Finding the higher ground:

Assessing Contrasting Approaches to Planning for Climate Change Induced Resettlement

By

Todd Edward William Schenk
Hon. B.A. Geography
University of Guelph, 2002

Submitted to the Department of Urban Studies and Planning in partial fulfillment of the requirements for the degree of

Master in City Planning

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

June 2009

© 2009 Todd E.W. Schenk. All rights reserved. The author hereby grants to MIT permission to reproduce and to distribute publicly paper and electronic copies of this thesis document in whole or in part in any medium now known or hereafter created.

Signature of Author: ________________________________

Department of Urban Studies and Planning
May 21, 2009

Certified by: ________________________________

Professor JoAnn Carmin
Department of Urban Studies and Planning
Thesis Supervisor

Accepted by: ________________________________

Professor Joseph Ferreira
Chair, MCP Committee
Department of Urban Studies and Planning
Abstract

Climate change induced resettlement (CCIR) is emerging as an issue that planners will need to address. It is expected that how planners in different political and economic contexts around the world respond will be shaped in large part by how they have traditionally planned. If so, it is important to consider the strengths and weaknesses of these different planning frameworks when applied to CCIR. This is a particularly important question in this context because of the unique nature of climate change, particularly the fact that it is typically less clear when resettlement is the right response.

This thesis examines climate change induced resettlement in two very different contexts, which could be considered archetypes of two very different planning frameworks – the resettlement of Tibetan nomads in Qinghai, China, and the response in the United States, and New Orleans in particular, to Hurricane Katrina. The Chinese approach can be typified as authoritarian in nature, favoring scientific management by a cadre of professional, centralized planners. The American approach can be considered market-oriented and laissez faire, minimizing government intervention.

The conclusion reached is that both planning frameworks have strengths and weakness, and should be learned from. The Chinese approach is better able to tackle the resettlement question proactively, using information to make decisive decisions. In contrast, uncertainty around the impacts of climate change, the inadequate dissemination and consideration of information, and resistance to government intervention make proactive decision making in the American context difficult. The Chinese approach does, however, have shortcomings; resettlement plans are largely generic and thus insensitive to individual needs and preferences, and planners hold a great deal of power that can be used nefariously.

In terms of resettlement itself, the American approach allows for a greater diversity of responses, better matching household preferences, as most decisions are made at the household level. The Chinese approach is highly standardized, reflecting the centralized and comprehensive nature of planning. The American approach does, however, arguably fail to provide satisfactory options for the marginalized while the Chinese approach provides the same resettlement scheme to all.
Acknowledgments

I would like to start by thanking everyone that selflessly gave their time to me for the purposes of this thesis. First of all, thank you to the wonderful people I had the opportunity to meet and interview in Qinghai, and to the others that made those interviews possible, especially Nangchukja (Robert) and his family, Evan for his thoughts and endless assistance, Ronald for taking me to my first resettlement, my friend and translator Landon, and Scot and the D Lab team. I would also like to thank Shane Carmichael for discussing Magnaville, and the broader post-Katrina response, with me for so many miles of his long drive.

I owe a debt of gratitude to my advisor, Professor JoAnn Carmin. She has had unending patience and a wealth of much-needed advice as I have bounced around a variety of ideas to arrive at this thesis. Her pioneering work on climate adaptation is also an inspiration, which I look forward to continuing to learn from. Thank you to my reader, Dr. David Fairman, for his thoughtful feedback and ideas on this work. His quick mind and keen insight were crucial to finding a way to a thesis at a critical juncture.

I also need to thank my parents for the inspiration they have always been to me, the faith they have always had that I could do it, and for not telling me to shut up when I pushed the boundaries of inquisitiveness. Thank you to my two sisters too, for making me tougher and for inspiring me with what they have both accomplished.

Last but certainly not least, I would like to say thank you (and sorry) to my wife Radka and son Honzik for their incredible patience, support and unending love when I certainly did not deserve it. Thank you for smiling farewell when I flew off to China, and for saving my place in the family when I called thesis camp home. Honzik, thank you for making the letter T for me, and thank you Radka for making dinner the last 128 days straight – I owe you.
Table of Contents

Abstract .......................................................................................................................... 3
Acknowledgments .......................................................................................................... 5
Chapter 1. Introduction ................................................................................................. 9
Chapter 2. Climate change and resettlement ................................................................. 15
Adapting to the inevitable ............................................................................................. 16
Resettlement as a response ............................................................................................ 17
Chapter 3. Planning for resettlement .............................................................................. 21
General planning frameworks ....................................................................................... 21
The unique nature of planning for climate change-induced resettlement ....................... 26
CCIR planning in China and the United States – the case studies ..................................... 27
Chapter 4. Case study: Resettlement planning in Qinghai, China ........................................ 31
Background .................................................................................................................... 31
Overarching planning framework .................................................................................. 33
The resettlement decision and relocation process ......................................................... 34
Information and consultation ....................................................................................... 37
Housing/shelter ............................................................................................................. 38
Employment and self-sufficiency ................................................................................... 38
Service and resource provision ..................................................................................... 39
Cultural preservation and change .................................................................................. 43
Conclusion ....................................................................................................................... 44
Chapter 5. Case study: Resettlement planning in post-Hurricane Katrina New Orleans ...... 47
Background .................................................................................................................... 47
Overarching planning framework .................................................................................. 48
The resettlement question ............................................................................................. 48
Resettlement options and selection process ................................................................... 52
Magnaville: A non-profit resettlement response ........................................................... 56
Information and consultation ....................................................................................... 60
Housing/shelter ............................................................................................................. 60
Employment and self-sufficiency ................................................................................... 61
Service and resource provision ..................................................................................... 62
Cultural preservation and change .................................................................................. 64
Conclusion ....................................................................................................................... 65
Chapter 6. Key observations + recommendations .......................................................... 69
Bounded participatory decision-making ......................................................................... 73
Information for decision-making ................................................................................... 74
Following plans ............................................................................................................. 75
Self-sufficiency and safety nets ....................................................................................... 75
Justice and equity issues ............................................................................................... 77
Market corruptions ....................................................................................................... 78
The roles of the public, for-profit and non-profit sectors ................................................. 79
Learning from past experiences ..................................................................................... 80
Chapter 7. Conclusion ...................................................................................................... 83
Chapter 1. Introduction

The impacts of climate change will vary from place to place and sector to sector. What is clear is that these impacts will be significant, and we will need to adapt to them. As the City of London’s climate change adaptation strategy notes (Greater London Authority 2008: vii):

Even if all global greenhouse gas emissions could be stopped today, the immense inertia in Earth’s climate systems means that changes to our climate for the rest of this century are unavoidable (...) International efforts to reduce global emissions are not so far making the drastic reductions required, so we may be heading for further and potentially more profound changes to our climate.

In fact, many argue that climate change is already being felt from New Orleans to Darfur, and remote Alaskan fishing villages to southeastern Australia. Some changes are subtler, including slowly rising sea levels and average temperatures. Others are more drastic, including increases in the intensity and frequency of major storm events, and prolonged droughts.

Regardless of the time scale within which they occur, climatic conditions will be altered enough in some cases to destabilize the ecological and social balances that humans depend on, either directly or in concert with other factors as a ‘multiplier’, forcing drastic lifestyle changes and even migration. In fact, the Intergovernmental Panel on Climate Change (IPCC) has predicted that human migration could be the most significant consequence of climate change (Brown, Oli 2008). Climate change displaced persons (CCDPs) will need alternatives; some will migrate and join other communities, some will return to their
original communities, at least as a short-term response and potentially at their peril, and others will resettle in new communities.

Given that climate change may lead to a drastic increase in the volume of CCDPs, and that climate change presents new challenges in its own right, the ways in which resettlement is planned, implemented and supported are important to consider. The nascent literature on climate change induced resettlement (CCIR) asserts that planning involves meeting peoples’ needs, creating viable livelihoods, and, in some cases, finding homes for newly stateless populations, as unplanned for migration has the potential to overwhelm infrastructure and services, lead to unsustainable and unsatisfactory livelihoods among both CCDPs and others in the areas they migrate to, and subsequently lead to tension and violence (See, for example, Brown, Oli 2008; Johnstone 2008). This literature, which is largely the product of development-oriented international organizations, is unsurprisingly normative in its prescriptions for how governments and organizations should meet the needs of CCDPs. However, if past and present planning to address other problems is any indication, how and the degree to which CCDPs are planned for will vary widely between countries and cases, depending on their broader planning frameworks. The few cases of resettlement that have already been characterized as climate-induced would confirm that the variation in planning responses is indeed wide here too.

---

1 A ‘planning framework’ is the broader political and economic model within which plans are developed and implemented.

2 The limited number of cases in which climate change has been cited as a potential driver of resettlement include the two case studies that form the core of this thesis – planning post-Hurricane Katrina in the United States and nomadic resettlement in Qinghai, China – small Pacific islands, including the Carteret Islands, and resettlement in Bangladesh.
The question is: How do very different planning frameworks effect resettlement planning in practice? What are the strengths and weaknesses of different approaches to planning – and associated economic and political systems – in terms of their ability to prepare for CCIR, and provide the best resettlement options for those involved?

This paper focuses on two very different approaches to resettlement. The first is in Qinghai, China, and involves the resettlement of Tibetan nomads. In terms of a broader planning framework, the Chinese model can be characterized as authoritarian and scientific rationalist, with an emphasis on top-down decision-making by experts. The second case I examine is planning post-Hurricane Katrina in the United States. In the United States, the broader planning framework can be characterized as market-oriented and laissez-faire, or neoliberal, with a limited role for government and strong dependence on individual freedom and market forces.

The assumption is often made that a market-oriented approach will lead to better individual and collective outcomes. The rationale is that households have the freedom to optimize their own outcomes by making the decisions that will benefit them to the greatest degree, given the resources they have. This, in turn, leads to optimal outcomes in the aggregate, as markets will provide the means for people to trade until a Pareto optimal state is reached. In the sphere of governance and policy, this neoliberal approach translates into the assertion that government should play a minimal role, largely confined

---

3 These assertions are rooted in the Fundamental Theorems of Welfare Economics, which are seen as descendants of Adam Smith’s ‘invisible hand’, and are implicitly and explicitly widely accepted in economic theory (Stiglitz 1991). The first theorem states that – provided certain conditions are met – market economies are naturally Pareto optimal, meaning that no one can become better off without making someone else worse off (Stiglitz 1991). The second theorem states that the price system (markets) can lead to all possible Pareto efficient outcomes, so all government needs to do is facilitate lump sum transfers to address initial equity issues (Stiglitz 1991).
to referee or safety net of last resort in extreme cases. The assumption here too is that households know what is best for them, and, provided that they have adequate information, will make the right decisions for themselves, balancing the risks and rewards of any options as they see fit. In the context of CCIR, this means that the government should encourage a variety of private responses, leave the bulk of decision making to households, and provide little assistance, largely disbursed in the form of cash or other transferrable support so that recipients can use it as they wish. Planning is given a minimal role, as little decision-making is in government hands.

There are a few weaknesses with this approach. First of all, as Stiglitz (1991) illustrates, markets are typically incomplete (i.e. not all options are provided), most if not all players are working with imperfect information, and there is rarely perfect competition. Secondly, Pareto efficiency says nothing about equity and, in fact, the false dichotomy between market efficiency and equity measures introduced with the Second Welfare Theorem ignores the fact that governments cannot and do not engage in lump sum resource distribution in practice (Stiglitz 1991). As a corollary, more market-oriented societies tend to have significant disparities between rich and poor, and subsequently disparities in access to various options in the marketplace. Thirdly, imperfect information plays a disproportionately important role in terms of planning for CCIR, as when conditions warrant resettlement as opposed to adaptation in-place is typically unclear.

---

4 For example: according to the United Nations Development Programme’s Human Development Report 2007/2008, the United States has the highest Gini Coefficient - which is a measure of inequality of wealth - of any developed country.
In stark contrast, the assumption in centrally planned scientific management systems is that government planners have access to superior information, and appropriate methodologies for assessing and synthesizing that information, and are better equipped to ensure that everybody's needs are met in both the short and longer terms. Economically, markets may play a role in the distribution of goods, but under the shadow of strong state management. In the political sphere, citizens may have some recourse, but planners make most decisions within the framework of a strong technocratic bureaucracy. In the context of CCIR planning, the government plays a strong role coordinating the response.

There are weaknesses with this approach too. First of all, as countless examples of authoritarianism in practice around the world have illustrated, "All power tends to corrupt and absolute power corrupts absolutely" (Lord Acton in Wikiquote 2009). Amundsen (1999) empirically illustrates the inverse correlation between the strength of a country's democracy and its level of corruption. Secondly, planners are expected to not only be altruistic but omniscient too, holding the capacity to deduce the right response for everyone in what are complex situations. This is unrealistic, and thus responses are often not optimal, nor what each household would choose for itself if given agency.

Given the strengths and weaknesses of these two approaches to planning, the thesis of this paper is that both bring advantages and disadvantages to the emerging discourse on planning for CCIR. The authoritarian Chinese model is more proactive and provides an essentially uniform response, including to the poorest members of a given community. Both the motivations and competencies of planners must, however, be trusted to a much greater degree, given the power they wield. Furthermore, the standardized approach is not
utilizing peoples’ resources to attain the Pareto optimal outcome in all cases. The American model allows for individual choice and freedom, but proactive responses are difficult to engender and the most marginal often fall through the cracks. A suitable hybrid approach could draw strengths from both. Households could, for example, be given agency to play a part in the resettlement process and build their own homes within the boundaries of a policy mandating resettlement as necessary. Recognizing the limitations of the two systems focused on, and the unlikelihood of radical change, there are also steps each could take to ameliorate some of their weaknesses.

Chapter 2 of this thesis will introduce resettlement as an emerging response to climate change. Chapter 3 will further elucidate the two planning frameworks being examined, discuss what is unique about CCIR, and introduce the two case studies. Chapters 4 and 5 are the cases themselves – Nomadic resettlement in Qinghai, China and resettlement post-Hurricane Katrina, particularly focusing on New Orleans. These case studies are framed with an eye towards how the broader planning frameworks these resettlements are occurring within impact planning in practice. Finally, chapter 6 draws some general observations and recommendations from the analysis.
Chapter 2. Climate change and resettlement

As a starting point, it is important to consider why planning for CCDPs is an issue, and resettlement must be acknowledged as a possible necessity. Much has been written about climate change, so this section is brief in its general introduction, focusing more on why resettlement deserves attention.

