WORKING PAPER
SCHOOL OF INDUSTRIAL MANAGEMENT

AIDING THE ENTREPRENEUR: SOME ISSUES

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CAMBRIDGE 39, MASSACHUSETTS
INTRODUCTION

The MIT Fellows in Africa have met together during a fortnight each summer since 1961 to exchange papers and to discuss their experiences as employees of African Governments. Since its inception in 1960, 26 American graduates from the MIT School of Industrial Management or the Harvard Business School, have performed duties as a part of the regular establishment of their African governments. The breakdown according to organizations is as follows:

- Economic Planning Ministry of Commission: 7
- Ministry of Finance or Treasury: 6
- Development Bank: 6
- Ministry of Commerce and Industry: 5
- Public Utility - Railway: 1
  - Posts and Telegraphs: 1

Nine Law Fellows, graduates of Harvard or Yale Law Schools have similarly served in legal offices, as follows:

- Ministry of Justice - Attorney General: 3
- Office of the Chief Justice: 2
- Ministry of External Affairs: 2
- Ministry of Finance: 1
- Director of Public Prosecution: 1

Their unusual positions have made the annual two week summer conference a time of lively and enriching discussion.

Last August, 25 Fellows and wives, along with African guests from the ministries and offices in which Fellows work, MIT faculty and a small number of governmental and international civil servants met at the Mont Parnes Hotel outside Athens. The theme which served as the departure point for discussion was the need for innovators and innovation. After opening presentations and discussions of issues, the Fellows separated into four groups: the external aid specialists, the planners and administrators, those concerned with financing and assisting private entrepreneurs, and the lawyers. For two days, these working groups met to examine the meaning of innovation in the context of their experience. Because of the almost unique position from which the Fellows approached this task, we are reprinting as School of Industrial Management Working Papers the report which issued after these two days. What follows is the working report of the assistance to the Entrepreneurs. The reports of our other working groups are being published separately.

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AIDING THE ENTREPRENEUR: SOME ISSUES

Group D: Beach, De Mol van Otterloo, Gustafson, Hall, Knapp, Norris, Spangler, Stoner.

FIA Athens Conference
August 10 - 24, 1963

A frequently discussed economic and social goal of many of the developing countries of Africa is the establishment of a strong, vital group of African entrepreneurs. African politicians have espoused the goal in degrees varying from mere lip service to the actual investment of hundreds of thousands of pounds. A number of significant issues which should be faced in pursuing this goal are raised in this paper.

THE AFRICAN ENTREPRENEUR

The African entrepreneur, like his brothers throughout the world, possesses traits of low aversion to risk, delight and competence in problem solving, and a good deal of personal drive and self-confidence in implementing his ideas and ambitions. However, in African countries capable entrepreneurs are presently few in number and in general possess a low level of education. In fact, entrepreneurship as a livelihood is often chosen because an individual lacks the education required for a high status position in the civil service or a profession and is too ambitious to accept a common laborer's wages.

These characteristics raise several problems when an African entrepreneur attempts to start a new business. It may first be useful to note several general observations about beginning entrepreneurs and then make some comparisons with those who have had five or more successful years and are desirous of making major expansion.
Generally, the African entrepreneur starting a new business:

1. Will need a large amount of planning, forecasting, and other help, including even the preparation of his loan application.

2. May be unaware of his need for help or unable to find help even if aid is available.

3. Is almost universally lacking in capital and is unattractive to conventional financial institutions, but may be able to induce family and friends to work for little or no wages for a short period or to contribute a small amount of capital.

4. May well have some technical competence in his field, but will have an inaccurate and incomplete perception of the complexities of the business.

5. Will be facing a very sophisticated market with hard competition from importers and/or local producers.

In some contrast, the entrepreneur contemplating a large expansion after five or more years of successful operation generally:

1. Remains fairly unattractive to commercial lenders, although he may obtain mortgage loans from them up to about one-third of the value of the mortgaged assets.

