
12	Gold Chain 18 gm (Rs.8000)				15	"	
13	Gold Bracelet 18 gm (Rs.8000)				15	"	
14	Gold necklace 20 gm (Rs.9000)				15	"	
15	VCP (Rs.8000)				15	"	
16	VCP (Rs.8000)	\			15	"	
17	VCP (Rs.8000)				15	"	
18	Videocon Color TV (Rs. 17,000)				15	**	
19	Videocon Color TV (Rs. 17,000)				15	"	
20	Auto-Scooter (Rs.21,000)				15	"	
	TOTAL PRIZES			=	300		

Annex for Chapter 5

CASH FLOW FOR FINANCIER

Table VI: CASH FLOW FOR FINANCIER

Months	Gross Inflow	Outflow (-)	Net Inflow	Discount val.@36%	Cum.net Profit.
0	40,000	15,600	24,400	24,400	24,400
1	39,600	3100	36,500	35,576	59,976
2	39,200	5100	34,100	32,396	91,972
3	38,800	3600	35,200	32,595	1,24,576
4	38,400	5600	32,800	29,607	1,54,174
5	38,000	5600	32,400	28,503 .	1,82,677
6	37,600	6,600	31,000	26,582	2,09,259
7	37,200	8600	28,600	23,928	2,33,187
8	36,800	12,600	24,200	19,713	2,52,900
9	36,400	5,600	30,800	24,456	2,77,356
10	36,000	5,600	30,400	23,528	3,00,884
11	35,600	8,600	27,000	20,368	3,21,352
12	35,200	8,600	26,600	19,558	3,40,810
13	34,800	9,600	25,200	18,060	3,58,870
14	34,400	8,600	25,800	18,022	3,76,892
15	34,000	8,600	25,400	17,294	3,94,186
16	33,600	8,600	25,000	16,591	4,10,777
17	33,200	17,600	15,600	10,091	4,20,868
18	32,800	17,600	15,200	9583	4,30,457
19	32,400	27,000	6,42,600	3,94,979	35,532
		6.48,000		5.39.162	

Total Inflow funds: Rs.5,39,162. Financiers' profit: Rs.35,532. or 6%.
Figure IV: Returns to Members in a Lucky Draw. Discounted rates @36% and 5-11%

Neighborhood as Factory

TABLE VIII: CASH FLOW FOR MEMBERS

Table VII: Cash flow for Members

Members	Output	Discounting at @ 36%				Discounting at Bnk. Rate			
		Out. Dis. Val. (A) +100	Input in Rs.400 Mul.	Cum. input (B)	Profit /loss (A-B)	Out.Dis. Val. (A) +100	Input in Rs.400 Mul.	Cum. Input (B)	Profit/l oss (A- B)
A	4700	4700	400	()	4300	4700	400	400	4300
В	2500	2536	389	789	1747	2589	398	798	1791
С	4500	4375	380	1169	3206	4535	394	1192	3343
D	3000	2878	370	1539	1339	3035	391	1583	1497
Е	5000	4613	361	1900	2713	4943	387	1970	2973
F	5000	4498	351	2251	2247	4903	384	2354	2549
G	6000	5244	342	2593	2651	5820	381	2735	3085
Н	8000	6792	334	2927	3865	7629	376	3111	4518
I	12,000	9875	325	3252	6623	11,292	373	3484	7808
J	5000	4070	317	3569	501	4723	369	3853	870
K	5000	3969	309	3878	91	4683	366	4219	464
L	8000	6134	301	4179	1955	7364	363	4582	2782
М	8000	5981	294	4473	1508	7307	360	4942	2365
N	9000	6549	286	4759	1 7 90	8137	357	5299	2838
0	8000	5688	279	5038	650	7182	354	5653	1529
Р	8000	5546	272	5310	236	7121	351	6004	1117
Q	8000	5408	265	5575	(-)167	7060	348	6352	708
R	17,000	11,095	258	5833	5262	14805	345	6697	8108
S	17,000	10,818	252	6085	4733	14633	342	7039	7594
T	21,000	13,004	245	6330	6674	17899	339	7378	10521
U21-80	8100	5077	245	6330	(-)1253	6965			

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DISTRIBUTION OF FUNDS IN A LUCKY DRAW

Table Viii Distribution of funds in a Lucky Draw.

Members	Profits @ 36% Disc.	% as of Total fund	Input at 36%	Output at 36%	Ret.(%) Refer Fig.5	Input at 11%	Output at 11%	Ret. (%)
Α	4300	0.79	400	4700	1075	400	4700	1075
В	1747	0.32	789	2536	221	798	2589	224
С	3206	0.21	1169	4375	274	1192	4535	280
D	1339	0.24	1539	2878	87	1538	3035	97
Е	2713	0.50	1900	4613	142	1970	4943	150
F	2247	0.41	2251	4498	99	2354	4903	108
G	2651	0.49	2593	5244	102	2735	5820	112
Н	3865	0.71	2927	6792	132	3111	7629	145
I	6623	1.2	3252	9875	203	3484	11292	224
J	501	0.09	3569	4070	14	3853	4723	22
K	91	0.01	3878	3969	2	4219	4683	10
L	1955	0.36	4179	6134	46	4582	7364	60
M	1508	0.27	4473	5981	33	4942	7303	47
N	1790	0.33	4759	6549	12	5291	8137	53
О	650	0.12	5038	5688	4	5653	7182	27
P	236	0.04	5310	5546	(-)2.9	6004	7121	18
Q	(-)167	()	5575	5408	90	6352	7060	11
R	5262	0.98	5833	4095	78	6697	14805	121
S	4773	0.84	6085	10818	105	7039	14633	107
Т	6674	1.24	6330	13004	(-)5.5	7378	17899	142
U 21 to 80	(-)1253	()	63 30	5077		7378	6965	(-)5

Total funds @ 36% discounting: Rs.539,162

Organizer's Profit: Rs.35,532. As a % of total funds: 6.59%

FIGURE 5: LUCKY DRAW -- PROFITS AND LOSSES

Neighborhood as Factory

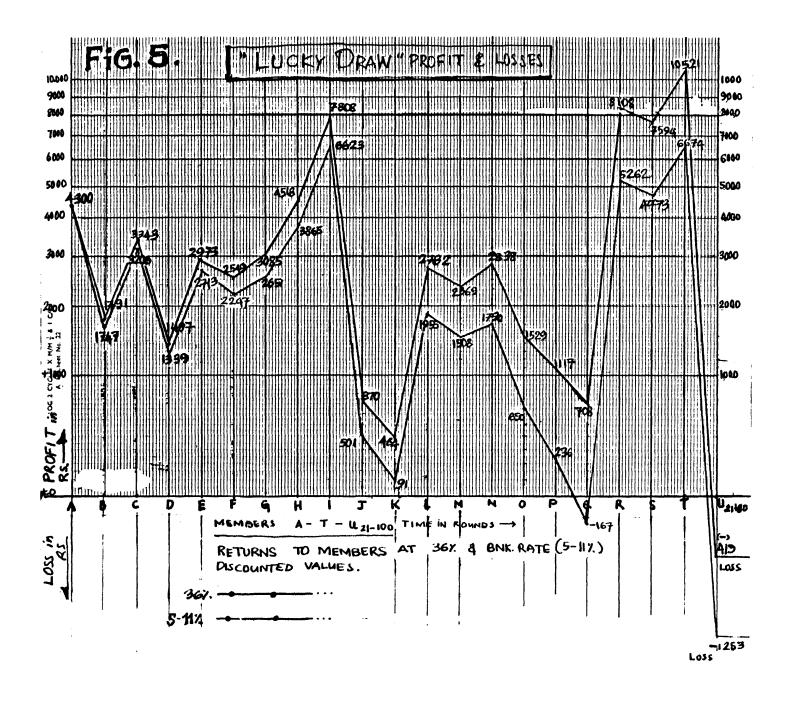
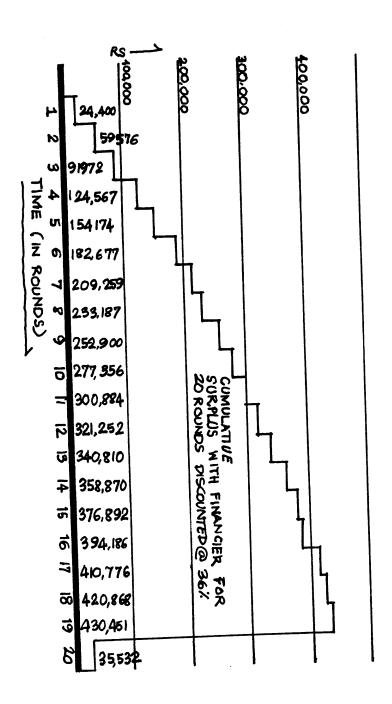


FIGURE 6: LUCKY DRAW -- RETURNS TO FINANCIER



Neighborhood as Factory

ANNEX 5-V

How does the *Marwari* in Viswas Nager compare their *Dalal* based systems with other financing mechanisms? Below is a account of my informant's viewpoints.

Committee: Investments in 'committees', while popular in *Punjabi* communities, are less so with *marwari* and *bania* groups. This is because, they do not provide the flexibility, speed, and low risk characteristics of the *dalal* system. In the committee system, withdrawals can only be made once during entire period 'round', and 'the bidding process serves to further deepen financial insecurity when the money is desperately needed by the entrepreneur. Secondly, the entrepreneur, if a member of many committees, is burdened by taking financial responsibilities himself, with little possibility to delegate them. This can bog down the entrepreneur in tension, affecting his productivity. The entrepreneur is also alone, having few of the supportive relationships, and the borrowing (or lending) is not personalized. Thus, the committee is largely used by those ethnic groups which otherwise do not get access to the *dalal* system of financing.

Banks:Investment in banks are even more inflexible due to the paper work, impersonal relationship, lack of speed, fixed terms of deposits and borrowing, and the usual nonrecognition of the special needs of small entrepreneurs. Banks are used, but normally as a depositary rather than in a strategic way to stabilize or promote production activities. However, even as depositaries, they are incorporated in the local financing system. Most entrepreneurs form groups (either due to trading/production relationships, or personal friendship, or being relatives). This grouping allows for their accounts to be also inter-related informally: The Dalal, and entrepreneurs develop personalized relationships with bank employees to keep a tab of each other's accounts. In case one entrepreneur needs short-term funds, the Dalal will find out informally, from the bank clerk, as to which entrepreneur in the group has funds available. He will contact those entrepreneurs, and will suggest a short term transfer, with the interests paid by the borrower, and the dalal taking on the risks. The main motivator of this deal however, remains the dalal. This 'grouping' of funds provides another source of short term borrowing. The bank system is not involved formally in plays a strategic role. Such groupings also promote the development of 'collective' strength of entrepreneurs. One entrepreneur related the following incident: After being treated in a bureaucratic way by the bank, he threatened to close his account with a complaint (which would officiate a formal inquiry), and got his fellow

Annex for Chapter 5

entrepreneurs to vouch that they would close their accounts, all within hours, if the particular official was not reprimanded.

Investment in shares, land, production or other areas. At a broader level, one important issue links the intention behind an investment, and the production circumstances of an entrepreneur. Most small and medium entrepreneurs, as most in Viswas Nager are, invest to stabilize and upgrade their production capability. This may be directly in the form of adding on machinery, shifting to more profitable production lines, or indirectly in the form of getting extra space, and improving infrastructure / services like electricity connections, or telephones. The funds for these are mostly obtained by selling adjacent properties, or building extra floors or rooms for rent. Since the production environment is constantly changing, it demands that the entrepreneur be constantly alert and responsive at technical, as well as social and political levels. Thus, only very few large entrepreneurs, with sufficient surplus, are interested in investments outside the immediate production arena, in the forms of shares, etc.

Neighborhood as Factory

ANNEX 5-VI

To clearly illustrate my point about the systemic aspects of financing mechanisms, I make a small digression into some perspectives from Bangalore. In this respect, two informants from Bangalore, both experienced and active members in committees in that city, have some interesting information. They describe 'chitties' (as committees are known there) which operate in <u>non-industrial areas</u>. These draw members from a variety of professional, trade and salaried backgrounds.

Ideally, it would have been useful to compare a 'committee' from a non-industrial area in Delhi itself. However, given the underground nature of the cash transactions involved, such details are hard to come by, unless one is participating as a member or have close relatives in such groups.

Firstly they are differences in the operating norms in *chitties* and the committees of Viswas Nager. In the case of *chitties*, instead of the organizer taking the entire second round as in Delhi, he takes the entire <u>first</u> round, <u>and 1.5% of the bid (as his/her commission) from each of the remaining rounds.</u>

Second, chitties rarely have the convention of a limit on the discount -- the safe-guard against members involved in high risk-high return investments (These exist in only the legal Chit Funds in Bangalore as required by law). These two aspects raise the stakes to high levels, considering that these are non-wholesale market committees. For instance, discounts offered even reach 60%, and in cases, remain at an average of 50% for the first five of a total of 30 rounds. Some actual figures illustrate the high stakes involved. For instance, one chittie has the following terms: 25 rounds of Rs. 6000 each, amounting to a committee of 150,000. Another chittie, operates for 30 rounds of Rs. 6000 each, amounting to Rs. 180,000. With the lack of limits on discounts, the bidding especially during the first few rounds is intense -running at an average of 50% for the first five rounds. Even without discounting these to get their real values, the returns are obviously substantial. One of my informants, in addition to being a housewife, is experienced in various capital markets. She is a part-time real estate agent, sometimes acts as a building contractor, and has, at various times, invested capital in gold and shares. This informant described one such chittie, of which she is a member. The chittie (of Rs. 150,000 with 25 members) started in May 1995, with some heavy bidding: the first round in May going to the organizer as per norms. The discount offered for the June bid was as high 54%. The discount of July bid went at 46%, and that of August went at 37% -very high, compared to the committees in Viswas Nager with a maximum norm of 30% and in very few cases, up to 35%. In addition to this committee, she also participates in what she calls a 'Poor Man's Chittie.' Introduced by her gardener, the total chittie is for Rs. 25,000, with 25 members (Rs. 1000 per member). The first and second rounds went at a discount of Rs. 13,000 -- almost 52%. The third round, as per the norms set for that particular chittie, went in total to the organizer. Interestingly, the fourth round went at a bid of 10,000 -- offering

Annex for Chapter 5

members a <u>fantastic 60% and in the same week, the group decided to draw once again resulting in a bid of Rs. 15,000, offering a discount of 40% to members.</u> This informant thought that it was quite possible that there would be another such event when two bids were covered in a single month. This would increase the returns, especially for those staying on (like her) for last few bids. Furthermore, biding at later stages, with such high rates of discount from the earlier rounds, is obviously profitable. Another factor influencing the bidding process is the high degree of anonymity: Most members rarely know all of the other members (except the ones they have introduced). This is contrast to Viswas Nager where the members would usually know all of the other members. This impersonal situation helps to raise bids, as my informant puts it:

"...I don't have to feel bad about the other person I am bidding against.."

