

AT MICROFICHE REFERENCE LIBRARY

A project of Volunteers in Asia

Small Enterprises in Developing Countries: Case
Studies and Conclusions

by: Malcolm Harper and Tan Thiam Soon

Published by:

Intermediate Technology Publications, Ltd.
9 King Street
London WC2E 8HN
United Kingdom

Paper copies are 2.95 British pounds.

Available from:

Intermediate Technology Publications, Ltd.
9 King Street
London WC2E 8HN
United Kingdom

Reproduced by permission of Intermediate
Technology Publications, Ltd.

Reproduction of this microfiche document in any
form is subject to the same restrictions as those
of the original document.

Small Enterprises in Developing Countries

Case Studies and Conclusions

Malcolm Harper / Tan Thiam Soon



Small Enterprises in Developing Countries: Case Studies and Conclusions

In developing countries small-scale industry may well be seen as the most important source of new employment opportunities in the future since the agricultural sector is often over-manned and the potential for new large industries is limited. Although a great deal of information is available about various types of appropriate technology and on systems of financing, training and advising small-scale business people, very little has been published on the ways in which the various methods of assistance actually impinge on their 'target', the small business they are designed to help, and on how governments should develop an effective integrated mix of assistance programmes.

This collection of case studies of individual enterprises, together with some general comments on how governments can most effectively help small businesses, may help to fill the gap. The case studies were contributed by participants in the 1977 programme on the Promotion of Small-Scale Enterprises in Developing Countries held at the Cranfield School of Management. Each case study is followed by a brief note summarising some of the issues which were raised in discussion, and including some suggestions as to what a small business promotion agency ought to do in the situation described. They make fascinating reading and provide a practical insight into the real problems faced by small-scale entrepreneurs. Specifically, the studies show the extreme diversity of these problems and the inadequacy, indeed the danger, of the narrow pursuit of any single prescription for their solution. Nevertheless, certain general conclusions can be drawn from the experience of working with businesses such as are described in this book, and a summary of these conclusions on the various forms of assistance available to small enterprises follows the case studies themselves.

Malcolm Harper is Professor of Enterprise Development at the Cranfield School of Management, U.K., and is primarily engaged in the development of new approaches to management training for use in developing countries. He is also the author of *Consultancy for Small Businesses* published by Intermediate Technology Publications Ltd.

Tan Thiam Soon is a lecturer in the Department of Business Administration at the University of Singapore. He is working on a PhD on Chinese Entrepreneurship in Singapore, has published a variety of articles on business and management education and is actively involved in educating small entrepreneurs in Singapore.

ISBN 0 903031 62 0

**Intermediate Technology Publications Ltd., 9 King Street,
London WC2E 8HN.**

Small Enterprises
in
Developing Countries

Case Studies and Conclusions

by

Malcolm Harper and Tan Thiam Soon

Intermediate Technology Publications Ltd

Acknowledgement

The publication of this book has been made possible by a loan from the Ministry of Overseas Development, U.K. The Intermediate Technology Development Group gratefully acknowledges their assistance.

**Published by Intermediate Technology Publications Ltd,
9 King Street, London WC2E 8HN, U.K.**

© 1979 Intermediate Technology Publications Ltd

ISBN 0 903031 62 0

**Printed by Billing & Sons Limited,
Guildford, London and Worcester**

Foreword

This publication from the Marketing Development Centre of the Cranfield School of Management draws together over 20 case studies of problems encountered by small businesses in various developing countries. There are individual commentaries on the studies and, in the second part of the book, a general discussion of the factors which determine the success or failure of a small business.

The case studies were contributed by participants in the 1977 Cranfield programme on the promotion of small-scale enterprises in developing countries. They make fascinating reading and provide a practical insight into the real problems faced by small-scale entrepreneurs. Specifically, the studies show the extreme diversity of these problems and the inadequacy, indeed the danger, of the narrow pursuit of any single prescription for their solution.

In particular, it should be noted that less than one-quarter of the studies presented show technology to be the *key* problem, and then usually in combination with other constraints. Those of us, therefore, who advocate the concept and application of 'intermediate technology' must recognise the partial nature of our solution. Our input, however valuable, must be one of many inputs. Technology is not the universal panacea.

David L. Wright and Chris J. Perry
Intermediate Technology Industrial Services

Table of Contents

Introduction	ix
Part 1: Case Studies and Commentary	
Summary Table	2-3
A & B Soap Manufacturing Enterprise Contributed by: Winston Nelson, Management Development & Productivity Institute, Kumasi, Ghana	5
Yanoski's Creations Contributed by: Alma Cox, Ministry of Development, Bahamas	9
Solidine Block Maker Contributed by: Alhaji Bello, Ministry of Trade, Industry & Co-operatives, Sokoto State, Nigeria	13
The Candy Factory Contributed by: Emnet Araya, Ethiopian Chamber of Commerce, Ethiopia	17
Leatherworks Contributed by: Mankone Mofelehetsi, The Basotho Enterprise Development Corporation, Lesotho	21
Montserrat Antilles Plastics Ltd Contributed by: Oral Howes, Chief Minister's Office, Government of Montserrat	25
Fertiliser Pty Ltd Contributed by: Nicholas Gunjew, Sarawak Economic Development Corporation, Malaysia	29
Pipat Casting Company Contributed by: Utaisri Tangkanitanon, Industrial Service Institute, Thailand	33
Kisan Engines Contributed by: Dama Nagaiya, Rural Electrification Corporation of India	37

United Oil Mills	41
Contributed by: Abdul Latif, Small Industries Development Organisation, Bangladesh	
Talk of the Town Beer Parlour	43
Contributed by: Obiekwe Ejike, The Projects Development Agency, Anambra State, Nigeria	
Mutangangi Kagotho	49
Contributed by: James Gatere, Industrial & Commercial Development Corporation, Kenya	
Ranaivo, the Building Contractor	53
Contributed by: Pascal Rakotojaona, Institute National de Promotion—Formation, Tananarive, Madagascar	
Roof Tile Manufacture in Gapura	57
Contributed by: Zaany Rachim, Armijn Rangkuti and Padmosarojo Soedarijo, The Faculty of Economics, University of Airlangga, Indonesia	
Mr Banda's Water Colour Paint Business	61
Contributed by: Annesley Abeyasingha, Industrial Development Board, Sri Lanka	
Ahmed, the Grocer	67
Contributed by: Abdul Rahim Bin Haji Shaari, Extension Service Unit, Pernas Edar, Kuala Lumpur, Malaysia	
Haroon's Printing Works	69
Contributed by: Ziaheer Ahamed Shaikh, Planning & Development Department, Government of Sind, Pakistan	
The Wool Spinning Centre at Mastung	73
Contributed by: Ali Hyder Mengal, Directorate of Industries, Government of Baluchistan, Pakistan	
C.A.M. Corporation	75
Contributed by: Abdul Wakil Amiri, Ministry of Planning, Kabul, Afghanistan	
Saite Camara, the Blacksmith	79
Contributed by: Fafanding Darbo, Ministry of Economic Planning & Industrial Development, The Gambia	
Light Roof Limited	83
Contributed by: Divakar Dev, Uttar Pradesh Small Industries Corporation, India	

Part 2: Analysis and Conclusions

The Role of Government	89
Credit Programmes for Small Enterprises	93
Extension Services and Training	97
Appropriate Technology	101
Organisation and Co-operation	107
Supporting Services	111

List of Photographs

Cutting cakes of soap in Ghana (Photo: Georgia Institute of Technology, Atlanta, Georgia)	4
Soli, the block maker, at work (Photo: UNICEF)	12
Drying leather in the open air for a similar small-scale leatherworks (Photo: Georgia Institute of Technology, Atlanta, Georgia)	20
A machine tool for making engines	36
Filling the cans with oil at United Oil Mills	40
Metal cutting machine made from scrap iron	48
A typical small-scale kiln for firing roof tiles	56
Three employees packing water colour tablets in rubber packs	60
A typical Malaysian grocery store	66
Local female employees spinning the wool (Photo: Oxfam)	72
A typical blacksmith's workshop (Photo: John and Penny Hubley)	78

Introduction

Governments throughout the world are turning their attention to small-scale enterprises; attempts to promote economic progress by establishing large industries have usually failed to improve the lot of the majority of the population, and small businesses are now viewed as an important element in even and equitable economic development. However, it is far easier to start, or expand, a large industry than a number of small ones; governments themselves can build factories employing thousands of people, even though they may not necessarily be successful, and foreign technology and management skills can be brought in to establish and operate these units. Even if the political will and sufficient resources are available for small enterprise promotion, it is not always clear how to deploy the efforts to achieve results.

Some but not all of the lessons of agricultural development are clearly applicable, but there is no body of experience or established methodology to be followed as there may be in the case of health services, education or other services commonly provided by governments. It may be argued that a policy of benign neglect is the most likely to generate a vigorous independent small enterprise sector, but governments are expected to take positive action, and when economic planning is fashionable it is impossible to allow an important sector of the economy to develop wholly at its will.

In most industrialised economies the small-scale enterprise sector, however defined, employs between one-fifth and one-third of the working population, and produces a slightly lower proportion of the gross national product. Far more people are employed in small business than in agriculture, and in many countries the trend towards concentration and larger units appears to be slowing down or has even been reversed, so that small enterprises may in the future bulk even larger in the economy. In developing countries agriculture is, of course, far more important, but small-scale, non-farming enterprises generally employ more people than big businesses, and since agriculture is often over-manned and the potential for new large industries is limited, small-scale industry may well be seen as the most important source of new employment opportunities in the future.

Small Enterprises in Developing Countries

It is perhaps surprising, in view of its importance, that small-scale business, and ways in which governments can help or hinder it, have not been more intensively studied. A great deal of information is available about various types of appropriate technology, and some work has been done on systems of financing, training and advising small-scale business people. These are usually treated from the point of view of a bank, a trainer or perhaps a technologist, but very little information has been published on the ways in which the various methods of assistance actually impinge on their 'target', the small business they are designed to help, and on how governments should develop an effective integrated mix of assistance programmes.

This collection of case studies of individual enterprises, together with some general comments on how governments can most effectively help small business, may help to fill the gap. The case studies were contributed by participants in the programme on the *Promotion of Small-Scale Enterprises in Developing Countries* which was held at the Cranfield School of Management in 1977. The programme was designed to help government staff and others responsible for small enterprises to learn from those doing similar work in other countries, and to view their own particular responsibilities in the context of an integrated programme of assistance. Each case study was discussed at some length during the programme, and they provided an invaluable background of reality against which the contributions and suggestions of outside experts could be assessed. The various individuals whose problems are described so vividly in the case studies almost became a silent jury sitting in judgement on the discussions, so that participants were effectively prevented from indulging in theoretical arguments and propositions which were of no practical relevance.

Each case study is followed by a brief note summarising some of the issues which were raised in discussion, and including some suggestions as to what a small business promotion agency ought to do in the situation described. The recommendations arose from the group's analysis of the case studies, but they should in no way be taken as the best or the only approach which should be considered. Every management problem admits of a number of alternative solutions, and small business problems are, more than most, a matter for sensitive and informed judgement as well as a quantitative analysis of facts and figures. The case studies are preceded by a table which summarises the issues which are involved for readers who may be more interested in one type of problem than another.

In a subject of this complexity it is neither possible nor

Introduction

appropriate to lay down any absolute rules: every country and every business is different and the major challenge involved in this work is to devise a system which can provide a unique tailor-made package of assistance to each enterprise and can still be sufficiently economic to allow every business to benefit from it.

Nevertheless, certain general conclusions can be drawn from the experience of working with businesses such as are described in this book; a summary of such conclusions on the various forms of assistance available to small enterprises follows the case studies themselves. These views were generally accepted by the participants in the programme; some may nevertheless be controversial. They will have served their purpose if they stimulate reappraisal of some existing programmes, even if the final conclusion is that present policies are appropriate for present conditions.

While sweeping generalisations and packaged solutions are obviously inappropriate, it is hoped that this collection of case studies and more general observations will be of value to those who are involved in this type of work. It should show small entrepreneurs that they are not alone in the problems and opportunities that they face, and that the attempt to develop indigenous small enterprises is as legitimate and important a function of economic development as other more traditional tasks which have received official attention for a longer period.