2. Has exhausted any voluntary work by family and friends, and a large number of these people may now look to him for support.

3. Has become familiar with his market, but may mistakenly expect demand prices to remain constant (infinite elasticity) even if he increases production.

4. Has developed some notion of profit and loss, but has no proper accounting system.
5. Has reached the limit of his technical ability and will need new
talent for the proposed expansion.

Of course, there is at any one time a continuous spectrum of entrepreneurs
from new to highly experienced, but the two stages outlined above may serve as
a guide to how much a successful entrepreneur may progress over five years.

SMALL INDUSTRY LOAN OPERATIONS

Schemes for making loans to small industries are one way to attack these
problems. They may be located as separate departments of the development banks
or can be made separate institutions altogether. The major reasons for separa-
tion are: (1) The ability to maintain independent accounts and (2) to retain
a staff fully responsible to the small industries effort. Independent account-
ing is necessary to measure the performance of the small industries loan scheme
in general and of individual loan officers in particular. Such an accounting
system should provide ready information on the repayment status of all loans and
should keep a separate accounting of the operating costs including salaries,
wages, travel expenses, etc., charged to each loan officer on a profit-loss center
basis.

Probably the most important activity in operating a small industries loan
scheme is the follow-up of projects after the loan has been approved. The
measure of follow-up pursued will depend mainly upon the personal resources of
the bank and, to a lesser extent, upon the funds available for operating expenses.

An effective follow-up system will make full use of the officers assigned

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1. For a fuller discussion see P. E. Beach, Jr., "Small Industries Development
Banks: Operating Procedures," MANAGING ECONOMIC DEVELOPMENT IN AFRICA,
to work solely on the small loan projects. Each officer should be assigned no more than 20 to 25 projects, depending on geographical dispersal. Each borrower should be visited at least once a month for supervision, training and assistance purposes, with extra visits being made in more difficult cases. Alternatively, borrowers within, say, five miles radius of the loan office could be required to call in monthly and to present a report, the accuracy of which should be checked periodically. If the bank’s portfolio of loans shows a high geographical dispersal, it may be advisable to station loan officers in provincial centers to save on time and transport expenses.

The following are several suggestions for procedures to be adopted in the follow-up stage:

1) A simple, standardized accounting system format, possibly adapted to several broad industries categories, could be adopted to facilitate quick audits and project reports by the loan officer.

2) The loan officer might make use of a wall chart showing the repayment status of each loan with a special signal to delineate borrowers in arrears. If such a chart is put in a prominent place, it may have a strong effect on borrowers who do not wish their irresponsibility to be displayed before the public.

3) Successful projects should be given publicity to encourage the borrower and the loan officer concerned and to build the reputation of the bank.

4) In more difficult projects the loan officer may exert strict financial control by:

   a) Arranging with the borrower’s customers to have a fraction of the price of all purchase transactions with the borrower paid directly to the bank as part of the loan payment.
b) Taking complete control of the project's finances by establishing a joint signature bank account between the borrower and his loan officer and by requiring that all receipts of the business be deposited in the account.

5) The loan officer should be required to file bi-monthly reports to his superior concerning travel, visits made, etc. A detailed report on the status of all projects should be made every three months.

6) Finally, the loan officer might be subjected to a carefully designed incentive salary scheme which would provide a bonus calculated on the basis of such factors as: (a) fraction of successful loans in his portfolio; (b) fraction and amount of loans in arrears; (c) number of loans handled; etc. Care would have to be taken to insure that the loan officer's primary goal remained the establishment of successful small business enterprises and not the mere recovery of loans.