With such high bidding, the risk of default also increase. Both informants say that the organizers of committees are very careful to select members along criteria similar to those mentioned in Viswas Nager: personal recommendations, past track record in payments in previous *chitties*, financial stability, ownership of property, and finally, enough diversity in the group to make a successful committee. In spite of this, the organizers sometimes have to 'enforce' the collection of payments by using hired strongmen. As my informant describes:

"...The collection comes in a white Ambassador (a large car) with tinted windows and goons (toughs) inside. While it waits outside, the agent comes to collect the installment.."

With all these safe guards, there are few cases of failure. The second informant recollects that of the 15 committees he has participated in over the last four years, not one has folded up or had serious default problems.

This slight diversion to the operation of committees in certain circuits in Bangalore is necessary because it raises two important issues:

First, if the returns are high for most of the participants, the gross returns seem to be even higher for the organizer -- accumulating the first round as well as a 1.5% of each consequent and bids increasing over the rounds;

Second, these high stakes complementing the high returns seem to be guaranteed by 'non' systemic regulations: The judgment and experience of the organizer, as well as the tinted window 'goons';

About the first issue, if the desperados (the initial lifters of the committee) are involved in such high interest rate borrowing, then it indicates that there are two possibilities. The first is that they are desperate -- much like what my second informant commented:

"..Once, after several round had been over and confident that this time I would take the kitty, I got a rude shock. I was soon left far behind in my bids the contest narrowing down to a doctor, a factory owner and a carpenter. To our surprise, at the end of it all, the carpenter took it all. He had a job contract at

Neighborhood as Factory

hand and needed the money to get the wood..'

In this case, if members continue to be in a unstable financial circumstances with high risks, they will soon cease to be accepted as members. The other possibility is that they could be themselves be lending at much higher returns in particular market segments. For instance, the first informant relates how her gardener offered to invest her surpluses in loans to street hawkers in City Market, one of the main wholesale areas of Bangalore. There, Rs. 100 -- loaned in the morning, is returned to her as Rs. 105 in the evening, giving a return of 1825% PA.! Thus, in a broader perspective, stability at one end of the financial circuit pushes risk to another end -- in this case to street hawkers harassed by the police, dealing with perishable commodities (vegetables), and with few surpluses left over after these harsh interest rates (See SEWA 1988). If this scenario is correct, than an improvement of working conditions could change power relations between the hawkers and their financiers (who in turn, may be borrowing from *chitties* at high interest rates). This would reduce the cost of borrowing and propensity of members of *chitties* to bid with excessive discounts. There are many different possible sets of interventions.

One set could be to improve the security of tenure by demarcating in central city areas, locations for such activities (ibid). This would reduce harassment by the police, as well as provide public services like clean water for hawkers to use, as done in Kuala Lumpur, Malaysia. Another set could be ensuring the free access to raw materials, via a more open distribution policy. A third type of intervention could be a SEWA Bank type of lending operation through trade specific co-operatives (See SEWA 1992). This would provide an alternative source of funds at a cheaper interest rates. A fourth set of interventions could also be of a systemic nature, much like the Viswas Nager case. These could for instance, be centered around clustering of inter-linked economic activities. If this hypothesis is generally correct, than it is possible to visualize a situation where, with less polarized relationships, the chitties in Bangalore might resemble the committees of Viswas Nager. Or in the case of Viswas Nager itself, an improvement of tenure conditions, easier access to electrical power and raw material would push the operations of committees to be even more equitable, while stabilizing fluctuation in the local economy. Just as the Committee is affected by systemic and nonsystemic regulations (translated into conventions), one can visualize the effects on the operation of lucky draws, of alternative investments emerging in the neighborhood. With these 'positive' conditions, the financier might increase the returns to members via the prize amounts, or alternately provide some nominal interest on the deposits of non-prize winning members, which is returned at the end of the lottery.

ANNEX 6A

The Daily life of Councilors

Being a councillor is not an easy job. He has to balance between different levels of municipal officers and residents. Also, walking through the neighborhood checking on public works is like constantly being on the firing line. Oldenburg (1976) provides a particularly vivid account:

"...Most dwellers blamed the contractor. Although the Slum Department as the councillor said, is responsible for supervising them. One man claimed to have seen a contractor selling five bags of cement..(T)he councillor's complaint (on the other hand) was that the section officer had promised to get things done four months ago, and nothing was done. The councillor introduced the superior officer as 'the officer bigger than the section officer' and on a number of occasions said to the dwellers:

"Don't talk to me, tell him (the officer) straight, let him hear."
One old lady persisted in saying:

"Oh no, I am complaining about you (the councillor); it's your responsibility..(ibid:80)

The main point is that the councillor in an important agent of change, to get civic development to happen in the neighborhood. This happens in many ways, via the councillor's "round." This is the process of the councillor making a field tour of his constituency to check on public works being implemented, complaints and 'to keep in touch'. There are personal styles of functioning, but the main objective is a direct 2 inter-face with local development issues¹. Oldenburg distinguishes between different types of rounds:

"The councillor may take a round by geographic area, noting complaints and issuing "orders" to the accompanying officers, or he may do a "subject" round, looking at drains,...(or).. He may walk quickly from place to place, or stop to pass the time of the day with the people, or go

¹ My own meetings with elected representative in the Viswas Nager and Shahdara area revealed several differences in the way elected representatives chose to meet people. One for instance, was more disorganized with people crowding in his residence early in the morning, and waiting for a few minutes of discussion. These were inter-spaced with numerous phone calls to the officers in charge to keep a tab on things. In contrast, another was more systematic. A notice board outside detailed a daily schedule, listing which part of the word he would be located in and times for meetings. Twice a week, he was available at home in the mornings between 7 to 9, while on the other five days, the morning were spent in his constituency.

systematically from house to house..'(Oldenburg Op.cit.p.83).

In many ways, the councillor is responsible to ensure that public institutions are responsive to the felt needs of residents. This is in the way he brings the government to the door step of the people (ibid:75). Here in fact, we seen the way a porous bureaucracy being played out in the field. Oldenburg notes this institutional responsiveness in detail, by specifying that the concerned officials accompany the councillor²:

'.There were five people who, with very few absences, were present on every round: The councillor, the two ASIs (Assistant sanitary Inspectors), the chief political worker (and personal friend) of the councilor, and the councilor's secretary "P.A." (personal assistant) whose job it was to keep the book in which complaints and observations were entered, including complaint date and date of action taken. In addition, the Works Department section officer was present on six rounds of 34..the Slum Department section officer on four, the drainage Department section officer on three, the water department section officer on one; and two more senior officers on three rounds...The "Inspection" is a sort of "super round" on which the most senior officers of the zone are called and which usually attempt to cover the entire ward... The Inspection, unlike the round, has a sizeable political component: It is considered part of the councillor's prerogative to be able to "call" the officer's (from the Zonal Assistant Commissioner on down) and to display them, as it were, in his ward..'(1976:84-85,90)

One general conclusion that we can draw from Oldenburg's detail work is that the councillor is one of the main guiding force behind civic improvement on a day to day basis. The local political interface between the administration and the public is particularly important in a situation when the Master Planning process has little opportunities for real public participation, and even the regularization procedures which incorporate these features are skipped over³. In this situation, it is of little

² These officers are directly concerned with the issue at stake, discussed previously in the morning meetings at the councilors residence, and scheduled as a site visit during the round. Information by Mr. K.S. Gujral, Cong.I. Councillor, Jangpura constituency, New Delhi.

³ M.N. Buch is more specific in his criticism of the planning and administrative process, blaming the lack of transparency and participatery approach in the regularization policy and the Master Planning process (Buch 1985). Similarly, in her three case studies, Banerjee shows that many of the procedures of regularization have been skipped, especially those relating to publication of the regularization plan and its public review (Banerjee

surprise that the planning process can quickly turn into one that is geared towards the elite living in parts of the city that are distinct from where the poor live. The common day to day reality of small entrepreneurs is that their access even to land, services, infrastructure, leave alone finance, raw material, and technological support, is restricted.

To understand the link between the neighborhood economy and its politics more accurately, I outline the different ways elected representatives (especially councilors) affect the regularization of un-authorized colonies like Viswas Nager, with a powerful local economy.

<u>a) Initiating regularization:</u> Residents put pressure on the administration to initiate regularization of the neighborhood through councilors. For the councilors, this is an important way to build up credibility as well as a support base to substantiate their representation to higher political levels -- Members of legislative Assembly (MLA), Member of Parliament (MPs) and Ministers or Party Presidents. In some cases, they can take the case directly to the administration, but usually this done through a higher political level⁴. Thus, councilors and other politicians intervene to:

- i) Get the administration to announce a new 'cut-off' date;
- ii) Get neighborhoods listed for regularization;
- iii) Negotiate the amount, terms & conditions of development charges that resident need to pay public authorities for the upgrading of services;
- iv) Initiate development by the various public bodies in charge for water, sewer, and electricity lines. Later this may be followed by road upgrading, as well as electric power and phone connections; and,
- v) Supervise the implementation program of infrastructure and services.

^{1994:}Table 5, pg 33).

⁴ While an approach might be at an individual level, the selection of the person depends upon the issue and how that person is connected to decision making. For instance, a councillor could be approached to feed a representation in one of the six municipal committees: 1) The Standing Committee (the most important with financial powers); 2) The rural areas committee, 3) The Education Committee, 4) The Delhi Electric Supply Committee; 5) The Delhi Transport Committee, 6) The Delhi Water Supply and Sewage Disposal Committee. Each of these have six to nine members, of which four to six are councilors. The rest are technical experts who are nominated by the central government. For a detail of the various committees and the structure of the Municipal Corporation of Delhi see: Oldenberg:317, & pp 269-327.

The councillor's efforts are supported by associations and federation, as well as lower level party workers and members of the party's youth wings. Together they help to consolidate resident concerns about the 'staging' of development, help to organize the payment of development charges, follow up action in the local administrative circles, and to reduce harassment by police.

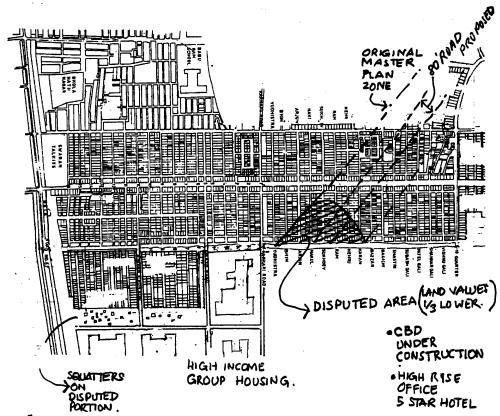


Figure 1: Disputed portions in Southern Part of Viswas Nager.

<u>b)</u> Sorting out conflict with the master plan: In many cases, an issue in the regularization process, is that parts of the neighborhoods come in conflict with the master plan. Thus, while a portion may exist on the ground as housing, the master

plan might have designated this as a green space, or a road cutting through⁵. The administration attempts to demolish the 'non-conforming use' -- setting off a serious conflict with residents who have settled in this area. At times, when the master plan has legally allocated the land for upper income housing or other projects, these conflicts are sharpened because local groups have to now compete for scarce public resources with well placed and influential groups whose claims over these resources are already strengthened by the planning process⁶. In this arena, elected representatives assisted by associations and federations, help to consolidate claims of residents. Thus in a situation where master plan allocations contradict what already exists, and when planning and administrative institutions are generally co-opted by more elite groups, these political processes are critical to subvert these threats.

c) Improving access to land by poor groups: Elected representatives play an indirect but important role in the access to land by poor groups. Since the regularization process depends upon the accumulation of political clout by residents, developers and promoters lower land prices in the initial stages to attract settlement by low income groups with very modest means. In a sense, they trade the political clout of these initial residents against lowered land prices⁷. Later, with legalization and public upgrading of infrastructure and services, they recoup their profits by the

⁵ This is actually the case in Viwas Nager, whereby a 80' wide road was proposed to pass through it according to the DDA's Master Plan. Although the road is not constructed, as of September 1995, the building structures located here are mostly in mud mortar in contrast to the surrounding houses in brick and cement. Plot values are almost a third as compared to the adjoining plots. The low land prices are also because the DDA did carry out some demolitions here in an attempt to reclaim land for the 'CBD' project adjacent to Viswas Nager.

⁶ Sarin (1982:182-249) discusses the class bias of planning in detail and the various strategies and resources poor groups use to safeguard their situation especially of employment. Indian society is highly fractured along caste and class lines. At a more subliminal level, planners, administrators, and senior technical staff are most often from a different class of society. Few of these groups actually live in areas where the poor live, use social and transport facilities that they use, and participate directly in the economic activities which drive the so called 'slum areas'. For a general discussion on this issue see Brahme 1990; Bidwai 1995. Politics too is affected by these cultural aspects. Many local politicians with representation from middle class areas openly support slum demolition as the need for a beautiful city. However, it is also politics that cuts through these social norms to get development in.

⁷ This possibility is very important for the financing of land developers. Most developers, except for very large companies, need to maintain a steady cash flow. Thus the staging of plot sales is critically important. Also, it has been well documented that the price of land is not only affected by infrastructure investments, but also increased security of tenure brought about by public declarations of legalization, off-site development works, site level electrification. See. Benjamin 1993.

increased land values of unsold plots. When the land market transforms into various property markets, the developers often become, or have close financial links with property agents.

Low income groups in turn, get access to undervalued but large sized plots in the initial stages of settlements. Although infrastructure levels might be minimal in these periods, they can be upgraded and subdivided as the neighborhood consolidates and the residents can develop savings. Initially, as discussed in chapter 2, simple manufacturing activities are undertaken. Later. as infrastructure and services improve, more sophisticated manufacturing can take place -much as it has in present day

The secretary of the residents welfare association explained me why lower middle and lower income groups to seek housing in areas such as Shashi Garden. The main reason according to him, is the low 'entry costs' brought about via local politics and organizing, and the possibility of ownership of a plot of land which can be upgraded in the future. For instance, in the early seventies, a one bedroom set on a 100 sq.yd. plot was rented in 1970 for Rs.200/Month, annually coming to Rs.2400/ a month. Alternately, a person could buy a 100 sq.yd. plot @ Rs 12/sq.yd. for Rs.1200. The cost of a one room plot was as follows:

Cost of construction of a 10'*10' room = Rs.800--(a) 25 Stone slabs: Rs.140 Beams wooden:Rs.160 (4nos) Total with labor in mud mortar: 1500/ Hand pump: Rs.200/

Total land and building comes to Rs.2700/. By the mid-seventies, a plot land costs: Rs.6500 to 7000 for a 100 sq.yd. plot. In contrast, in 1974 the official price of a DDA flat was Rs.38,000 to 40,000/ in the Low Income Group category. Few people can get it through the allocation system. The market value for the same flat was however Rs.125,000.

Access to plots in neighborhoods like Shashi Garden is not easy, and requires residents to organize together and round up local politicians and to avoid demolition. However, this is also not impossible since as he says 'everyone is doing it'. They are helped along in this process by the developers, who are also keen that their sub-division gets regularized as soon as possible.