PART 1

Case Studies and Commentary

Summary of Case

	Industrial Estates	Marketing	Co-operatives	Training
A & B Soap Manufacturing Enterprise				
Yanoski's Creations		×		
Soli, the Block Maker				×
The Candy Factory	×	×		
Leatherworks	×			
Montserrat Antilles Plastics Ltd		×		
Fertiliser Pty		×		×
Pipat Casting Company				×
Kisan Engines	×			
United Oil Mills				
Talk of the Town Beer Parlour		×		
Mutangangi Kagotho				
Ranaivo, the Building Contractor				×
Roof Tile Manufacture in Gapura		×	×	×
Mr Banda's Water Colour Paint Business		×		
Ahmad, the Grocer				×
Haroon's Printing Works	×	×		
The Wool Spinning Centre at Mastung		×		
C.A.M. Corporation		×		
Saite Camara, the Blacksmith				×
Light Roof Limited		×		

Study Issues

Extension	Credit	Technology	Programme Co-ordina- tion	Project Appraisal	Govern- ment Intervention
x	x		x		x
				x	
x	x	x		x	
	x	x			
	x	x		x	
x					
x	x	x			
		x	x		
		x	x		x
					x
	x	x		x	
			x		
	x	x			
			x		
x					
	x		x		
		x		x	
			x		x
x	x				
		x	x	x	



*Cutting cakes of soap in Ghana.
(Photo: Georgia Institute of Technology, Atlanta, Georgia)*

A & B Soap Manufacturing Enterprise (Ghana)

*Local currency: 10 Cedis = U.S.\$7:50**

The A & B Soap Manufacturing Enterprise was established by two brothers in 1973. Though soap-making was their basic objective they also planned to produce other products, such as face powder and perfume, in the future. The business has not yet been registered either as a partnership or a limited liability company.

The initial capital investment was 2,000 Cedis and the business employed four people. Soap is produced by the traditional labour-intensive methods, and although production was very small in the early stages it started to pick up rapidly in 1975 when the Government restricted the importation of soap and other detergents. At this time working capital became a major constraint which prevented the business from responding to the increased demand for soap.

In 1976 the management of the enterprise approached the Ghanaian Business Bureau, a division of the Management Development and Productivity Institute, to seek advice on sources of financial assistance. The Bureau introduced the partners to two commercial banks, and to the Ghanaian Enterprises Development Commission, which operates a Government-sponsored small credit scheme giving loans for the purchase of raw materials and other working capital requirements. At about the same time, the two most important raw materials for soap-making—palm oil and caustic soda—were becoming very scarce, and the Bureau allowed for these materials to be stocked for a minimum of six months.

In January 1977, one of the commercial banks approved and released a loan of 8,000 Cedis and two months later the Ghanaian Enterprises Development Commission's loan approval also went through and the partners drew 9,000 Cedis from this source. They

* The local currency conversion figures given in this and subsequent case studies are very approximate and are only intended to give the reader some idea of the scale of the enterprise.

also obtained advance payments of 3,400 Cedis from various traders who had ordered soap from them.

Without the knowledge of the Bureau's officer in charge of this enterprise, the partners took the following steps:

1. They purchased a second-hand saloon car for 5,000 Cedis;
2. They started to build a temporary building for about 6,000 Cedis in order to accommodate the increased expansion programme;
3. They employed an additional 25 people, mainly girls, for cutting and packaging the soap. Two of the 25 new employees were friends of the two partners, who had 'helped' them during their times of difficulty.

All seemed well with production and marketing of the soap until mid-July when the two newly-employed friends, who had been permitted to join the business, disagreed over the distribution of shares in the company and left to set up their own soap manufacturing company in the same city. An acute shortage of palm and coconut oil then set in and the business had very limited stock to rely on for continuous production. To make matters worse, the Government liberalised the importation of many goods, including soap, in its August 1977 budget. This decision led the traders to demand the return of their advance deposits in order to purchase imported items instead.

As the partners waited for the palm oil supply situation to improve, they decided to diversify into face powder production.

Comment

The history of this business illustrates the disruptive effects of changes in government regulations; the import restrictions in 1975, and subsequent liberalisation in 1977, created far more rapid changes in demand than normal market forces would ever have done. Small, newly-established enterprises are ill-equipped to cope with changes of this sort.

There does not appear to have been any co-ordination between the authorities in charge of import regulations and those responsible for small enterprise development, and this is perhaps not surprising given the complexity of modern government. It should, however, have been possible for the various institutions involved in small enterprise promotion to co-ordinate their activities more effectively. Owners of small enterprises often fail to make use of all the sources of funds which are available to them but these entrepreneurs successfully exploited the lack of co-ordination by obtaining loans

from the Ghana Enterprise Development Commission and from a commercial bank, in addition to substantial deposits from their customers.

Their success in obtaining new capital encouraged them to make over-optimistic investments which in the event led to more serious problems, and their decision to diversify into new products may further strain their financial and managerial resources.

This situation illustrates the need for a co-ordinated approach by government and other agencies concerned with financing and advising small business. If one institution, and one individual within it, had been responsible for co-ordinating the 'package' of assistance offered to this company, and for ensuring that it was correctly used once it had been provided, the entrepreneurs and the country would have benefited from the sound expansion of a necessary and basically well-conceived business.

Yanoski's Creations (Bahamas)

Local currency: 1 Dollar(\$)=U.S.\$1.00

In 1973 Don Yanoski entered business as a manufacturer/wholesaler of coconut shell jewellery products. Having no cash of his own, Yanoski secured a loan of \$1,000 from a local bank to start his project. The initial capital was apportioned equally to the purchase of second-hand production equipment and of raw materials.

The small business unit was accommodated in a portion of Yanoski's dwelling house. The enterprise specialised in coconut shell earrings, bangles and necklaces utilising a simple technology in the process. The coconut shells were cleaned, carved, varnished and shaped into the respective items of jewellery, and then packed in lots of 50. These products were sold at \$1.00 per unit to retail shops in New Providence and were re-sold to tourists at around \$1.95 or \$2.00 each. With the assistance of a part-time trainee craftsman, Yanoski's total output was 1,000 units per month.

During the first two years of operation Yanoski did not pay himself a salary. He consistently ploughed profits back into the business as further capital, drawing money merely to provide for the living expenses of his family and for wages for his helper. The ready acceptance of his products by tourists enabled Yanoski to generate sufficient finance to sustain him in business.

Due to the progressive increase in demand for coconut shell jewellery, by 1975 Yanoski found it necessary to employ two full-time craftsmen and a secretary. This increase in his production capacity meant that he could supply to markets in Freeport, Grand Bahama. However, as sales expanded operating costs increased, and this resulted in a decline in profits from 20% to 10%.

There were two alternatives available to Yanoski as he saw it:

1. increase the wholesale price of his goods by 20%, or
2. continue wholesaling and at the same time enter the retail trade with the object of selling his products for \$1.95 per unit direct to the tourists.

There were two cost considerations involved in the second

approach which made Yanoski somewhat wary. The cost of relocating his business and expanding into the retail trade was \$2,000. Some of his equipment was also in need of replacement.

With only \$1,500 in cash at his disposal, Yanoski felt that it would be advantageous to relocate his business in an area which was accessible to tourists and convenient for displaying his products.

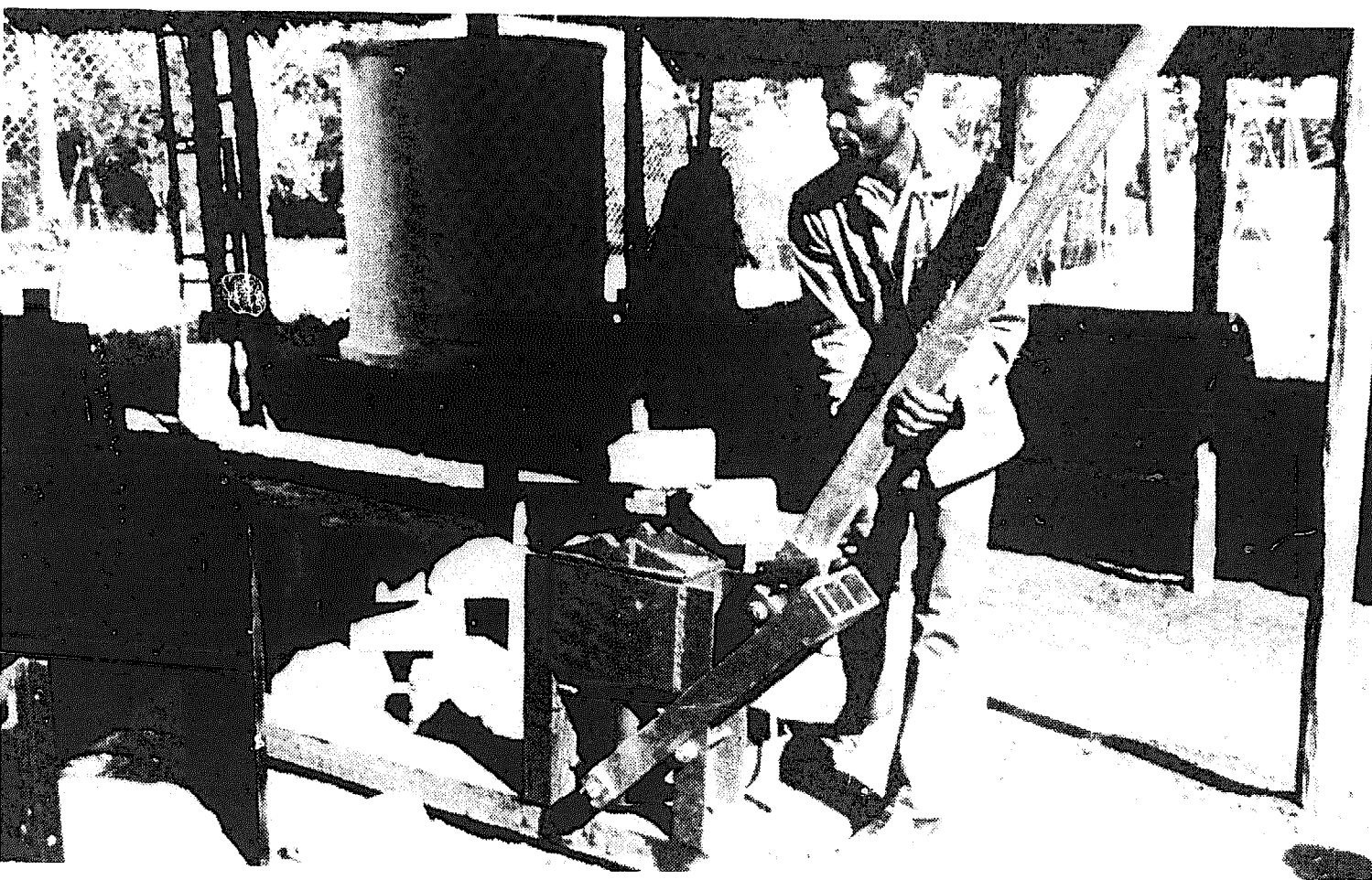
Comment

Yanoski is an ambitious entrepreneur who expanded his business in response to an increased demand for his products. As a result, however, his profit was halved, and he appears likely to damage his business still further in his attempts to put things right.

Small business people often pay themselves no salary, and this helps them to reinvest as much as possible of what they earn. Unfortunately this practice also leads to underpricing, and when the business expands, and paid employees are necessary, it may be uneconomic to sell at the original prices, and impossible to increase them.

Entrepreneurs should be warned against underestimating the problems involved in retailing, which is a very different activity from manufacturing: a retail shop which exists solely to sell the products of one small-scale producer may not have a sufficient range to attract customers, and premises which are suitable for retailing will probably be far too expensive and otherwise unsuitable for manufacturing. Other retailers may refuse to buy from a supplier who becomes a competitor, and Yanoski may find that he has lost his existing customers without being able to replace them.

Yanoski should be advised to redesign his products in some way in order to justify an increase in prices, and he should receive some training and assistance with costing his products and planning the future of his business. He should also be advised to scale down his ambitious expansion plans and to concentrate on the job he knows.



Soli, the block maker, at work. (Photo: UNICEF)

Soli, the Block Maker (Nigeria)

Local currency: 1 Naira (₦) = 100 Kobo = U.S.\$0.75

Soli learned how to mould building blocks at an early age; his mother died when he was 19 and a year later his father died leaving the responsibility for the entire household on the young man's shoulders. He started work as an apprentice in a small building block factory near his home. They moulded building blocks made from a mixture of clay and water with a simple locally-made wooden moulding tool. Three semi-skilled workers and seven labourers were employed. Soli worked hard and was soon promoted to a semi-skilled labourer and was thus involved in actually making the bricks for a period of two years.

At this stage Soli left the factory in order to set up his own unit in a nearby village some ten miles away from his own home. He leased out his family's property and bought a smaller house in the village together with a metal-moulding machine for his own enterprise. He started to produce hollow building blocks in the backyard of the new house and employed two labourers to help him. The business flourished from the beginning since the demand was high, and the factory produced at its full capacity of around 100 blocks per day.

During the first year of operation the factory produced 36,000 hollow building blocks. Soli sold these for 20 Kobo per block and sales thus amounted to ₦7,400 during the year. Soli estimated that he used ten donkey loads of clay each day at ₦1 per load while he paid the labourers ₦2 each per day and withdrew ₦3 for his own use. Soli calculated that he had used ₦3,600 worth of raw material during the year and paid a total of ₦2,520 as wages to his labourers and himself. Thus the net profit at the end of the first year was ₦1,280. Soli reinvested this profit in his business and acquired a new manual block-moulding machine which was capable of producing 200 blocks per day. This machine cost ₦600 and he also built a small shed in which to store his finished stocks.