Preceding the follow-up stage is, of course, the feasibility study or project analysis stage. To the extent that the analysis is well performed, the follow-up measures will be easier and more effective. In principle, project analysis for large, medium and small businesses do not differ appreciably, and the process is the same except for the varying degrees of technological and analytical ability required. Three points stand out: (1) It is important to require the project analyst (probably the loan officer himself in the case of the small loan project) to complete a well drafted, standard, feasibility report including all the information required for such studies.\(^2\) The completion of such a form forces the loan

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2. Such information includes cost, revenue, and cash-flow estimates, capital requirements, capital injection schedule, loan security offered, etc.
officer to obtain all the necessary information and prevents him from skipping over the more difficult items. (2) There is a question as to whether project analysis and follow-up should be performed by the same individual for each project. Possible difficulties in this arrangement are that the more interesting and often more immediately pressing demands of project analysis might distract the individual from doing an adequate job of follow-up. Also, if the individual follows up his own project analyses, he might be inclined to cover up his mistakes. In favor of the arrangement are the advantages of continuity of personal contacts and information flow with the project and the clear responsibility of the loan officer for a particular project. (3) The previous point leads to the question of whether final approval on loan applications should be vested in a loan officer or in a board or committee. The clear responsibility argument would indicate that the officer should make the decision, but in many cases a board may be necessary to insure the integrity of loan officers and partially shield them from non-objective pressures.

The maintenance of a staff adequate to meet the above demands will place a severe strain on financial and recruiting efforts. At the start, officers may be obtained all or in part on a technical assistance basis. Each officer should have a trainee-understudy, who should have at least a secondary school certificate and some accounting knowledge. The trainee would initially work with his superior, but as the loan portfolio increased, he would be given primary responsibility for a growing number of loan projects.
It is unquestionably clear that a small industries loan scheme operating along the above lines, with loans of an average size lower than £1000 will require a subsidy from governmental and/or external aid sources. The best estimate at present is that the bank might just be able to cover bad debt losses out of interest payments. Salary, clerical, travel, rent, and other expenses will have to be a complete write-off (subsidy). Our estimate is that the operation of a scheme with a floating investment of £100,000 in 100 loans would cost approximately £25,000 per year, or 25 per cent of the invested capital. Some economies of scale could probably be gained as the bank increased its portfolio of investments since overhead costs for travel, administration etc., would be spread over a larger total floating investment. It has been suggested that small business development banks enter the public relations field to attract more able entrepreneurs as borrowers and thereby significantly reduce risk and follow-up costs. In view of the fact that small business development banks have in the past received many more applications than could be approved, a large expenditure on public relations may not be advisable, but a moderate effort may bring more desirable applications from the

3. Estimated as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 officers at £1500</td>
<td>£7,500</td>
</tr>
<tr>
<td>5 trainees at £500</td>
<td>£2,500</td>
</tr>
<tr>
<td>4 clerical at £400</td>
<td>£1,600</td>
</tr>
<tr>
<td>2 messengers at £100</td>
<td>£200</td>
</tr>
<tr>
<td>1 bookkeeper at £1000</td>
<td>£1,000</td>
</tr>
<tr>
<td>1 manager at £2500</td>
<td>£2,500</td>
</tr>
<tr>
<td>Travel 4000 mi/mo at 1/6 per mile</td>
<td>£3,600</td>
</tr>
<tr>
<td>Rent</td>
<td>£3,600</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>£22,500</strong></td>
</tr>
</tbody>
</table>
remoter, usually less knowledgeable areas of the country.

The extent to which the government and/or external aid sources are prepared to subsidize the operating expenses of the bank should have considerable influence on the bank's asset structure. In general the less experienced entrepreneurs with smaller capital needs will require more follow-up per unit of loan, so a constriction in the operating budget (in relation to the size of the total loan portfolio) of the bank should be followed by a change in emphasis toward the larger, more experienced businesses, and an increase in the operating budget should permit extension of aid to the younger or new businesses. The 25 per cent estimate for operating costs includes a high emphasis on new businesses.