1 Access to a plot in Shashi Garden vs a DDA low income flat

Viswas Nager. Also, many of these residents can sell or rent part of all of their plots to manufacturing or its related uses.

Thus, local politicians play a critical role in translating the 'accumulated clout' of these early settlers into legalization and extension of services in the neighborhood. Thus, political processes indirectly strengthen the hands of the early residents in

negotiating with developers for lower prices8.

<u>d) Thwarting evictions</u>: As cites grow, land especially in central city locations near employment sources, comes under intense competing demands by public agencies as well as private groups. Since most low-income settlements are unrecognized by the mainstream planning process and in a situation of forced illegality, high income groups often use the official mechanisms to evict settled groups. Local politicians play an important role because evictions of these groups undermine the political future of their voting blocks⁹. When the local democratic process is stifled, this protection is diminished and poor groups become easily vulnerable¹⁰. This political support is important because evictions obviously bring about untold human suffering¹¹. The impact on the economy is equally bad and long term. First, evictions destroy investments made in tools, machinery, stocks, severely disrupting the local economy (Mishra et.al 1982)¹². Second, along with pushing the poor out, they push

⁸ One of the case studies presented in this chapter (Blocks 28-29 in western Viswas Nager), show that resident groups also use political pressures to get developers to sell empty plots as these often are used as garbage dumps and pose a threat to security. Also, having more people means that pressures can be built to get public provision of infrastructure and services.

⁹ This local politics can be very complicated sometimes when rival political groups instigate eviction of settlers supporting their opposing political candidate. In other cases, the elected representative might promote the demolition of a part of his neighborhood which might be supporting his rival candidate.

¹⁰ For instance, the declaration of a state of internal emergency between 1975 to 1977 allowed the central government to undertake large scale demolitions and resettlement of poor families in the capital, as well as several other cities. Local political reaction was eliminated by police force. The case of Shashi Garden related previously is a good example of how the organization of 16 residential associations as a larger federation FOAPEC was instrumental to avoid demolition. For a eyewitness account of the emergency actions see Dayal (1980). For a contrasting viewpoint justifying these actions as needed for beautification see: Jagmohan (1976).

¹¹ In Delhi, as well as other cities, eviction is undertaken by using brute police force, often resorting to firing into protesting crowds. Often working days, and mid-mornings are chosen when male residents are out at work. Compensation is minimum, and often gets siphoned off mid-way within the distribution bureaucracy. Also, because of the speed of events, amid the chaos, renters who cannot 'prove' their stay there, are often the worst victims as they cannot claim any compensation available. For a detailed account of the politics of eviction see Sarin 1982.

 $^{^{12}}$ The authors describe the impact of resettlement of poor groups on their economic circumstances and employment opportunities following their eviction from central city locations.

out their economy -- replacing their economy by a more corporatized one 13.

5) Resolving local disputes: Finally, elected representatives, association representatives and locally acknowledged 'elders' play an important role as mediators in the internal disputes of neighborhood life. As an industrial district evolves, along with relationships being established between entrepreneurs and residents (many of whom are also entrepreneurs) there are also conflicts. This is inevitable because production is carried out in close quarters of living environments, as well as the wide cultural gap that sometimes exist between unskilled labor working in the home based factories and upper middle income families living above. While the police may be called in some cases, elected representatives are important to settle disputes amicably. Similarly, there are always issues of noise, vibration, and air pollution. Rather than only depending upon inspectors from the pollution control department, affected residents use social pressure, and appeal to associations and local politicians as a way to stop pollution via a workable resolution. Another example is the implementation of local conventions of not operating machines during evening hours to avoid power disruptions. Here again, elected representatives and office bearers play an important role in checking non-compliance. In case a conflict is a serious one and remains unresolved in spite of local mediation, and it is decided to appeal to public authorities, then politicians can be called upon to ensure that the concerned public agency does act according to its rules and procedures¹⁴.

After this description of councilors in the general civic development of unauthorized colonies, I now turn to ways in which councillor's actions affect the local economy. This is especially important in the case of industrial clusters specializing like in the case of Viswas Nager. Here, one major issue is that of access to electrical

¹³ For example in Delhi, many commercial authorities sponsored or built by development authorities have been on land which was previously occupied by squatters. While the commercial centers cater to private and public corporate interests, the resettled squatters have to begin their economic life in deprived surroundings.

Oldenberg mentions in several places that his main informant, the councilor, kept a distance from 'Police cases'. However, in almost of my meetings with councilors, the e was invariable a couple of cases of fights or accidents involving the police. In all cases, the councilor tried to settle things internally, and if not than went strictly by the law.

The first situation concerns a case of resolution of disturbance by the loading and unloading goods from trucks, large vans into factories. Invariable this is a noisy process, especially if trucks come in late at night. This is usually because they are only allowed to use certain internal city routes at off-peak hours, or if they are coming in from long distances. To resolve this situation, residents and their association representatives met with entrepreneurs and their associations. They decided that these operations would be undertaken only during the day shifts, and no operations undertaken between 10 PM to 6 AM.

The second situation relates to a vibration problem. Here, a family staying above a factory (rented out) suffered from vibrations during the night time when machines below were operated. The factory owners said that they were forced to operate machines then because electricity supply often broke down during day hours and they suffered extensive losses. It took at least 2 hours to get the heaters to the required temperatures before production could start, by which time another electricity breakdown would occur. To resolve this situation, the association was called in. After reviewing the issue, they analyses the production process and tied down the vibration to a particular grinder. It was agreed that the factory would not operate that grinder at night.

The third situation relates to a mis-match between families and unskilled labor force who work in factories locating below residential units. Often, the latter resort to drinking especially during evening hours creating an un-pleasant situation for female members of households. Here the association stepped in to get factory owners to discipline the labor.

The fourth case relates to air pollution caused by factories heating their compounds, affecting families living above. Here, in this case, the association resolved that these factories would use high chimneys to avoid pollution at the lower heights.

The aim here is to emphasize the importance of the political and participative process in the way 'convention' or local agreements come into being as a way to regulate the functioning of local society. Legal statutes could build on these conventions to have greater impact because they would account for local realities, as well as enjoy greater local sanction. At a broader conceptual level, these conventions form a key part of the local regulatory environment.

2 Resolving local disputes

power. In Chapter 3 on the evolution of manufacturing in Viswas Nager, I had shown that some firms (for instance those involved in plastic recycling, compounding, enamelling) require specialized infrastructure and services like new transformers, heavy duty trunk cables, and higher electricity loads. Other firms, like those in copper wire drawing, were more moderate in their power requirements, although they still required larger plot sizes and if possible locations where trucks and vans could easily unload their goods. Of these firms involved in copper wire drawing, some of the larger ones would definitely think of moving into aluminum wire drawing, again raising them in the same category as the plastic compounding and enamelling firms. All these cases contrast firms which can function quite reasonably with power loads that are

conventionally available for residential usage. This situation is reinforced by Chapter 4 descriptions of Viswas Nager's differentiated land markets sought out by different kinds of firms. These firms, who need infrastructure and services that go beyond the conventional upgrading programs, obtain these essentially via the various industrial licensing schemes. Electrical loads (capacities) allocated in most unauthorized colonies are lower than their legal counterparts.

The main way firms get access to a stable source of electricity is by a municipal license. This is especially for firms requiring a heavy duty 'power' or a 'three phase connection' ¹⁵. Similar to obtaining basic infrastructure and services, the announcement of licensing schemes that allow industrial use is a highly politicized process. To fully understand this politics, it is necessary to briefly understand the regulatory environment. Regulations, especially those concerning land use and access to electrical power in 'non-conforming' areas (residential areas) vary between different types of neighborhoods: Un-authorized colonies (administered by the MCD/DDA), urbanized villages (administered by the MCD), refugee housing (administered by the MCD), and 'planned' areas like mass housing or plotted development (under the MCD/DDA).

Figure 2 below, lists the various types of factory licenses available for manufacturing firms locating in various non-conforming areas. Some of the licenses are spatially defined. For instance, some entrepreneurs locate along major roads or in particular blocks in these neighborhoods that have been declared as 'Local Commercial Areas' (LOCA). This gives them access to higher loads of electric power, and some form of legality to undertake production¹⁶. Since few by-laws and regulations apply there, and electric power connections are legally available, production can start with a vigor few other places can match.

¹⁵ One can illegally draw electric power only to a limit. Secondly, even with a legal connection, a firm would usually have to draw loads in excess of what is legally allowed, because the licensed load is very low.

 $^{^{16}}$ A similar case is that of some entrepreneurs who hire 'halls' within the many urbanized villages in the city.

Fig.2: INDUSTRIAL LICENCES IN NONCONFORMING AREA IN DELHI

LOCAL
COMMERCIAL
AREA

Unauthorized colonies

- *Local commercial areas are identified by the DDA / MCD and the Ministry of Rehabilitation periodically -- usually main roads or on declared `Light Industrial Areas'
- * Power load restriction is upto 7.5 HP
- * Licence is expandable and promotional
- *Location not allowed adjacent to any medical clinic
- * Includes light industry, light mechanical workshop, repair shops, cooling and refrigeration plants, and service trades.

URBAN VILLAGE

- * Village to be in urban areas
- * Typical trades allowed are: Lentil, rice, flour mills, cotton earding.
- * Power load is upto 20HP and maximum numbers of workers allowed is 10
- * Expandable licence.
- * No Licence needed if the unit is inside the `Laldora' (village built up territory) and if power consumption is less than 20 HP

HOUSEHOLD INDUSTRY

- * Entrepreneur operating from dwelling unit
- * Power Load allowed upto 2 KW (15-20 HP), raised from 1 KW
- * Maximum number of workers: 4
- * Licence is granted to listed 38 trade groups of D.F.C list
- * Permissible on all floors except basement
- * Enterprise should not be more than 300 sq.ft area.

HEATING & COOLING LOADS

* For enterprises located on main roads with electrical loads upto 11 KV: A/c showrooms, restaurants, clinics, automaintaining shops.

AD-HOC REGISTRATION

- * For registration purpose of units in nonconforming areas functioning in an unauthorized way without any licence. Units which have come up upto (declared cut off date by Govt.) are eligible (Proof of date to be submitted)
- * Polluting / Obnoxious/ hazardous units not allowed (Listed under Annexes C in master plan.)
- * Maximum ceiling of power is 40HP, increased to 70-80 HP in 1982-83, and 100 -120 HP under Ad-hoc certificate policy of 1990-91
- * Grant of permission only on ground floor.
- * Licence is not nonrenewable or expandable
- * No change of trade is allowed. no passing of factory to the entrepreneur's heirs
- * Cases which were booked in unauthorized construction after 10/6/92 shall be kept pending until further instructions.

In addition, a temporary one bulb connection on medical grounds can be given for 3-4 months.

Most entrepreneurs, however, cannot afford land values on main streets, or within the core production areas. They have to make do with locations in interior sections of the neighborhood, where land is cheaper and plots larger. Here, they can try to obtain electric connections under the 'Ad-hoc' license scheme. If not successful, or if they cannot afford the official fees & unofficial bribery rates, entrepreneurs have to make do with 'heating & cooling' loads under the 'household category', sanctioned with the help of petty bribery, as a first step to get an ad-hoc license. Each of these different categories allow different levels of legal power consumption.

From the larger perspective of the master planning which I discussed earlier in this chapter, it is not surprising that even with the factory license categories listed earlier, life is not very simple for the entrepreneur¹⁷. From the point of view of factory licenses to get access to electrical power, these difficulties are further compounded due to five reasons:

- i) Most licenses are not 'development' oriented. This means that after a couple of years, when production has consolidated, the entrepreneur cannot apply for additional electricity loads;
- ii) Licenses are not transferable from one area to another.
- iii) As explained in Chapter 1, entrepreneurs locating in non-conforming areas cannot avail themselves of government incentives and finance and technical facilities available to entrepreneurs locating in industrial estates. The lack of proof of property ownership, or functioning in rented premises cuts them off from state help.
- iv) Once a license is given for a particular use, it cannot be modified, even if the market for that product has changed.
- v) The licenses are not hereditary. Many firms are family based, and passed on from one generation to another. This condition restricts transfer.

¹⁷ Officially, from the planner's perspective, the master plan has only recently been made more flexible to allow designated uses which can be undertaken at home, based on light power connections. Even this change has come from political sources rather than the planners. (Comments by Joint Secretary, Ministry of Urban Development, Government of India during the seminar Access of poor to urban land' organized by USAID, MOUD, NHB, New Delhi November 1992.). For most entrepreneurs, this listing is irrelevant, because it lists activities assumed to be cottage industries, and because of difficulties in expansion.

vi) The 'ad-hoc' license (which is commonly applied for due to its higher electricity capacity) for instance, does not have a 'promotional' aspect. It only recognizes the factory and legitimizes it. It does not recognize a change in product line, no passing of factory to the entrepreneur's heir in case of death, no change in the constitution of the firm. The LOCA license is relatively lenient, but then it caters to fewer entrepreneurs due to its locational characteristics.

While factory licensing via any of the licensing schemes is one which only gives some form of recognition to the small entrepreneur, it is a valuable one. However, since these licenses are framed from a 'fire-fighting' perspective, this puts both entrepreneurs and the municipal corporation at a disadvantage to raise revenues for the latter, and more a stable electricity supply for the former¹⁸. Nevertheless, electrical power is a critical issue, and assumes importance as a political issue around election time.

In this context, we see that just as councilors were important for the regularization of neighborhoods, they play a similar role in defining the special needs of industrial clusters.

a) Initiating licensing schemes: Just as the declaration of 'cut-off' dates are important political announcements, the declaration by the party in power of initiating the ad-hoc registration scheme, or the designation of particular streets or blocks as 'LOCA' (Local Commercial Area), both of which give access to power. These form important political mile stones in the development of the industrial cluster. Here, again, the role of elected representative as pressured by local associations, is key in galvanizing political clout to access specialized services.

b) Making possible specialized public investments: Councilors, with the help of

¹⁸ As one commissioner put it:

^{&#}x27;...The MCD (via its licensing scheme) has been reduced to a permission giving authority and not with (substantial) regulatory powers), to play a developmental role and be able to raise revenues. With the lack of trained staff, resources and powers, a single authority cannot do much. The MCD itself should be decentralized in its operations with more powers. In that way, (industrial) associations could play a more positive role... At present, the Deputy Commissioner's office has regulatory powers but they are 'otally detached from the ground. The DDA's (Master) Plans are too ambiguous for any (useful) use...

With the local elections to the legislative assembly in 1993, the Delhi Government took several steps to ease the difficulties of small entrepreneurs. One of these was the start of a 'listing' of small firms, so that these may be accounted for in policy. Another was the re-opening of the 'adhoc' licensing scheme. Entrepreneurs operating from non-confirming areas could apply for licenses, if their industrial units were considered non-hazardous or polluting. The most immediate advantage was the access to electrical power.