It is fairly safe to say that the debate around whether or not the climate is changing is over. The Fourth Assessment Report of the UN Intergovernmental Panel on Climate Change (IPCC), released in 2007, states that: “Warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice and rising global average sea level” (Bernstein et al. 2007: 2). The Report goes on to assert that it is very likely that the primary cause of these changes in the climate is anthropogenic emissions (Bernstein et al. 2007). This is notable, given that the report is the product of hundreds of scientists; is vetted by hundreds more, including representatives of most states; and has traditionally been criticized as watered down in light of the need to reach such broad consensus. From the popular press to the scientific journals, the discussion is moving on to how quickly that change is happening, what the implications are, and how we will adapt (Oreskes 2004; Lydersen 2009).

The broad implications of climate change are quite well understood. The IPCC Fourth Assessment report observes or predicts the following trends with varying degrees of certainty (Bernstein et al. 2007): The melting of glaciers, ice caps and the polar ice sheets; sea level rise; decreases in snow and ice; changing precipitation patterns, with increased
precipitation in some areas and decreased precipitation in others; less cold days and frosts, and more heat waves; an increase in the number of intense tropical cyclones; increased instability in mountains and other permafrost regions with ground melt; and shifts in the ranges of flora and fauna, and in their seasonal cycles.

These trends are expected to have, or are already having, serious impacts, including: increased heat-related mortality; changes in infectious disease vectors; changes in the ranges of flora and fauna, with increased rates of extinction; flooding; drought and water scarcity; and increases in the frequency and intensity of tropical storms (Brown, Oli 2008). Furthermore, even if we were to drastically reduce emissions today, scientists note that our climate has a great deal of lag, meaning that we are likely to experience the changes outlined above based on the greenhouse gasses already present in our atmosphere in elevated concentrations (Byravan and Rajan 2006).

Adapting to the inevitable

In light of the changes to our climate already underway, governments and other organizations are asserting that they need to plan how best to adapt. Adaptation strategies have been, or are being, developed by governments and agencies at all scales, from the World Health Organization to the City of Cape Town, and Finland in between (Ministry of Agriculture and Forestry 2006; Mukheibir and Ziervogel 2006; World Health Organization 2009).

Adaptation planning is, however, nascent and thus far not nearly comprehensive enough to adequately address concrete changes at the local level. For example, the City of London’s plan is among the most comprehensive, yet still barely skims the surface regarding how
climate change will impact the city at the level of individual facilities, streets and so on, let alone what technical adaptation measures will be required. For example, it quantifies what proportion of various infrastructure - schools, police stations, bus depots, gypsy and traveler sites, and so on - are in various flood zones and provides some global advice regarding how the city could better prevent and prepare for flooding, but does not discuss how this infrastructure will need to be reinforced, moved or prepared in light of increasing risks of flooding (Greater London Authority 2008).

The key takeaways from the London strategy, and most like it, are not concrete adaptive measures, but assertions that planning is necessary and recommendations regarding what research and analysis should be conducted next to better understand and respond to this complex and multi-dimensional issue. Planning practitioners are a long way from fully understanding how climate change will play out on the landscape let alone what the best adaptive responses are.

**Resettlement as a response**

In some cases, resettlement – which can be thought of as the most extreme adaptive response – may be necessary when it is clear that viable livelihoods are no longer sustainable in a given region. Researchers are only starting to investigate - and policy makers and politicians concern themselves with - how climate change will displace populations and what this displacement might look like (UNHCR 2008).

It is not surprising that small island states are the first to face the very real threat of climate change associated sea level rise swallowing their lands and forcing them to migrate. Some estimate that countries like Tuvalu, with its highest point at 4.5 meters above seal level,
will be completely submerged under rising seas within fifty years (Conisbee and Simms 2003; Friends of the Earth Australia 2007). Recognizing this, Tuvalu’s Prime Minister was among the first world leaders to request assistance, and a destination, for his citizens (Lopez 2007). In fact, in light of inaction and the gravity of the situation, Prime Minister Talake went so far as to threaten legal action against the developed states responsible for the bulk of greenhouse gas emissions (Conisbee and Simms 2003).

Resettlement, rather than rebuilding, was also recommended in particularly vulnerable neighborhoods of New Orleans post-Katrina, but this advice has largely been ignored (Whoriskey 2007a). Beyond a handful of extreme cases, resettlement has, however, rarely been considered as an appropriate adaptive response thus far. As climate change intensifies, this may change. The drivers of climate migration that small island states are experiencing now may merely be harbingers of much wider-scale climate change the world can expect.

There are myriad ways in which climate change is expected to induce migration, including (Australian Human Rights and Equal Opportunity Commission 2008; Brown, Oli 2008; UNHCR 2008): Flooding and inundation; increases in the frequency and intensity of tropical storms; land destabilization; reductions in fresh water availability; desertification; salt water intrusion; extreme heat waves; shifts in the distribution of flora and fauna; and political and social instability, often accompanied by violent conflict, that is triggered by a diminishing resource base. Climate change will be the only driver in some cases, but will act in concert with other forces in most.
What is daunting are the millions, if not billions, of people exposed to climate risks that may force them to uproot (Biermann and Boas 2008). For example, approximately half of Bangladesh’s population of over 150 million live in areas below five meters above sea level, and sixteen of the world’s nineteen mega cities, from New York to Bombay, are in low-lying coastal areas (Conisbee and Simms 2003; Friends of the Earth Australia 2007). Shanghai and the surrounding Province, China’s economic heart, face the very real risk of complete inundation in the coming decades due to sea level rise and subsidence (Myers 1993). According to the UNFCCC (2007), millions of people in the catchment areas of the Himalayas and Andes face the perverse risks of too much water causing flooding, as glacial melt is accelerated, then drought and water scarcity once the glaciers are gone.

Estimates of how many people will be displaced vary widely - from 25 million to a billion by 2050 (Myers 1993; Brown, Oli 2008; Friedman 2009b; Hodgkinson et al. 2009). Some predict that climate change will induce the largest migration in human history, and that many of those displaced will be among the world’s poorest, with few options and little preparation for finding new homes elsewhere (Friedman 2009a). Others caution that poorly-devised and overblown statistics are being used to culture fear and that the number that actually can migrate will be much lower, as would-be migrants need a place to go that has the necessary socioeconomic foundations in place before they can or will move (Piguet 2008; Friedman 2009b). This is, however, no reason to be hopeful. To the contrary, it reflects how desperate and already marginalized many of those that will feel the greatest impacts of a changing climate are, and how few options they have.
The scale of impending CCIR is unknown and likely impossible to accurately pinpoint. It will, of course, depend on how much the climate changes, and on how successful other adaptation measures are. Nonetheless, we know it is coming, we do know the general locales in some cases, and it is beneficial to start planning now.
Chapter 3. Planning for resettlement

General planning frameworks

Planning for CCIR is naturally nested within, and responsive to, the broader general planning frameworks of the countries within which it is taking place. This is especially true in terms of China and the United States, as they arguably have pronounced general planning frameworks – that is, political and economic systems - that greatly shape how planning occurs in practice. It is, therefore, important to assess these broad frameworks to anticipate how CCIR planning will be conducted in practice.

Planning has a strong tradition of asserting itself to be above the political fray, and even above values, emanating from its modern roots in scientific rationalism post-enlightenment (Friedmann 1987; Baum 1988; Campbell and Marshall 1999). Modern planners emerged as a technocratic management class that, in the Hamiltonian and Taylorist traditions, is entrusted to devise the most appropriate plans and policies in any context using value-free facts and empirical tools.

Frederick Taylor, who is widely credited as the father of modern scientific management, argues in his Principles of Scientific Management monograph that scientific methods and strict pre-defined standards should be followed to maximize efficiency, rather than the traditional ‘rule-of-thumb’ approaches (Taylor 1911). He prepared his original monograph for the American Society of Mechanical Engineers, and thus focused on manufacturing, but argues that the principles are applicable to all sectors, including ‘governmental departments’ (Taylor 1911). This is a recommendation that did not go unnoticed; his ideas
went on to have a major influence in places as different as the United States, particularly during the New Deal, and the Soviet Union (Hughes 2004).

In some ways, scientific management has waned in the Western planning tradition, particularly in the public sector. This is in part due to the rise of relativism, which asserts that - despite scientific rationalism's claims otherwise - values cannot be separated from decisions and there is no single discernible 'correct' path that can be rationally revealed by planners provided they have the necessary information and skills (Campbell and Marshall 1999). The notion that planners will always plan in the public interest rather than to personal or entrenched interests, or that personal greed can be surmounted via stricter rules and planning guidelines, has also been challenged.

Scientific management in public planning is, however, far from dead. Planning in authoritarian state-socialist (i.e. 'communist') states continues as a potent permeation of this tradition; the "dictatorship of the proletariat" is trusted to know what is best for, and plan in the interests of, the masses (Marx 1875). Even outside state-socialist regimes, scientific management lives on in practice; planners may be more humble and forced to barter with other parties, but much of planning is still analyzing a situation, identifying ideal outcomes and devising a global plan to reach them (Friedmann 1987).

Some are skeptical of the ability of planners to discern the correct, most efficient, path and maintain the integrity to follow it in the public interest rather than deviating for personal gain. One school that the skeptical have turned to is free-market capitalism, otherwise known as, or analogous to, neoclassical economics or neoliberalism. This is the school of Adam Smith, Friedrich von Hayek and Milton Friedman (Friedmann 1987). Neoliberals
argue that the cumulative effects of individuals following their own selfish interests will act as an 'invisible hand', regulating the market and leading to the optimal outcomes (Stiglitz 1991). This laissez-faire approach can be thought of as an anti-planning tradition, as it presupposes that government intervention should be as minimal as possible, lest it interfere with the market's ability to derive the optimal outcomes. The market approach is, therefore, not restricted to the economic sphere, but ultimately considered the best vehicle for making decisions in general. Gary Becker, a Chicago school economist, is credited with popularizing the idea that market-rationalism has huge implications beyond traditional economics to areas as different as crime, education and even drug addiction (Harford 2006).

Scientific management and neoliberalism cannot be considered antithetic - both believe that rational outcomes do exist and can be achieved, but differ in what they perceive as the best way to reach them. In practice, most governance systems have taken elements of both schools, trusting the market to efficiently distribute most goods and employ most labor, but with some regulation by experts to protect social welfare, the environment and so on (Friedmann 1987). The two schools often exist in contention, with neoliberals arguing that the state should reduce it's role in the name of efficiency and proponents of scientific management in the public sphere countering that the state should do more to identify and regulate towards 'optimal' outcomes, protecting social interests and overcoming corruptions in the market. Scientific management and market rationality also do not represent a duality; a myriad of other philosophies of governance exist, including the social-democratic tradition and anarchism.
Political and economic systems in practice are subject to the context in which they are instituted, including the contentions of the players involved and competing philosophies. For these reasons, they can never perfectly match, or represent, a single philosophy. Furthermore, political and economic systems change over time in response to the relative power of different actors and internal and external events or trends that alter the discourse. The United States is generally thought of as favoring free-market neoliberalism, with a strong tradition of praising individual success and freedom from government intervention. It is, however, also the nation of Franklin Roosevelt's New Deal - a set of major government initiatives managed by planners in the scientific management tradition (Friedmann 1987). China's ascendance as a market powerhouse has received a great deal of attention over the last two decades; nonetheless, this is within a rubric of strong state control and planning, both in the private and commercial realms (Pei 2006).

Although both are ultimately hybrids, China and the United States represent suitable archetypes of scientific management and neoliberalism respectively. Various aspects of each country support this assertion. Despite market liberalization, China is still an autocratic one-party state; as of 2003, the state still controlled over half of the fixed industrial assets; and decision-making is largely opaque, involving a professional elite prescribing strict rules to be followed (Pei 2006). In contrast, many services that are considered public goods and thus are universally available in other developed countries, notably healthcare, are private in the United States (Board on Health Care Services and Institute of Medicine 2004). As noted previously, the United States also has the highest

---

5 The United States is the only wealthy industrialized country in which healthcare insurance is not universal (Board on Health Care Services and Institute of Medicine 2004).
Gini coefficient – a measure of wealth inequality – of any developed country (United Nations Development Programme 2007). Furthermore, the current global financial crisis has been blamed at least in part on the extremely weak regulation of the financial industry in the United States (Andrews 2008).

*Figure 1* outlines the general approaches to planning we would expect to see in China and the United States, given these broader political and economic planning frameworks. The expectation is that planning in China is strong and authoritarian, with relatively homogenous policies and procedures mandated by central bureaucracies. The population is addressed in plans, but there is little opportunity for recourse should they disagree with what is prescribed. In contrast, the expectation is that planning is relatively weak in the United States, with planners conducting analysis, but often powerless to impose decisions based on it. Furthermore, they have limited opportunity – or support – to address the needs of marginalized populations.

*Figure 1 – General approaches to planning expected in China and the United States*

<table>
<thead>
<tr>
<th>China</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong, authoritarian, planning; planners know best</td>
<td>Planners are weak, regularly deferring to others</td>
</tr>
<tr>
<td>Decisions imposed</td>
<td>Information collected, recommendations made, but decisions rarely imposed</td>
</tr>
<tr>
<td>Centralized planning</td>
<td>Largely decentralized planning</td>
</tr>
<tr>
<td>Marginalized populations provided for, but expected to join the mainstream</td>
<td>Marginalized populations largely ignored</td>
</tr>
<tr>
<td>Planning extends to the private sector, with strong controls and/or state ownership</td>
<td>Minimal intervention in the private sector</td>
</tr>
<tr>
<td>Collective interests and well-being emphasized</td>
<td>Self-sufficiency emphasized</td>
</tr>
</tbody>
</table>
The unique nature of planning for climate change-induced resettlement

Much can be learned from conventional approaches to resettlement, such as involuntary resettlement implemented because of government takings (e.g. when new dams are constructed, displacing populations) and long-term refugee resettlement. Some factors do, however, make CCIR planning unique and thus the study of how planning for it may be conducted important.

Chief among the differences is that climate change-related drivers of resettlement are often less clear and present than the drivers in conventional cases; that is, there is typically no specific point at which it is obvious that resettlement is the right response. Water levels rising as a result of dam construction are a very clear indication that one must leave. The political instability and violence that causes one to become a refugee or IDP is usually similarly stark. Conversely, it is typically much less clear at the community level that the climate is in fact changing and resettlement is the best option. The human affinity with place is strong, and a classic ‘frog in a pot’ dilemma can emerge in which conditions are deteriorating over time and the impacted communities are simply tolerating unnecessary hardship rather than migrating because they grow used to it. When the impact of climate change is a catastrophic event, it is easy to dismiss it as a one-off or extremely rare occurrence rather than identifying patterns or seeing the event as a sign of increased risk.