The business prospered during the first six months of the second year; towards the end of this year Soli faced certain serious problems. First, cement blocks started to offer serious competition.

These quickly captured a large proportion of Soli's market and this had disastrous results on the demand for his products. Soli soon found himself with about 40,000 blocks in his shed ready for sale and there was no more space in which to store more blocks. Soli was nevertheless determined to survive; he laid off his two labourers and devoted all his time to finding a new market for his blocks. He found, however, that the cement blocks had penetrated into every market and were selling very well. The cement blocks equivalent to Soli's clay blocks were sold for 40 Kobo, which was twice the price of Soli's product but they were undoubtedly stronger and more durable.

A second problem arose from the fact that the rainy season was fast approaching. The engine room and the storage shed occupied more than three-quarters of the plot and the remaining piece of spare land was piled high with the finished blocks for which there was no room in the shed. These blocks would not survive the torrential downpours and strong winds which could be expected at the onset of the rainy season. In addition, the nearby source of clay was almost exhausted and the cost of transport made it quite uneconomic to bring clay from the next source which was about ten miles away, near Soli's original home.

Soli decided that his first priority was to clear his stock and he cut his selling prices from 20 Kobo to 15 Kobo. This price cut achieved very little and he only cleared his stock by making a further reduction down to 10 Kobo per block.

Soli then approached the Small Scale Industry's Credit Scheme Funds for advice on management and for financial assistance. This scheme had recently been introduced to assist in the establishment, expansion and modernisation of small-scale enterprises which were considered technically feasible and commercially viable. The officials operating the scheme reviewed Soli's case and conducted a market survey in order to determine the feasibility of establishing a concrete block factory in the area. They were satisfied that there was a sufficiently large potential market and they approved a loan of ₦6,000 for Soli to purchase machinery and equipment. It was understood that Soli himself would contribute the cash he had realised from his cut price sale in order to provide working capital and to pay for an office and store as well as a new shed. In addition, the officials helped Soli to acquire a new plot and arranged for him to undergo a two-week training programme on the principles of management and basic book-keeping.

Comment

The businessman in this case study is clearly a born entrepreneur; he acquired a sound technical background through two years' experience in someone else's factory, and he appears to have managed his own business quite effectively. Many entrepreneurs make the mistake of accumulating large quantities of unsaleable stock, but this often leads to permanent stagnation since they are unwilling to recognise their mistakes and recover what cash they can by selling their goods even if this means a loss. Soli was wise enough to do this, even to the extent of halving his prices.

The Government Credit and Advisory Service was obviously wise to welcome Soli's enquiry, since he had both technical and managerial experience and, perhaps most importantly, was willing and able to contribute his own money to finance 40% of the new venture he proposed. Soli's own experience suggested that there was indeed a market for concrete blocks. Training in 'principles of management' may be unsuitable if, as so often, it consists of irrelevant theory transplanted from the management of large enterprises in Western industrialised economies. Soli appears, however, to have enough common sense to survive the experience, or even to benefit from it, and also to find out for himself how to make cement blocks with his new equipment.

Generally, the case is an all too rare example of an effective package of finance, advice and training being made available to a man who is an entrepreneur with both technical and management experience. Such people are not to be found every day, but it is easy to fail to identify them or, worse still, to actively hinder their progress through ill-considered programmes of assistance. This does not appear likely to happen to Soli, and although he would probably have succeeded in some way without any external assistance, the help he has had from the Promotion Agency will probably increase his chances of becoming a substantial and successful businessman.

The Candy Factory (Ethiopia)

Local currency: 10 Birr = U.S.\$5.00

A small factory which produces candy is located in Mercato, a densely populated market area of Addis Ababa. The annual sales of candy of various kinds and flavours amounts to about Birr 130,000.

Sugar which is the major raw material for candy production is obtained from the local market, while chemicals which account for 17% of the total costs are imported from abroad.

The firm employs 31 workers: 19 of them are women, most of whom are engaged in wrapping the final product.

The factory building is old and cramped causing some inconvenience. The machines and the workers are crowded in small rooms, while the raw materials and the candies in stock are piled up in every space that can be found.

The owner does not find it feasible to repair and enlarge the building due to lack of space for expansion. He is thinking of moving to an industrial zone on the outskirts of the city. Constructing a factory building, however, involves a substantial amount of expense which can result in shortage of working capital. Since some of the materials are imported from abroad and take months to arrive, he needs to set aside a good amount of money to order consignments in bulk. This ensures uninterrupted supply and production.

Moving to the outskirts of the city can also result in additional costs. The factory in its present location serves as both a production and a sales centre. It will not be possible to sell from the new site, as the old customers—wholesalers and retail traders—would not want to incur extra transport expenses, and would probably change to a nearer supplier in the city centre.

There seems to be only one solution: to open a sales office in the market place. This means a change in the cost structure of the factory as new costs of transport or rent for the sales office and payments for additional staff will be incurred. This will result in an increase in prices of the candy, which in turn will lead to a fall in demand and sales, thus affecting the whole business.

The employment situation complicates the problem further. The

workers who now live adjacent to the factory will either demand higher wages to cover the transport and other expenses which the move will entail or ask for a free transport service. They may even consider changing their job. Therefore the owner will have to pay higher wages in order to keep them.

He could avoid the new costs and its chain of effects on production, employment and marketing, if he stays at the present place. On the other hand, the problem of space is a pressing one: the imported items come in large quantities and have to be stored for a long time, the final products are stocked in some volume until sales are made and the working environment is not pleasant. All these factors point to the need for more space.

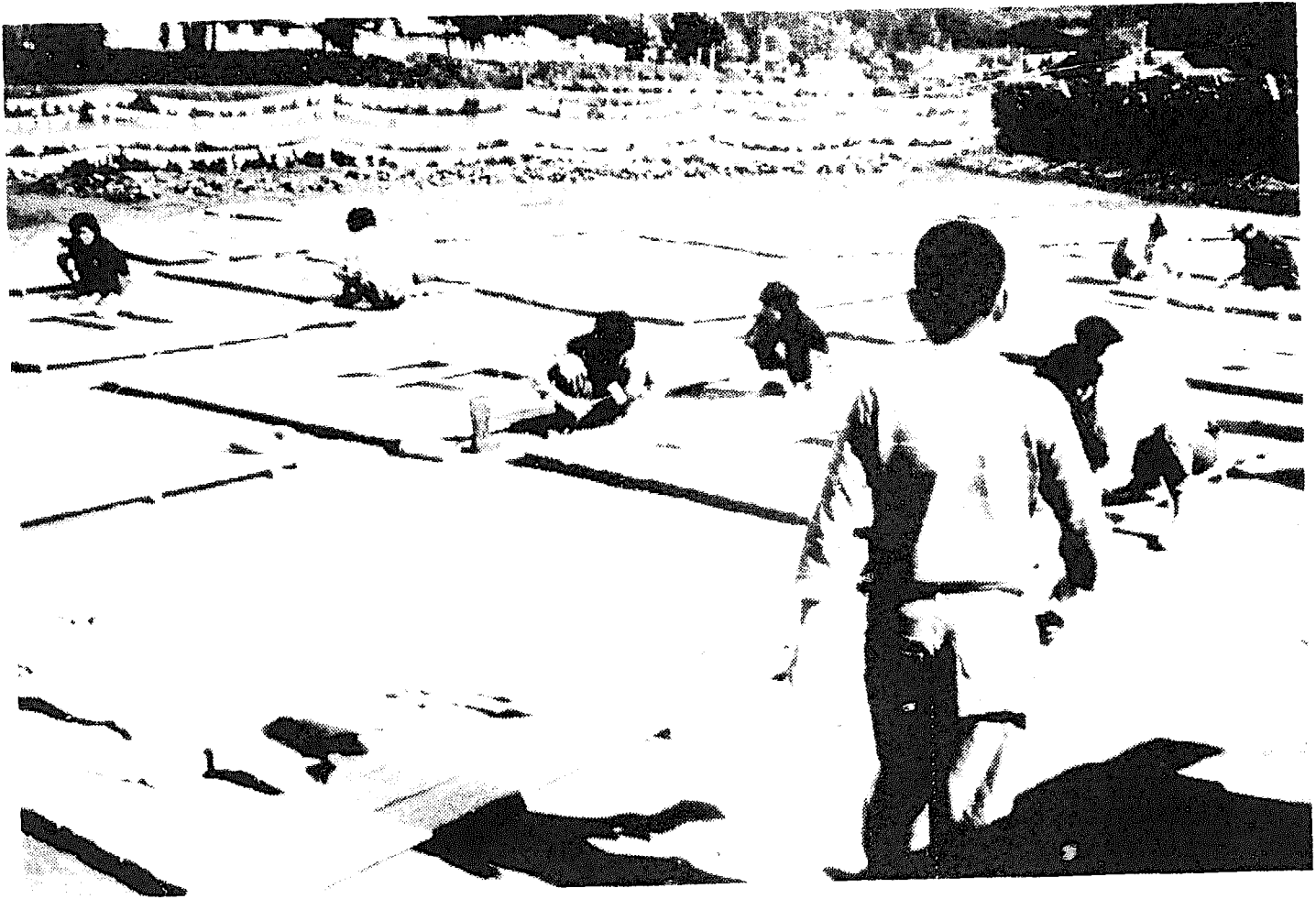
Comment

This situation illustrates the problems which face an enterprise as it expands; most small businesses start with manufacturing and selling on the same site, carried out by the same people. In developing countries, channels of distribution and other supporting infrastructure may be expensive or poorly developed. The employees, however much they need employment, cannot easily travel to a new location, and it is not a simple task to change from direct selling to marketing through intermediaries, with all the price and cost alterations that this implies.

The city authorities, as in many of these cases, will no doubt want to encourage or even compel the business to move out of the congested city centre, but a premature move, without management which can cope with the changes involved, may destroy the business.

Growth is not an end in itself, and it may be better for a business to remain small, or even to contract, in order to make a profit, than to expand and lose money so that it eventually ceases operations altogether.

It may be wise, in the medium term at any rate, for the company to seek advice on improving its use of storage space, and to look for additional warehouse facilities elsewhere rather than a completely new factory. This might provide a breathing space during which management can plan an orderly transfer and development of marketing channels without being under daily pressure to move in order to continue operating at all.



*Drying leather in the open air for a similar small-scale leatherworks
(Photo: Georgia Institute of Technology, Atlanta, Georgia)*

Leatherworks (Lesotho)

Local currency: 10 Rand = U.S.\$11.50.

Mr Qhoqhome manufactures leather belts at his home in Katlehong Village. The product is marketed in the Republic of South Africa by Qhoqhome who has generated his own sales through various distributors in that area. Qhoqhome gained experience in both manufacturing and selling in Johannesburg.

The present production takes place in the most primitive conditions—entirely out of doors and dependent on good weather. However a high quality product is produced due to the skilled personnel involved. A small hut of roughly 100 sq. ft serves as the only inside workspace during poor weather and as storage space for the raw materials. In the dry season all work is performed outside on three small wooden tables. All the work is performed manually, and this involves cutting, trimming, punching, lacing, sewing, and finishing with buckles.

The operation employs twelve people: two skilled male artisans who have been with the business for some time, four regular employees and six part-time women who make up laced belts. The business records are meticulously maintained by Mrs Qhoqhome.

Qhoqhome has a machine to assist in the assembly of plastic handbags and similar products and anticipates expanding into the operation once he is able to cope with the demand for belts and when he can obtain electricity to operate this machine. His other equipment includes cutting tools, punches and two ancient sewing machines.

The demand for Qhoqhome's products far exceeds his present production and orders for 200 to 800 dozen belts are common. Daily production can run to 20 dozen belts; on a six-day week, at full production, this means roughly 500 dozen belts per month. Each belt takes 5–10 minutes from cutting to finish depending on the style.

The volume of orders prompted Mr Qhoqhome to seek financial assistance from the Batsoto Enterprises Development Corporation (BEDCO) and a sum of 5,000 Rand was granted to him. This loan

is being used for the purchase of raw materials and machinery and for transportation.

BEDCO outlined the following problems:

1. Under-capitalisation: the loan has relieved some of the production pressure but only *some* of the profits are ploughed back into raw materials and wages.
2. The absence of adequate working space and services reduces productivity.
3. The present 'hand-to-mouth' operation prevents adequate planning and expansion.

To alleviate the problem of working space, three possible building sites were investigated. The first site is the present location which is about 2 kms from the highway, in a beautiful setting with a fine view of the mountains. The site is very large and most of it is unused. The main disadvantage is its distance from the highway, utilities and existing commercial centres. A basic workshop with the necessary foundation could be built there for 9,560 Rand. A large new manufacturing building would be out of keeping with the rural neighbourhood.

The second site is a residential plot allocated to Mr Qhoqhome along the highway. Mr Qhoqhome is at present building a house on this site, and there is not much space for a structure of the size appropriate for the business. Although the site is on the highway, it is still at a distance from the electricity supply and water would have to come from a well.