The eight industrial associations in Viswas Nager, represented by their federation, took to these new opportunities. Firms were asked to apply to the DESU via the federation who were also to provide guarantees against mis-use of connections. The listing were scrutinized in meetings attended by federation representatives, elected representatives and the concerned Chief Engineer of the DESU -- operating as a organizing group. Most firms were passed as being non-hazardous, making them eligible for a 40 Hp electric connection and asked to pay their deposits fees (6 months of a assumed electricity bill) towards infrastructure works. The few cases which fell into the hazardous category were kept under consideration to resolve their issues. This situation however threatened local inspectors and field officials of the DESU, whose claim for 'connection money' would be jepodized. To stall these efforts, as well as to reap some income, they approached entrepreneurs demanding money in return for legal connections which was already being undertaken.

The firms contacted the federation who in turn met with the organizing group. The latter decided that the federation should convince the firms approached not to pay, as this would undermine the entire process, taking it back to the days of extensive corruption. Due to fear, as well as past connections with the field staff, some entrepreneurs decided to pay in spite of directives from the federation. In this situation, the organizing group decided that the electrification program would start, but by-pass those entrepreneurs who had paid up the field staff. The electrification was then initiated. Soon those who paid up realized that they were being missed out of the process and approached the organizing group. These entrepreneurs were asked to get their money paid as a bribe (About Rs.20,000/), and use that to pay the DESU, for their case to be considered.

The above case illustrates the importance of the close working relationship at a senior level: between senior federation officials having the support of associations, MLAs (who is also an owner of a cable manufacturing unit), and senior officials of the DESU.

3: Implementing a licensing program.

their party superiors, help to obtain specialized infrastructure for production as part of neighborhood improvement programs in conjunction with local associations play an important role in three ways:

- i) First, parts of the neighborhood housing such firms, need to be declared as 'light industrial areas' or 'local commercial areas' which get them access to higher electric loads;
- ii) Alternately, public authorities are pressured to re-open specific schemes like the 'ad-hoc industrial license' to which entrepreneurs can apply to get access to heavier loads of electricity.
- iii) Certain issues, falling outside the regulatory framework, are only incorporated after they are politicized.

For instance, the declaration of a 'Local Commercial Area' within a slom area providing access to higher electric loads happens via a highly

politicized process. This contrasts with issues of roads and drainage, generally considered part of routine upgrading procedures and are relatively less politicized (excerpt perhaps in the finer details of the implementation process).

c) Making programs responsive to varying local priorities: As Chapter 3 and 4 showed, industrial areas are varied and highly contextualized by differences in land and infrastructure conditions from place to place, the nature of production, and also by mix of social and ethnic groups settled there. All these factors mean that entrepreneur's priorities are not homogenous. However,

A senior office bearer in manufacturers federation explained the importance of local elections:

"..for five years we struggled without any solution to our problems (of access to electric power), in spite of numerous representations to senior administrators, Member of Parliaments, even the L.G! (Lieutenant Governor)... After local elections, things have started to get resolved. Our elected representative, also an entrepreneur, knows the problems manufacturing, and being a resident in the same neighborhood, he also knows the residential problems."

Given the experience of national level parties often promoting their out of state candidate displacing local ones, he is quick to add:

'..(T.N.) Seshan's, the Chief Election Commissioner of India. directive that an elected member can only stand for election from the place where he/she has the name in the electoral role is important to ensure that outsiders without roots are not brought in..'

4: On the need for local representation

their associations help to specify local priorities and concerns so that upgrading programs (as part of regularization process) can be more responsive to their member's needs. However, administrators and the technical staff of local government institutions are bound to an extent, by the routine procedures and interpretation of rules. This can seriously reduce the effectiveness of upgrading programs. Elected representatives help to adapt rules and procedures to local circumstances and make interventions more responsive to local needs. As we shall see in the last section of this chapter, if need be, councilors via their approach to higher level politicians (MLAs, MPs, the Chief Metropolitan Councillor, and party chiefs) can initiate and direct policy changes. This helps to institutionalize procedures to get access to infrastructure and

services¹⁹.

<u>Making programs responsive to economic change:</u> Chapter 3 showed that industrial clusters like Viswas Nager have important evolutionary aspects. New groups settling in, as well as existing ones upgrading their production, all lead to new demands. Civic development has to go hand in hand with this consolidation of economic activities. These kinds of local complexity cannot be anticipated by the planning process unless it is highly localized²⁰. Elected representatives at the grassroots, with day to day touch with these changing realities, as well as the operational constraints at the municipal level, act as a important bridge to ensure that public interventions stay responsive the dynamics of development.

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¹⁹ In many cases, politicians seek technical advice from more educated entrepreneurs to frame their case positively, and often initiate informal dialogue between administrators and the skilled federation or association representatives. These informal meetings form important 'starts' of a negotiation process where each side can lay out their priorities and understand the other's constraints. Without political support, these forums are almost impossible due to the lack of institutional procedures, as well as the antagonistic relationship that characterizes the beginning stages.

Traditionally the interface between residents and public authorities have been elected representatives, associations & federations. More recently, this has also been suggested as a role for NGO's. The actual track record has been uneven, although they have been promoted by some administrative lobbies, central political interests, and international agencies. See Kothari 1986.

ANNEX 6B

This annex provides additional insights into the negotiation process between the Shahdara Manufacturers Federation (S.M.F) and the DESU, State and National level politicians, as well as internal correspondence within the government. A reading will reveal the initial political groundwork which is needed to force the public authority to the negotiating table, followed by use of the 'porous bureaucracy' once it begins. One can see towards the ending sections, that a lack of an elected government restricts the capacity administrators to take policy decisions.

- 28th.May 1990 Letter from Gen. Sec. S.M.F to The General Manager DESU:

 Background of manufacturing in Viswas Nager; Consequences of harassment by DESU inspectors, and of erratic power supply. Request for proper policy with a practical approach. The S.H.F is willing to bear with the reasonable expenses/ charges for the regularization of loads. Annexure provides an overview of types of licenses being used, number of industries in Shahdara and employment. Why people are forced to pay miss-use charges due to the lack of legal option, causing serious losses.
- **1st. June 1990** Letter from Gen. Sec. S.M.F. to H.K.L. Bhagat Member of Lower House of Parliament (MP):

Reference of meeting with GM DESU and Chief Secretary Delhi Administration regarding regularization of extra and enhanced electrical loads to industries in Viswas Nager. Appeal to the MP to meet the Chief Secretary to take a policy decision.

- 4th. June 1990 Letter from Gen. Sec. S.M.F. to Ram Narayan Gupta, Advocate:

 Letter of thanks for help in the agitation strategy to protest against the DESU, and protection from atrocities by Delhi Police during the protest meet. Request for assistance in meeting the Chief Secretary Delhi Administration.
- 4th June 1990 Letter from Gen. Sec. S.M.F. to V.K. Kapoor, Chief Secretary, Delhi Administration:

 Background of Viswas Nager and Shahdara as an important employment center. Problems caused by DESU raids, and consequent meeting with GM, DESU. GM suggests that as a policy issue, Chef Secretary has power to act. Request to the Chief Secretary to consider the regularization of power loads consumed by entrepreneurs, and the willingness of the federation to bear reasonable charges for the electrification process.
- 6th. June 1990 Letter from Gen. Sec. S.M.F. to V.K. Malhotra M.P.:

 Background of the problems faced by entrepreneurs in Viswas Nager by the DESU, and request for a recommendation to the Chief Secretary Delhi Administration.
- **7th. June 1990** Letter from Gen. Sec. S.M.F. to: i)Jai Prakash M.P.; ii) Kalka Das M.P; iii) L.K.Advani M.P.:

Background of problems caused by DESU raids, and consequent meeting with GM, DESU. GM suggests that as a policy issue, Chef Secretary has power to act. Request to both MPs to contact Chief Secretary and appraise him with the situation of small firms in Viswas Nager.

7th. June 1990 Letter from Akhtar Ali, Alderman & Ex.Vice Chairman Medical Health & Public Health Committee Municipal Corporation of Delhi, (also a resident of Viswas Nager) to V.K.Kapoor, Chief Secretary Delhi Administration:

Endorsement of memorandum by S.M.F, and request to direct authorities to find an early solution.

8th. June 1990 Letter from Madan Lal Khurana M.P. and President of Bharatiya Janta Party to R.D. Kapoor, Commissioner MCD:

Endorsement of memorandum by S.M.F. requesting regularization of electrical loads.

8th. June 1990 Meeting between S.M.F., Dr. Narender Nath (Councillor), Akthar Ali (Councillor), and Chief Secretary, Delhi Administration.:

Chief Secretary agrees in principle, but wanted more detailed information on the town planning, master plan, and future growth of industry, before a final decision. Chief Secretary assures that he will take a pragmatic approach, and frame a policy that is conducive to the growth of the industry. Discussion of cost sharing of C.T. meters for industries using higher loads.

11th. June 1990 Letter from Gen. Sec. S.M.F. to GM DESU:

Reference to a recent meeting with him regarding the regularization of loads in Viswas Nager, and his suggestion to meet the Chief Secretary Delhi Administration, as the final authority. Appraisal of the meeting of the S.M.F with the Chief Secretary on this issue. A request to the GM to meet with the Chief Secretary. S.M.F. assure the GM DESU that they will refrain from using power on weekly off days and during peak hours. A note of thanks to the GM for the two additional feeder lines to reduce failure in HT lines, especially load shedding continues 5-6 times a day with a duration of 15-20 minutes disrupting production.

20th. June 1990 Letter from Addl. General Manager (Tech) DESU to Gen. Sec. Shahdara Manufacturer's Federation:

Reference of their letter to the Chief Secretary. Report of checking by DESU in Viswas Nager, where a large numbers of industries were indulging in theft & pilferage of electricity, and using more load than sanctioned amount. Request to entrepreneurs to apply for regularization of extra load to be sanctioned to the extent possible by the MCD license.

22nd. June 1990 Letter from Gen. Sec. S.M.F to Chief Secretary Delhi Administration:

Reference of meeting held on 8th. June 1990. Appreciation for concern shown by Chief Secretary, and his directions to the GM DESU. However, GM DESU reiterates that action can only be taken under existing policy. Gen. Sec. S.M.F. emphasizes that existing policy is not useful for the

under existing policy. Gen. Sec. S.M.F emphasizes that existing policy is not useful for the regularization of electrical loads. Request for an enactment of a law or issuance of a directive to regularize excess loads being consumed and ad-hoc licenses are issued. And:

'It is true that there are other aspects like town planning, master planning and the ever growing population and the consequent un-employment, which are to be taken into consideration while deciding on this matter. But for the survival of tiny and small industrial units, which really play a vital role in the economy of the country, it is imperative to take suitable action in this direction. As you are aware, DESU can only act after receiving your directive.'

25th. June 1990 Letter from Dr. Vijay Kumar Malhotra MP to Gen. Sec. S.M.F.: Acknowledgment of letter and action taken by the MP.

25th. June 1990 Letter from Commercial officer II, DESU to President S.M.F.:

Letter about the regularization of industrial loads, stating that policy requires a val

Letter about the regularization of industrial loads, stating that policy requires a valid municipal license, deposit of development charges, regularization fees, and completion of bureaucratic formalities.

25th. June 1990 Letter from Gen. Sec. S.M.F. to M.L.Khurana, MP & President of Bharitya Jantha Party.:

Survey of DESU in Viswas Nager and their methodology assuming minimum consumption of a industry being 60% of installed load * 8 hr. daily working * 26 days. Lunch break, preparation time before production, national holidays and festivals not taken in account. Suggestion of S.M.F that formulae should be 60% of installed load * 7 hr. * 20 Hr.. While issue of methodology is not critical, the main concern is the apprehension that the DESU will charge with a retrospective effect based on the ongoing assessment. The other issue is that the MCD, despite the announcement of an industrial licensing scheme, is only issuing registration certificates which the DESU, or the Directorate of Industries do not recognize. Also, manufacturers of PVC compounds/ electric wires & cables being deprived from registration on ground that they are polluting, even when the pollution control board has certified these in the non-polluting category. A request for comprehensive planning and directive to officers about these issues.

13th. July 1990. Letter from DESU to Gen. Sec. S.M.F.:

Need for valid municipal license, completion f requisite commercial formalities viz. submission of proof of lawful occupancy, deposit of development charges, and security deposits for the sanctioning of electrical loads in access of 20 HP within urban villages and any industrial load outside urban villages.

18th. July 1990 Letter from Gen. Sec. S.M.F. to Chief Secretary, Delhi Administration: Reminder of their letter of 4th. June 1990.

7th. August 1990 Protest against DESU harassment by members of S.M.F:

3000 supporters of the S.M.F. break into the complex of the East Delhi DESU headquarters. Window panes are broken during the stoning. An indefinite strike is declared in industrial units in Viswas Nager, Jwala Nager, and Bhola Nath Nager.

15th. August 1990 Letter from Gen. Sec S.M.F. to the Finance & Chief Accounts Officer (F.A. & C.A.O.) DESU:

The S.M.F. has been in contact with the officers of the DESU, and they seem keen to solve the issue. However, the regularization issue is for the Chief Secretary Delhi Administration and Chief Commissioner MCD to decide. The discrepancy between what entrepreneurs are consuming and what the actual licenses mention or allow is high enough to create a serious loss to the department. The main problem is the low capacity meters installed in the factories. A request made to the DESU to install higher capacity meters measuring actual consumption of electrical power and be mutually useful. As such:

'....after a lot of soul searching and discussions , we the industrial members, have come to an understanding to lay bare all the factual details of connected loads in the present functioning industries. But we are also aware of the stringent and strict rules and regulations of the present. As such, we humbly appeal to you to kindly grant us a wavier of retrospective penalties and charges, which may be levee upon our member industries...In this regard, every member is prepared to give an undertaking of actual load connected in his existing unit, in case they (charges) will not be levied with retrospective effect. The members are also ready to deposit the additional security for excess connected load declared/assessed by DESU, which will help you to assess the actual electric load required for the functioning of the industries in this area. Accordingly, a new system/set-up can be framed to augment the power supply by installing additional transformers etc. The expenditure incurred to augment the load factor of the trans-jumnna area by installation of additional transformers of suitable capacity will be self-offsetting in view of the height yield of revenue from such increases, actual load consumption's, and security deposits; and in our opinion, you will be highly benefitted from the point of view of recurring revenue earning....A deputation of five executives from our federation would like to call on you at any time, most convent to you, and discuss the matter in detail with facts and figures.'

29th. August 1990 Internal note (confidential) from De. Chief Accountant East DESU to FAA & CAE DESU about report of special team conducting a survey/checking of Viswas Nagger's industrial area:

'...In the aforesaid Report it has been stated that about 95% of these small scale units are using loads ranging from 50HP to 200 HP as against the sanctioned load of 7.5 HP to 15 HP.....(T)he acceptance of the aforesaid demand of the Federation is in the financial interest of the undertaking as the DESU will be able to recover the additional revenue on the basis of (the) connected load at least from the date of giving undertaking by the member-industry of (the) above Federation....To enforce the above undertaking on individual consumers, we may write to the federation to send undertakings from the individual consumers declaring therein the actual connected load by each consumer and we may charge them on the basis of connected load plus misuse charges with effect from 16th. August 1990...'