This introduces a potential, but controversial, role for planners. If the government deems to know what is best and wishes to foster resettlement proactively, existing uncertainty arguably necessitates either coercion or strong enticement.
The second factor that makes CCIR unique compared to takings-based involuntary resettlement and refugee management is that standards, normative approaches to planning and the allocation of financial responsibilities are not yet codified in international conventions. While they do not always meet their obligations, countries are obliged to meet established standards with both takings-based involuntary resettlement and in accepting refugees (UNHCR 2007; World Bank 2007). In addition to standards, global mechanisms are in place to support their efforts. Thus far, there are no similar standards or support mechanisms in place for resettling CCDPs. Biermann and Boas (2008), Hodgkinson et al. (2009), and others have proposed the codification of the responsibilities developed countries have to CCDPs as the primary emitters of greenhouse gases, but such agreements appear far from entering force, and do not touch upon planning directly, but rather broader funding and trans-national migration issues. This distinction is of particular interest in the context of this thesis, as it theoretically means that a wider range of possible approaches exists, and that CCIR is more likely to mirror the general planning frameworks of the countries involved case-by-case.

**CCIR planning in China and the United States – the case studies**

As noted previously, it is typically impossible to definitively attribute any given migration to climate change. Nonetheless, there are cases – such as those involving sea level rise – in which there is strong reason to believe that it is a key factor. There are also cases in which the drivers of migration are the same as those expected with climate change, such as desertification and increased storm intensity and frequency. A goal in identifying case studies to examine for this thesis was to find situations that meet the second criteria – a shared driver - and potentially the first - climate change is a factor stimulating the drivers.
Additionally, case studies were chosen in which the factors that make climate change-induced resettlement unique introduced in the last section – particularly the lack of certainty that resettlement is the right response - could be examined.

The cases studied also involve marginalized communities. While all communities can expect to feel the repercussions of climate change, marginalized communities will frequently be disproportionately impacted due to their spatial concentration in already marginal areas, and because they often have the least resources, including political capital, to respond (UNFCCC 2007; Australian Human Rights and Equal Opportunity Commission 2008).

Out of the finite constellation of cases that meet the above criteria, two were chosen for in-depth analysis based on the availability of information, including the ease of access to planners involved for primary interviews. These two cases are: The resettlement of Tibetan nomads in Qinghai Province, China, and post-Hurricane Katrina resettlement in the United States. The methodology followed in assessing these cases is presented in Appendix 1.

It is notable that these cases are nested within broader national planning frameworks that are archetypal of two very different approaches: One that is authoritarian and favors scientific management, and the other that is market-oriented and gives very little power to planners. This is very appropriate given the question this paper addresses: What are the strengths and weaknesses of different approaches to planning – and associated economic and political systems – in terms of their ability to prepare for CCIR, and provide the best resettlement options for those involved? While these two cases by no means represent all
possible approaches to planning for CCIR, their positions towards the opposing ends of a spectrum of planning intervention provide an informative contrast for comparison.

*Figure 2* contrasts how we might expect these two different planning frameworks to translate into CCIR planning. The following two chapters examine how planning has proceeded in each case in practice.

*Figure 2 – Expected differences in how China and the United States plan for CCIR*

<table>
<thead>
<tr>
<th>China</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planners say when and where to resettle</td>
<td>Households choose when and where to resettle</td>
</tr>
<tr>
<td>Single government resettlement plan</td>
<td>Multiple responses, most coming from outside of government</td>
</tr>
<tr>
<td>centrally coordinated</td>
<td></td>
</tr>
<tr>
<td>Opaque centralized decision making</td>
<td>Decentralized decision making, often in private hands and with varying degrees of transparency</td>
</tr>
<tr>
<td>Planning is proactive</td>
<td>Planning is reactive</td>
</tr>
</tbody>
</table>
Chapter 4. Case study: Resettlement planning in Qinghai, China

Background

Citing desertification (exacerbated by overgrazing) and chronic poverty, the Chinese government has been actively resettling traditionally nomadic Tibetan communities, sometimes referring to them as ‘ecological migrants’ (Human Rights Watch 2007; Namgyal 2007). The government’s ambitious goal is to resettle all farmers and herders in the Tibet Autonomous Region into “safe and affordable houses” by 2011 (Xinhua 2009). Other neighboring Provinces with large Tibetan populations, such as Sichuan and Qinghai, are following similar trajectories (Human Rights Watch 2007; People’s Daily 2008).

As is expected under a strong scientific management approach to planning, a centrally created and orchestrated plan – called the Development-oriented Poverty Reduction Program for Rural China - guides resettlement (China Tibet Information Center 2001). The program’s white paper contains a section titled ‘Aiding the Poor by Encouraging Migration’ that mandates that the state support migration from areas with difficult living conditions and deteriorating natural environments via subsidies and the establishment of ‘migrant settlements’ that are to meet their needs without damaging the surrounding environment further (China Tibet Information Center 2001). These dedicated settlements are typically on the edges of larger towns or cities.

The Chinese government claims that its resettlement programs are state-of-the-art, providing improved livelihoods and more opportunities for those involved than they had
previously (China Tibet Information Center 2001). The government-produced China Tibet Magazine paints the following picture (Penkyi 2007):

Over 300 Tibetan-style two-storey houses are scattered at random, and cement-paved roads lead directly to their entrances. The village square for multiple activities is big enough for three basketball courts. Every household can gain access to phone, radio, television, a healthy and comfortable environment and solar energy. Many villagers have TV sets with big screens, audio equipment, and computers, even cars. The village leader explained to us that the changes were brought about by the housing project. In the past, village residences were scattered and the structure of their houses was poorly designed. Nowadays, the old-fashioned village has gone and a new one has emerged which is bright, comfortable and modern.

Positive or negative, resettlement does have profound impacts on communities, particularly when it involves significant lifestyle changes, such as a loss of ability to herd livestock (Human Rights Watch 2007; Namgyal 2007). How peoples’ needs, including food, fuel and water, are being met must be considered. Changes in culture and social norms can also be significant.

It is impossible to conclusively deduce whether or not the desertification the Tibetan Plateau is currently experiencing has any relationship to climate change, and thus whether or not these resettlement programs are in fact climate-related. Projections do suggest, however, that climate change will exacerbate desertification in the region, leading to a greater need for resettlement programs for Tibetan nomads (Ni 2000).
Overarching planning framework

The overarching planning framework guiding planning for Nomadic resettlement can be characterized as authoritarian, following the principles of scientific management. The government is the dominant player in planning and service provision; in fact, it is the only player in most cases. Within the bureaucracy, planning is very top-down, with most decisions made at the national or provincial level and simply implemented at the local level. In the scientific management tradition, the assumption appears to be that decisions are best left to the most skilled planners (i.e. those that have made it to the top echelons of their respective departments), which draft detailed plans of action lower-level functionaries are simply to follow.

The strength of this approach is that the best minds are devoted to devising the strongest plans. A weakness is that it makes alterations in light of contextual differences or temporal changes difficult; lower-level planners have little leeway to learn from what they experience on the ground and adapt plans accordingly.

Most of the government’s resettlement plans and guidelines are also confidential. A weakness here is that this limits the ability of those outside the bureaucracy, including the residents themselves, to respond to them. It may also limit cross-departmental information sharing, if information is restricted even within the bureaucracy. The government also seems reticent to admit any shortcomings, making the assertion that the plans devised are optimal and should not be questioned.
The resettlement decision and relocation process

As noted previously, the Chinese government cites environmental concerns, particularly desertification, and a desire to support the development of an impoverished minority suffering because of environmental change as the reasons for proactive resettlement. Some fear that the real reasons are more nefarious, including removing possible opposition to resource extraction and urban development; the desire to weaken Tibetan culture, slowly absorbing them into mainstream Chinese society; and the desire to urbanize the population to make it easier to monitor and control (Human Rights Watch 2007).

The processes and procedures for assessing the viability of resettling versus keeping Tibetan nomads on their traditional lands are opaque. Government planners proactively make the decisions; communities are informed whether or not they are part of a resettlement scheme with little choice, nor opportunity to assess the pluses and minuses of participating first. Nor are they given sufficient information to assess the veracity of claims that resettlement is superior to staying and adapting. A weakness of this approach is that those involved are naturally more skeptical of the motives of planners, and subsequently may attempt to subvert plans to the degree possible rather than commit to them. Furthermore, planners are given a great deal of capacity to plan to their own interests rather than those of the communities involved. The strength of this approach is that planners can be proactive, making decisions based on what may be superior information.

Even after a community is selected for resettlement, it is a somewhat gradual process, with a few families selected via random draw each year. The random draw approach is logical within a scientific management framework, as it allows for a formula to be developed at the
top and simply implemented with little or no leeway at the local level. It does, however, disregard the subtleties of how relatively prepared and suitable different families are for resettlement.

Once a family is chosen, they are informed of the parameters of their resettlement package. In the case of the Tseden family, the government has promised them 8,000 RMB (approximately 1,200 USD) per year for 10 years, but charged 6,000 RMB for the home itself. 8,000 RMB/year sounds like a large sum to villagers that previously had little need for cash, but this goes quickly in their new cash-based environment. Interviewees also noted that the money seems to be slow to come in some cases.

The government claims that, at the household level, resettlement is strictly voluntary; that every effort is made to resettle families close to relatives, friends and their traditional lands; and that families can keep their old homes until they have properly settled into their new ones (China Tibet Information Center 2001). Human Rights Watch conducted an extensive investigation, culminating in a report titled No One Has the Liberty to Refuse. As the name suggests, they found that resettlement is, in practice, not voluntary (Human Rights Watch 2007). The experiences of the families interviewed would suggest that the coercion is subtle, but present. One family was informed that they had to pay for the home either way; would not receive government payments unless they moved; may be forced to give up their traditional home, land and livestock in the future anyways; and that their resettlement home could be in danger of vandalism, which they would have to pay to repair, if they did not occupy it.
Because the planning documents are not public, it is impossible to deduce whether or not any coercion tactics are officially sanctioned. What might be happening, given China’s top-down planning structure, is that local technocrats are expected to ensure that plans are implemented smoothly and centrally established program goals met, and thus do what is necessary to get the requisite levels of participation. Either way, a significant weakness of this approach is the loss of personal autonomy and free will.

Families are given time to transition from their old to their new communities and lifestyles. Rather than giving up all of their livestock immediately, some members of the Tseden family resettled while leaving others in their traditional lands. The Mkhargyal family is in a similar situation, maintaining some livestock in their traditional summer pasture. A strength of this strategy of gradual resettlement is that it allows resettled members of the family to maintain access to essential resources, such as dung for fuel and yak milk for sustenance, while establishing the family’s urban household and adjusting to the associated new life. In practice, it is often the oldest and the youngest generations that move first, as their labor is most expendable on the grasslands. A resulting weakness is that the most productive members are not in the resettlement looking for work and contributing to community development.

It is not clear whether or not this degree of flexibility in the transition process is officially sanctioned. It is too soon to see how long the government will allow families to live dual lives before they force them to sell their remaining livestock and give up their traditional lands. It is possible that the current arrangement – which deviates from the otherwise
strict planning process to some degree – is an aberration allowed because planners realize that they cannot meet their objectives of providing fuel and food otherwise.

Information and consultation

According to interviewees, officials do not take settlers opinions into account. Very few visit resettlements, and when they do residents are unable or unwilling to talk about their problems due to lack of education and fear of retribution, according to one interviewee. An interviewee also complained that information disseminated regarding resettlement programs is published in Chinese, a language that many residents cannot read. Village leaders are expected to inform their citizens, but are often given incomplete information themselves.

Again, this can be considered typical of an authoritarian scientific management approach to planning; planners are thought to have the correct information and subsequently optimal plans, based on their superior analytical and decision-making skills, making consultation unnecessary. Information is guarded on a need-to-know basis in order to avoid what are perceived as counterproductive responses from untrained communities that do not understand what is best for them.

The weakness of this approach is that planners do not acquire valuable local knowledge from those they are planning for. Furthermore, community members lose even more of their ability to define their own destinies.
Housing/shelter

In a scientific management planning framework, one would expect housing to be available for all, but highly standardized and utilitarian, meeting residents’ needs while being cheap and easy to build in large volumes. This is the case with Tibetan resettlement communities in Qinghai; the homes are designed by the Provincial Resettlement Bureau and thus are nearly identical across this massive Province, despite significant variations in climate and the availability of various materials, and the varying needs of different households. Government planners have made some attempts to adopt the Tibetan vernacular into the architecture of resettlement homes, but this is largely cosmetic.

The strength of this approach is that housing is provided for all. One weakness is that the homes families receive are not necessarily optimal for their specific needs and wishes. Furthermore, the construction quality of housing is not particularly good. Gaps under doors, for example, mean that energy is wasted heating homes. Contractors take little interest in building quality, as they are awarded construction contracts based on their ability to meet the specific volume and design specifications stipulated by the Resettlement Bureau, regardless of where they are in Qinghai. An associated weakness is that individual families have no opportunity to seek recourse for poor quality. Nor do builders have to compete for their business, as housing is standardized and those being resettled have little opportunity to seek alternatives.

Employment and self-sufficiency

Employment opportunities are limited in the towns nomads are being resettled to. This is due to: Generally high unemployment; the lack of relevant skills, including Chinese
language skills, and education among those being resettled; cultural differences between predominantly Han Chinese employers and managers and would-be Tibetan workers; and the associated Chinese tradition of hiring and building business relationships through personal connections (guanxi), which typically excludes Tibetans.

In a heavily state-controlled context like China, one would expect government planners to play a significant role in orchestrating the labor market, and that the state would be a major employer. As noted previously, the state does play a major part in the economy, despite the high-profile market liberalization of the last two decades (Pei 2006). However, planning for employment – addressing what is an unemployment problem – is conspicuously absent in the resettlement process. Programs to overcome the aforementioned barriers, such as skills training, are lacking. The countervailing assertion that the government will take care of resettled communities anyways, so unemployment is not a crisis, appears stronger. In other words, self-sufficiency does not appear to be a priority for planners. The good news is that the government subsequently sets the ambitious goal of meeting people’s needs. The weakness is that it is not always able to do so. Furthermore, complete dependency may weaken the social structure of the community and demoralize individuals.

Service and resource provision

Self-sufficiency is not a priority because the assumption is that planners can ultimately orchestrate the necessary provision of goods and services for everyone. The government is, for example, promising assistance with fuel for heating and cooking as part of the resettlement process. The problem is that, in practice, it is not meeting all the needs of the
families interviewed so far. Coal is, for example, not being provided and is expensive for families, so they are still using yak dung provided by their relatives that remain on their traditional lands with livestock. This solution works for now, but it is unclear what will happen if/when these relatives give up this livestock and resettle too.