The third site is on a one acre site in the National Development Corporation Industrial Area. There is plenty of room for the building and at the current annual rate of 500 Rand per acre, a suitable plot would cost about 56 Rand per annum. Electricity and water are laid on and an adequate workshop could be built for about 17,000 Rand.

At this point two options are being considered by BEDCO:

1. A site within the NDC industrial area

With capital assistance from BEDCO a highly motivated entrepreneur can be brought into the existing favourable industrial environment. This type of assistance perfectly fulfils BEDCO's terms of reference. The critical question is whether BEDCO is ready and able to implement this 'ideal' opportunity. At present the Corporation does not have sufficient staff to handle the project and to construct, own and administer the premises. Mr Qhoqhome, on

the other hand, has little construction experience and could not oversee construction of the new building while managing belt production in Katlehong. If there is any possibility of default on the loan, the building could probably be sold or converted to another use.

2. Present location in Katlehong Village

This option seems simpler in that it would take most of the responsibility out of BEDCO's hands and give it to Mr Qhoqhome. BEDCO's responsibility would be limited to the normal follow-up procedures on the loan. This assumes that a suitable structure could be built by local village craftsmen. A ceiling could be set on the loan towards this building of say 10,000 Rand, but if Mr Qhoqhome defaulted it would be more difficult to recover the money invested.

Comment

Some doctors who find, or hear, that a certain medicine has dramatically cured certain patients proceed thereafter to prescribe the same medicine for everyone. The Promotion Agency in this case may be following a similar practice: they have an unfilled factory estate and may want to relocate the leather factory there even though the business would not benefit, and there might also be the problem of insufficient staff to assist with the construction of the necessary buildings.

Rural development will not take place if rural industries are centralised in a semi-urban location; there are usually all too few non-farm employment opportunities outside the cities, and such enterprises as do exist should be encouraged and assisted to progress in their present locations; services should be brought to them, rather than bringing them to the services, even though this may be administratively inconvenient and less 'tidy' from a planning point of view. It should be cheap to construct a simple shelter to enable production to continue when it rains and, if electricity is brought to the site, other householders, farms and potential industries will all benefit. Successful and well-managed small businesses, as this appears to be, are all too difficult to find in any country. There is a danger that when they are identified they may be 'smothered' with assistance programmes which are looking for businesses to help. A business promotion service should aim to

encourage and facilitate business development rather than to redirect and dominate the process.

Montserrat Antilles Plastics Ltd (Montserrat)

Local currency: 10 East Caribbean Dollars (EC\$) = U.S.\$3.50

Montserrat Antilles Plastics Ltd is a business which was established in early 1977 to produce plastic bags for local consumption and also to meet some regional demand in the future. It engages in production from the secondary stage in that the polyethylene film used is extruded before importation into Montserrat.

The company's three shareholders are residents of Montserrat. From the outset the investors were faced with some serious problems which to date have not been fully resolved. The shareholders' investment resources are limited and there is very little market information. Both factors are crucial in determining the scale of operations required. The third serious difficulty is the competitiveness of the regional industry: new firms are being established in St Vincent and Barbados to produce the same range of bags as the local plant.

After much hesitation the local investors took the plunge and purchased a small bag-making machine for EC\$7,000. This machine was able to cope with local demand for plain polyethylene bags used mainly in the fresh fruit markets and the supermarkets.

Local demand is insufficient to support a fully fledged industry, and the local investors now see expansion as the only means of success. However, regional demand is more diversified. All that the investors have to guide them is a rather inconclusive study which confirms their belief that a wide range of polyethylene bags is required. What the study does show quite conclusively is that the larger carrier bags, both printed and unprinted, are the most popular. The magnitude of the market is still anybody's guess.

With the limited resources available to them the investors did some market research and personal selling in the neighbouring islands. They are convinced that their present machine does not have the capacity nor the versatility to meet expansion requirements. The investors have approached the Development Finance and Marketing Corporation and the Caribbean Development Bank

for a loan of EC\$62,000 to purchase a new machine with greater capacity and flexibility.

The Bank is now appraising the project to decide:

1. Whether the proposed machine is the most suitable in terms of capacity and versatility to cope with present and future demands.
2. Whether such competitive market justifies the size of investment contemplated, especially in view of the small local market and the chance that they may be forced to cut back on production at any time.
3. Whether a combination of smaller machines requiring less capital outlay would not prove to be, overall, a sounder investment decision.

The three shareholders of Montserrat Antilles Plastics Ltd have no doubts that the proposed machine is what they need.

Comment

This company was started with limited resources and little information in a very competitive market. The owners are operating at a loss and are nevertheless thinking of expanding their business. This is not an uncommon phenomenon among small businesses. What can government agencies do to help such people?

In the first instance, it appears that the three shareholders had no knowledge of the market situation and made no advance plans when they started the company. The business would definitely benefit from some sort of training and consultancy.

The fundamental problem at the moment is not whether the investors should buy a new machine with greater capacity and flexibility, or a number of smaller machines, but to ensure that they are really able and competent to manage the business.

A government agency should not finance the capital investment in a situation where demand is uncertain. The entrepreneurs themselves may be trying to correct one mistake by making a still more expensive one.

In addition to training and general management advice for the shareholders, the major need is for more definite information about the market demands. The Government Marketing Corporation should, if it has the necessary resources, assist the shareholders to make a detailed market study, and the decision of the Development Bank can then be based on the results of such a study thus ensuring a more successful outcome.

Montserrat Antilles Plastics Ltd

Balance Sheet as at 15/7/77

<i>Liabilities</i>	EC\$	<i>Assets</i>	EC\$
Shareholders' capital	30,000	Formation and preliminary expenses	1,232
Montserrat Gases Ltd	15,000	Building	40,000
Bank overdraft	11,650	Plant and machinery	8,100
Capital reserve (building)	15,000	Less depreciation (6 mths)	<u>810</u>
Operating loss	(6,079)	Prepaid expenses L/C	2,635
		Stock	14,414
	<u>65,571</u>		<u>65,571</u>

Montserrat Antilles Plastics Ltd

Profit and Loss Account for period 1/1/77 - 15/7/77

Purchases	19,204	Sales	13,670
Wages	1,319	Stock of materials	7,731
Gross profit	7,561	Stock of bags	6,683
	<u>28,084</u>	Gross profit	<u>7,561</u>
<i>Deduct</i>			
Salaries	5,200		
Shipping and transport	312		
Marketing etc.	4,807		
Advertising	200		
Cartons	273		
Commissions	58		
Insurance	423		
Water	23		
Electricity	76		
Telex etc.	645		
Repairs	40		
Cleaning and maintenance	195		
Bank charges	217		
Miscellaneous (stationery)	361		
Depreciation	<u>810</u>		
			<u>13,640</u>
		Net loss	<u>(6,079)</u>

Fertiliser Pty Ltd (Malaysia)

Local currency: 10 Malaysian Dollars = U.S.\$4.00

Fertiliser Pty Ltd is a private limited company. Messrs Abdul and Brahim are the only shareholders and they each hold 50% of the paid-up capital which totals \$100,000. The company is the sole distributor of a new brand of fertiliser and agricultural chemicals. It was incorporated on October 30, 1974, and began operation shortly thereafter. The profit and loss accounts of the company for the first and second years of operation were rather discouraging: a profit of \$615 was made in 1975 and a loss of \$25,923 was incurred in 1976. The current accumulated loss for the first half of 1977 is \$63,000.

The following is a summary of the market for fertiliser in 1975 and 1976:

	<i>1975</i>	<i>1976</i>
<i>Market Demand</i>	<i>M/tons</i>	<i>M/tons</i>
Government departments	12,000	12,000
Semi-government bodies	7,000	9,000
Open market	10,000	10,000
	<u>29,000</u>	<u>31,000</u>

	<i>1975</i>	<i>1976</i>
<i>Market Breakdown</i>	<i>M/tons</i>	<i>M/tons</i>
Rubber farmers	1,500	500
Oil palm farmers	6,500	8,500
Pepper farmers	14,700	18,000
Paddy farmers	3,800	2,000
Other farmers	2,500	2,000
	<u>29,000</u>	<u>31,000</u>

1. Stiff competition from established competitors

Before the company entered the market, the main suppliers in the country were:

ICI BASF
Behn Meyer

Bian Heng
Hoechst Malaysia Sdn Bhd

These companies trade in the local market through local agents and dealers to take advantage of local acts and regulations. They have been in operation in this market for some years and have better knowledge of local agricultural conditions and farmers' requirements than Messrs Abdul and Brahim. Thus at the end of 1975 the established suppliers shared the fertiliser market among themselves as follows:

	<i>M/tons</i>	<i>%</i>
ICI BASF	10,000	34.5
Behn Meyer	7,000	24.1
Bian Heng	4,000	13.8
Hoechst	4,000	13.8
Others	4,000	13.8

Thus only a small proportion of the market is open to smaller suppliers. A big proportion of the ICI/BASF business is secured through its near monopoly of the tender business to the Government department, due to the contacts the company has established there.

2. Insufficient development and promotional activities

The company is trying to introduce a new brand to the market, and like most new products the consumers will take time to adjust to it. In this country the scope for mass promotional work is almost non-existent. The basic mass media ideal for mass promotional activities are not suitable for the consumers who in the main are illiterate or semi-illiterate farmers. Thus promotion work must consist mainly of:

- (a) advisory services to farmers
- (b) farm demonstrations
- (c) farmers' meetings
- (d) farmers' tours
- (e) illustrated leaflet advertisements.

The difficulties encountered with advisory services will be discussed later. Large numbers of farmers' meetings and tours cannot be arranged as they involve a great deal of time. A typical farmers' meeting would take at least a week or two of preparation in contacting farmers and arranging a suitable site with proper facilities. In the same way farmers' tours involve travelling for days

and weeks to farms as they are widely scattered and are seldom served by proper all-weather roads.

In spite of these difficulties the company managed to carve out 8% of the market both in 1975 and 1976. However, the major portion of the market was still impregnable.

3. Lack of adequate and trained staff

The company has four full-time officers. Out of these only one senior executive officer has any extensive agricultural training. The two freshly-recruited field officers lack experience in tackling the market. On-the-job training is provided by the senior executive staff whose duties include preparation of reports for the company directors, supervising the junior sales staff, sales promotion and management in general.

The farming area is extensive and is spread all over the country. Various methods of farming are used from the traditional shifting cultivation of rice farming in the hilly areas to the more modern mechanised method in the developed areas. The farmers speak a variety of dialects.

The sales staff were unable to break into this market properly. The company was not able to provide related advisory services to farmers, such as methods of improving their crop yields, disease and pest control, and soil treatment including irrigation and drainage.

4. Insufficient working capital

For 1975 and 1976 sales turnover was \$1.2 million and \$1.97 million respectively. Much of the company's trading was financed through credit from the principal supplier for a maximum of 90 days, subject to interest charges for any period beyond that, and from overdraft facilities from the banks.

Customers paid their bills irregularly and this resulted in the company having to bear interest charges. The gross profit was low and overhead expenses were high, mainly because the warehouse was originally meant to house a mixing plant as well as being used for storage. This plan was then abandoned and the warehouse is now hardly used. Promotional and advertising expenses ran as high as \$40,000 in the company's budget for the year ended 1976. These eroded any gross profit margin made by the company and it was faced with substantial debt. The supplier has recalled its credit facilities and this may result in creditors winding up the company.

Comment

Foreign suppliers who are endeavouring to enter a new and competitive market sometimes try to secure an advantage by selling through indigenously-owned distributors rather than setting up their own distribution organisations or relying on foreign-owned companies. Their enthusiasm for their product may lead indigenous businessmen who are without the necessary skills and experience to invest heavily in distribution of the product in what may be a basically overcrowded market.

A basic error of this sort may explain the present situation of Fertiliser Pty, since although the investors are local people they are apparently less familiar with local conditions and less able to communicate with the small-scale farming community than their larger foreign competitors. It is possible that the investors should never have started the business but in their present situation they may be well advised to attempt to identify a certain section of the market, either in terms of crop or region, and to concentrate their attention there rather than to try to compete with other firms throughout the country. In countries with highly developed methods of promotion it is often almost impossible for a small firm to compete because it cannot pay for television films and expensive advertisements. In a market of the sort described in this case a smaller company can compete if it is properly organised since there are less economies of scale involved in the personal promotion that is required.

The Government should resist the temptation to support this company by requiring other Government agencies to purchase their fertiliser from it, since the interests of the small farmers who use the fertiliser are more important than those of this company on its own. Most entrepreneurs believe that the main thing which is preventing their success is shortage of capital. This may in some cases be true, but this belief also leads businessmen who do have access to capital to believe that nothing else is required for business success. It is very easy to start any business so long as the necessary funds are available but to run it successfully requires a full range of management skills. A small business promotion agency should endeavour to develop these skills through training programmes and advisory services which are made available to those who have capital and wish to go into business for themselves.

Pipat Casting Company

Local currency: 1,000 Baht = U.S.\$50.00

Mr Winai is the deputy manager of The Pipat Casting Company which specialises in the manufacture of medium to heavy mechanical cast metal components. The manager is his father, who started the business in 1973 with only four employees. It has grown steadily and at present there are eight employees including his son to whom he has given full responsibility for the business.