4th. Sept. 1990 Internal note (confidential) from FAA & CAE DESU to Dep. Chief Accountant (East) DESU:

"...The (DESU) report is quite interesting and reveals the following important features:

I) In about 95% of the cases, the SIP are using loads from 50-200 HP as against the sanctioned load of 7.5 HP to 15 HP;

ii) Higher size of cable was provided to these small scale industrial units. How this was done requires investigation by the vigilance department.

iii) In most of the cases, internal setting of the meters has been done by the consumer with or without

the connivance with DESU staff resulting in loss of 80% to 90% of revenue as the meter is showing less consumption to this extent.

.....If we agree to the request of the S.M.F., from the point of view of the finance angle for the undertaking, it may be prudent to accede to the request since so far even with enforcement/ vigilance action we have not been able to either know their connected load or raise bill on their connected load basis. As against this, by acceptance of the suggestion made by the S.M.F., we shall not be able to recover the misuse charges for the previous three years. The undertaking will have to forego revenue to that extent for which the MCD is the component authority. Therefore, Chief Secretary's exercising power of D.E.S.C. will have to take a policy decision on the request made by the S. M. F. in their letter refereed above. As such GM(E) may like to discuss the matter with the Chief Secretary or he may like to submit the case to him for decision on file...'

12th Sept. 1990. Letter from Kalka Das, M.P Lok Sabba (Lower House of Parliament) to recently instated Ashok Pradhan as GM DESU:

Introduction to letter by GEN. Sec. S.M.F. regarding their proposal to regularize industrial loads in Viswas Nager.

- 17th. Sept. 1990 Letter from GEN. Sec. S.M.F. to GM DESU:

 Background of problems in Viswas Nager and request for a meeting between a d
 - Background of problems in Viswas Nager and request for a meeting between a delegation from the Federation and the GM, as well as invitation to visit Viswas Nager.
- 17th. Sept. 1990 Letter from Gen. Sec S.M.F. to recently instated Chief Engineer Distribution DESU.

 Background of problems in Viswas Nager and request for a meeting between a delegation from the Federation and the GM, as well as invitation to visit Viswas Nager.
- **1st. Oct. 1990** Letter from S.E. (Distribution) DESU to Gen. Sec. S.M.F.

 Reference to the federation's letter to L.K.Advani MP (Leader of the opposition Lower House of Parliament, and Party chief, Bharatiya Jantha Party), received via Chief Secretary Delhi Administration. The federation's representation being passed on to Chief Engineer Commercial.
- **10th. Oct. 1990.** Minutes drafted by S.M.F. of meeting between representatives from S.M.F. and GM (Technical) DESU sent to DESU on 19th. Oct. 1990:
 - "...That the DESU will augment its system by putting more transformers and other infrastructure to restore continuous supply of power for eight hours without interruption...whereas the federation will assist and co-operate with the DESU in arranging for land and plinth at the site.....
 -That after having a satisfactory supply of power for a month or so, the members of the associations, constituent to the Federation, shall give an undertaking to the DESU regarding existing loads, and DESU will install pilot meters at every unit which declares excess load...
 - .the member industry shall not and the federation will not support any erring member.As per assurance given by Addl.GM, no retrospective charges will be levied on the industries after the installation of the pilot meters. ..
 - ..That Addl. GM and Addl. Chief Engineer will also visit the area very soon to assess the situation and the work be taken up to regularize supplies, and after that the department will work out modalities to be observed and discuss the same with the federation and a joint working plan will be signed to ensure untrammeled supply of power and to avoid pilferage of power....
 - ..That the (Addl. CE) and the (Exec. Engg) have assured that they will inform the federation sufficiently in advance as and when there will be any breakdown /shut down/load shedding..'
- 19th. Oct. 1990 Letter from Gen. Sec. S.M.F. to The Addl. GM (Tech) DESU:
 - "..Land for construction of plinths to erect high capacity transformers has been earmarked and the work is also under progress...Item 3 needs your special attention. The scheme for the extension of the 11 KV overhead jeeder along the nallah up to Yudhishter Gali in Viswas Nager and establishment of a sub-station ought to be taken up on a priority basis. Since DESU requires an undertaking from

every unit regarding the existing load/excess load, we request you to send us a format of the undertaking required, so that we can circulate the same amongst the units. In this context, we wish to bring to your notice that the industry owners are quite apprehensive of the fact that DESU may charge for excessive load with retrospective effect from the last three years, as is the general practice. They would come forward to give the voluntary undertaking only if they are assured in advance that charges of excessive loads would be levied only after the installation of CT meters and their reading; and not with retrospective effect. We therefore, seek your categorical confirmation in this regard.We need not stress here that by working mutually the problems faced by the industry as well as the department can be solved and the industry will get smooth and regular supply of power, which is indispensable to run the business without loss...'

20th. Oct. 1990 Letter from Addl. Chief Engineer (T&D) E DESU to Gen. Sec. S.M.F.:

- "..The gist of the meeting sent by you is not as per discussions /decisions taken in the meeting. In accordance with the discussion, the federation is required to give list of consumers with the connected load and sanctioned load to review the case for providing higher size of the meters as desired by the federation. This list is still awaited. You are requested to arrange to send this list to this office so that we could have another meeting with the federation..'

 Minutes of the Oct. 10th. 1990 meeting as drafted by DESU as in enclosed:
- "..The frequent interruption of (electrical) supply is mainly due to overloading of the DESU system because of excess load which is (consumed by) small scale industries (over) their sanctioned load. Until and unless the load is brought within the sanctioned limit, it is not feasible to provide uninterrupted/stable power supply....
- ...Whenever additional transformers are augmented or added in the area, the consumers add more machines by enhancing their load and as such the system is not being relieved...
-The industrial load is sanctioned on the basis of the license issued by the licensing department (of the MCD). The DESU is not in a position to regularize the load till the sanction for additional loads is obtained by the component authority... This matter is within the purview of Delhi Administration for the regularization of load and the federation is advised to (approach them.)...
- ..Higher size ('CT') meters are provided on the basis of sanctioned load. The federation was advised by the A.G.M.(T) that connected load be given for each unit to review the matter. The Federation has agreed to provide the details..
- ...The federation has offered to provide additional plinths and enclosures at various locations so as to add additional transformers in the area. It was pointed out that such plinths should only be constructed in coordination with the Distt. Engineers...'

25th Oct 1990 Letter from Addl. GM (Tech) DESU to Gen. Sec. S.M.F.

'..The gist of the meeting sent by you has been examined as some of the items recorded is not as per the rules of the undertaking and may not be possible to be enforced..'

12th. Dec. 1990 Letter from Gen. Sec. S.M.F. to The Addl. Chief Engineer (T&D) E DESU.,:

"..We confirm having agreed to furnish details of every unit with installed load in excess of sanctioned load, but it was on assurance from your department that we will be given a confirmation in writing that those who come forward to declare their installed load would not be charged for excessive load with retrospective effect. In fact, this is the basic aspect the small scale units are apprehensive of and which ought to be dealt with immediately. As soon as you can give us your assurance in writing to this effect, we can approach the units and they will definitely furnish the particulars and accordingly C.T. Meters can be installed...prompt action (will) be beneficial to the undertaking and on the other, remove the hardship and harassment the units are facing.....Since the minutes sent by you is not signed/attested by anybody, we cannot act upon it. Moreover, the above point should be incorporated in the same..'

18th. Dec. 1990 Letter from Gen. Sec. S.M.F. to The Addl. GM (Tech) DESU in reference to his letter of 25th. Oct. 1990

'..(About) your observation that some of the points specified in the minutes of meeting are not as per the rules of the undertaking and as such they cannot be enforced. However, since you have not mentioned those points, we are unable to comprehend the same and take up suitable action accordingly..' It is therefore, earnestly requested that you may please let us know such points as are not acceptable to the undertaking...'

10th. January 1991 Letter from Gen. Sec. S.M.F. to the Addl. Chief Engineer, DESU:

"...It is extremely regretted that despite so many reminders and persuasion since the last 2 months with all the officers of DESU in the area, no action has been taken to restore the (electrical) supply. A delegation met with the Executive Engineer, Mr. Kochar, but he was unable to give a satisfactory reply in the absence of all the high officials...Now it appears that there s no body in the department who could take suitable measures in this regard and hence all the members are very much aggrieved in the way f the working of DESU in the area of Viswas Nager. Under the circumstances, we once again remind you to take up suitable measures immediately without further delay otherwise members will be forced/compelled to take direct action i.e., peaceful dharna (public sit down protest) on the roads and the entire responsibility of any untoward situation will lie on the head of the department......copy to Station House Officer Vivek Vihar Police Station: In case the department fails to reply suitably to members, they will be forced to sit on peaceful dharna on Viswas Road after 3 PM today. This is for your information please...'

21th. Augest 1991 Internal note from GM (E) DESU to office of Lt. Governor, Delhi Administration.:

"..The unauthorized excessive connected load is injurious to our system. This effects the stability of supply and increases the number of breakdowns. Press notifications have accordingly been issued on different occasions to get the loads regularized so that DESU can augment its system suitably. One of the main hitch in this respect from the consumer side is that the load in respect of industries is sanctioned by DESU limiting the same to the one mentioned in the license. This necessitates to review the present practice of sanctioning of the loads limit to the one mentioned in the license.For giving an industrial connection, one of the main requirements is the compliance of clause 4 (D) of the Delhi Electrical Control Order 1959.... (This) clause only mentions that the electric connection is to be given on the production of a valid municipal license or a no-objection certificate by the consumer from the concerned local body. It nowhere mentions that the quantum of load to be given for the industrial connection is to be limited to the quantum of load mentioned in the license.....

....In the license issued in 1966 in respect of the DCM silk mills, even the quantum of load is not mentioned which indicated that earlier, there was no practice of even writing the quantum load in the license. ...Presumably, this insertion of load has been with a view for levy of license fees in accordance with section 417(3) of the Corporation Act which provides that the Corporation shall fix a scale of fees to be paid in respect of premises licensed provided that no such fees shall exceed Rs. 500..

....As a result of the present practice, however, of restricting the sanctioned load to that mentioned in the license, DESU is losing revenue on account of security deposit, development charges, and electricity consumption in the absence of authorization of the actual control load. Since minimum guarantee charges are levied on the basis of sanctioned loads, with the regularization of higher load, monthly revenue on minimum consumption charges will also increase.

28th. Augest 1991 Internal note from the office of Lt. Governor, Delhi Administration to GM (E) DESU. Decision No 1617/GM/Corp.:

"...It has been stated that one of the main obstacles in the regularization of excess connected loads is that DESU have to restrict the sanction of load to the one mentioned in the municipal license....it has (also) been argued that the condition of production of municipal license by the

consumer may continue to observed sanction of power need not be restricted to the limit mentioned in the municipal license...(Finally), it has been made out that DESU are losing revenues on this account. Department has also described the scope for consumers to draw excess loads fraudulently in the present arrangement. Approval of the authority exercising powers of DESC/Corporation has been sought to bring about a change in policy as discussed..

...Clause 4(1) (a) provides that no consumer shall connect load in excess of what he was lawfully entitled to consume. Clause 4 (D) prohibits DESU to sanction power loads to consumers till he produces a valid municipal license or a No Objection Certificate...A simple reading of the two clauses confirm that a municipal license is a pre-requisite to the considerate of a request for grant of commercial or industrial power load. Further it is also clear that a consumer cannot be allowed to connect load in excess of what he was lawfully entitled to consume...

...Further, the department's note seems to suggest that the Licensing department is needlessly mentioning the power load in a municipal license. It is beyond comprehension that commissioner may consider granting license to a premises for running of a factory etc. without looking into its capacity aspect at all with reference to the volume of power likely to be used...

...About the possible addition to DESU revenues by regularizing un-authorized excess industrial load, it goes without saying that a government organization has to act strictly within the domain of lawful exercise of its functions. Any estimates of yields by resorting to means the legitimacy of which could be brought into questions may not be considered very appropriate. As for the possibility of drawl of excess load fraudulently by consumers, no policy decision can insulate an organization against it....

...The Delhi Administration has evolved an industrial policy for the union territory of Delhi which lays down certain limits for sanction of (electric) power loads for different categories of industrial units. Beside, the Master Plan 2001 also lays down various restrictions regarding the sanctioning of power load to industrial units. The proposal of GM(E) has not taken into consideration these aspects of the matter while making recommendations in the instant case....

.....GM(E) may, therefore, re-examine the matter after obtaining the comments/views of Commissioner MCD and Commissioner Industries, Delhi Administration and re-submit. The case is accordingly refereed back.'

ANNEX 6C

The following excerpts from press reports document the impact of the local elections held in Delhi with regard to small firms.

25th. May 1992: MCD may amend factory bye-laws" Hindustan Times

"...The proposed amendments include increasing the period of validity of the license and restructuring of the fee...A senior MCD official when contacted today said these changes were being contemplated following the demands of the factory-owners of the city. At present the factory license is valid for one year. The proposal is to increase the validity of the license to five years..."

January 5th. 1993 Industries have high hopes" Times of India

The installation of an elected government has raised the expectations of small and medium industries in Delhi. They are hoping that under a popular government, economic reforms will percolate to the state level and their long pending demands for removal of 'functional irritants' will be conceded. Last summer was a nightmare for factories in Delhi. Many of them had to go without power for weeks as the northern grid once collapsed and was on the verge of collapse throughout the summer...Mr. Bhargava (President of the Delhi Factory owners Federation) urged the Delhi government to extend operational facilities to industries which were incompatible under the last master plan but have been found compatible under the new master plan. The federation has also urged the government to put industrial property in a category separate from commercial property and charge property tax at a lower rate....Mr. Bhargava suggests conversion of industrial properties from leasehold to freehold subject to conversion charges not exceeding 20 times the annual lease payable. But the problem which needs to be addressed most urgently is the poor civic amenities in industrial areas.'

15th. April 1994 Many illegal Delhi units to be registered Times of India:

"..The city government has approved the scheme to register industrial and commercial units located in violation of Delhi Master Plan guidelines in certain areas... All units in non-confirming areas in place by December 31 last year may apply (for registration)... Registration, however, will not amount to regularization of any non-confirming use or any un-authorized construction in the premises. Officially called 'Ad-hoc registration of units, this has generally been done more than once earlier, generally as a one time action". registration will facilitate electricity and water use by units. In what he described as a major step towards providing a corruption free government, the CM said units would no longer have to pay "illegal money for gratification......The scheme will not entitle units to official small scale industry registration. But applying for this will be simpler; estimates are that four fifths should be able to secure SSI registration. With it, they would be eligible for much of the official aid and other subsidy schemes....The Scheme applies to units in (among others) unauthorized regularized colonies. It does not apply to (among others) unauthorized colonies. Some of the terms are:

Units employing up to nine men may operate where they are; The position will be reviewed after 10 years, giving them a chance to relocate in confirming areas;

Light and service industry units with 10-19 workers will be given a chance to relocate, the position will be reviewed in five years;

Polluting industries and those not in approved, master plan list, will not be registered;

Specified types f household industrial units employing up to five men and occupying 30 Sq. meter space on the ground floor may get one kilowatt as power load;

Specified light and service industry units may get a maximum power load of 30KW.