Furthermore, coal, the predominant fuel in China, has other problems, particularly in terms of greenhouse gas emissions and air pollution. It is ironic and problematic if changes being instituted because of climate change-induced resettlement are further accelerating climate change itself. Alternatives like biogas and solar cookers, which are both cleaner and cheaper, are widespread in rural western China and could be more broadly introduced into resettlements. These technologies do not, however, fit well within a centrally planned scientific management framework because they involve autonomous fuel collection as opposed to centrally planned and implemented fuel procurement and distribution. This inflexibility and unyielding preclusion towards centralized systems is a potential weakness of the scientific management approach.

Nomadic families are traditionally almost entirely self-sufficient food-wise. This changes radically when they resettle; suddenly they are forced to purchase their food. In their traditional villages, the amount of food a family yields, and can exchange for, varies yearly and seasonally, but if a family is short there is always a neighbor that can share some. According to the interviewees, this does not happen in the resettlement communities, as traditional village networks are broken and they become part of the formal food system. This is consistent with the scientific management approach to planning, which defines food security in terms of stability, with constant volumes fed through formalized supply chains.
It sees the traditional, informal and highly variant, models of distribution as risky and thus aims to supplant them with formal food systems. Again, the strength is that the government is planning for greater food security; the weakness is that less standardized, but traditionally sufficient, informal food systems are destroyed. This is problematic when centralized government systems are not fulfilling their commitments and the traditional production and exchange mechanisms are no longer present to provide a backup.

Decent water and sanitation infrastructure is essential to the viability of new settlements. It lowers the probability of diseases and improves the quality of life by lowering the amount of time women need to spend collecting water and providing a cleaner, more pleasant, environment. Within a scientific management framework, one would expect centrally engineered and fully reticulated water and sanitation systems.

Water service is excellent in the resettlements visited, with standpipes outside of each home. That being said, the region is already facing severe water scarcity and further desertification is projected. Planning efforts appear to take for granted that enough water will remain available for all in growing urban areas; should this change, it is probable that these resettlements on the edges of larger communities, both physically and politically, will be the first cut off. A strength of the scientific management approach is that basic needs like water are identified and their provision planned for. A weakness is that fully reticulated systems may not be the most resilient in the face of climate change.

In contrast, sanitation service is very poor, with a complete dearth of planning for it. In the case of Dobdain, toilet buildings were constructed, but are locked for the exclusive use of government officials. Garbage is also unmanaged, with no designated collection areas
leading to trash strewn about. A lack of sanitation and waste management facilities is usually not a problem in lower-density traditional villages and nomadic camps, but facilitates the spread of diseases and other problems in the denser urban areas communities are resettled to. Poor sanitation could further exacerbate the spread of diseases already anticipated with global warming, which is expected to change the ranges of various disease vectors, like mosquitoes. A related weakness of China’s authoritarian approach is that individual initiative is not permitted or encouraged; when a problem is not addressed – as is the case with sanitation services in the resettlements visited – it is left as such, potentially to the detriment of a community that could potentially do something about it if permitted.

In theory, residents have improved access to health services when resettled, as they are closer to better clinics and hospitals. This is one of the arguments the government makes when promoting resettlement (Human Rights Watch 2007). However, some new health problems – including substance abuse and diseases associated with higher population densities – may emerge. Again, the strength of the Chinese approach is that a comprehensive set of services, including health care and education, are prescribed. A weakness is that they are not always responsive to changing local needs.

Education becomes all the more important when former nomads are integrated into urban society. Children that stay in school learn Chinese and are fluent in the cash-based economy, giving them more employment opportunities. Unsurprisingly, given the scientific management framework, education is highly centralized across China. Local children receive some instruction in Tibetan, but the curriculum is largely the same as that used
elsewhere in the country. A weakness associated with this standardization is that, as interviewees complained, students and their families cannot relate to the curriculum and fear that school is simply a propaganda tool to indoctrinate their children into mainstream Chinese society. Because of the lack of employment opportunities, they also fail to see how school will improve their future.

The Mkhargyal family also noted that, ironically, educational opportunities have declined for some children. In their case, they have a middle school back in their village, but the one in Goma has limited enrolment and children from the main community (i.e. not the resettlements) get priority. Again, this illustrates how an inflexible planning system can lead to unintended consequences.

Cultural preservation and change

China’s centralized planning system appears to be promoting the spread of a single unified cultural identity and the commensurate weakening of minority cultures over time (Human Rights Watch 2007). Traditional cultures are seen as ‘backwards’, as they do not value scientific rationalism and efficiency. To those that seek to protect traditional cultures, homogenization is a weakness of authoritarian scientific management; everyone is expected to conform to the standardized model of resettlement and development.

Interviewees complained that their traditional culture is indeed dying out with resettlement. There is no reason to sing the traditional songs associated with certain tasks they performed as nomads any longer, for example. Furthermore, youth take little interest in their traditional culture, as they are exposed and drawn to more urban Chinese or international culture.
Conclusion

It is not within the realm of this thesis to assess the absolute success or failure of this resettlement program. The fact that potential participants are using the few opportunities they have to avoid resettlement – just moving the oldest and youngest generations while keeping the productive adults on the land, for example – would indicate, however, that the program is unsatisfactory to some participants. For better or worse, this may change should climate change, or other factors, make their traditional nomadic lifestyles less viable, or the government enacts changes to make resettlement more enticing, such as programs to increase employment prospects.

The fact that the government is resettling Tibetan nomads proactively may be helping them avoid hardship later, as desertification intensifies. As discussed previously, a unique problem within the context of CCIR is that there is often no specific point at which it is clear that resettlement is the best option. If China’s centralized planners do know what is best in light of the changes they identify via empirical analysis, it is conceivable that they are indeed planning in the long-term interests of those they are resettling.

Problems emerge because the resettled are not given access to the planning process, including to information justifying their resettlement, and thus may be resisting rather than working within the confines of resettlement as a foregone conclusion. This is also problematic because it leaves a great deal of opportunity for planners to plan against the public interest. Working with communities to understand why and how they are being resettled may make the process smoother by engendering acceptance; make it better by extracting feedback and ideas from those with local knowledge; and help to minimize
corruption and nefarious decisions on the part of planners by adding an element of monitoring.

A strength of the Chinese approach is that the planning conducted is fairly comprehensive, addressing a wide range of needs from shelter to fuel provision. Its weakness is that it is also very restrictive; there is little room for the resettled to improvise to overcome shortcomings, or better meet their preferences. A positive consequence of this rigid and comprehensive approach is that the needs of all, including the most marginalized are, at least theoretically, addressed. On the down side, the response is not sensitive to individual needs and wishes, with a single approach applied to everyone. Furthermore, it is not clear that the state can satisfactorily meet everyone’s needs while it is purporting that it will do so and subsequently explicitly and implicitly weakening self-sufficiency.
Chapter 5. Case study: Resettlement planning in post-Hurricane Katrina New Orleans

Background

Hurricane Katrina came ashore from the Gulf of Mexico on August 28th, 2005, taking over 1,800 lives and causing more than 81 billion USD in damage (U.S. Department of Health & Human Services 2009). The City of New Orleans was hit particularly hard, with levy breeches allowing water to flood large swaths of the city, including many of the poorest neighborhoods. Slow and inadequate government preparations and response made matters much worse (Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina 2006).

While the stranding of residents received more media attention – perhaps deservedly so, given the trauma they endured – the mass migration of evacuees during and post-storm was no less shocking and unwieldy. Over one million people were displaced, approximately 400,000 from New Orleans alone, in what was the largest mass migration in the United States since the Dust Bowl (Appleseed 2006). Most found themselves in nearby cities, with destinations decided based on a variety of factors, from relatives with a free couch to where the bus they got on happened to stop. Many were not able to return home quickly; only one quarter of residents from flooded areas of New Orleans had returned a year after the storm (Appleseed 2006).

Ascribing blame for the damage that Hurricane Katrina caused is virtually impossible. In fact, policy failures, engineering failures, anthropogenic environmental change and Mother
Nature likely share the blame (Brown, Oli 2008). Credible voices have, however, noted that climate change quite possibly played a role and could make events like this all the more common (Burkett, Zilkoski and Hart 2003; Henderson 2005).

Overarching planning framework

There were a variety of responses to Hurricane Katrina, most chosen at the household level. This is not surprising, given the neoliberal framework within which they occurred. As elucidated in the Qinghai study, an authoritarian scientific management approach to planning is likely to create a limited set of responses, developed by central planners. In contrast, a market-oriented approach leaves the crafting of responses to competing players - whether commercial interests or competing proposals from non-profit organizations - to the degree possible. In other words, the emergence of a multiplicity of responses is a core characteristic, and possibly a strength, of the overarching framework itself.

In the neoliberal paradigm, the expectation is that governments will have relatively few resources to directly plan for and address problems. The philosophy is that the role of government should be as small as possible, leaving the market to allocate resources most effectively (Friedmann 1987). Another, related, assumption is that people will make rational resettlement choices on their own, which ultimately aggregate to Pareto optimal outcomes overall, so the government should not make them for them (Glaeser 2005).

The resettlement question

The causal relationship between climate change and Hurricane Katrina is tenuous at best, and virtually impossible to confirm or deny. A paper published by the U.S. Geological Survey in 2003 did, however, ominously warn that climate change-related sea level rise
and subsidence could pose a serious risk to life and property in the New Orleans area unless infrastructure was updated and natural systems restored (Burkett, Zilkoski and Hart 2003). An American Society of Civil Engineers group tasked with investigating the failure of New Orleans’ levees during Katrina similarly found that the U.S. Army Corps of Engineers did not have adequate safety measures in place, and should have foreseen and addressed the risks (Warrick and Whoriskey 2006). Ultimately, half of the city is below sea level and thus the risks, even pre-Katrina, were arguably obvious. These warnings were, however, largely ignored. This inability to use credible projections to proactively respond to threats is a weakness of the neoliberal approach.6

Given its geography and the risks posed by a changing climate – which is projected to include sea level rise and increases in storm severity - some have suggested that rebuilding New Orleans to its pre-storm dimensions is not appropriate (Henderson 2005; Reardon 2006). This is not, however, always a popular or universally shared opinion, and the market-oriented neoliberal approach leaves decision-making largely in the hands of individuals. In the marketplace of ideas, the case for resettlement is a hard one to make. People have extremely strong emotional, cultural and social connections to place, and need very attractive alternatives to entice them before they will consider moving.

Post-Katrina, political leaders and planners did question whether or not they should allow people to rebuild in certain areas of New Orleans. The first major planning effort was an assessment by a blue ribbon panel of 40 experts from across the country, organized by the

6 Markets, at least in this case, seem to be reactive. This is perhaps because of imperfect information; the risks were known, but most market actors did not have that data. The markets are also likely incomplete; residents cannot access the same mix of employment, housing, community identity and so on outside of their neighborhoods.
Urban Land Institute (ULI) at the request of Mayor Ray Nagin. The most controversial recommendation the panel made was that the city follow a ‘selective rebuilding plan’, concentrating redevelopment in areas damaged least, and least at risk moving forward, and turning the most damaged areas into restored wetlands and parks (Henderson 2005). This recommendation received a very cold reception, political leaders, including Nagin, distanced themselves from it, and subsequent efforts, like the Unified New Orleans Plan (UNOP) process, have largely avoided the issue in favor of leaving the choice to individuals (New Orleans Community Support Foundation 2007). Again, the market-oriented approach was weak in its ability to use credible data to make proactive planning decisions.

The market rationalist argument is that, if resettlement elsewhere is ultimately the most rational response, markets will signal this via increasingly expensive insurance rates and other market mechanisms. Lester Brown (2007) of the Earth Policy Institute echoes this, noting that danger and financial risks, compounded by the unwillingness of the insurance industry to provide coverage, are de facto driving many people and businesses to resettle elsewhere. This process of market signaling is, however, evidently corrupted by government incentives and investments supporting rebuilding; government-backed insurance schemes; and cultural, emotional and political pressures.

The government-induced corruptions are ironic given the neoliberal approach’s penchant for minimal state intervention, but a reality in practice. The National Flood Insurance Program is one example; this government-operated program does include some caveats to avoid profligate coastal development, but is ultimately designed to provide coverage for property in higher-risk areas that commercial insurance companies will not cover at
affordable rates (FEMA 2007). Various levels of government are also playing significant roles rebuilding the levees and other infrastructure that make returning to New Orleans an option (Henderson 2005).

The cultural, emotional and political forces are also significant, and the relatively slow pace at which New Orleans has been rebuilt is a serious and ongoing matter of contention (Rose, Clark and Duval-Diop 2008). Organizations like Brad Pitt's Make It Right, which is focused on the Lower Ninth Ward, are working to fill the perceived void of government assistance in returning the poorest to the city (Make It Right 2009).

A weakness of the neoliberal approach – which emphasizes small and relatively disempowered government – is that it leaves government planners weak in terms of their ability to address perceived risks proactively. In this case, they did not have the adequate resources, or political authority, to address climate risks proactively via resettlement, levee reconstruction, or any other approach.

Post-Katrina, a weakness of the market-oriented approach taken is that it may not be leading to the optimal outcomes for a couple of reasons: First of all, emotional and political forces are championing resettlement in areas that may not be suitable for resettlement, particularly given projected climate change. These decisions are not being made based on objective analysis, but on the assertion that everyone should have the right to rebuild their home in the same location as before the storm (Henderson 2005; Shafer 2005). 7 Secondly, allowing rebuilding anywhere is not efficient, as it requires that the city reconstruct its

7 A significant problem is that it is difficult to disaggregate legitimate calls to selectively rebuild from nefarious attempts to gentrify the city. The city's largely poor and marginalized black population in particular has good reason to be skeptical, given the long history of systemic racism.
entire infrastructure to pre-storm dimensions rather than focusing on re-populating areas identified as more appropriate first.

Resettlement options and selection process

The expectation in a neoliberal planning framework is that private solutions are best suited to addressing people's needs, so government should play a minimal role. Variations in response are therefore expected due to the variety of personal choices possible. The relative wealth of individuals also impacts the choices they can and do make around resettlement. In the short term, those with more resources can opt-in to more robust choices - like leaving the city in their private automobiles and staying in a hotel when a Hurricane is approaching - than those with fewer resources. In the longer term, some also have the resources to choose certain resettlement (or rebuilding) options, that are not open to others (Cutter et al. 2006).