SCHEME TO INCLUDE MEANS FOR SELF-PERPETUATION AND GROWTH

Regardless of the costs involved, the most important fact which the development banker must keep in mind in designing the program and procedures for assisting small entrepreneurs is the necessity of developing a system which includes within itself the means of self-perpetuation and growth. A program which leads to the development of the individual managers who come into contact with it or which leads to the successful expansion of the businesses to which loans are made may not have a major impact on the economy unless it also includes provisions for the regeneration of new entrepreneurs and managers within the companies assisted. If additional managerial skill is generated within the companies assisted by the scheme, there will be manpower available both to leave the present organization to seek out opportunities for the creation of new companies or to remain in the organization to assist it in meeting the new needs arising from further expansion. Without such a regeneration of entrepreneurial and managerial skills the program effect can only be "one shot" assistance creating new or larger businesses which may then stagnate.
For this reason, the bank should include as a prior condition of financial assistance provisions such as the requirement that each borrower take and train one or more executive assistants in his company or that he arrange for further academic or industrial training outside of his organization for employees of his company or similar mechanisms which will generate increasing numbers of men inclined to become entrepreneurs.

An alternative to requiring hard-pressed entrepreneurs to pay for training programs would be for the bank to operate a business internship program to be financed by government or an external aid source. In such a program the bank would hire qualified young men (education at least to secondary school or technical institute plus accounting level) and would place them with the loan recipient companies to act as operating assistants to the manager in some significant capacity. The "business interns" might be given two years in such employment after which they would find other employment, perhaps with the firm of their internship, perhaps with another firm, or, possibly, starting their own businesses. Such a program would need to be highly selective and voluntary on the part of the loan recipients receiving interns.

REASSESSMENT OF THE GOALS

The cost of performing the functions necessary to offer substantial amounts of assistance in the development of the small African entrepreneur should lead the development banker and the other decision-makers dealing most directly with economic development to reassess with an open mind the goals that they are actually seeking in their attempts to assist the small entrepreneur. This introspective examination should also consider the most appropriate paths to these goals. Although the standard politician's statements may well include the plea that the
government assist the "small businessman", trader, or local entrepreneur and although the appropriate ministers are likely to pledge such assistance, the depth of this commitment, relative to other competing and conflicting needs of the people, may not be very great. The overall economic return on resources devoted to this end is almost certainly unknown to the politician and is unlikely to be immediately apparent or easy to ascertain. However, the cost of a program as described above makes it necessary that an attempt be made to predict the likely returns.

Because of the apparently high economic cost of attempting to develop entrepreneurs, it is especially important to make certain they will fill needs which will exist in the society as it emerges from its predominantly agricultural state.

If, for example, an economy emerges in which the greatest immediate managerial need is for technically sophisticated managers in medium scale industry, the small scale entrepreneurs developed at very high cost may be of little or no use in satisfying the economy's most pressing industrial manpower needs. Similarly, the development of socialistic policies in the society may result in an economy in which there is little or no room for the small private entrepreneur, especially with his independent characteristics. The most successful products of the program may be those least useful in meeting the industrial sector's needs and the presence of these men in the society may be disruptive rather than beneficial. It is not inconceivable that the economy will develop best in the long run if as large as possible a share of the resources available for industrial development are devoted to programs other than those aimed at developing small entrepreneurs.

Yet, even if it appears that the overall return on resources devoted to programs for developing small entrepreneurs is very much lower than the return on
alternative programs for furthering industrial development, it may still be necessary for political reasons to make some visible attempt to satisfy the demands for assistance for the small entrepreneur. In this case the program for the development of the small entrepreneur should be designed with the goal of achieving these necessary political ends at the least long-run cost to the economy.

Realistically assessing the goals to be achieved and the likely returns from alternative resource allocations should not lead to a cynical attitude in designing the actual procedures to be carried out in a program to assist the small entrepreneur. The program should still be designed and implemented so as to yield as much economic benefit as possible.

Success in development of entrepreneurship and small industry, then, will up to a point depend greatly upon the funds available for the effort. Before such funds are committed, it is important that a study be done to determine the economic worth of small industry development in comparison with other development efforts in industry and other fields.