Commercial units in areas identified as mixed land use in the DDA's draft zonal development plans may be registered if they meet the specification in these plans.

18th. April 1994: Scheme to regularize illegal use of power Times of India.

'..These practical measures (announced by the Chief Minister), likely to benefit 200,000 persons, are expected to add Rs.75 Crs (Rs.750 Million) to the cash strapped electricity department's kitty, apart form the regular income there after.At a news conference today, the chief minister Mr. Madan Lal Khurana, said that the expected beneficiaries would include small units and shops in non-confirming areas mis-using domestic connections or drawing more than the sanctioned load. The government, he said, feels it "will neither be feasible to close these units nor shift the units to confirming areas. This seems to contradict portions of the government's scheme to register industrial and commercial units in non-confirming areas announced four days ago. ..The CM said regularization would not only benefit consumers but help DESU plan for the extra power load. It would, hoped the CM, reduce electricity pilferage, damage to meters and burning of transformers. (Under today's announcements) industries in non-confirming areas with a licensee or those covered in the ad-hoc registration scheme may get a power load of up to 30 KW regularized. Units in industrial and confirming areas may get a power load of up to 100KW...'

25th. December 1994 'Delhi Govt, Center likely to lock horns' Times of India.

'A tug of war between the center and the Delhi government is on the cards over the former's threat to reduce the plan outlay of Delhi to pay for DESU dues and the move of the BJP to launch a

'mass awakening campaign' for full statehood.....While the Delhi assembly, overwhelmingly dominated by the BJP, has resolved to protest against any plan reduction...The Delhi assembly was constituted under the 69th. amendment of the Constitution and the Government of Delhi Act 1991 under which the local government does not have powers to deal with land, law and order and police. The Delhi government has been harping on issues like regularization of un-authorized colonies, public law & order, and the police. The government has been harping on issues like regularization. Lamenting that the Delhi government could not be treated like a department of the central government", Chief Minister Madan Lal Khurana said that certain rules were contrary to the authority bestowed upon his government by the constitution. The Chief Minister said that his government had sent a list of 600 unauthorized colonies and another list of 257 colonies to the center for regularization with a view to providing bare minimum of civic amenities like water, power, and sewage. However, no response has so far been received he said. The Delhi government also demanded suitable amendment to the Delhi Development Act 1957, to provide for the representation of three members from legislative assembly in DDA in place of members of erstwhile metropolitan council..'

The city government has decided to allow one kilowatt load to non-domestic power connections in residential areas. It is believed that scaling up the load to two kilowatt is under consideration, (and) the Master Plan changed (it presently says that 1kW is the limit). City government officials said: If the land-use specified in the master plan can be changed -- the same can be done about non-domestic connections in residential areas. A large number of small commercial establishments are operating in areas declared as residential. They draw electricity much in excess of the sanctioned load. DESU routinely slaps misuse charges on them and bills them for the units consumed. But the theft-beleaguered undertaking is not able to charge these consumers commercial rates, much higher than domestic ones, and for laying and maintaining lines to carry higher power loads. The sanction, however, will not give the consumer any right to claim commercial-

status for the premises concerned....This will ensure that the civic bodies MCD, DDA, NDMC can go ahead and prosecute the consumer for violating land use and building rules.'

23rd January 1996 'No power for industries at peak hours' Times of India In view of the severe power shortage in the northern grid, the DESU today banned use of electricity for industrial activity during peak hours. Industrial units were told not to use electricity from am to 9 pm.... To ensure the units were not misleading the undertaking on this count, they will install suitable electronic meters for recording the timings of the drawl of electricity. DESU has also announced an incentive scheme for the industrial units changing over their operation from day to night shift exclusively, and observe working hours from 9pm to 5.30pm. These units shall be eligible for a 20% discount in the energy bill.... The voluntary declaration scheme is extended till January 25th. The last date earlier was January 20th. This is the second extension and the undertaking is attributing it to heavy demand. Under this scheme, industrial and commercial units which were drawing more electricity than was sanctioned can declare the excess load and get it regularized....The scheme was announced by the Delhi government in a bid to prevent 'forced theft', which it believes, were forced upon the consumers by limitations in the law governing electricity use....The undertaking will stand to earn more as it will be able to bill the consumers as per the electricity consumed and not sanctioned..'

ANNEX 6D

DESU

Attention to all Industrial units

This is to draw the attention of all industrial units that the DESU, under the legislation of the Delhi Electric Control Order (DECO) 1959, directs all industrial units to declare their actual load, connected load and avail of the scheme to get legal meters, electricity lines. This golden opportunity has been publicized via the newspapers. Your declaration should reach the DESU by December 1995.

If all those persons who have misused their connected loads or meters, should complete their payments/dues by the notified date, no FIR will be lodged against them. Whereas, the persons who fail to declare their actual loads before the notified date in-accordance with rules, will face serious charges and FIR will also be lodged against them.

Asst. General Manager

(Notice to members of Shahdara Manufacturer's Federation issued by the secretary)

The problem of electricity is increasing day by day. To resolve this problem, the federation of the associations in Viswas Nager has taken some steps after discussing this issue with the concerned officers about the regularizing of loads currently being used, on a declaration of the same by members. Members who possess a license of any kind, have a upper limit of 40 HP, and the DESU fees must be paid. Those members who want a license of a lesser power rating can also apply for this scheme, with the same kind of license.

We are sending forms to all members. They are requested to kindly fill this up and submit it to the President Mr. Hari Omji or Mr. Ashok Singhal by Saturday 18/2/95.

The federation is meeting with the concerned officers of the DESU on Monday to discuss the issue again. Therefore, your forms must reach the federation office by Saturday.

Thanking you (Ashok Singhal) Secretary.

Format of declaration:

- 1) Name of firm, address, and telephone numbers:
- 2) Name of owner, or partner(s) and address:
- 3) License issued in the name of:
- 4) H.P. Rating of the license and license number:
- 5) Item for which the license is issued:
- 6) Item actually being manufactured:
- 7) HP rating required (40 HP maximum limit):
- 8) License required in the name of:
- 9) License required for the production of:
- 10) Electricity connection No.:

(Signature of the owner/partner with stamp)

This is a confidential document & it will be kept by the associations. It is assured that this information will not be miss-used. If any members does not provide correct information or does not participate in this scheme, than the associations will not be responsible for any kind of problem that arises in the future with that member.

Thanking you,

Secretary of the Association

ANNEX 6E

(Translation of letter by Ajay Maken MLA Rajouri Garden, New Delhi)

Dear friends.

I Hope that through the news papers, you must have learnt by now that in accordance with the Supreme Court orders, all hazardous industries (In Delhi)have been asked to vacate their plots. The Supreme Court have given the above orders to all the 9000 industries listed by the government's ministry of environment to the court. These orders were given on 24/3/95. All 9000 industries have been given a notice by the Central Pollution Control Board to terminate their work & clarify their position regarding pollution. Your industry is also one of the 9000 notified industries, and you might receive or have already received a similar notice.

Increasing pollution is a central concern of the public in Delhi. The fact is also that Delhi stands fourth in the most polluted city in the world. However, this is an incomplete truth. According to official reports, this (high) rank of Delhi's pollution level is only because of the SPM (suspended particle matter) reading. More than 2/3 of the pollution is due to vehicular traffic, because of the three power plants. Due to these power plants, 16% of the air gets polluted. It has also been noted in these official studies that 8% of the air pollution is from brick kilns, hot-mix plants, the ceramic industry, heavy furnaces, and rolling mills. Only 2% of the pollution in Delhi is due to the 9000 industries listed by the Supreme Court. Of these, only 320 are those which are heavily polluting (who should be first targeted for action).

I have learnt that you are the owner of a small unit. The decision of the Supreme Court to give notices to small units like you is unfortunately based on information full of flaws and mistakes. If such notices are taken seriously, than (small entrepreneurs) like launders, auto-mechanics, are included in the list of polluting industries. In this matter, I have approached several specialists & they say that to terms these units as dangerous would disqualify the meaning of the word dangerous. According to the Delhi Master Plan, all the dangerous units should be shifted to the outskirts of Delhi. Thus, including your unit in this listing is a serious issue.

It is our earnest request to the government that all the industries in Delhi should be surveyed by experienced specialists and the industries here should be divided into three categories: i) Heavy industries & heavily polluting industries; ii) Small industrial units of which pollution can be controlled easily; iii) Small industries which are not and do not cause pollution. It is necessary that the old mistakes have to be amended & the court should be appraised of the facts of this issue, and their should be no such mistake in the future. It is my earnest request & suggestion to you that you should bring this to the notice of the Vidhan Sabba Member (Legislative Assembly of Delhi) & help in creating a public awareness of the actual facts of this issue. I request you to give me an opportunity to approach the right officials to help you and make the government aware of the facts. Only with your co-operation and our awareness can we help the government to improve their policies.

Yours sincerely, (Ajay Maken)

ANNEX 7

Neighborhood as Factories in Delhi: This dissertation, by highlighting the complexity of the evolution of industrial districts, may well prompt the reader to wonder about other such districts in Delhi and if they share any common features with Viswas Nager. While more research is obviously needed in this direction, I would argue that prima facie, the policy implications mentioned in Section I are applicable more generally. The discussion below gives a sense of the industrial structure of Delhi, into which Viswas Nager fits.

The industrial structure of Delhi can be spatially divided into three major parts. The first is the 16th Century walled city of Shahjahanabad in central Delhi. Here, different streets, apart from being residential and commercial, have manufacturing activities that are often cramped into the tiniest spaces. Shahjahanabad's streets were traditionally specialized in the manufacture of particular products. Today, many of these manufacturing activities have been forced out by wholesale commercial activities due to increasing land values, the severe shortage of space, and the increasing economic centrality of this walled city in the national economy.

This shifting out of manufacturing has been one of the reasons for the evolution of two industrial belts, in the western and eastern parts of Delhi. Many of the industrial clusters here, similar to Viswas Nager, specialize in particular products. In the western industrial belt, Tri-Nager is famous for its plastic manufacturing, Narsing Garden is known for auto headlights, Sudarshan Park for incandescent bulbs, and Basai-Darapur for electric fans. The Wazirpur Industrial Estate has many firms specializing in stainless steel items, among other product lines. Kirti Nager has a large wood market and also the concentration of plastic compound traders. Further north, Jwalapuri is reputed to be Asia's largest plastic recycling area, spread over a square kilometer. In the central part of the city, is Anand Parbat, set on a hill, with a concentration of mechanical and plastic industries.

Across the river Yamuna, lies the second industrial belt. Here, Gandhi Nager has rapidly developed as Asia's largest garment market. This neighborhood attracts buyers from Russia and the East European republics¹. Further east is the Shahdara district. Many neighborhoods here, Viswas Nager included, concentrate on electrical, mechanical, and plastic goods. In the central parts of East Delhi, smaller neighborhoods like Khureji specialize in the manufacture, repair and sale of auto-rickshaw spares, and many houses here have printing presses. Adjacent to it, in Geeta Colony, paper is folded and pasted into boxes and stationery items in every other house. Further south, in the midst of recently developed public developed mass housing projects, are urbanized villages housing clusters of firms involved in garment

 $^{^{1}}$ This has become so extensive, that once unemployed graduates of Russian studies, today find lucrative jobs as translators and business associates. (Bhushan et.al 1995)

Neighborhood as Factory

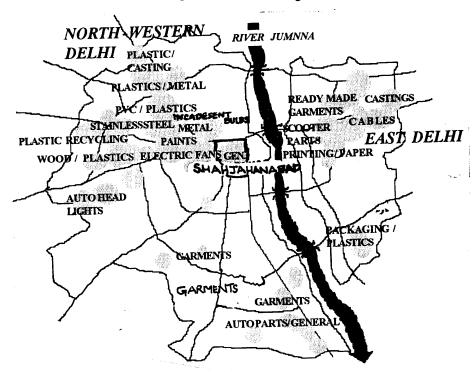


Figure 1: Specialized industrial clusters in Delhi

manufacture and various mechanical workshops. These clusters mentioned above complement publicly developed industrial parks. The latter house less than 10% of all manufacturing firms, highlighting the economic significance of industrial clusters.

The Economic relevance of Industrial clusters: People think these neighborhood-based factories have little economic and political relevance. Nothing could be further from the truth. Manufacturing and services are playing an increasingly important part in the urban economy, and these industrial clusters are rapidly growing employment and economic centers of Delhi.

For instance, the decline in opportunities in the various government office complexes and the public sector is contrasted by the rapid growth of employment in the small scale manufacturing and service industries². This growth over the last four decades has been truly phenomenal, reaching between 93,000 to 97,000 industries, according to the Office of the Commissioner of Industries, Govt. of NCT of Delhi. The Delhi Electric Supply Undertaking (DESU) has estimated, based on the number of Light Industrial Power connections, that there

² For a comprehensive description of industrial development in Delhi see Saigal 1994; For statistical details and government policy towards the small and tiny industries see Sharma et.al 1994.

Annex for Chapter 7

are already about 300,000 industries in the capital³.

Official figures suggest that manufacturing industries account for a third of the capital's employment (Saigal 1994). Recruitment has increased from 6,57,000 in 1987-88 to

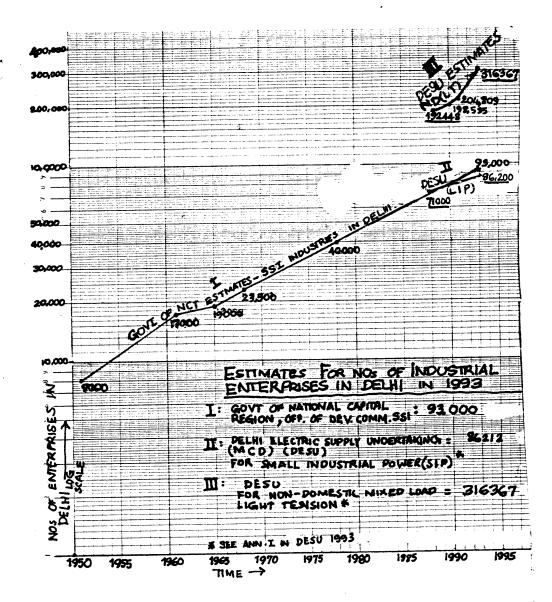


Figure 2: Manufacturing and Service industries in Delhi: Evolution from the 1950s to the 1990s

³ Page 15 of Vasant Committee Report, DESU (1996). Personal communication from Madan Lal Gaba (MLA Viswas Nager constituency March 1995). Also see: Annexure I (showing breakup of consumers of electric power) in 'Privatization tender...' Dept of Local Govt NCT 1993.