Choice is a central tenet of a market-oriented framework. The assumption is that each individual will make the most rational choice in light of their preferences and resources, leading to the best possible outcomes for all (Glaeser 2005). It is not, however, clear that satisfactory choices are always available to the displaced, especially those with the least resources. Post-Katrina, the government has attempted to ameliorate this while still leveraging market forces by channeling a significant proportion of its assistance as direct cash payments to the displaced for them to use as they see fit – renting or buying elsewhere, or rebuilding in New Orleans (Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina 2006; The Road Home Program 2007). A weakness with this solution is that it has done little to address preexisting poverty over
the long term, as the vulnerable have the least access to these programs, and the rental market is typically the slowest to adequately recover (Cutter et al. 2006).

Post-Katrina, the most obvious resettlement option is, of course, not to resettle at all, but to return to New Orleans and rebuild. As mentioned previously, several incentives and emotional, cultural and political forces are promoting this option. Despite these forces, many residents, particularly the most marginalized, still face major hurdles to returning (Cutter et al. 2006). This option requires resources that many do not have. Two years after the storm, Jervis (2007) commented that “the rebuilding of New Orleans, and much of the Gulf Coast, has largely taken two paths: Communities that have rebuilt themselves using private funds, insurance money and sheer will — and publicly funded efforts that have moved much more slowly”. At that point, 80% of the wealthy neighborhood of Lakewood, which did experience extensive damage, had been rebuilt, while poorer neighborhoods like the Lower Ninth Ward remained in ruins (Jervis 2007). The poor do not have the same private capital, and government programs have been inadequate, mired in red tape, and ignorant of the needs of the most marginalized, including renters. Some have gone to extremes, like collecting cans to sell the aluminum, in order to finance reconstruction (See Dewan 2009).

Resettlement into existing cities is a logical alternative for many of the displaced. Significant proportions – both rich and poor - have indefinitely resettled in Atlanta, Houston and other cities across the country; an estimated 150,000 remained in Houston alone a year after the storm (Appleseed 2006). For some, this represents a fresh start – a chance to get away from a city that did, after all, have among the nations highest crime and
poverty rates, and 'academically unacceptable' schools (Shafer 2005). It is not clear, however, that this is a viable solution for all, or even most, displaced populations.

Many of the displaced that found themselves in other cities were left in unsatisfactory conditions. Some have found adequate housing via friends and family, their ability to get into the public housing systems in their new locales, or using their own resources. Others face real difficulties, with a dearth of suitable and affordable housing options (Appleseed 2006). Employment has also been a persistent problem for many, with their ability to find jobs hindered by hurdles ranging from no childcare to unaddressed mental health issues (Appleseed 2006).

Meeting both the shorter and longer-term needs of the influx of evacuees has proven challenging for the cities they fled to. Migrants pose a major strain on the limited resources these cities have, especially as many evacuees already had health and other problems and are now in need of comprehensive care. The limited funding and other support mechanisms that are present tend to focus on short-term emergency response and policing to protect private property, giving little attention to the resettlement and assimilation process, including mental health treatment, employment training and long-term housing (Appleseed 2006). When poor and from marginalized communities, these migrants frequently become second-class citizens in their de facto adoptive homes.\(^8\)

---

\(^8\) Appleseed's A Continuing Storm: Struggles of Hurricane Katrina Evacuees (2006) provides comprehensive analysis and useful recommendations regarding how destination cities could have better managed the evacuees they received, both in the shorter and longer-terms. It is not clear, however, that the political will exists to devote the necessary resources.
Another resettlement option – which is typically an option of last resort for the marginalized, and renters in particular – is the infamous Federal Emergency Management Agency (FEMA) trailers. Trailers were broadly made available post-Katrina, and many middle class homeowners used them on their properties as temporary shelter while they rebuilt. For the poor, the trailers, often clustered in parks, became a housing option indefinitely, though they were originally expected to be out within 18 months after the storm (Adams 2006).

Crime became an all too common feature in some parks; parks were often poorly managed, with inadequate infrastructure; the surrounding communities were often highly suspicious and opposed to parks; and residents were often anxious to leave, but had few options (Adams 2006; Whoriskey 2007b). Though FEMA does not plan to throw them out, the final deadline for leaving the trailers was supposed to be May 1st of this year; at that point, about 6,000 of the most marginalized families still lived in them, many in difficult situations with no other obvious options due to extremely weak resource bases and/or personal capacity (Lohr 2009).

The strength of the market-oriented approach followed post-Katrina is that it allows those impacted to rebuild or resettle as they see fit, given the resources they have. This emphasis on individual choice theoretically means that people have the opportunity to craft the response that is optimal to them. An associated strength is that self-sufficiency is emphasized, potentially fostering greater resiliency and less dependence on the government. A significant weakness is that the poor and marginalized have inadequate resources to access a satisfactory response. While the well-endowed have resources and
the freedom to use them as they wish, the neoliberal approach leaves the poor marginalized and with little opportunity to succeed.

Magnaville: A non-profit resettlement response

In the neoliberal planning framework, an assumption often made is that non-profit organizations will fill the gaps, meeting the otherwise unmet needs of the poor. An associated belief is that the non-profit sector is a more appropriate vehicle for implementing support and redevelopment projects than the public sector. Non-profits like Habitat for Humanity and Brad Pitt’s Make It Right Foundation are indeed playing an important part in providing marginalized populations with other housing options. The planned resettlement community of Magnaville is another non-profit response. While an outlier in some ways, given that it involves planned resettlement to a purpose-built community, Magnaville is instructive.

Magnaville was born when businessman and philanthropist Frank Stronach was so incensed watching the events unfold in New Orleans in the immediate aftermath of Katrina that he decided that something must be done and picked up approximately 300 people, largely residents of the Ninth Ward, from a staging area in Alabama and took them to a horse track he owns in Florida for temporary shelter (Carmichael 2009). Recognizing that people were not going to be able to return home any time soon, and that this was an opportunity to help people make a fresh start, Stronach and his team decided to construct a new ‘model community’ for victims of the hurricane. 1,000 acres were acquired in the town of Simmesport, Louisiana, and construction started in short order, with major assistance from a variety of companies and organizations, but notably no government support and
little government involvement (Carmichael 2009). By mid-December – less than four months after the hurricane – residents were already moving in.

One interesting element of the Magnaville project is its pervasive social change agenda. The belief that the project should help residents disassociate from their troubled pasts and start fresh within an agrarian idyll, complete with an on-site organic farm, is signaled both explicitly and implicitly (Maggi 2007; Carmichael 2009). Residents are required to live by a set of rules - ranging from a requirement that any vehicles on their property be insured to a prohibition on lending money to each other - that are designed to foster this social change.

One reason for choosing a rural setting for Magnaville was to provide a more relaxed pace of life away from the vices of the city.

It is notable that the intention was not necessarily to permanently resettle project participants, but rather to offer them ‘a hand up’ to get them back on their feet and into a new life; Magna - Stronach’s company, after whom the village is officially named - made an initial commitment to fund the project for five years (Carmichael 2009). With those five years drawing to a close in 2010, Stronach, Magna and the project team are currently weighing their options, which include selling the property, giving residents plots of land and allowing them to stay, or extending the project as-is.

Non-profits play an important role in fostering the self-sufficiency encouraged and required under a market-oriented planning framework. An associated weakness is the assumption that most can attain a high level of self-sufficiency and those that do not deserve to suffer for it, because it is largely a personal choice.
In terms of planning, Shane Carmichael, the Magnaville project manager, lauds the fact that the project went from conception to occupancy in just over three months, and credits this to the astute management abilities of the high-profile project proponents. Their business style approach, tackling issues head-on, quickly addressing them, then rapidly moving to the next was key. It is notable that this kind of dynamic and quick decision making is generally impossible in government-run projects. A strength of non-profits is their ability to respond quickly and flexibly, as they are typically not limited by the same degree of bureaucracy as government programs are.

Within the broader market-oriented neoliberal framework, the acquisition of land on which to build a resettlement community is also expected to follow market mechanisms. One element of the real estate market when sensitive sitings are involved is the 'not in my backyard' (NIMBY) syndrome; that is, significant resistance to certain land uses from neighbors afraid it will negatively impact their property values and crime rates. As with the FEMA trailer parks, this was the case in the siting of Magnaville. The project team was not able to build on the first site they identified due to community opposition. They also faced significant resistance in Simmesport; they were only able to gain tepid approval after making concessions, including a new community center and support for additional policing, and Carmichael adds that ongoing problems somewhat stymied their ability to focus on the project itself.

A corollary to the free-choice nature of the neoliberal approach is that those providing resettlement options also have a market of applicants that they may discriminate between. In the case of Magnaville, the initial selection process was not particularly discriminating,
but the transition to Simmesport did involve a screening process. Background checks were conducted on applicants, and, as per an agreement reached with the Parish Magnaville is located in, the local District Attorney reviewed any criminal records and held the right to reject applicants.

Perhaps more importantly, in order to reside in Magnaville, program participants must sign and conform to a ‘Covenant of Responsibility’. These rules – which range from keeping your space clean to volunteering eight hours per week in the community - encapsulate the project vision and are designed to ‘help residents avoid the problems often associated with their old lives’. The project also reserves the right to test residents for drug use and issues guest passes to visitors staying over night (Bohrer 2007). Tenants that do not live by the rules are subject to eviction or, as Carmichael puts it, ‘choose to not live by the rules and thus make the choice to have to leave’, and some have indeed been forced out. Carmichael admits that his regimen can be strict, but says that this is part of helping people develop a good work ethic and better themselves.

A weakness with this strict approach is that some people are naturally excluded. Carmichael suggests that this is a necessary reality in making an ambitious project like this work, and is why others like it that do not include the social change element – like the FEMA trailer parks - have failed. In fact, one of his recommendations for future projects like Magnaville is that they do a more thorough job of screening applicants to ensure that they fit with the philosophy of the project. On the other hand, the least desirable also need a place to go when they have been forced to resettle. This kind of selectivity is only possible in a market-based system, in which the displaced have more than one resettlement option,
and the providers of resettlement opportunities have the right to be selective, a right typically not afforded to government agencies resettling populations.

Information and consultation

According to the neoliberal approach to planning, citizens are best ‘consulted’ via the choices they make in the marketplace of options. A weakness is that this presupposes that citizens have perfect information and complete markets exist (Stiglitz 1991). The difficulties many of the most marginalized victims of Katrina have had accessing the right resources and receiving support is indicative of the fact that neither perfect information nor complete markets are present for them (Lohr 2009). Beyond the lack of options, many among the marginalized suffer from mental illnesses, or are simply overworked as, for example, single mothers, and thus are not able to complete paperwork and take advantage of options that do exist.

Information is typically freely available for those than can and want to access it for their decision-making. An example is the aforementioned USGS report forewarning of New Orleans vulnerability, which went largely ignored (Burkett, Zilkoski and Hart 2003). The fact that little was done to heed this warning is another matter. This is the paradox of information in the market-oriented approach; to its credit, information is largely available, but its weakness is that it is typically not acted upon decisively.

Housing/shelter

Within the neoliberal framework, one would expect an essentially infinite variety of housing options, as personal preferences, coupled with resource limitations, define the shelters households construct or attain for themselves. In practice, those with resources
post-Katrina – namely wealthy and middle class homeowners – have largely been able to collect on insurance policies and other government programs and rebuild as they wish, either in New Orleans or elsewhere. A weakness is that housing options are much more limited for the marginalized, especially those that were renters. As mentioned previously, many have ended up in unsatisfactory FEMA trailers.

Employment and self-sufficiency

Self-sufficiency is very important under the neoliberal framework, as social safety nets are minimal. In this context, it is not surprising that helping residents acquire gainful employment is a central objective of most resettlement support projects. In the case of Magnaville, all residents that are able must be gainfully employed, or actively seeking work, under the conditions of the Covenant of Responsibility (Carmichael 2009). To facilitate employment opportunities, training courses in agriculture, computers, construction and other areas in which jobs are available have been provided, as has employment counseling. While the service has been discontinued, Magnaville also provided free shuttle service to nearby towns so that residents could access job markets. Residents are also required to volunteer eight hours a week in the community, with the intention to instill both community service and work ethics.

Despite these programs, un- and underemployment remain a problem in the community. Carmichael attributes this largely to the poor work ethic that he perceives as pervasive. The project is working on breaking these ‘cycles of poverty’, but it is difficult to work against deeply engrained mentalities. In Carmichael’s opinion, the training programs are important, as they provide hope and direction, but the real issues are mental and cannot be
overcome easily. Again, non-profits can play an important role in providing a ‘hand up’ to the marginalized - helping them develop the skills and confidence for self-sufficiency – and are thus a strength of the neoliberal approach. A weakness is that those that are truly unable to attain full self-sufficiency still need care, and are potentially further marginalized in a paradigm that perceives them as lazy and somewhat deserving of their plight.

Education can also provide an important path out of the aforementioned ‘cycle of poverty’, but only if it is of good quality and being taken advantage of. Even public schooling is a de facto market commodity in the United States, with the best schools typically in the wealthiest communities and the worst in the poorest, which makes the cycle difficult to break (Kozol 1991). This is an ironic weakness of the neoliberal approach, as the poor are expected to lift themselves out of poverty, but are not given the tools to do so. In Magnaville, Carmichael witnessed the low quality of the education system and the lack of attention many parents, which are often high school dropouts themselves, were paying to their children’s education, so hired some retired teachers and instituted an after-school program in which the youth receive remedial instruction, and assistance and encouragement with their homework.

Service and resource provision

As mentioned previously, in the neoliberal paradigm, self-sufficiency is viewed as highly important. The expectation is, therefore, that people will acquire goods and services almost exclusively via exchange in the market. Again, this results in those with more resources having greater access to a wealth of options. Post-Katrina, the government’s emergency response measures did provide some support, including food and blankets in emergency
shelters, but they were widely criticized as grossly insufficient, and focused almost exclusively on the short term, rather than long term wellbeing (Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina 2006).

In Magnaville, residents are encouraged to plant small garden plots and tend small herds of livestock in the name of greater self-sufficiency. The idea is that residents with low wages can lower their grocery bills, and potentially earn some extra income, by growing some of their own food and selling any surplus (Maggi 2007). This initiative has the side benefit of improving diets with fresh and healthy foods.

Under the neoliberal framework, healthcare is also considered a largely private service, most efficiently allocated via market mechanisms. A consequence of the market-based approach is that the poor and uninsured have little or no coverage. This was identified as a problem post-Katrina, as many of the most adversely effected received short-term emergency care, but have not been able to access the longer-term care they need to fully recover (Appleseed 2006).