Early in 1977 the company took an order for several heavy-duty bronze bearings for the main transmission shaft of a large sugar refinery, each casting weighing almost a ton. Production was badly behind the schedule stipulated by the contract because the castings were full of cavities caused by gases which were entrapped in the molten metal. The cavities either had to be filled by welding or the whole casting had to be melted down and recast. Both solutions take time and cost money, but Mr Winai felt that a high proportion of faulty castings was inevitable and their number could only be reduced after some years of experience. He wanted to make a good quality product, and at the same time tried to maintain the delivery schedule in order to keep his customer's goodwill.

Since the building was large enough for expansion, he thought that the best way to improve the business was to employ four more workers and buy extra equipment. He thus needed about 500,000 Baht for these plans and Mr Winai visited The Industrial Service Institute to enquire whether he could obtain a loan with a low rate of interest from any finance sources.

Comment

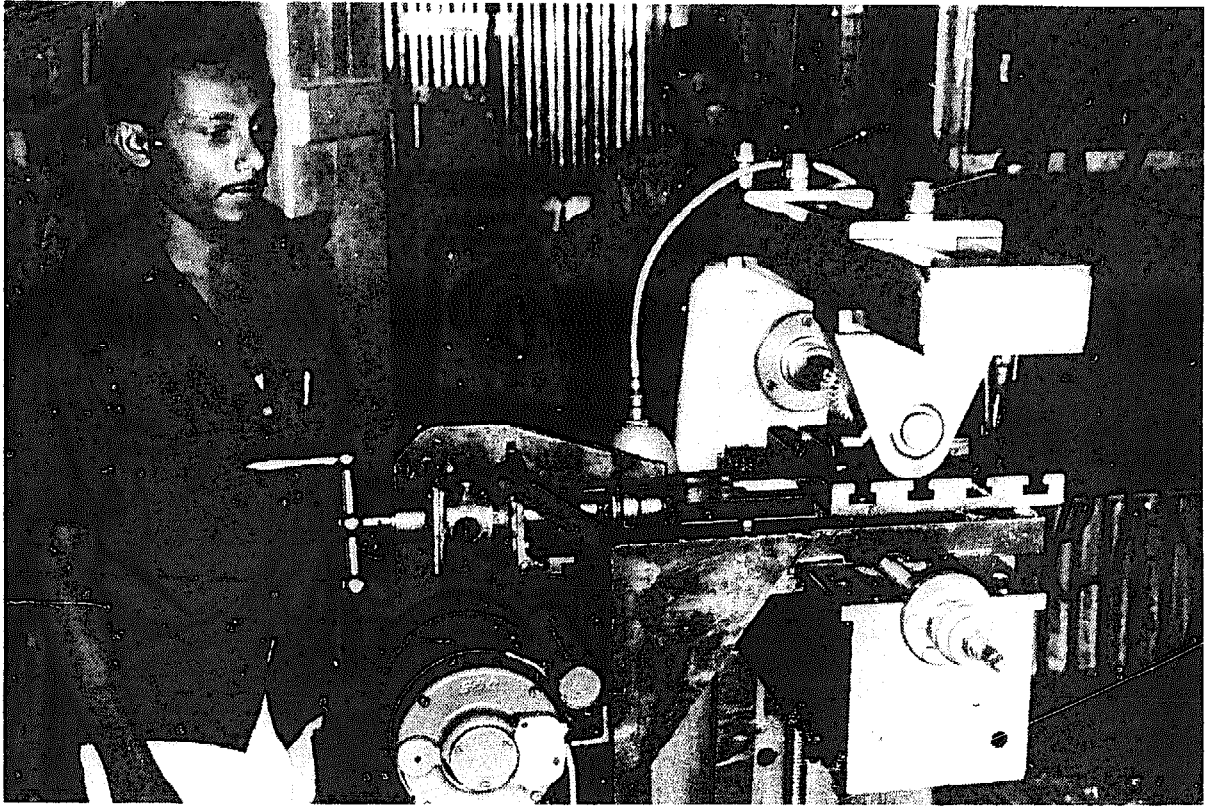
This case study describes an entrepreneur who, like so many, believes that his problem can be solved if he obtains more finance and expands his business.

A lending institution acting on its own, without co-ordination or assistance from technical advisory services, might well grant the loan for which Mr Winai has asked. This would probably com-

pound the problems he is presently facing and lead eventually to the destruction of the business.

The best assistance that can be given is to help Mr Winai to solve his production problems and to provide technical training to upgrade his skill and that of his operatives. The delay in deliveries is not caused by any shortage of man-power or equipment, but by lack of expertise in an industry which requires a reasonable degree of technical skill.

This case illustrates the need for careful analysis, both of management and the technical situation, in order to find out what are the real as opposed to the perceived needs of the business. Analysis of this sort is likely to be beyond the ability of any single adviser and this example shows that generalists are required in the first instance. These are people who may not be very experienced either in management or in technical subjects but who have the ability to look at the business as a whole and decide which skills are required in order to analyse the problems correctly.



A machine tool for making engines

Kisan Engines (India)

Local currency: 100 Rupees = U.S.\$125.00

Two entrepreneurs with a background in both mechanical and agricultural engineering started a small-scale diesel engine manufacturing plant in 1962; they rented a ready-built factory on the industrial estate at Hyderabad in Andhra Pradesh, and their initial investment in the company, which they called Kisan Engines, was 300,000 Rupees. The factory could produce up to 300 engines per month ranging between five and ten horsepower. A few of the key components were manufactured in the factory and the rest were obtained from sub-contracting firms in Kolhapur in Maharashtra. As a result of Kisan's initiative a number of sub-contracting firms also started in Hyderabad and these provided part of the firm's needs.

Kisan established a reputation for good quality workmanship, and in 1967 the entrepreneurs were able to expand the capacity to 500 engines a month through an investment of a further 200,000 Rupees. Turnover rose from 400,000 Rupees in 1964 to 1,200,000 in 1968 and the technical and managerial ability within the firm, combined with the advice the partners received from development institutions, seemed to promise a secure future.

However, the demand for diesel engines is cyclical and depends on the prosperity of farmers and their ability to obtain subsidised loans for installation of irrigation. In 1969 there was a severe slump in demand which lasted three years and a number of diesel engine manufacturers, both large and small, were in serious difficulties. Kisan managed to survive, partly because the Government of Andhra Pradesh had included its engines on their approved list for subsidised loans in order to encourage local industry.

In spite of the cyclical demand the overall prospects were good particularly in areas which had not yet been reached by rural electrification. The profit margins were also generous, and in the late 1960s a number of enterprises started to manufacture diesel engines in various states including Andhra Pradesh. In 1970 a large-scale firm called Shri Ram was established in Hyderabad with a capacity of 3,000 engines per month. Kisan, Shri Ram and

the other manufacturers in Andhra Pradesh still obtained the bulk of their components from Kolhapur in the north where there were over 500 small-scale firms sub-contracting to the diesel manufacturing industry.

In spite of difficulties and competition Kisan expanded its turnover to 2,000,000 Rupees during 1972. Because of the increasing local competition and the cyclical nature of the business the partners thought it might be advisable to diversify their product lines. They decided to remain in the agricultural area and to manufacture power tillers in collaboration with a Japanese company.

With the help of this Japanese collaborator Kisan put forward a proposal for manufacturing power tillers. This involved an additional investment in machinery of 500,000 Rupees which would raise the capital invested in the business to 1,000,000 Rupees.

It would also be necessary to increase the factory space and there were two ways of doing this: one alternative was to rent another shed on the factory estate and the other possibility was to build a power tiller factory in the industrial development area where land was available. In the latter case the building would have to be built at Kisan's expense whereas if they remained on the industrial estate they would be able to rent the necessary space.

The partners preferred to invest money in manufacturing rather than in buildings and they applied to the Industrial Estate Authorities in 1972 for another shed on the estate.

This request posed the Estate management with a problem: if Kisan made the envisaged investment the company would go beyond the official limit for a small industry and would therefore not be eligible for factory accommodation on the estate. Any deviation from this rule would mean a basic change in Government policy and the Estate management therefore preferred the company to locate its new factory in the industrial development area. They suggested that Kisan should build this factory with a loan to be obtained from the State Financial Corporation and the problem was then referred to the Directorate of Industries for a decision.

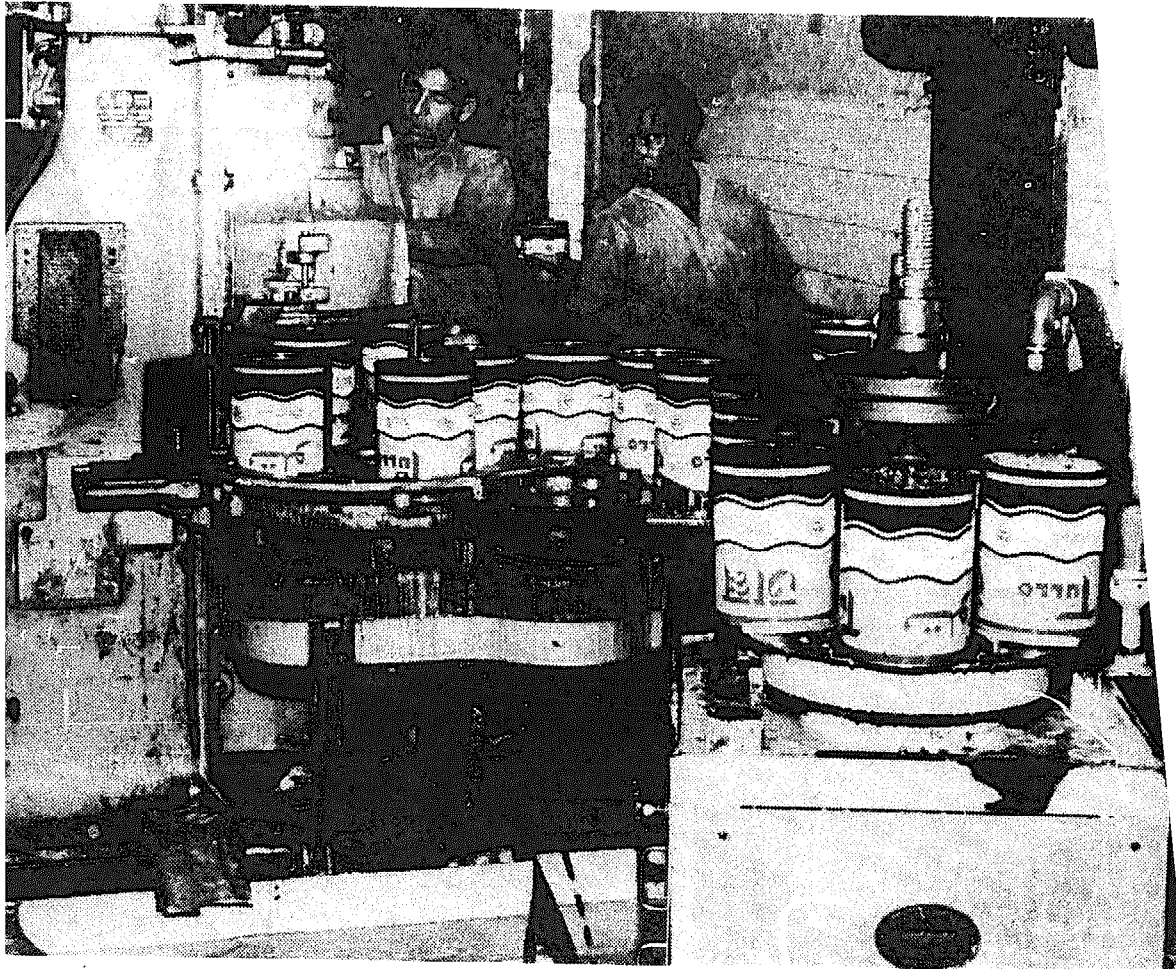
Comment

This company started operations thanks to a Government factory estate and in its 15 years of existence it has prospered very well with occasional assistance from the Government in terms of preferred purchases and advisory services.

The manufacture of diesel engines is not normally considered

suitable for small-scale operations, but the Indian experience suggests that small businesses can capture a share of this market if they are efficiently managed and judiciously assisted through government programmes. It also appears that the industry has had a substantial multiplier effect in that it has given birth to large numbers of sub-contractors providing components of various sorts. Generally, this industry seems to be a very promising example of the type of activity which can be developed through government assistance; the product itself contributes to agricultural development, the industry is widely scattered throughout the country and the technology involved is such that it is bound to contribute to a general improvement in technical skills available in the country.

Problems arise, however, when a small business expands. Although this company has not relied excessively on subsidised government assistance, it is obvious that a move to commercially available premises will severely strain the financial resources of the business and inhibit its proposed development plans. It might be argued that the Government should not withdraw support just because the business reaches a certain arbitrarily selected size. In a free economy all businesses must eventually be exposed to the full force of competition and the company should only be permitted to occupy the extra space on a strictly temporary basis until another genuinely small business applies for it. In any case they should be advised to plan for a move out of the special industrial estate in the very near future.