Neighborhood as Factory

7,65,000 in 1991. It is estimated that between 1987-88 to 1991 industrial investment leaped from Rs.1,420 Crores. to Rs.1,659 Crores. and production increased from 3,850 to 4,462 Crores. Industries in the capital account for almost one third the city's revenue (ibid). Figures for service sector, more difficult to estimate, are most likely to be even more impressive.

Most of this growth has been via small firms. The office of the Development Commissioner Govt. of India, estimates that 96% of all firms belong to the 'Tiny enterprise' category (Development Commissioner SSI 1994). The economic importance of the SSI sector is emphasized in many forums and official documents. Despite the various problems faced by SSI's, this sector contributes 33% of India's total direct exports and between 45 to 60% indirectly as sub-contractors and suppliers (ibid: 3-11; India Today 1995:122).

However, the contribution of firms in the 'Tiny enterprises category' either directly to the country's large and rapidly growing internal market, or as sub-contractors to exporting firms is not known (Dev. Comm. SSI Op.cit). Similarly there is less systematic documentation of the economic, employment and functional characteristics of the various industrial clusters in the capital⁴. In general, it is agreed that firms in the electrical and electronics sector have grown the fastest, followed by metal products & parts, and Rubber, plastic and petroleum products (ibid:14). Discussions with entrepreneurs from these areas suggest that almost all trade their products at the regional and national level. For instance, Basai-Darapur (specialized in ceiling fans) procures its metal castings from East Delhi, while brass wires and switches come from Jamnagar in Gujarat. Firms in Viswas Nager, supplying cables to markets all over the country, Nepal and Bhutan, procure recycled plastic from Jwalapuri in North Delhi which, in turn, has unsorted wastes trucked in from all over North India. Similarly, plastic raw stocks are trucked in from Kirti Nager in West Delhi. One has only to enter one of the numerous long distance telephone booths during the evening discount hours to experience the complexity of transactions taking place. However, there is another significant aspects to the existence of specialized industrial clusters. This relates to the kind of land settings where these clusters have evolved. Many concentrate in neighborhoods evolved from particular kinds of land sub-division processes. For instance, like Viswas Nager, a great many industrial clusters have evolved within 'un-authorized colonies'. Figure 1 in Chapter 4 had listed the specialized industrial clusters in terms of these land sub-systems. The other significant point is, evident from the discussion on the politics in chapter 6, that changes over licensing policy have come about from political forces -- cumulating from clusters all over the capital.

These four points: The existence of many more specialized clusters, their economic importance for the urban economy, their common basis of land sub-systems, and the wide

⁴ A schematic study is a background paper by the DDA (DDA 1989 PPW). This paper mentions that 45% of establishments supply their products outside Delhi.

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spread political issues regarding the legalization of these land (For instance, as connected to industrial licensing), suggests that the policy implications from the case of Viswas Nager might well have wider applicability, and be important for the urban economy. In a similar vein of argument as above, it is useful to explore the issue of wider applicability of the policy outlined previously to these clusters in various towns and cities.

Neighborhood as Factories in India: The cultural diversity of India is reflected in its handicrafts and also in the wide variety of industrial clusters in towns and metropolitan cities. Many of these industrial clusters are specialized in the manufacture of a particular range of products. Figure 3 shows the location of some of these centers of production and their particular areas of specialization. The origins of these industrial clusters are varied. Some of them emerged out of industrial estates promoted by state governments. For instance, the clustering of engineering and plastic firms in the Odhva industrial area in Ahmedabad and chemical industries in the Vapi-Ankleshwar belt in Gujarat, and the mechanical industries in the Pimpri-Chinchwad industrial area outside Pune in Maharastra in western India⁵. Other industrial clusters emerged out of changing agricultural practices and government sponsorship of small scale industrialization. The north Indian state of Punjab illustrates this quite well: Jullundhar is famous for sports goods, bathroom fixtures, water pipes and hand tools, and Ludihana for its hosiery, woolen blankets, and bicycle industry. The industrial contribution of Ludihana is particularly impressive, producing 60% of the state's industrial output, 95% of the country's woolen hosiery, 85% of the country's sewing machines and 60% of cycle and cycle parts (Dasgupta 1989). Amritsar in the same state, is famous for its garment and blanket manufacturing industry. In some cases, state policies on import restrictions, coupled by the investment in public works, defense and railways, fueled their growth. A good example of this is Bangalore, capital of the southern state of Karnataka, popularly called the 'Silicon Valley' of India. Its hi-tech character grew in response to the extensive investment made in defense industries, as well as to the establishment of several scientific institutions in the 1960s (Vyasulu 1985).

Other clusters emerged in close relation to the surrounding agricultural economy, with a wide repertoire of manufacturing and handicraft skills. For instance, Ludihana is also famous for agricultural implements spurred by the green revolution techniques of farming adopted in the sixties. Bangalore, Mysore, and Mandya in Karnataka are traditional centers for silk production drawing their raw inputs from the rural areas within this triangle. The Kaira and Mehsana districts in Gujarat have dairy co-ops which have built oil mills, solvent extraction plants, vanaspati (margarine) units as part of a strategy of local value addition

⁵ More detailed descriptions of some of these clusters are in the following documents: i) For Tirupur, see <u>Frontline</u>, April 1995; ii) For the case of Coimbatore, see <u>Krishnakumar</u> 1995: 59-91; iii) For Odhva, see <u>The Economic Times</u>, December 1995:26-27. For a general discussion, see Ramesh 1995.

Neighborhood as Factory

(See'Racing Ahead...). In the north eastern states of Tripura, Assam and Meghalaya, an important local industry is that of working various varieties of bamboo and cane into products for daily use. Similarly, the rural and small town scape of Kerala, coastal Karnataka, Tamil



Figure 3: Some of India's Specialized Industrial Clusters

Nadu and Andhra reveal ingenious ways of utilizing every part of the coconut tree to manufacture daily use products. Some of these products are traditional, like baskets and floor-

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mats. Others are very contemporary -- like rubberized coir mattress (prescribed for aching backs), and ply-board made from Phenol-bonded bamboo mats, used as door panels.

Some clusters have historical origins dating back to the early twenties and in many cases even longer. Uttar Pradesh for instance, is famed for their handicraft skills, perfected since at least a couple of hundred years. Neighborhoods in Agra and Mathura in that state house many small workshops with craftsmen busy in marble inlay work, with skills dating back to the Mughal times when the Taj Mahal was built with similar expertise. Today, Agra is also famous for its shoes, and Firozabad has evolved a extensive colored glass industry⁶. In the same state, Saharanpur is known for its carved wooden partitions and more recently hard wood furniture, Khurja is famous for its pottery and ceramic industry. The famous padlock industry in Aligarh was started in 1860 by the Postal Department, and employed almost 100,000 persons in 1981 (Burra 1987). The concentration of power looms in the Surat districts date back to the early twenties (Zariwala 1995). It developed much earlier, when the Mughal trade policy promoted weavers to produce intricate designs on handlooms with silk and zari. Out of the 500,000 power looms in the country, weaving man made fabrics, about 300,000 are concentrated in Surat and the surrounding regions of South Gujarat (ibid). Similarly, the traditional brass ware industry of Moradabad has become so famous throughout the Middle east, that Gulf money has spurred a real estate market of mansions that rivals any of the most exclusive neighborhoods in Delhi and Bombay.

Rajasthan, like Uttar Pradesh, is world famous for its handicraft skills which have found recent use in India's growing exports. Its power looms and handlooms use contemporary skills woven in with age old dyes using natural colors and drawing on its rich tradition of printing, weaving and dying. Jaipur the state capital there, is famous for its gems and diamond polishing industry, and 'lac' work. Similarly, towns in northern Kerala and the Konkan coast have age old skills, dating back to the 14th century, of cast and wrought iron?. Many of these skills still continue till today, in the manufacture of specialized cooking vessels and other items of daily use. Other clusters are relatively recent in their specialization within the last century. Tirupur in Tamil Nadu has rapidly grown as a center for hosiery products, catering to national and international markets exporting Rs.2000 Crores in 1994 (Frontline Op.cit 1995). Coimbatore, also in Tamil Nadu, is well known as the entrepreneurial center of

⁶ Some such clusters developed in centers along trade routes dating back to the 14th century, or in response to demands generated during the two World Wars and the Afghan war. Unfortunately, there is little documentation on these historical aspects, in spite of their importance to understand contemporary industrial structure. One of the few studies focusing on institutional and political aspects of technological development in pre-colonial and colonial India, is that by Vyasulu 1985.

⁷ For instance, in the 14th century, high quality iron ore was mined in Madagascar, shipped to the Malabar coast to be smelted into high quality swords and metal objects and re-exported to northern Africa for use in the war between the arabs and the moors. See Alvares 1995; Ghosh 1995.

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the south (Frontline 1995)⁸. Entrepreneurs have indigenously developed and manufactured a wide range of specialized pumps, motors, and motorized kitchen appliances⁹. Bangalore as mentioned earlier, is the silicon valley of India, attracting the country's best software talent to this rapidly developing industry. Morvi in Gujarat, apart from power looms, also specializes in digital watch mechanisms. Similarly, Jamnagar in the same state, produces brass components used in valves, electrical switches, and mechanical housings¹⁰.

The significant issue of these industrial clusters is their link to particular kind of land sub-systems. Figure 4 shows that most Indian cities have similar land typologies although local terminology varies due to conventions and legal frameworks. Almost all either predate the planning frameworks in those cities or towns, or have evolved outside them. In many cases, these are also categorized as "slum areas" requiring regularization much in the same way of un-authorized colones in Delhi. My preliminary indications in some of these cities -- Bangalore, Baroda, and Bombay, reveal that indeed, many industrial clusters in these cities do evolve in these types of areas, since not all can afford to get access to publicly developed industrial estates. Thus, it is quite possible that many of the issues revolving around civic development and land are similar to those seen in the case of Viswas Nager. Other scholars mention the active role of industrial associations involved in negotiations with local governments, although it is not clear if these include civic development issues¹¹.

⁸ Also see 'Coimbatore: Tenacious....in <u>India Today</u>, 1995:136-139; This town supplies 80% of the country's textile machinery, 60% of pumps in India, 40% of motors, 30% of its yarn, and a significant percentage of its auto-parts source to major auto companies.

⁹ For instance, a particular kind of 'submersible' pump was first developed here, and found extensive use in farms throughout the state and later in other parts of the country. Similarly, Coimbatore is famous for the 'wet-grinder' -- a motorized low speed heavy duty food processor using granite rollers in a stainless steel container. This replaces the traditional granite grinding stone -- essential in South Indian cooking used to grind rice, lentils and spices without heating the mix. So sophisticated are the designs of wet grinders, three different types are manufactured -- each developed to cater to subtle differences in styles of cooking between the states of Tamil Nadu, Andhra Pradesh, and Karnataka. Information by Arshi Sharif Industrial Designer Feb. 1994.

¹⁰ Nadvi & Schimitz give a detailed description of industrial clusters in poor countries in Latin America and South East Asia. See Nadvi et.al 1994:5-13.

¹¹ See: "Coimbatore Calls" Op.cit. and Tewari 1990.

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ANNEX 7B

The above discussion suggests the wider applicability of the Viswas Nager case in terms of the situation with industrial clusters in other parts of Delhi, and in other cities of India. Chapter 6 and 7 also raised a substantive issue about the larger urban political conflict over economic turf, which rather than played out over grounds of economic efficiency, are instead in the arena of land development. This politics seems to have prima facia, also important institutional aspects involving financial and planning institutions. In this larger perspective, it is interesting to note that this conflict is not only specific to the metropolitan situation in poor countries, but that of rich countries too. The following pages present a introductory documentation taken from news articles which highlight this theme. Rather than attempting to be conclusive, my intention is only to place the issues raised from my detailed study of a industrial cluster in East Delhi in a wider context.

Excerpts from New York Times

1) Johnson Kirk 'Where a Zoning Law Failed, Seeds of a New York Revival: Bending the rules' p.1, 42 in The New York Times 21st. April 1996.

(This article provides an excellent account of this metropolitan's dynamic economy in its relation to land use regulation.)

2) Gonzalez David 'Widening The Aisles For the Few' p.1 <u>The New York Times</u> 3rd. April 1996. (This article focuses on the political aspects of the same issue, in the differential way corporate chain stores and smaller independent supermarkets are impacted by city regulation.)

DAVID GONZALEZ

About New York

Widening The Aisles For the Few

UIS SALCEDO waited tables for 11 years, saving tips and paychecks until he could buy a modest coffee shop in Brooklyn. A few years later, he bought a grocery store in the Bronx. Then he put together \$1 million through savings and highinterest loans, renovated a dilapidated Harlem storefront and opened up a supermarket with the grand name of Bravo.

Hold the applause.

His ascent up the food chain may be ending. He is convinced that his business will be gobbled up by predators coming into his neighborhood with unfair advantages. A few blocks east of his Fifth Avenue store, a large Pathmark is to be built. To the west, Fairway's mammoth uptown outpost attracts a socioeconomic mix ranging from aficionados of gourmet cheese to the recipients of the Government kind.

Like many owners of independent supermarkets in the area, he is irked by the city's helping to close the Pathmark deal by providing a 1 percent mortgage on the site and offering to act as an equity partner until a Hispanic community sponsor is found.

As for Fairway, Mr. Salcedo sees nothing fair about the way the 35,000-square-foot store opened late last year, apparently in violation of zoning laws that limit retail floor space to 10,000 square feet. The store's owners said it was a wholesale operation open to anyone, thereby exempt from the laws. While Fairway's owners negotiate a solution with the city, officials are preparing this month to discuss changing zoning laws to allow stores to sprawl out over 200,000 square feet.

OVERNMENT'S embrace of these economies of scale makes Mr. Salcedo and his contemporaries feel mighty small. They say their dealings with officialdom are often limited to maddening encounters with health inspectors and code enforcers who are quick to dash off a summons for the slightest infraction.

"We want a level playing field," he said, perched in his tiny office where video monitors provide a scan of the store. "I will not put down Fairway at all as a business. The question is how someone got away with violating the law while others can't."

His complaints are typical of the 400 or so independent supermarkets scattered throughout the city, many of them in poorer communities that were abandoned by the big supermarket chains in the 1960's. The owners of these smaller supermarkets - many of them Hispanic immigrants who chafe at the term bodega, which their businesses are not - moved into those empty stores, shunned by bankers but often financed by food wholesalers and others who made them pay high interest on short-term loans.

"We came in aggressively and financed it privately," Mr. Salcedo said. "Now the big supermarkets see us thriving in here and they want to come back. But they need special zoning and benefits we don't get. I don't

think that's American."

Especially not when he was just hit with a \$50 summons because a passer-by tossed garbage onto the sidewalk near his dumpster. The law holds him responsible, he said, even if the garbage wasn't from his store.

Before that, he faced \$13,000 in fines because he had failed to put price stickers on every roll of paper towels he stacked in a display. The rolls were in sealed boxes.

"Are they technically following the laws, or do they use discretion?" he said. "Their job is to give me a summons, and then you

deal with the system."

Now Mr. Salcedo is getting help. Many supermarket owners banded together to confront city agencies, working out a settlement on outstanding fines that allows them to pay only a quarter of what was owed.