Magnaville residents fortunately do have access to a free clinic about a half hour away, and some local doctors are willing to provide services at reduced rates, but most residents are ultimately uninsured and do not know how to access the free services they are entitled to. Because of this, there are serious health issues in the community that remain unaddressed. Mental health problems often overlap with poverty, and thus are all too common among Magnaville residents. Recognizing this, Carmichael hired a social services worker with a psychology background to work with residents.
This overwhelming priority placed on self-sufficiency is in stark contrast to the scientific management approach followed in Qinghai, in which the expectation is that the government will essentially provide. The strength of self-sufficiency is that personal resiliency is increased in the face of potential government shortcomings, and allows for greater autonomy and personal choice. The weakness is that it appears to be fostered at the cost of a sufficient safety net for the marginalized.

Cultural preservation and change

The decimation of areas like the Lower Ninth Ward undoubtedly had a negative impact on the vibrant culture that existed pre-Katrina. Planning and development efforts in New Orleans post-Katrina have been labeled as cultural gentrification by some, with accusations that the government has explicitly and implicitly discouraged Black residents from returning by favoring higher-end development, suspending affirmative action requirements, and via a number of other decisions (Davis, Mike 2005).

Cultural change is also central to some resettlement options. In the case of Magnaville, the strong cultural norms that have been constructed – with their agrarian undertones and emphasis on Protestant notions of hard work and good behavior – are potentially quite different than the traditional cultural norms of the resident population. Accusations have been leveled at Magnaville that it is engaged in ‘social engineering’. It is not clear, however, that this is derogatory to the project team as introducing what they perceive as positive social change – getting people on the ‘right track’ such that they are able to hold good jobs, keep their children in school, have a home they are proud of and so on – is a primary goal.
Interestingly, cultural homogenization – which was criticized as a weakness in China’s authoritarian approach – may be just as prevalent in the supposedly laissez-faire neoliberal planning framework. Like it or not, citizens are expected to conform to the market’s needs, facing a great deal of pressure to become ‘rational economic actors’. Furthermore, market forces can and do lead to the gentrification of neighborhoods and subsequent displacement of their traditional populations and thus micro-cultures.

Conclusion

The difficult question of whether or not rebuilding in New Orleans - and particularly in low-lying areas like the Lower Ninth Ward – is appropriate must ultimately be asked. After all, approximately half of the city is already below sea level, and many areas are subsiding further; the Gulf Coast is notoriously prone to hurricanes; and rebuilding the levee infrastructure is expensive with no guarantee it will adequately protect the city from future storms (Burkett, Zilkoski and Hart 2003; Henderson 2005; Williams 2007). Some predict that climate change is, and will continue to, only make matters worse. One of the most significant weaknesses of the neoliberal approach is that - even if planners deem resettlement (or ‘selective rebuilding’, as the ULI blue ribbon panel proposed) a suitable response to risk - they are essentially powerless to impose it.

Another weakness with leaving the choice to rebuild or resettle to the markets is that this can be inefficient from a resource allocation perspective; the city has to run services across its entire former territory, for example, rather than focusing on zones deemed most suitable for rebuilding (Henderson 2005). Unfortunately, there is no clear and shared view of what should and should not be rebuilt, nor shared criteria against which this could be
evaluated; the neoliberal approach does not condone discussion and decision-making regarding these questions, as the presumption is that the market will best decide. This is made more difficult in the context of climate change, because the specific impacts in any given place are impossible to definitively project and the time horizons are often long and also uncertain. A significant racial and class divide in New Orleans compounds the challenge of collectively agreeing on whether or not to redevelop, as many perceive any suggestion that the poorest, and hardest hit, areas should not be rebuilt as a nefarious attempt to gentrify the city to the benefit of the corporate white elite and loss of the majority black population (Reardon 2006).

As expected, a variety of responses emerged to Hurricane Katrina. Many are meeting the needs of the displaced, particularly those with the resources to reestablish themselves elsewhere or rebuild their homes in New Orleans. This ability to respond to climate change, or any crisis, as one wishes is a strength of the neoliberal approach. Marginalized populations have, however, had a more difficult time finding satisfactory options, which is a weakness of this planning framework.

The amount of resources one has ultimately seems to be a better indicator of which option one chooses, or has chosen for them. Those with the resources to rebuild in New Orleans often do so, though some take their resources and rebuild elsewhere; those that cannot rebuild, at least not immediately, but have employment and/or other opportunities in other cities often resettle in them, at least temporarily; those that are willing and able to live by the requirements of a non-profit initiative, and are fortunate enough to be selected, will often take that route; and those that have nothing else often found themselves in FEMA
trailer parks, and are still struggling. In other words, the element of choice – a core strength of the neoliberal approach – is not accessible to all.

In the case of rebuilding privately, the choice can be quite personalized. In the case of resettlement into a non-profit initiative, one must compromise to the typically dominant mission and social change objectives of the project. In Magnaville, participants are buying into Stronach’s vision of what an optimal resettlement scheme should look like. Those requiring resettlement have the choice of whether or not to participate, but are agreeing to live by the project’s rules, if they do.⁹

Self-sufficiency is seen as a priority under the neoliberal framework, and the supporting objective of helping people get established and into the workforce is typically highlighted in projects. The strength of emphasizing self-sufficiency is that it fosters resilience at the individual level, lessening dependency on government planners that may not be able or willing to meet everyone’s needs in all cases. The weakness is that self-sufficiency is often emphasized at the cost of a safety net for the most marginalized. Post-Katrina, the government failed to protect the poor, leaving them in New Orleans without an adequate emergency response plan, then failed to provide satisfactory housing and resettlement options (Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina 2006).

---

⁹ Magnaville’s rules and social change objectives may sound particularly strong, but they are not so different than Habitat for Humanity’s requirements, including a commitment to home maintenance, ability to pay and sweat equity.
Chapter 6. Key observations + recommendations

In concurrence with the thesis of this paper, I conclude that both the more authoritarian scientific management and market-oriented neoliberal approaches to planning have strengths and weaknesses. The key observations drawn from each are presented in figure 3 for comparison.

**Figure 3 - Key observations drawn from the case studies**

<table>
<thead>
<tr>
<th>China</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>State resettling nomads proactively; strong response to perceived change</td>
<td>Little up-front planning despite warnings; government response to disaster is weak; resettle only in response to disaster (i.e. when need clear)</td>
</tr>
<tr>
<td>Reasons for resettlement not always clear</td>
<td>Most information freely shared, but not necessarily translated into direct action</td>
</tr>
<tr>
<td>Single government-orCHEstrated response – not necessarily appropriate in all contexts</td>
<td>Multiple (not entirely mutually exclusive) responses, some public but most private, including: Rebuild in New Orleans; move to other cities; FEMA trailer parks; NGO initiatives (e.g. Magnaville)</td>
</tr>
<tr>
<td>State purports to act as a caretaker indefinitely, promising shelter, food, fuel, and so on</td>
<td>Emphasis on getting people 'back on their feet' so they are self-sufficient and meeting their own needs as quickly as possible</td>
</tr>
<tr>
<td>State not meeting these promises adequately in all areas:</td>
<td>Some are able to adapt well, but others are not recovering satisfactorily:</td>
</tr>
<tr>
<td>-Resettled populations need to get fuel and food from relatives</td>
<td>-Those with resources rebuild and/or resettle elsewhere independently</td>
</tr>
<tr>
<td>-Shelter provided, but of poor quality</td>
<td>-Marginalized depend on a variety of (often unsatisfactory) programs</td>
</tr>
<tr>
<td>-Provided healthcare and education, but sometimes difficult to access</td>
<td></td>
</tr>
<tr>
<td>Stringent plans that are strictly followed</td>
<td>Various plans; in Magnaville, loose plans with constant innovation and change from the project team</td>
</tr>
</tbody>
</table>
The authoritarian Chinese system’s primary strength is that it is better able to proactively respond to threats like climate change. Planners are empowered to make decisions, resettling communities before they are extremely adversely impacted, and before they may even realize that resettlement is necessary. In contrast, planners in the market-oriented American system engage in very little proactive planning. Experts ominously forewarned of the risks New Orleans faced for years, yet planners were essentially powerless to use this information to force proactive responses. Even post-Katrina, mandated resettlement is an extremely controversial idea, and thus off the table for the most part.

A weakness in the Chinese system is that decision-making is fairly opaque. Those being resettled have very little access to information justifying their resettlement, or explaining how they are being planned for. They also have no opportunity to participate in the decision-making process, and little recourse if they disagree with decisions made on their behalf. This makes the honesty and competency of planners, two elements that cannot be taken for granted, all the more important. Participants are also unable to act on their personal preferences, nor can they affect change based on their local knowledge of the context. In the American system, most information is widely available – just not necessarily known or used – and most decisions are left to the individual.

The market-oriented American approach’s main strength is that it allows for a diversity of responses from various for-profit, non-profit and government players, responding to personal preferences. This diversity also promotes competition, which arguably leads to quality improvements and innovation. Resources that are provided by the state often
maximize the capacity for individual choice. An example is cash compensation for people to rebuild where and how they wish, rather than rebuilding for them. In contrast, Chinese resettlement follows a one-size-fits-all approach, in which those being resettled are treated in a uniform way, placed in standardized housing and promised similar provisions. A weakness with this approach is that the standardized offering is not necessarily ideal, or even satisfactory, for all. In physical terms, the shelter provided is, for example, not appropriate in all climatic conditions or for all families.

The American approach first and foremost expects people to resettle on their own, using their own resources as they see fit. For those with insufficient resources, both the state and private not-for-profits provide different options. The emphasis is still, however, on helping people ‘get back on their feet’ so they can resume self-sufficiency. A weakness with this approach is that - because they are deemed options of last resort - the organized resettlement option the state provides, such as FEMA trailer parks, are arguably unsatisfactory. Those least able to attain self-sufficiency are, therefore, typically left in the most precarious situations. The alternatives non-profits provide – like Magnaville - can be much more appealing, but residents typically must meet established criteria, be willing to live by prescribed rules, and be fortunate enough to be chosen in order to participate. In other words, exclusivity persists and is a weakness of the neoliberal approach.

On the other hand, the strength of the neoliberal approach is that self-sufficiency can increase resiliency, lessening dependence on the state, which is always somewhat volatile. The corresponding weakness with the Chinese approach is that those involved are made highly dependent on the government’s ability to provide; something the government is not
always able to live up to. In the cases investigated, the government is not, for example, providing heating and cooking fuel, despite the promises made.

Another distinction between the American and Chinese approaches is the comprehensiveness of plans developed, and how rigidly they are followed. True to its authoritarian scientific management framework, plans in China are comprehensive, and dispatched with the expectation that they will be implemented literally. Two strengths of this approach are that the best resources, both human and otherwise, can be used to devise high-quality plans, and the successes and failures of local officials to fulfill the plans are relatively easy to measure. A weakness is that there is little room to adapt plans to the local context, and planners greatly removed from that context are arguably ignorant to its needs, capacities and preferences. In the United States, it is harder to define a single approach, as it varies by organization or project. This is a strength in and of itself, as all resources and hopes are not devoted to a single approach that could fail. In the case of Magnaville, the written plans are scant, and much more power is given to the management team to make decisions based on ad hoc analysis. This allows for flexibility to contextual changes, but requires that the planners (the project team) are competent and have the trust of their superiors.

Any policy implications drawn from this analysis must recognize that overarching planning frameworks are unlikely to radically change, but could be improved, responding to the weaknesses and capitalizing on the strengths elucidated above. For this reason, many of the below recommendations recognize, and are responsive to, these boundaries. Some are, however, more normative in nature. Of course, these recommendations are only intended
to point towards possibilities and areas for more research, based on the observations made in these two case studies.

**Bounded participatory decision-making**

There are arguably instances in which it is in the public interest that planners make decisive decisions, like mandating resettlement. The power of planners to do so in the Chinese context is one of its strengths. The weakness of giving planners this power is that individuals lose a degree of autonomy and must trust that planners are making the right decisions, in their interest. To ameliorate the loss of autonomy, the related decisions that follow – ranging from the logistics of resettlement to what their new homes will look like - could be reverted back to the households involved. Engaging people in decision making, while recognizing that there are times in which action needs to be mandated, also helps to provide checks and balances on planners, and set clear limits on when they are and are not expected to make decisive decisions more or less unilaterally.

In any context, community engagement may actually help planners make contentious but necessary choices by avoiding or reducing community opposition. As noted previously, whether or not to rebuild all of New Orleans was a controversial issue, with the initial planning assessment indicating that redevelopment should be concentrated and some areas left for parks and wetlands. The community was not engaged in reaching that decision, however, and took it as an attack on their right to live in the city, leading to the removal of the question from the table in favor of the potentially less suitable resolution to allow people to rebuild anywhere (New Orleans Community Support Foundation 2007; Whoriskey 2007a).
It is not certain that a community engagement process would have led to a different outcome, but it at least would have given the citizenry the opportunity to assess the information themselves and reach an informed opinion. Residents deserve to be empowered and to play a role in the planning process, but they should be given accurate information and also made to take responsibility for difficult choices.

**Information for decision-making**

If resettlement is to be voluntary, getting information in the hands of the public is an important part of the decision-making process. The complex and uncertain nature of climate change makes the acquisition of the best information possible all the more important. Neoliberalism assumes that all market participants - in this case, those choosing between resettlement options - have perfect information to make rational choices. This seems to be far from true at present, and may be impossible, but more information could be aggregated and presented to the public to increase their level of understanding, leading to better decisions.

In the more authoritarian Chinese approach to planning, the assumption is that planners can and will acquire all relevant information and use it to make the best decisions for communities. Planners can still, however, ameliorate suspicion and avoid opposition by sharing the information and methodologies they are using to make decisions.

A hybrid approach in which planners and communities collectively make resettlement planning decisions, or in which community perspectives weigh heavily on and are taken seriously by planners, requires that they have a shared body of information everyone trusts the veracity of. By involving community members in the question identification and
information collection process, they are more likely to understand and trust the findings, improving the quality of their participation in the resettlement itself. The information analyzed can also help households make better choices in their own decision-making.

**Following plans**

An interesting distinction between planning in Qinghai and in Magnaville in particular is the level of planning in advance, and adherence to plans developed. In Qinghai, comprehensive plans are prepared at the national level and handed down to local planners for strict implementation. Conversely, planning in Magnaville is highly dynamic, with decisions regularly made on the fly by the highly trusted project team. The strength of the Chinese approach is that very little trust and confidence has to be invested in local planners; they are essentially expected to be automatons of the larger state. The strength of the Magnaville approach is that the best solutions can be crafted on a case-by-case basis in response to changing dynamics. Which approach is ultimately best is highly dependent on the context, including how competent those implementing the plans are and the relative fluidity of the factors at play. This dichotomy does, however, deserve attention.