Filling the cans with oil at United Oil Mills

United Oil Mills (Bangladesh)

Local currency: 1,000 Taka (Tk.) = U.S.\$70.00

Two brothers started United Oil Mills as equal partners in 1970. They started with crushers and a 15 H.P. electric motor and the initial fixed investment was Tk. 60,000. The partners first planned to mill oil seeds on contract but later on they decided to buy seed, mill it and sell on their own account.

The business did not make good profits at the beginning and the quality of the oil was below standard. One of the partners visited the Counselling & Industrial Study Department of Bangladesh Small Industries Corporation early in 1971, where the Food Technologist advised him to install an oil expeller and also a filter for cleaning the oil. The partners bought this equipment for Tk. 30,000 and commissioned it in September 1971. The production then increased considerably due to better recovery from the oil cake and the quality of the oil also improved due to filtering. The business can now compete with others and makes a good profit. There is no problem in marketing the product since there is a tremendous demand for edible oil in the country.

Today the partners have enjoyed good profits for five years, and they plan to expand the business, but they are faced with a number of difficulties. Mustard seed, which is their raw material, is a seasonal crop, and the local production is not sufficient to meet the demand. The country also imports a large quantity of edible oil seeds every year but there is still a serious shortage. The partners try to overcome this problem by buying and storing raw materials during the harvest season, but they do not have the necessary financial resources.

In addition, they find it difficult to obtain spare parts as these are mainly imported and not always available. The unreliable electricity supply also creates problems and the machinery often stops because of power breakdowns. There is talk of more reliable electricity services being brought to the small town where United Oil Mills operates, but nobody knows when it will come, and this changeover will presumably involve new machinery.

Comment

This case study illustrates the interaction between the government and small business at various levels. Regulations designed to conserve foreign exchange have the effect of preventing the importation of vitally needed spare parts; it is difficult to devise simple and equitable systems for allowing certain classes of enterprise to import spare parts when others are prevented from doing so, and there is always a risk that spare parts will be imported as such but actually used as components for new equipment. Close liaison is required between the Ministry responsible for import duties and the small business promotion agency.

At another level the business is unable to plan securely for the future because nobody knows when a reliable electricity service will be available. Here again, the development of small-scale, non-farming industry, particularly in agricultural areas, may be only a very small part of the benefits which will arise from rural electrification, but the small business promotion agency must liaise with the electrical authorities in order to ensure that their interests are taken into account.

As far as the small business promotion agency itself is concerned, it may be significant that the entrepreneurs found it necessary to visit the authorities for advice, since this implies that the agency had no way of reaching out to small businesses in order to identify their problems and provide assistance possibly before they knew that they needed it. This outreach or extension, as it is sometimes called, may be expensive to provide, but it is likely that a 'business clinic', which depends on business people seeking it out, will reach only a very small proportion of small businesses and probably only those least in need of help.

Governments can also help with supply problems such as are faced by this company. Particularly if there are a large number of mills with similar problems, it may be possible for the government to finance the storage and purchase of the raw materials from farmers and to sell them to the mills as they need them; alternatively, it may be more effective for the government to encourage co-operation between farmers' associations or co-operatives and individual small businesses or, indeed, associations of similar businesses. Group purchasing schemes, like most other forms of assistance, are usually better organised by the industry itself rather than relying on direct government management.

Talk of the Town Beer Parlour (Nigeria)

Local currency: Naira (₦) = 100 Kobo = U.S.\$0.75

John Okafor is the type who has an eye for business. He is full of energy and has a great deal of confidence in his ability to succeed in any small-scale business venture. One evening he talked to his friend who was a salesman for a brewery about the feasibility of his opening a beer parlour. His friend assured him that adequate supplies of beer would be available at a good price.

John, therefore, decided to open a beer parlour and started to look for a strategic location. He was determined to have a considerably higher class beer parlour than the other bars. In January 1974 he found a site in a perfect location on the corner of Liberty Road and Trans-Ekulu Avenue quite near the bus turn-around. The rent for the special building was rather high (₦80.00 a month) but John was confident he could still make it. Besides, he thought, he could always close down if something went wrong. After all, to make it one must take a small risk.

He proceeded to furnish the place, putting in cushioned chairs and centre tables and building an imposing drinking counter with high bar stools. By the time he had finished decorating the place, he found out, to his amazement, that he had spent about ₦3,000.00 which was all the money he had. He still had to get the place licensed by having it inspected by the Ministry of Health and the Police. By the time everything was ready, he was so completely out of money that he did not bother to have the opening ceremony which would have involved a big fanfare with free drinks for everybody passing by. He simply started selling beer.

The response was tremendous. He attracted many customers from the first day. He realised that an opening ceremony was not really necessary. People were attracted by the good facilities and more especially by the low price. He was selling beer at 55 Kobo a bottle while the other beer parlours were selling at 65 Kobo a bottle. His customers increased day by day and at times his three helpers were completely overwhelmed. People were sitting on the

counter, on the window ledge and even on the floor. Some even brought their own chairs and sat outside. The place became the talk of the town and that is how it got its name—The Talk of the Town Bar.

This dramatic success, however, was a mixed blessing, and the business was almost out of control. His three employees could not cope with the situation and he hired a fourth. He increased the price to 65 Kobo a bottle in a vain attempt to limit the number of customers, but without success. People kept coming. With people standing outside and drinking beer like a street party, his neighbours became alarmed and on several occasions called in the police. Fortunately the police came from the local post whose staff were regular customers of the bar and so did nothing. His biggest problem, however, came from the landlord who also owned a hotel about two hundred metres from the bar. This hotel had lost most of its custom to the Talk of the Town, and the landlord retaliated by sending John a notice to quit six months after his opening. John pleaded with the landlord and asked his friends to talk to him but the landlord was adamant. John braced himself for a fight and contacted his lawyer. A threatening letter from the lawyer brought the landlord back to his senses, and he stopped harassing John.

The boom continued. The bar was netting an average of ₦500.00 a month. John's friend from the brewery arranged a direct allocation from the factory for him and he also put him in touch with the other breweries' salesmen who gave him direct allocations from their breweries. Under normal circumstances the beer supplies would have been more than enough but there were still too many customers.

John put one of his boys in charge of the sales and devoted his entire time to collecting more beer. He arranged for a dealer to deliver a large quantity of fried meat, a delicacy which increased the thirst of his drinking customers, and this increased his profit to ₦650.00 a month. After nine months of operation he was doing so well that he started thinking of finding a bigger place, but before he could do anything real trouble started.

A price control edict was enacted setting the wholesale price of beer at ₦5.00 per carton of 12 bottles and the retail price at 50 Kobo per bottle. This meant that John's profit was now only ₦1.00 per carton which made little difference so long as he was getting enough beer. However, almost simultaneously with the promulgation of the edict, his salesman friend was transferred to Lagos, a distance of some 350 miles. Although his official allocations were the same he was unable to procure additional supplies since the beer distributors started evading the edict by

selling on the black market. For the first time he was unable to satisfy the demands of his ever thirsty customers. At first John refused to buy on the black market but when he started to have problems even with his official allocations he entered the black market. He knew this was very dangerous because the price control inspectors were always on the look out. Sometimes his beer parlour had to be closed for a whole day when his informants reported the presence of price control officials in the neighbourhood. His business went from poor to dismal, and he did not even make enough sales to pay for the rental. He hung on for a while hoping that business would improve but instead things got worse and in frustration he simply closed down, disregarding the advice of his friends. After auctioning his old furniture and fittings he had saved ₦6,000 after a year and a half of operation.

Three months later an amendment to the edict came out imposing mandatory prison terms for violators. One morning he read in the papers that two of his former competitors had received six months' jail terms for selling beer above the controlled price; John celebrated his foresight with a bottle of beer which he bought for ₦1.00.

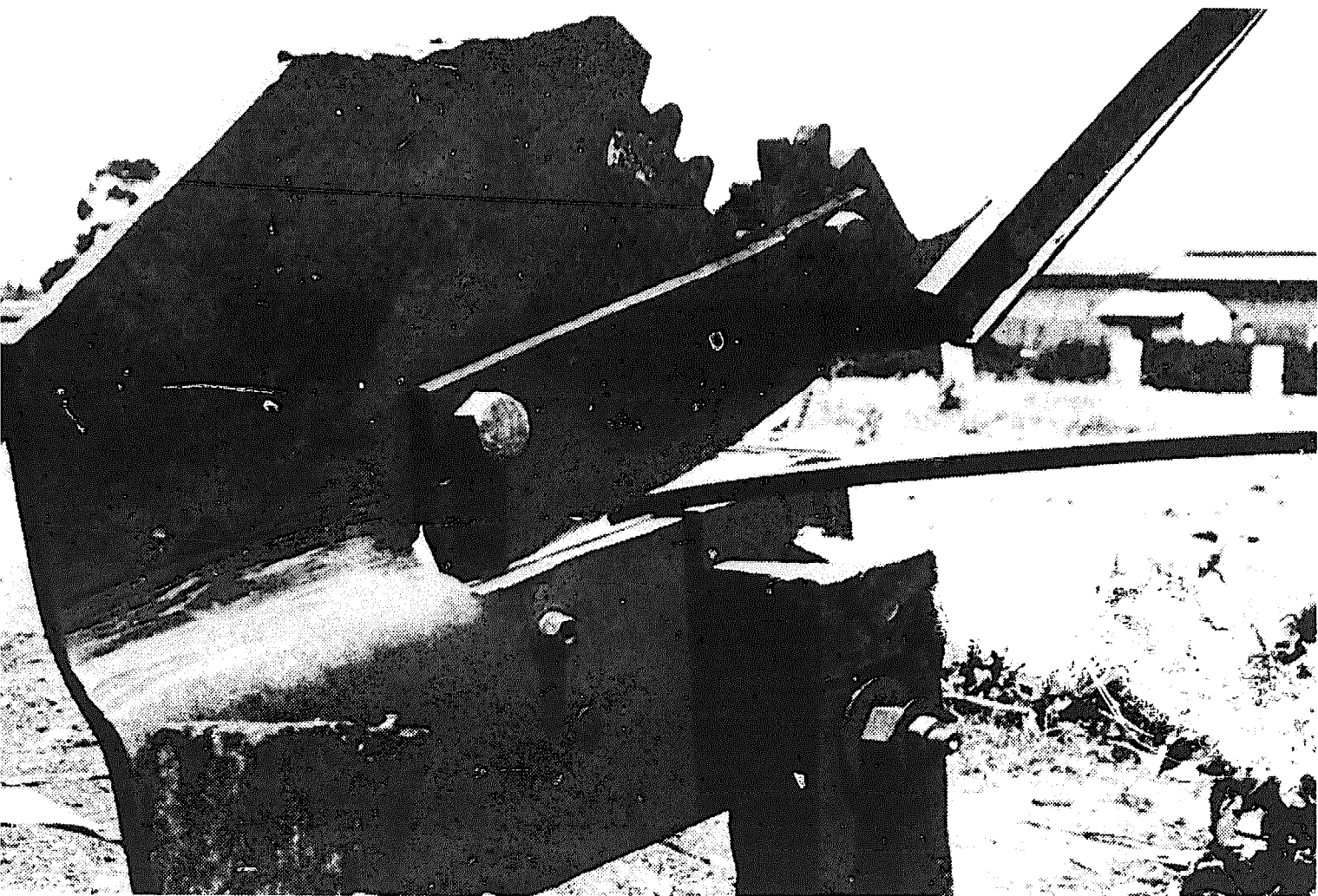
Comment

This case study describes one venture of a typical entrepreneur, who seized an opportunity when he saw it, took a calculated risk by going into the business and then withdrew from the market when the prospects declined. Entrepreneurs of this type will continue to seek out opportunities regardless of whether or not they receive support from the government and it may be argued that a beer parlour is not a suitable industry for government support. Nevertheless, economic activity of any sort which is not illegal all contributes to development and employment, and governments should avoid rapid price changes such as occurred in this situation when these are likely to cause major problems to indigenous small-scale entrepreneurs who distribute the product.

It may be possible for breweries and other suppliers of staples to promote and train indigenous distributors since this increases their own sales. Many of the best small business assistance programmes are in fact run by manufacturers of shoes, beer, fats and other staple products.

It should also be noted that entrepreneurs of this type are perhaps the scarcest commodity of all in most developing countries, and it may be possible through judicious advice and encouragement

to turn their attention towards industries which are more directly beneficial to the economy in terms of the product they produce and the numbers they employ. All too often, entrepreneurs of this type are regarded as 'cowboys' or quasi-criminals rather than as partners in the process of economic development.



Metal cutting machine made from scrap iron

Mutangangi Kagotho (Kenya)

Local currency: 100 Shillings (Shs) = U.S.\$10.00

Mutangangi Kagotho learnt the art of metal forging before the war from his father who owned a foundry. By 1940, he had acquired the basic skills and was able to make various metal implements. His career was interrupted by the Second World War when he was recruited to fight for the British. The war took him to India and Burma before he came back to Kenya in 1947.