ORE recently, Hispanic supermarket owners and Korean greengro-. cers have joined forces to make sure they don't get lost in the shuffle of new zoning maps that would clear the way for big, warehouse-style stores. This ethnic alliance would not have been likely a decade ago when the two groups considered each other as competitors. Now they've petitioned the state to study the economic impact of their small businesses, which together employ some 48,000 people.

"We're building up and sharing our common concerns and problems," said Sung Soo Kim, the vice president of the Puerto Rican-Asian-Hispanic Development Corporation.

We are a social class.'

Mr. Salcedo thinks that this newly united merchant class might help them pool the resources to compete with the big guys. Together, maybe they can get government to look at them as players with economic clout and more than a few votes.

'Why not offer the opportunities to the people who went in with their own dollars and risked everything?" he said. "I don't want something for nothing. I just want the

same opportunity."

Where a Zoning Law Failed, Seeds of a New York Revival

By KIRK JOHNSON

In a moment of panic in 1974, as manufacturing jobs were disappearing by the tens of thousands in New York, the city tried to lock in its past as a burly, blue-collar colossus. A new planning blueprint was imposed, severely limiting uses for anything but manufacturing across nearly 14 percent of the city's land area, more than 20,000 acres.

There was a vainglorious polgnancy to the blanket declaration that the tides of time and industrial relocation should somehow be halted by whim of city bureaucracy. The jobs did not return or even slow their rate of departure. The 20,000-acre zone still stands, while two-thirds of the 800,000 manufacturing jobs the city had in the early 1970's are gone.

But even as those old plans failed their stated purpose, they nonetheless have left a profound and unexpected mark on the city's economy, the machinery of government and the plans for the coming century, city officials, urban planners and business people say. Indeed, in many ways the plan's failure was its contribution. From the ashes rose opportunity.

BENDING THE RULES

A special report.

The city owes much of its recent economic success, in fact, to the disregard of its own manufacturingzone rules. The lofts and warehouses of SoHo and Tribeca, where rents were cheap and huge open spaces were available, proved to be ideal incubators for the hip hybridization of computer technology, art and residential loft living that the city now crows triumphantly about as Silicon Alley. A retail renaissance led by big suburban chain stores has transformed a derelict stretch of the Avenue of the Americas below 34th Street. The Fairway Market at 133d Street has drawn more commerce to Harlem than anything in recent memory.

And almost none of it would have happened — or would look as it does today — if New York had vigorously enforced its own laws.

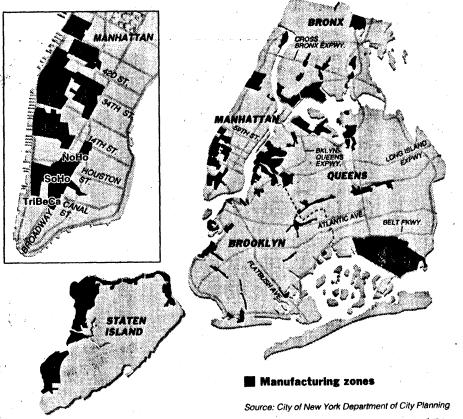
"Things that have been celebrated as the keys to renewal of whole areas initially came into being contrary to the letter or spirit of the zoning law," said the director of city planning, Joseph B. Rose. "If the city got what we planned for," Mr. Rose added, "many currently vital areas would still be wasteland."

This is a story of how New York City works in the 1990's, and how it doesn't, and how sometimes—in ways that could not remotely have been predicted—it succeeds despite

A CLOSER LOOK

Zones of Opportunity

In 1974, to protect declining industry, the city set aside 20,000 acres limited to manufacturing. The plan failed, but the city today owes much of its economic success to the zones, which thrive despite the rules.



itsell, if only by figuring out when to look the other way. It is also a story of capitalist democracy at its unruliest, a theme of local history as old as New York itself.

"The wonderful charm of New York is that when the regulations are old-fashioned or don't make sense, you just charge altead," said Michael Kwartler, an architect-urban designer and the director of the Environmental Simulation Center at the New School for Social Research. "The city had one idea of how we were all supposed to live and function and it turned out to be a mismatch," Mr. Kwartler added. "Being practical, we don't obey."

Certainly, there are plenty of critics who believe New York lost doubly in its manufacturing policies — first by creating rigid rules, that didn't address the problems of high costs and taxes that manufacturers faced, then by giving in to the first possible alternative use when landlords began complaining about their empty buildings. And there is sharp debate as well about the implications of the new growth, although for the most part it has nothing to do with manufacturing. Owners of some small grocery stores in Harlem, for instance, say they fear the Fairway store will drive them out of business.

But few disagree that for the city as a whole, something new and unexpectedly positive has happened in the industrial zones, even if the road was paved with the grease of least resistance. A survey released this week by Coopers & Lybrand, the consulting firm, said that 1,350 computer-related media companies are doing business in New York, mostly in lower Manhattan, employing about 18,000 people — more than the city's television industry.

How, precisely, New York came to win by losing is partly a matter of old-fashioned inefficiency and chronic budget-cutting that have decimated the numbers of city building inspectors — thus making zoning violators harder to catch — and partly a matter of conscious policies to encourage economic development whenever and wherever opportunities arose.

The point is not that every new business in a manufacturing district in New York is there illegally, but rather that the distinctive economic colonization of the manufacturing zones would never have occurred, or spread, without creative legal interpretations. Artists, for example, are considered manufacturers in New York — that's why they can legally live in their lofts in SoHo. So are some composers of disembodied computer instructions for the Internet. The effort to keep manufacturing jobs was built on rules; the new growth is premised on flexibility.

City officials say the vaguely countercultural flavor of much of the new media businesses — a broad category that includes everything from software developers to computer-graphic artists and video production companies — could also probably never have been created deliberately, even if it had occurred to anyone to try. In SoHo, in particular — generally considered the fountainhead of the new media culture — living and working outside the system became one of the defining traits. The vast open spaces of the leftover manufacturing zones also lent themselves naturally to big retailing uses.

But the pressures to enforce the law and build the economy have also often been in conflict, creating within the city's two key

development authorities — the Buildings and Planning Departments — a constant meditation about the balance between the sanctity of the law and growth of the property tax and job base.

"The city is in the business of making and enforcing laws — it can't be in the position of enforcing some but not others," said Mr. Rose at the Planning Commission. "But when they're being violated with abandon, and when the market says, 'This is stupid, we're not going to abide by it,' it gets very difficult. It can be like shouting at the ocean."

The economic sea changes of the last quarter century have also made planning and enforcement much more difficult. When the old manufacturing zones were imposed '

in 1961 and amended in 1974, many current retailing practices had not been invented. The specific exceptions in the 1974 code allowed, for example, toy stores and hardware stores in some manufacturing zones. That is how Toys "R" Us and the Home Depot — superstore specialty retailers that did not exist when the rules were written — came into the city.

But now the ad hoc has become deliberate. The city is now consciously trying to cultivate similar successes among the towers around Wall Street, where millions of square feet of office space sit vacant. A new zoning proposal, to be issued within the next month by the City Planning Commission, would also legalize much of what has already occurred.

But city officials insist that they are not looking backward to what worked before, as they did in 1974, and that the past, this time, really is prologue.

The Loopholes

Defying Rules, Or Rethinking Them?

Howard Glickberg, a co-owner of the Fairway Market in upper Manhattan, said he sincerely believed that his supermarket, the largest in Manhattan, was not really one store at all, as it appears to the rest of the world. In truth, he said, it is a series of separate stores, each smaller than 10,000 square feet. By happy coincidence, this is the very threshold beyond which the sum of the Fairway parts would violate New York City zoning laws for a manufacturing district.

Is this a delusion? A legalistic humbug? Or is it, in fairness, an approximation of truth that no one before Mr. Glickberg and his attorneys had ever managed to achieve? And if New York City Buildings Department officials accept Mr. Glickberg's formula, as many members of the City Council are pressuring them to do to save the popular store, will it become official doctrine?

Ignoring Zoning Laws Helped New York City things have happened. In a city one to live by its loopholes, no Succeed in Spite of Itself

Stranger things have happened. In a city that has come to live by its loopholes, no argument is too strange, no justification too arcane.

Bed, Bath & Beyond, for example, a large home-furnishings store on Avenue of the Americas between 18th and 19th Streets, was the first store to open, in 1992, in what is now a vibrant retailing district. Its building was a department store in the 1800's, when the area was the fashionable "Ladies' Mile," but rezoning in 1974 prohibited any but small, street-level retail stores. It was a tortured

legal history, and it evoked a tortured modern reinterpretation.

The solution that allowed the store to open was to classify it as something new in the universe — so different that its identity had not been codified into law, and could therefore not be barred.

"We develoused a theory, which the Buildings Department accepted, that Bed, Bath & Beyond, as a type of establishment, didn't fall into the categories that were prohibited—it wasn't a department store because there was no clothing, it wasn't a variety store, and it wasn't a home furniture store," said Paul D. Selver, an attorney who represented the store. "Because it wasn't any of the things that you specifically can't do, it was more properly characterized as a generic commercial use," he said. "It was sui generis."

Some rules that applied to the manufacturing zones never really had a chance to succeed. When the city created a system in the 1970's of allowing properly certified artists to live and work in the lofts of SoHo, which they were already doing anyway, enforcement was left up to individual landlords. But the landlords seeking to rent out their buildings had every incentive to violate the rule.

There was the regulation on one hand, and there was the enforcement provision on the

other, said Sandy Hornick, the deputy executive director of strategic planning at the Planning Department. "But there was no point where the two came together — that's why it worked so well."

In most instances, however, the growth of non-manufacturing in manufacturing zones has been a matter of case-by-case flexibility.

"Whenever you have a disjunction between what the zoning allows and what the market pressures dictate, you have a lot of creativity," said Richard L. Schaffer, a visiting professor of urban planning at Columbia University and chairman of the city Planning Commission from 1990 to 1993. "Sometimes my legal staff knew enough not to talk to me about it, so I wouldn't know," he said.

The Philosophy

It All Started With Budget Cuts

A hand-off attitude, except when prodded by a complaint or in issues of public safety, has effectively become the policy of the City of New York in zoning matters. That was a crucial development in the story of how the manufacturing zones changed character.

"Nobody is going to go out and look for reasons to aggravate people when there isn't a reason," said Joel A. Miele Sr., the city's Buildings Commissioner.

It all started, Mr. Miele said, as a matter of simple budget cuts. New York had teams of building inspectors well into the 1950's who would comb through targeted neighborhoods and commercial areas aggressively looking for problems. Now, he said, a reduced staff

has to focus on safety violations at the exclusion of lesser issues. Since 1977 alone, the number of inspectors has declined by more than 28 percent, to 203 from 283.

But a philosophical change occurred alongside those cuts. The old style of enforcement, Mr. Miele said, would not only be impossible now because of straitened circumstances, but wrongheaded even if the money were there.

"If somebody wants to live in an industrial area, who's hurt?" he said.

In a complaint-driven enforcement

system, a certain amount of ignorance about violations is inevitable. And when market forces are producing positive results, the ignorance becomes, in a way, its own reward.

The rule still stands in SoHo, for instance, that a landlord in most larger buildings must make a "good faith" effort to find a genuine manufacturing-related tenant for all street level uses — the search must even include advertising for up to a year in a newspaper. Yet the amount of retailing only grows in the area, and Mr. Hornick at the Planning Department said he presumed that not everyone had followed the rule to the letter. He doesn't really know. Finding out would require research that could in turn compel enforcement against a use that the city is now trying to legalize with new zoning rules.

Business people say that that kind of laissez-faire attitude permeates the new manufacturing-zone economy.

"If anything, it's a benign neglect," said Cis Wilson, co-founder of Deep River Productions, a documentary film production company on Hudson Street in Tribeca. Her building, with its huge windows and clanking-chain elevator, is filled with tiny companies in niches from computer software to video production. "It's almost like the force of the people who have come and lived here are what's driving the energy," Ms. Wilson said. "I don't feel the city in any way."

The Future

A City Debates Its Self-Image

What happened in New York's manufacturing zones over the last two decades, both legally and illegally, is now framing the debate about what comes next for the city.

The City Planning Commission is expected to propose within the next month a sweeping revision of the manufacturing zone rules. In some cases, the changes would legitimize what has already occurred, like the widespread retailing establishments of SoHo. But it would also allow more big retail stores, larger than 10,000 square feet — like the Fairway store, or stores — to open in the zones as well. The debate, with its undertones of civic self image and nostalgia, is expected to be vehement.

"This will be the hardest thing we ever do — allowing other Fairways to exist," said Mr. Rose at the Planning Department.

The implications of the manufacturing zone story also echo on the southern tip of Manhattan, where the city is now consciously pushing a policy of extending its Silicon Alley success into the financial district. That has meant in some cases deliberately creating, in buildings that were designed as bank and brokerage offices, the look and feel of industrial loft spaces. That's what companies want and what they say their customers have come to expect.

"Culturally, we wanted the look and feel to be fun and creative, both for our employees and for people coming in," said Jon Diamond, the vice chairman of N2K Inc., an online entertainment company that rented space this year at 55 Broad Street. The building was home to Drexel Burnham Lambert before it went bankrupt in the junk-bond fiasco of the 1980's. But now post-industrial anarchy has become post-service economy artifice. The ceiling was ripped out to reveal the beams and heating ducts, which have been sprayed with a suitably industrial gray.

"It had to have the look and feel of a loft," Mr. Diamond said.

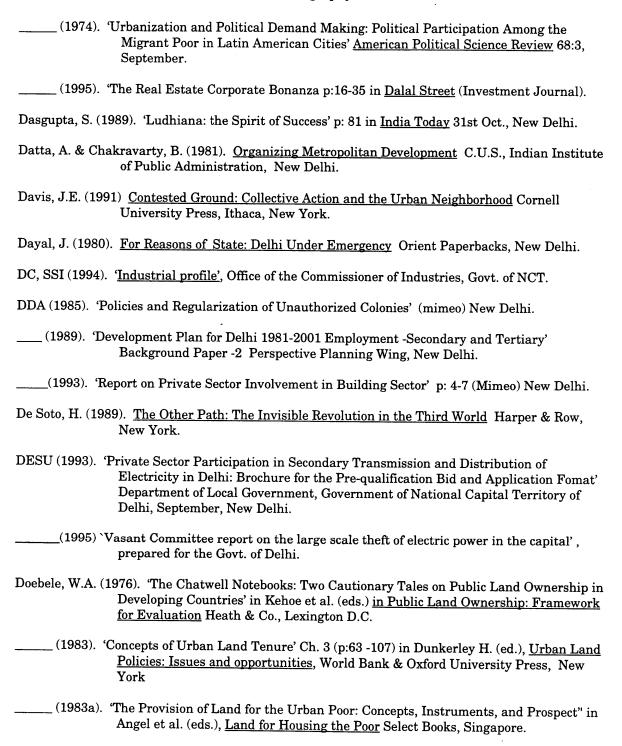
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