**Self-sufficiency and safety nets**

Self-sufficiency is emphasized as a key objective of government agencies and non-profits in post-Katrina resettlement. This is potentially at the cost of a safety net, as the overwhelming expectation is that people can and should be responsible for themselves, and thus any support mechanism is a minimal intervention to support that end, catching those few that truly fall through the cracks while avoiding incentivizing free-riding. In contrast, meeting a comprehensive set of needs – from housing to fuel – directly is stressed
in resettlement planning in Qinghai, emphasizing the safety net over self-sufficiency. A weakness of this approach is that it encourages dependency and can lead to problems when the state is not able to meet needs. A healthy balance of a safety net and self-sufficiency may be a more appropriate response, encouraging and supporting self-sufficiency whenever possible, but ensuring that a robust safety net is in place for times when individuals need to depend on it.

Fostering self-sufficiency through workforce participation is not easy. Labor markets are extremely complex and, especially in capitalist economic systems, planners have few methods at their disposal for intervening (Friedmann 1987). Make-work projects, like those implemented in Magnaville, can keep people busy and build their skill sets and work ethics, but they are typically not the most efficient and productive uses of that labor. Innovative approaches, microfinance among them, may be considered. In Qinghai, one interviewee suggested that capital should be invested in creating small businesses run by, and employing, Tibetans. Creating a parallel economy may create employment opportunities for resettled persons in areas with high unemployment, persistent prejudice or other barriers to workforce participation. Two drawbacks are that the divisions between the host and the arriving populations are strengthened; and, particularly if the receiving population is poor and facing its own employment challenges, programs supporting employment exclusively among the arriving population may foster jealousy and resentment.

Ensuring that schooling is accessible to resettled children – and ideally adults too - is essential to fostering self-sufficiency, especially given that different skills will likely be
required of those resettled in their new environments. Planners and educators could also do things to make school more attractive, like making the curricula more relevant to their daily lives.\(^\text{10}\)

**Justice and equity issues**

In the Qinghai case, there are very few disparities between those being resettled, as they are all provided virtually the same style of home, similar subsidies and so on. This homogeneity is expected under an authoritarian scientific management framework in which planners devise the 'optimal' solution and implement it universally.

In contrast, a significant weakness of the American approach is that there are major disparities along class and racial lines in how people are resettling post-Katrina. The wealthy are able to rebuild in New Orleans or elsewhere relatively quickly, while the poor found – and in some cases still find – themselves isolated in sub-standard conditions in FEMA trailer parks (Davis, Belinda Creel and Bali 2006). Ensuring that an adequate safety net is in place could ameliorate this weakness. Disparities between rich and poor are unlikely to disappear in the American context, but softening the impacts on the poorest by ensuring that their basic needs are being met is arguably possible. Better planning could go a long way towards achieving this; after all, the shortcomings post-Katrina were not necessarily due to a lack of resources, but rather an uncoordinated and reactionary response that did little to address long-term environmental change or socio-economic problems.

\(^{10}\) For example, one of the Qinghai interviewees, Wenchangjia Namgyal (2009), is currently working on an English language textbook geared towards Tibetan students with the goal of making it more accessible to and interesting for them.
The element of choice prescribed under the market rationalist planning framework has strengths, as it allows individuals to optimize their happiness and wellbeing by making unique decisions based on their unique preferences. It can, however, result in a variety of satisfactory choices for those with resources and no satisfactory choices for those without, exacerbating inequalities. As noted previously, the government attempted to ameliorate this problem while still allowing for choice post-Katrina by providing those displaced with cash payments to use as they see fit. This is a logical response but was not entirely successful, as the amounts the poor and marginalized received were often insufficient. Furthermore, markets were not working well, with real estate prices inflated and many of the poorest unable to access satisfactory solutions (Appleseed 2006; Davis, Belinda Creel and Bali 2006; Rose, Clark and Duval-Diop 2008). Ensuring that the needs of the marginalized are met is arguably a key role for planners. This may require the provision of different responses for groups with different levels of access to resources.

The exclusivity of certain resettlement options further complicates matters. It is typically the most marginalized and least functional that are unable to meet the standards required of a project like Magnaville – whether it be due to a criminal record or the inability to hold down a job – and thus get further marginalized by a lack of resettlement options.

Market corruptions

The neoliberal American approach to planning is premised on the notion that markets are allowed to operate with minimal obstruction so they can ultimately transmit the correct signals, leading to the Pareto optimal outcome in the long term. In practice, corruptions like government-backed insurance may be sending the wrong signals, permitting people to
rebuild in areas in which an unfettered insurance market would either refuse to cover them or charge exorbitant premiums, signaling that it is not appropriate. If markets are deemed the primary vehicle for decision-making and the conveyance of information, it is important that corruptions like this are identified and removed.

The roles of the public, for-profit and non-profit sectors

Nomadic resettlement in Qinghai and post-Katrina resettlement in the United States sit at opposite extremes in terms of the extent of direct government involvement, which is not surprising given the very different planning frameworks each is taking place within. Post-Katrina, the majority of the responses have been private, both profit-oriented (e.g. using insurance claims to hire a contractor to build a new home) and non-profit (e.g. Magnaville). Magnaville is almost exclusively a private venture, fully funded by corporate donations and implemented by a non-governmental project team. At the other end of the spectrum, the government is virtually the sole planner and implementer in the Qinghai resettlement initiative.

Both government and non-profit organizations bring strengths and weaknesses to resettlement planning. Governments carry the legal authority to mandate changes when necessary, typically have access to broader funding, and are expected to look out for the interests of all community members. They are, however, often saddled with cumbersome bureaucracies and are not always the most responsive to individual communities. Non-profit organizations are typically more flexible, free to take positions on issues and

11 According to Carmichael (2009), the only government support has been funding for very small one-off projects, like a computer-training program.
advocate for them, and are often closer to their constituencies. They do not, however, always keep the interests of the broader community in mind, may be exclusive in terms of who they work with, and often lack the resources that governments have.

Other cases would suggest that the best approaches to resettlement involve both government and non-governmental organizations, each doing what they do best. In a case of involuntary resettlement in Mumbai, for example, non-profit organizations were extremely effective in mobilizing the community, educating them, and ensuring that their needs and perspectives were taken into account. The government appropriately responded to these efforts, and ultimately provided the necessary resources and led project implementation (See Patel, d'Cruz and Burra 2002).

Non-profits can also play important roles in supporting service provision. They may, for example, be well suited to provide job training and cultural preservation initiatives. In Qinghai, the government does allow non-profits to operate, but with limited scopes and inadequate support. Further supporting, partnering with and permitting them may be an efficient way to foster more effective programming. Conversely, it can be argued that some roles are better left to the state, even in non-profit-led resettlement projects. In the case of Magnaville, the project is ill equipped to provide healthcare, for example, a service that the government is perhaps better able to provide.

Learning from past experiences

The concept of CCIR is fairly nascent; norms and best practices have yet to emerge. Much can be learned from case studies such as those examined in this paper partly because they
offer good approximations of what we can expect with CCDPs under different planning frameworks and conditions.

While far from perfect, much can also be learned from traditional resettlement practices. Appendix 4 examines three existing forms of resettlement – involuntary taking-based resettlement, refugee self-reliance, and slum resettlement – that may be instructive as CCDPs increase in number and norms in planning for them are developed. It is, however, notable that all three of these approaches to resettlement arguably fall into the scientific management paradigm, as they prescribe strong roles for planners.
Chapter 7. Conclusion

The balance of evidence suggests that the impacts of climate change are upon us, and we need to redouble our planning efforts now. In most cases, adaptation is expected to involve the construction and strengthening of infrastructure and changes in our modus operandi to protect our existing settlements. Unfortunately, in some cases the impacts are expected to be more profound, requiring that communities completely resettle. In preparation for an increase in CCIR, we need to start considering how different approaches to planning shape the resettlement process, and which broad approaches are best suited to both the planning and implementation of resettlement programs.

This thesis examined two different cases of resettlement that are situated within very different overarching planning frameworks: The resettlement of Tibetan nomads in western China, which is planned within a strong authoritarian scientific management framework; and resettlement planning in New Orleans post-Hurricane Katrina, which is nested with a broader neoliberal, market-oriented framework.

The overarching conclusion reached is that both planning frameworks bring strengths and weakness to planning for CCIR. China’s authoritarian approach is widely criticized in the West as undemocratic. It may, however, be better able to address a unique problem - the long-term nature of climate change, and uncertainty around when to resettle and when to stay – than the laissez faire market-oriented approach of the United States. This is due to the ability of planners in the Chinese system to proactively assess climate change-related
trends and make decisions. Information is analyzed and plans are devised and introduced with minimal interaction with communities.

The serious shortcomings with the Chinese approach must, however, be acknowledged. Plans are comprehensive and generic, with little or no sensitivity to individual preference, or differing conditions and needs. Planners are also greatly empowered, which can lead to exploitation for their own personal gain, or for the perpetuation of the status quo, against the interests of those being planned for. This approach also neglects self-sufficiency in favor of a strong safety net, potentially breeding dependency. On the other hand, another advantage of the Chinese approach is that resettlement options are typically made accessible to all, regardless of relative wealth; everyone’s needs are, at least theoretically, addressed.

In contrast, the market-oriented response post-Hurricane Katrina leaves most decisions in private hands. Planning is thus inherently reactive and planners and experts are often ignored. Despite information suggesting that rebuilding in certain areas of New Orleans is not advisable, for example, personal preference is given priority and thus rebuilding proceeds. On the other hand, the American approach does allow for individual choice, and thus, at least potentially the most suitable response at the household level.

A variety of options have indeed emerged to meet varying preferences and capabilities. Another shortcoming post-Katrina is however, that not everyone’s needs are necessarily being met satisfactorily. Those with more resources are able to essentially buy the best responses, while the poorest are often marginalized in poor conditions. Non-profit organizations have emerged as important players in the provision of resettlement options,
but they can be exclusive, working only with households that meet their criteria. They also tend to have a limited capacity.

Policy implications drawn from this analysis were identified in the last chapter. They include: How public engagement in decision-making might be bounded within a proactive decision to resettle made by planners; the importance of sharing commonly supported information; balancing self-sufficiency and adequate safety nets; the need to promote justice and equity; the presence of market corruptions in the neoliberal approach; balancing public and private stakeholders; and how other, more established, resettlement systems can be learned from. These are areas deserving of attention moving forward, as the nascent field of planning for CCIR emerges.
Works Cited


Brown, L. R. (2007, July 1). "Climate Refugees' Growing Tab." USA Today


Jervis, R. (2007, August 29). "2 years after Katrina, pace of rebuilding depends on who pays." *USA Today*

Johnstone, L. C. (2008). *Planning for the Inevitable, the Humanitarian Consequences of Climate Change* UNHCR.


UNHCR. (2008, October 23). "Climate change, natural disasters and human displacement: A UNHCR perspective "


Appendix 1 – Interview process

Qinghai, China

I had the opportunity to travel to Qinghai Province, China, in January of 2009 to visit resettled and traditional communities. My research involved interviews with two recently resettled families in two different government-built resettlement communities – the Tseden family in Dobdain Township, which partially resettled from the traditionally nomadic Normgo Village in 2008, and the Mkhargyal family in Goma Township, which resettled from the Wonskor Village’s original site in the path of a Yangtze River reservoir in 2006/7 (Mkhargyal 2009; Tseden 2009). Mr. Wang, an engineer and government official responsible for the six different village resettlements in Goma, was also interviewed (Wang 2009). Finally, I interviewed the Huatsebum family and Wenchangjia Namgyal, which resettled from the Wonskor village’s original site to a new rural site provided by the government, on which they constructed their own home, when the aforementioned Yangtze dam was first constructed in 1986 (Huatsebum 2009; Namgyal 2009). Namgyal is particularly of interest, as he is a university lecturer that wrote his own masters thesis on the resettlement of nomadic Tibetan communities.

My objective was to gain a better understanding of how the resettlement process – particularly the contemporary round of resettlement to government-constructed communities – is proceeding. I wished to identify what problems are emerging or persisting, what programs are being implemented to address these problems, and subsequently consider how the planning approach being followed fits with and varies from
what might be expected given China's authoritarian scientific management planning framework. The survey protocols followed are attached as Appendices 2 + 3. The first is the protocol followed with Mr. Wang, the planner, and the second is the one followed with community members interviewed.

United States post-Hurricane Katrina

I had the opportunity to interview Shane Carmichael, the Project Manager for Magnaville (2009). Information and insights he provided form the foundation of the Magnaville analysis, supported by an extensive review of media coverage. The survey protocol I followed with Carmichael is attached as Appendix 2.
Appendix 2 – Interview protocol for project planners

Interview protocol
Resettlement Communities

Interviewer: Todd Schenk
Interviewees: Community Planners and/or leaders

These interviews will be conducted orally either directly or via translators in resettlement communities. I will start by having the translator read the following statement to interviewees:

The purpose of this study is to identify best practices in permanent resettlement communities, particularly those that are the product of environmental change. The questions asked are designed to better understand what policies, programs and/or technologies you are implementing to meet the needs of this community. Your participation is completely voluntary; you may decline to answer any or all questions, and end the interview at any point with no adverse consequences. If you wish, your confidentiality may also be protected; you have the option of having your name, the name of this settlement, or both excluded from the record of this interview. If you wish to be anonymous, you will be identified simply as a leader or manager from the community.

1. Settlement name and location?
2. What is your position/job title?
3. How old is this settlement?
4. Why was it created? Where did the residents come from?
5. How long have you been working in this community for?
6. What is your background (past experience, education)?
7. Could you describe the planning process that was followed to site this community and get it established?
8. What services were planned prior to the arrival of residents? Is there a standard planning model you followed and/or continue to follow?
9. How have you modified these services from the original plan since residents moved in? Are they adequate/meeting needs?

10. What services should have been planned before residents arrived, but were neglected? How have you been meeting these shortcomings?

11. What would you say are the main problems residents face?

12. What is being done to solve these problems? Who is conducting these programs?

13. Do you feel that these programs are effective? Why or why not?

14. What are the limitations preventing more/better programs?

15. *If not mentioned:* In your opinion, is there a housing problem? How are you addressing it? How would you address differently if you could? What is preventing this?

16. *If not mentioned:* In your opinion, is lack of employment opportunities a problem? How are you addressing it? How would you address differently if you could? What are the limiting factors?

17. *If not mentioned:* Is there a fuel shortage? How are you addressing it? How would you address differently if you could? What are the limiting factors?

18. *If not mentioned:* Is there a food shortage? How are you addressing it? How would you address differently if you could? What are the limiting factors?

19. *If not mentioned:* Do you feel that the health of community members has improved or declined since moving here? Do you have any indicators of changes in health? Why do you think this is? How are health problems being addressed? Would you do something differently if you could? What are the limiting factors?