Mutangangi renewed his interest in the forging business as soon as he returned. His total savings were Shs 600 and he invested this sum as follows:

	<i>Shs</i>
Construction of temporary shed	260
Purchase of scrap metal	300
One month's salary for apprentice	40
	<u>600</u>

He fabricated and installed a crude fan from the scrap metal and a discarded bicycle rim. This fan, which he still uses with a few modifications, is revolved by hand at high speed and blows wind into a charcoal fire to generate a very high temperature. Iron rods are then fed into the hot fire; when they are soft they are struck repeatedly with special forging hammers and moulded into various products.

Mutangangi is highly creative. He managed to make three metal-cutting guillotines, two drills and one anvil out of scrap iron, and he has managed to modify every machine he has to suit his own special requirements. By 1948 he had enough equipment in his workshop to make and sell charcoal burners, water buckets and coffee measuring buckets, and his annual sales for that year amounted to Shs 7,000 while his expenses were Shs 5,400.

Mutangangi ploughed back most of the profits into the business, buying scrap metal, and paying more apprentices, and by 1958 he had improved his equipment still further and had added bicycle carriers, road rollers and metal cooking pots to his production.

His sales had increased by 1958 to Shs 34,000 but, because he

had insufficient space to finish his products properly, his profits were only Shs 2,500.

During the sixties Mutangangi managed to expand the variety of his products and to modify and improve the existing ones. He now made chaff cutters, which are used by farmers to cut maize stalks and hay for feeding animals, and door bolts, v-nails, door handles, water tanks and some simple machine tools.

In 1969 some Ministry of Social Services' officials, on a routine visit to Githiga village, visited the shed used by Mutangangi and were so impressed by his ability that they allotted him a temporary occupation licence on their plot at the market. He immediately built a bigger shed on the plot and employed more apprentice trainees to help him.

During the last eight years he has sold most of his output to the Kenya Farmers' Association and The Agricultural Finance Corporation and to the farming community around Kiambu District. They all agree that Mutangangi's products are more durable than imported ones.

He now employs three qualified craftsmen and engages up to eight apprentices at a time who are paid an allowance during training. However, his business has not been able to satisfy the demand for its products; the rate of production is too low which is inevitable because of the manual methods employed. In addition, some of the operations such as welding have to be done elsewhere, thus considerably reducing his profit margin.

Mutangangi had no formal education, but he heard about the activities of The Industrial and Commercial Development Corporation which assists capable and aspiring industrialists to establish or expand viable projects. Therefore, when the local council allocated him an industrial plot, he did not hesitate to approach the ICDC for the necessary assistance.

The ICDC realised the potential of Mutangangi's business and offered him a loan of Shs 130,000 to supplement his own savings of Shs 55,000 and to enable him to purchase modern machinery and equipment and erect a shed on his own plot. The loan amount was based on the following requirements:

	<i>Shs</i>
Machinery and equipment	96,000
Installation of electricity and machinery	10,000
Workshop building	35,000
Working capital	44,000
Total requirements	<u>185,000</u>

In carrying out a feasibility study, it was assumed in view of the demand for the products and the expected increase in output as a result of the installation of modern machinery and equipment that the business would perform as follows:

<i>Production and sales per year</i>	<i>Shs</i>
80 chaff cutters @ Shs 1,500 each	120,000
5,000 doz. door bolts @ Shs 40 per doz.	200,000
10,500 door handles @ Shs 4 each	42,000
8,250 kg. v-nails @ 4 per kg.	33,000
35 machine tools @ Shs 2,000	70,000
70 water tanks @ Shs 1,000 each	70,000
General repair work	30,000
Total	<u>565,000</u>
<i>Expenses per year</i>	<i>Shs</i>
Raw materials	240,000
Wages and salaries	77,000
Water and electricity	24,000
Transport costs	36,000
Advertisements	5,000
Postage and stationery	2,000
Insurance and licences	3,000
Depreciation on machinery @ 12½%	12,000
Loan interest @ 9½%	12,350
Contingencies	40,000
Total	<u>451,350</u>
Profit before tax	113,650
Less tax @ 45%	50,000
Net profit	<u>63,650</u>

With a net profit of Shs 63,650 per year Mutangangi should be able to repay the ICDC loan at Shs 26,000 per year and maintain a good surplus which he could reinvest thus expanding his industry in the future.

Comment

This study describes an entrepreneur who started on a very small scale and, over a period of 30 years has expanded so that he is employing 11 workers and is successfully manufacturing and selling a high quality product for use in agriculture.

It is significant that apart from a licence to occupy a certain plot the business has achieved its present success wholly without government assistance.

The owner now wishes to expand his business by mechanising some operations presently done by hand and by installing welding equipment so that he can himself carry out operations which presently have to be sub-contracted to other businesses. The small business lending agency is willing to advance over two-thirds of the money which is necessary, and their offer appears to have been based on a sound analysis of the future prospects of the business. It is clear that one result of the new investment will be to replace labour with capital; it is generally accepted that the major objective of promoting small enterprise is to create employment, and it may appear paradoxical that one effect of this loan will be to enable the business to produce more goods with less people than would otherwise have been employed. It is also probable that much of the equipment will have to be imported. Lending agencies should only support this type of investment when it is necessary for the business to have the machinery in order to compete, and they should demand that potential borrowers investigate every possible way of producing a similar output through labour-intensive methods.

The feasibility study has taken account of demand, material costs and so on, but the managerial ability of the businessman is always an unknown. It is vital that a lending agency should closely co-ordinate its operations with the extension and training services available to small businesses so that they can rigorously assess the managerial ability of potential borrowers. If there is any doubt as to their ability to manage a greatly expanded enterprise, they should be provided with the necessary training and advice as well as the finance.

Ranaivo, the Building Contractor (Madagascar)

Local currency: 1,000 Malagasy Francs (FMG) = U.S.\$4.50

Ranaivo started his building business in 1970. Before that he was a foreman in another enterprise and he set up his own business with his savings from this job.

Ranaivo is a very skilled builder himself and he does not trust his workers to do their jobs without constant supervision. He therefore acts as both manager and foreman, and has no time for paperwork or book-keeping. He writes down the main costs he incurs and he reckons that the money which is left over when each job is finished and paid for is the net profit of his business.

Whenever Ranaivo has money to spare he buys second-hand equipment for which he may have no immediate use. He therefore has many unused machines lying behind his house.

He has recently been offered a mechanical shovel for 150,000 FMG. It is not in working order, and it will cost about 1,000,000 FMG to repair it. Ranaivo knows that the price of a similar new mechanical shovel is now about 18,000,000 FMG.

He has heard from a friend that the Government department which is his principal customer is about to call for tenders on a job which needs such a mechanical shovel; Ranaivo hopes that if he can buy and repair the machine he will obtain this order and larger contracts thereafter.

Comment

A successful entrepreneur needs technical knowledge, managerial skill, finance and the intangible quality of entrepreneurship. This builder appears to have access to a certain amount of capital and he is obviously a skilled technician as well. We may perhaps assume that he is an entrepreneur from the very fact that he set up his own business but, as is all too often the case, he is not a manager.

Like many small businessmen, he has reinvested his profits in assets which are of dubious value. This may be better than

dissipating his funds through personal extravagance or over-indulgence to family claims, but unplanned purchases of inventory, machinery or any other asset will eventually mean that the available capital is tied up in articles of no immediate use or saleability and is therefore not available for buying something which is needed at once.

It is very difficult to change people's attitudes so that they recognise that the profitable *use* as opposed to the *possession* of assets is what is important. Government agencies should nevertheless attempt to foster this type of change through training, consultancy and so on.

Many countries are attempting to develop an indigenous construction industry and since the government is the major customer they are in a position to discriminate in favour of small building firms and thus to encourage their development. In some cases contracts below a certain size are reserved exclusively for small-scale contractors. Tenders from small firms may be accepted even if they are somewhat more expensive than those from large firms, or large contractors may be required to sub-contract a stated proportion of the contracts they receive to small-scale firms. Whatever strategy is adopted, it is important to balance the national interest in terms of the quality, costs and completion dates of the buildings against the interest of the small-scale construction firms.



A typical small-scale kiln for firing roof tiles

Roof Tile Manufacture in Gapura (Indonesia)

Local currency: 1,000 Rupiah = U.S.\$2.40

The island of Madura lies off the north-east coast of Java. The people of Gapura District in the Regency of Sumenep are mainly farmers, like most of the people on the island, and they can only practise their small-scale agriculture during the rainy season. Their earnings are low and there is a serious need for alternative employment. In some places around the farming areas of Gapura there are rich deposits of clay which are very suitable for producing pottery and roof tiles. The people of the district endeavour to increase their income by using this valuable resource.

Roof tiles are the most popular product; they are moulded from the clay, and fired in simple wood-burning kilns. The cost of producing 1,000 tiles in this way is as follows:

	<i>Rupiah</i>
40 double baskets of clay, carried by hand, at 25 Rupiah each	1,000
5 double baskets of sand, carried on horse back, at 100 Rupiah each	500
10 double baskets of dried wood for firing, carried by hand from the upland wooded districts, at 400 Rupiah each	<u>4,000</u>
Total cost	<u>5,500</u>

These figures allow for a limited amount of wastage but the primitive methods of drying and firing the tiles often mean that a substantially larger proportion is wasted. As a result the actual cost of producing 1,000 finished tiles is considerably higher than this figure.

The people can only start to manufacture roof tiles when they have an order from one of the traders. These traders pay for the roof tiles some two months before the scheduled delivery date and the average price paid to the people is 6 Rupiah per tile; they generally sell the tiles for around 9 Rupiah each and in times of shortage the price may reach 13 Rupiah per tile. When the wastage

rate exceeds that normally expected the people have to manufacture larger quantities in order to deliver the necessary quantity to the trader who has paid in advance.

The tile makers are anxious to improve their technology by building a modern kiln which might possibly be fired with oil thus reducing their fuel costs and damage to the scarce woodlands of the island. The people are also anxious to find an alternative to marketing their tiles through the 'Cukong' as they call the trader who advances them the money for the tiles two months before they must deliver them.

The Government sympathises with their problems and is very anxious to develop the local people's ability to make use of their one valuable resource, namely the excellent clay. The people have requested a substantial loan in order to construct a kiln, but the staff of the Department of Industry have demanded that the tile manufacturers first form a viable association and equip themselves with the proper management skills both to operate the kiln and to market their products themselves. For this purpose, the Department of Industry has offered some training on how to improve quality using the present firing methods and has proposed a training programme covering business management, the advantages of co-operation and the technology of the improved firing process. Not all the tile manufacturers are enthusiastic about this, but the Department of Industry hopes that the training programme will develop the necessary enthusiasm for co-operation, and a knowledge of the new technology, so that the Government will then be able to extend the necessary loan and develop the indigenous tile-making business of Gapura to its full potential.

Comment

The tile-makers in this case study are beset with problems from every side. They lack the necessary working capital to finance manufacture, even using the present primitive methods, and they have no independent marketing channels. They are therefore at the mercy of the 'Cukong' who combines the functions of money-lender and distributor in order to ensure that he has a monopoly of their supplies.

The people also lack the finance and knowledge to invest in and operate an improved kiln which would enable them to reduce the breakage rate and thus to earn a greater surplus however they distributed their products. It does not appear that at the moment

they are inclined to co-operate with one another in order to overcome their problems.

The problem for the Small Business Promotion Agency is to decide which of these many deficiencies should be dealt with first. The strategy they have adopted is to offer finance both for working capital and for new equipment but only on condition that the people undergo technical and co-operative training so that they can form an association which will own and operate the new kiln.

When and if the new kiln is in operation the tile-makers will also presumably be expected to find their own marketing channels and this may be difficult if the 'Cukong', as so often is the case, also controls further channels of distribution to which he normally sells.

If people are forced to co-operate when they are not inclined to do so, the association or co-operative, which they form, is unlikely to prosper. It may be more successful in the long run to offer the training using the existing methods in the first instance. Once the tile-makers are producing the best quality tiles possible with the existing methods they will be all the more ready to appreciate the advantages of the new technology, and perhaps they will then see that by forming a co-operative and pooling their own resources they can construct a kiln without recourse to outside funding. It is often surprising how even the poorest communities are able to mobilise substantial resources when they genuinely believe that they will benefit from this, and if the tile-makers can, through training, be encouraged to appreciate the virtues of a co-operative investment this will in the long run be a better solution than financing the operations through a government loan.

It may be unpalatable for a government agency to accept that the tile-makers should continue to deal with the 'Cukong', but it is probably better to deal with a few problems at a time and to leave the method of marketing unchanged until such time as the technical and production problems have been solved.



Three employees packing water colour tablets in rubber packs

Mr Banda's Water Colour Paint Business (Sri Lanka)

Local currency: 1,000 Rupees (Rs) = U.S.\$65.00

Mr R. Banda had only a primary school education but was a very skilled mechanic; he played an important part in the construction of the bridge for the film *Bridge over the River Kwai*. He lost any money he made, however, on various unsuccessful ventures. Ultimately, he settled down to producing students' water colours in 1973 in a village about 125 miles from the capital city of Colombo.