20. *If not mentioned:* What about water and sanitation? How do residents access fresh water? What about sanitation? Do you feel that these services are adequate? If not, is this being addressed? How would you address differently if you could? What are the limiting factors?

21. *If not mentioned:* Do you think the natural environment is deteriorating? Do you feel that this settlement is contributing to the deterioration or counteracting it? What makes you feel this way? What is being done to protect the natural environment?

22. *If not mentioned:* What about traditional culture? Do you feel that the traditions of residents are deteriorating due to the lifestyle changes? What, if anything, is being done to keep them alive?
23. Do you feel that this community is robust in the face of climatic events, including further desertification, global warming and/or water shortages? What are the major stresses?

24. How are decisions made here in the community? Who decides what projects take place? Do you involve community members in decision making? How?

25. Do you inform community members of the decisions being made? How?
Appendix 3 – Interview protocol for resettled community member

Interview protocol
Resettlement Communities

Interviewer: Todd Schenk
Interviewees: Community members

These interviews will be conducted orally either directly or via translators when necessary. I will start by having the translator read the following statement to interviewees:

The purpose of this study is to understand what policies, programs and/or technologies are being used to improve your standard of living and the sustainability of your livelihood; how effective or ineffective these programs are at solving the problems you identify; and to collect your thoughts on what programs, policies or technologies might better meet your needs. Your participation is completely voluntary; you may decline to answer any or all questions, and end the interview at any point with no adverse consequences. Your confidentiality shall also be protected; the place and date of this interview will be recorded in the interview notes, but not your name or any other information that will identify you personally.

1. Settlement name and location?
2. How long have you been in this community for?
3. What were your reasons for moving here?
4. What have been the benefits of settling?
5. What have been the disadvantages?
6. Do you see you and your descendants staying here permanently? Why or why not?
7. What would you say are the main problems you and your neighbors face?
8. What is being done to solve these problems? Who is conducting these programs?
9. Do you feel that these programs are effective? Why or why not?
10. What would you do differently?
11. *If not mentioned:* Are you happy with your shelter? In your opinion, is there a housing problem? How is it being addressed? By whom? How would you address it differently?

12. *If not mentioned:* What about unemployment programs? In your opinion, is lack of employment opportunities a problem? How is it being addressed? By whom? How would you address differently?

13. *If not mentioned:* What about fuel? Is there a fuel shortage? How is it being addressed? By whom? How would you address differently?

14. *If not mentioned:* What about food? Is there a food shortage? How is it being addressed? By whom? How would you address differently?

15. *If not mentioned:* What about health problems? Do you feel that the health of your family and neighbors has improved or declined since moving here? Why do you think this is? How are health problems being addressed? By whom? Would you do something differently?

16. *If not mentioned:* What about water and sanitation? How do you get your water? What about sanitation? Do you feel that these services are adequate? If not, is this being addressed? By whom? How would you address differently?

17. *If not mentioned:* Do you think the natural environment is deteriorating? Do you feel your lifestyle is contributing to the deterioration or counteracting it? Compared to your past, nomadic, lifestyle? What makes you feel this way?

18. *If not mentioned:* What about your traditional culture? Do you feel that your traditions are deteriorating due to the lifestyle changes? What makes you feel this way? What, if anything, is being done to keep them alive?

19. How are decisions made here in the community? Who decides what projects take place?

20. Have you been consulted regarding what your needs are and/or what solutions are being implemented? If so, how?

21. Do you feel informed about what is happening in your community? If so, how are you informed?
Appendix 4 - Learning from conventional resettlement

Involuntary resettlement (takings)

The practice of resettling into planned communities is not new. Despite its dubious history, there is much we can learn from the wealth of case studies and literature on planned resettlement. The literature on takings-related ‘involuntary resettlement’ – typically people moved because a planned project requires or will disrupt the land they currently inhabit - is particularly relevant, as planning for the mass resettlement of CCDPs will often be somewhat similar.12

No doubt motivated by resistance to and failures with past resettlement programs - including the infamous Narmada River dams project in India and Three Gorges project in China - the World Bank has developed an Operational Policy on Involuntary Resettlement that projects it supports are subjected to (World Bank 2007). The Bank and many of its sister organizations, including the World Commission on Dams, have also prepared a wealth of case studies and reports on the topic (See World Bank 2009).

The Bank’s Operational Policy on Involuntary Resettlement notes that unplanned for displacement can lead to serious economic, social and environmental problems as peoples’ lives are up-ended. For this reason, one of its core objectives is (World Bank 2007):

---

12 Resettlement planning for CCDPs does have some characteristics that make it different than conventional takings-based resettlement. For one thing, it is not clear that resettlement will be involuntary, at least not in all cases.
Where it is not feasible to avoid resettlement, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits. Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs.

Borrowers are required to take a number of more specific measures in order to meet this objective; these include the provision of assistance with the physical act of moving itself, housing and land at least equal in quality to that taken, support with resettlement for a transition period, and transparency in that resettlement plans are made available to those impacted in languages and formats they can access (World Bank 2007). The Policy notes that marginalized groups deserve and require additional attention, and that lifestyles should be disrupted as little as possible.

Borrowers are required to file Resettlement Plans and Resettlement Policy Frameworks to demonstrate to the Bank how they plan to properly manage any resettlement (World Bank 2007). Several examples and templates of these instruments are available online (See World Bank 2009). The Bank’s comprehensive Involuntary Resettlement Sourcebook is a veritable how-to guide on plan making and implementation (World Bank 2004). The International Finance Corporation has also developed a related Handbook for Preparing a Resettlement Action Plan (2002).

The West Seti Hydroelectric Project, Reservoir Area and Downstream Project Components resettlement plan submitted for an Asian Development Bank-funded project in Nepal is
typical of those submitted for large or medium-sized projects (it is estimated that approximately 2,400 households will be impacted and 1,400 will require resettlement). At over 300 pages, the plan profiles the impacted communities; outlines exactly how their lifestyles will be altered and what efforts are being made to mitigate; enumerates how communities are being consulted; explains how, and where, alternative land is being acquired and distributed for resettlement; outlines how compensation will be calculated; and so on (West Seti Hydro Limited 2008). The plan prescribes livelihood restoration and community development initiatives, and includes provisions for landless households impacted.

Of course, plans like these can be broadly interpreted, are often simply ignored, and in no way ensure that resettlement will be a success (Patel, d’Cruz and Burra 2002). The Chinese government promised to allow scrutiny of its resettlement plans in Qinghai Province, for example, but allegedly arrested individuals it accused of conducting an ‘illegal investigation’ into the World Bank-funded project (U.N. Wire 1999).

Nevertheless, similar processes may be appropriate in the context of planning for CCDPs, and thus warrant examination. Should a protocol addressing how planning for CCDPs should be conducted at the local level be proposed, or international organizations working in the area desire a policy governing their project implementation, this Operational Policy could serve as a valuable model.

More generally, some of the requirements the Bank’s process prescribes – including the thorough assessment of the communities impacted and comprehensive community engagement processes – should be applied to CCDP resettlement too.
Refugee self-reliance

There are obvious similarities between CCDPs and conventional refugees, in that both are displaced. The major difference is that the primary objective in most conventional refugee and IDP situations is to stabilize their homelands and return populations as quickly and smoothly as possible. Their care is thus considered in terms of short-term emergency management, not resettlement.

In practice, however, two-thirds of refugees have been in camps more than ten years and some families have been displaced for generations (UNHCR 2005). In many cases, the rights of these refugees to seek gainful employment, move freely, receive education, grow their own food, improve their shelters and do many other things are restricted by rules their host countries impose. In other cases logistical limitations, ranging from lack of employment opportunities to fear of safety, restrict their abilities.

Recognizing that keeping refugees in a persistent state of dependence and restricting their self-sufficiency and rights is exacting a real toll in terms of their personal development, sense of worth and purpose, and community health - not to mention the financial and technical costs to host countries and supporting agencies - the UNHCR developed a Framework for Durable Solutions for Refugees and Persons of Concern (2003). The Framework prioritizes increasing self-reliance among refugee communities by providing development assistance that leads to self-sustaining livelihoods and puts greater agency in the hands of residents.

The UNHCR’s Handbook for Self-reliance (2005) is one document providing guidance as to how greater self-sufficiency can be fostered. It promotes the creation of broader self-
reliance strategies that set goals and establish processes for the identification and initiation of self-reliance projects, building off of the service gaps, capacities and wishes identified among, and in partnership with, target communities.

The Handbook also prescribes tasks for the design and implementation of specific projects, which include (UNHCR 2005: Book 2, 3): “Understand the context, the actors, and the development priorities”; “Ensure host governments are appraised, supportive and participate fully”; “Plan and help coordinate joint assessments”; “Seek/promote medium and long term employment opportunities”; and “Ensure joint monitoring systems are established and used”. Specific implementation guidelines and links to further resources are provided for each. The Handbook recommends that clear benchmarks and indicators be developed for objectives set. For example the objective of access to land for food production could have “All refugees/returnees who live in rural areas have access to agricultural land, either through ownership, rental or share-cropping” as a benchmark and the percent of refugees engaged in agriculture established as an indicator (UNHCR 2005: Toolkit 58).

An example provided in the Handbook for Self-reliance is a project to increase the volume and quality of honey produced in Uganda to meet market demand in Europe. Both refugees and local residents were trained how to manage hives, process the beeswax and so on, increasing their incomes and helping Uganda to strengthen it’s market ties with Europe (UNHCR 2005).

In Tanzania, Rwandan refugees were not permitted to farm their own land, but brought a great deal of expertise and thus worked with local farmers, greatly increasing their
productivity and providing some income to the refugees. The District Commissioner admitted that the eventual departure of the refugees was a blow to a local economy, but that the agricultural skills they had brought remained (UNHCR 2005). It is optimal when the development and increasing self-reliance of refugees brings benefits to the surrounding communities too, rather than fostering jealousy that can destabilize relations and lead to problems.

Another example of self-reliance provided in the Handbook involves the provision of care for IDPs in East Timor in the wake of incredible violence in 1999. According to Bernard Kerblat, the Chief of the UNHCR’s Emergency Preparedness and Response Section (UNHCR 2005: Book 1, 8-9):

The displaced were starving, had lost everything and were traumatised, but they engaged in decision-making from the outset once humanitarian support was available. They decided on the construction materials to be used. They selected the beneficiaries of the operation. They planned who should do what. Despite their circumstances their social organisation (their social self-reliance) provided a very strong basis for their recovery. Furthermore, the people made key critical decisions and designed and implemented what they wanted, to the extent that some agency workers were defending the wishes of IDPs despite their own personal bias.

Allowing for self-reliance from the initial stages of a resettlement program can work to avoid disempowerment in the first place, minimize dependency, and ensure that solutions best, and most efficiently, meet residents’ needs.
It should be noted that the Framework for Durable Solutions sees greater self-sufficiency as a medium-term way to improve the situation for refugees and their host communities and prepare them for their ultimate departure from camps, not as a long-term solution (UNHCR 2003). It ultimately prescribes the repatriation, local integration outside of camps, or resettlement to third countries of refugees. While each of these approaches may play a role in the planning and management of CCDPs, the option of indefinitely resettling them into planned communities, drawing lessons from the UNHCR’s work on self-reliance, among other sources, may be a viable alternative in some cases. Of course, if resettlement is truly indefinite, near-complete self-reliance is all the more important.

In terms of community engagement in decision-making, the UNHCR, which operates between the emergency response and longer-term camp management spheres, argues that there is value in having communities engaged as soon as possible to ensure that their needs are being understood and met. The UNHCR Tool for Participatory Assessment in Operations prescribes engagement at all stages, including structured dialogue at the initial situation analysis phase to identify: The risks community members face, both individually and in the aggregate; the capacities that exist within the community; and to discuss solutions (UNHCR 2006). The Tool also recommends that community representatives be involved in the technical aspects of defining strategies and programs. Community engagement must be structured to ensure that standards are met. These standards should include provisions that all voices are heard, information is appropriately shared between planners and community members, and decisions will be made in an agreed upon fashion.
Slum resettlement

Slums – informal settlements, typically with inadequate services, sub-standard construction and unclear property rights – are a common feature of most developing world cities. UN Habitat (2008) estimates that one-third of the world’s city-dwellers, almost one billion people, live in them. How municipalities and other actors address slums varies as widely as the settlements themselves do (Tuhus-Dubrow 2009). There are commonalities among refugee and IDP camps, as they are subjected to the same protocols and the same agencies are usually involved. The pervasiveness of funding from the World Bank and its sister development banks and agencies, and thus frequent application of the Bank’s standards on involuntary resettlement, results in commonalities among involuntary resettlement planning too. It is difficult to find the same level of homogeneity among projects working within slums, and thus impossible to prepare an exhaustive list of the lessons that can be learned from the vast array of slum initiatives. It is, however, important to note that slum resettlement is an area planning for CCDPs can draw from and thus is deserving of further attention.

In many cities, resettlement was the traditional approach, with slums simply raised and residents moved in to government housing in the best cases and left to fend for themselves (i.e. move somewhere else until evicted from there too) in the worst (Tuhus-Dubrow 2009). More recently - recognizing the important and complex web of connections and local knowledge that exists within slums, and that many resettlement programs were failing – keeping residents where they are and conducting slum upgrades has become a more popular approach. One of UN Habitat’s core programs is, for example, its Slum Upgrade Facility. The Facility supports the development of innovative urban financing
instruments to support, largely grassroots, lending and projects so that families, communities and city governments can improve their neighborhoods (UN Habitat 2008).

Resettlement is, however, still conducted in some cases, for various reasons. Climate change may increase the frequency of cases in which resettlement is a better option than upgrading, as many slums are built in the areas vulnerable to sea level rise, flooding and other hazards, as that is the land that was least attractive to others and thus left for them to build on (Australian Human Rights and Equal Opportunity Commission 2008).

In Mumbai, approximately 60,000 people were resettled from slums located in railway yards as part of a railway improvement project (Patel, d'Cruz and Burra 2002). This resettlement program, which was subject to the World Bank's Operational Policy on Involuntary Resettlement, is interesting partly because all parties generally considered it a success; residents and organizations representing them were intimately involved in the resettlement process, residents were given high-quality replacement housing with complete utilities, and no one had to be forcibly removed (Patel, d'Cruz and Burra 2002). Patel, d'Cruz and Burra (2002) postulate that the involvement of competent non-governmental organizations that were trusted and respected by both the residents and state actors was central to the success of this case. These organizations were well-prepared, having conducted community mapping to understand and mobilize their constituencies in advance, and even conducted a 'house model exhibition' to get residents thinking about what kinds of housing they would like and designing their own models. Competent non-governmental organizations can play similar roles in CCDP resettlement, helping communities defend their rights and become savvy about their options.