In 1974 he sold only about 4,000 boxes of paints mostly in the early part of the year for Rs 5 each. Therefore, in May 1975, he sought the assistance of the Industrial Development Board (IDB).

An analysis of the market showed that:

1. the product was seasonal and sales were concentrated during the four month period—December to March—coinciding with the new school year;
2. his pack which contained 12 colours in 1 grm tablets in a metal box was similar to those of his competitors, and was based on the 'Reeves' pack that used to be imported 15 years before, but had since been banned;
3. the curriculum in art had been changed 10 years before and instead of outlines with a white background, the students now used colours to cover the whole area of the medium, so that the 1 grm tablet of each basic colour did not last even a month, after which the rest of the colours were of no use;
4. while Mr Banda's price was competitive compared to similar boxes of other brands selling at between Rs 5 and Rs 6, it was very high compared to pastels which were sold in a pack of 12 colours for Rs 2, and lasted nearly six months;
5. before the oil crisis a box of water colours was sold at Rs 3, but as a result of high costs the retail price was increased by two-thirds without any additional profit as shown on page 62;
6. sales of the local water colour industry had dropped considerably in the past few years.

	<i>Before Oil Crisis Rs</i>	<i>After Oil Crisis Rs</i>
Value of water colours	0.40	0.50
Packing	0.80	2.00
Brush	0.50	0.50
Contribution	0.55	0.55
Ex-factory price	<u>2.25</u>	<u>3.55</u>
Retail price	<u>3.00</u>	<u>5.00</u>

In consultation with the Department of Education, the IDB reorganised the water colour industry, which consisted of four other manufacturers in addition to Mr Banda. A box board carton containing six tablets of 5 grms each of the basic colours in a rubber pack was designed and introduced into the market for the 1976 sales season, retailing at Rs 3. The costing was as follows:

	<i>Rs</i>
Value of water colours	0.70
Packing (carton and rubber pack)	0.80
Brush	0.15
Contribution	0.60
	<u>2.25</u>
Retail price	<u>3.00</u>

Since dealer resistance was anticipated at first, the new product was promoted at seminars of art teachers and inspectors, while the Education Ministry wrote to the principals of schools recommending the new pack. It was made available to schools' co-operatives through the IDB. The schools were free to choose the brand they desired, but the product and price was standardised. As a result, sales of the industry in 1976 were Rs 210,000 or approximately 95,000 boxes, as against Rs 77,500 or approximately 22,000 boxes in 1975, and Rs 113,600 or 32,000 boxes in 1974.

However, Mr Banda could not decide on a pack in time for the 1976 season, and could not benefit from this campaign. His financial situation had also deteriorated further so that he did not have the working capital to organise production in time for the 1977 season. However, in December 1976, he was successful in obtaining a Development Bank loan for Rs 10,000 against an order for 7,200 boxes of water colours which the IDB obtained for him from the Co-operative Wholesale Establishment. Although he was

given until the end of January to supply this order, by the end of March he could supply only 3,600 boxes. The delay was due to the fact that when he obtained the loan in December, he decided to turn out the mould for the rubber pack and produce the rubber packs himself. The result was that by the end of March, although he had produced enough paints for the complete order, half of the boxes were not ready until May 1977. The Co-operative Wholesale Establishment refused to accept these goods as the season was over, so that on 1st June, 1977, the position of Mr Banda's water colour business was as follows:

Liabilities

Bank loan outstanding	Rs 5,000
Payment due to suppliers	Rs 2,000

Stocks

3,600 completed boxes worth Rs 3 each
Water colour tablets: 1,440 × 6 colours
3,600 brushes
Material for 2,160 rubber packs
Dyes for 1,440 boxes

The bank wanted to help Mr Banda and did not press for repayment immediately on condition that he reorganised his business. On 12th June, 1977, at a conference of the water colour manufacturers arranged by the IDB to draw up a plan for the 1978 season, the Chief Education Officer (Art) of the Ministry of Education said that the new trend was for powder colours and the use of water colour tablets in schools would decrease in future. The Education Ministry would be purchasing about Rs 50,000 worth of powder colours in 1978 and requested those interested in supplying to submit samples and prices through the IDB.

Mr Banda says he hopes to establish his water colour tablet industry first and he is not interested in the powder colours market at the moment.

Comment

The situation described in this case study appears to have arisen because the Government in its well-intentioned and effectively planned efforts to assist local manufacturers of colour paints has become involved with a manufacturer who is temperamentally unfit to run a successful small business.

It might be argued that the Government agency has gone too far, in that it has not only surveyed the market but actually obtained orders for the paint manufacturers. This type of 'feather bedding' approach can easily lead to the survival and even growth of businesses which would have rapidly ceased trading in a more competitive environment and will only survive if they are continually subsidised in a wholly uneconomic way.

On the other hand, it can also be argued that the Government agency should become heavily involved in the actual business transactions, particularly when there is only one major customer which is the Government itself. In addition, inexperienced small business people can be helped if they are allowed to concentrate on only one aspect of the business at a time. In this case the manufacturers were freed from any responsibility for marketing their products so that they could concentrate on getting the production right.

In any society, however, there are likely to be enough entrepreneurs with enough skill and energy to undertake more of the complete task of management than was required in the case of Mr Banda. The community, and the business people themselves, are ultimately best served by a rigorous process of elimination of weak businesses. Government policies which artificially prolong their survival should not be introduced.



A typical Malaysian grocery store

Ahmad, the Grocer (Malaysia)

Local currency: 10 Malaysian Dollars (\$) = U.S.\$4.00

Ahmad bin Yusuf is 55 years old and before starting his grocery business five years ago was a farmer who had never attended school. He has five children: the eldest is 31 years old, married, and lives elsewhere with his family; the youngest is 15 years old and is the only child living with him; the others are employed elsewhere. None of his children is interested in the grocery business, including the youngest son who wants to become an accountant, but this boy reads and writes for his father when this is necessary.

Ahmad started his business with stocks worth \$500, and his stocks are now worth \$600. He does not keep any accounts except for debtors and creditors ledgers, and his youngest son helps him with these after school.

Ahmad says he has debts of \$1,000 outstanding and owes \$500 to various suppliers. His monthly sales amount to approximately \$1,000 of which about half is cash and half on credit.

There are three grocery shops in the area including Ahmad's, whose shop is the smallest in terms of monthly sales and stock holding. The other two, which are run by non-Malays, are of the same size with sales of about \$6,000 per month each. The purchasing power in this area is around \$15,000 per month. About 90% of the customers in the area are Malays.

Ahmad does not go to town which is about 15 miles away to buy stocks, but prefers to buy his stocks from delivery vans. He makes his orders by phone, when goods are out of stock, and he has been working in this way since he started the business.

An Extension Service Officer visited the shop to ask Ahmad how his business was faring. He replied 'I am not doing badly, I can survive', but the officer's investigation showed that he was making a loss! He was not keen to expand his business since he is already old, and none of his children was interested in taking over the business when he retires in five years' time. He pointed out that he runs the business only on a part-time basis; his children supplement his income by giving him part of their wages every month.

Comment

Small-scale business extension officers, whose task is to help businesses to expand and become more profitable, are often faced by business people who are content to operate at little or no profit, or even at a loss, either because they do not appreciate the situation or because they do not regard it as serious. They may not be interested in expansion of what is to them essentially a part-time business, and if their heirs are not interested in taking over the business there is no encouragement for them to build it up into something that can be handed down to later generations.

It is valueless to attempt to train such a businessman in the use of book-keeping and other management techniques. He must first of all, if it is possible, be encouraged to change his attitude so that he wants to adopt new practices and improve his business. This may be a very difficult task and it may be wiser, given the shortage of small business promotion resources, to leave such businesses to their own devices and to concentrate on those which are more interested in expansion and improvement.

Apathy of this sort may be the result of long-standing traditions of commercial deference to alien people, and it may be national policy to attempt to overcome this even if the community is being adequately served by the foreign traders. In such a situation it is probably better to devote business promotion efforts to younger people who have been educated to believe in their own ability in all aspects of commercial life. An extension officer should possibly attempt to change the attitudes of a businessman of this type for a short period, but if after a few visits no change has taken place the extension officer would be well advised to turn his efforts elsewhere.

Haroon's Printing Works (Pakistan)

Local currency: 1,000 Rupees (Rs) = U.S.\$100

Haroon had worked in the Government service for 20 years and over that period had saved a certain amount of money; he had always wanted to go into business on his own and one of his old school friends, who is now a successful businessman, advised him to start a small-scale printing business. A number of Haroon's friends agreed that this would be a good idea and he decided to start such a business in the city of Karachi.

Haroon contacted a number of machinery suppliers and finally obtained a second-hand letterpress printing machine which cost him only 5,000 Rs. This was half the price of a new machine of the same type. He also rented a small workshop which was not in very good condition but was ideally situated on Banda Road in the middle of the book publishing district of the city.

Haroon started his business in 1968 with a mechanic and also a bookbinder and general assistant. The quality of his printing was not high and he could not match the fast delivery of offset printers and was therefore unable to obtain big orders from publishers. Nevertheless he managed to collect small orders from a number of firms in the city and survived in business somehow or other until 1970.

In that year general elections were called and Haroon managed to obtain the contract for printing voters' lists for the Election Commission. He worked round the clock on this job and this contract seemed to have put his business on its feet. He was now in a position to consider buying an offset press so long as he could obtain some assistance from the bank or some other source. The Industrial Development Bank of Pakistan finally agreed to lend him up to 50% of the value of such a machine on the security of the machine itself and the machinery he already possessed. The Bank insisted that the new machine should be purchased and installed under its supervision.

Haroon thought he would soon have the machine, but trouble arose over the building. There was insufficient space and the structure was insecure so that an accident might happen at any

time. The site occupied by Haroon's business was sufficiently large to allow for expansion of the building but the landlord was not prepared to pay for this. However, the landlord was willing to lease this site to Haroon for 20 years if Haroon would reconstruct the building according to his own requirements at his own expense. This would cost 24,000 Rs and the landlord was prepared to deduct 100 Rs a month from the rent for the next 20 years in order to repay Haroon's investment. Haroon's resources were not sufficient to allow him to buy the new offset machine and to expand the building at the same time, and the Bank was unwilling to finance the building as well as the machine because of the lack of security.

Finally Haroon contacted the Sind Small Industrial Development Corporation and asked for a construction loan. The Corporation's officials recognised Haroon's need and the potential of his business and they were willing to finance both his machinery and buildings on condition that he moved to the Industrial Estate five miles away from the city, where advance factories were available. This would have completely dislocated Haroon's business since it would separate him from the centre of printing activities in the city. Haroon asked his friends for advice and looked around for suitable premises to rent near to his present location but to no avail. Finally he decided to delay the purchase of an offset press and to maintain his present business with the letterpress machinery for the time being.

Comment

The businessman described in this case study is unable to expand and improve his capacity because he needs not only to buy new machinery but also to improve his rented premises where the machinery will be used. The small business lending agency is willing to finance the purchase of the machine but it cannot advance money on improvements to rented property.

The alternative solution advanced by the lending agency, namely that the business should move to an industrial estate, would be almost certain to destroy the business. Industrial estates are not a panacea for all small business problems and are quite inappropriate for a business such as this one which depends on rapid and easy contact with its customers and on a conveniently accessible location.

A more flexible lending policy might allow the lending agency to negotiate with the landlord, and in some way to put together a proposal which would be acceptable to itself, the landlord and the

businessman. It may be expensive to work out special arrangements of this sort for small businessmen, but flexibility is needed if a lending agency is to achieve its objectives.



Local female employees spinning the wool (Photo: Oxfam)

The Wool Spinning Centre at Mastung (Pakistan)

Local currency: 1,000 Rupees (Rs) = U.S.\$100

The Department of Industries of the Government of Baluchistan started a wool-spinning centre in Mastung in 1969 in order to create employment for the local population. The factory uses locally-produced wool to make yarn for the various carpet factories which are also located in the province, and 47 people are employed.

The factory has 500 spindles for spinning yarn and the capacity is about 500,000 pounds of woollen yarn per year, working on a double shift basis. In 1977 the factory was operating at less than 10% of this capacity, and the following figures show that ever since it was started in 1969 the business has been running at a substantial loss.

<i>Year</i>	<i>Production in lbs</i>	<i>Cost of Production in Rs</i>	<i>Loss in Rs</i>
1969-70	10,783	68,743.00	19,788.00
1970-71	20,551	132,235.00	20,935.00
1971-72	19,368	133,858.01	45,927.30
1972-73	87,482	815,903.70	83,714.71
1973-74	20,814	417,829.79	124,560.52
1974-75	63,597	1,355,873.50	377,584.30
1975-76	38,850	559,440.00	79,642.50

There is a large quantity of unsold completed woollen yarn, which is likely to deteriorate in storage, and this clearly implies a potential for further losses. Supplies of raw wool have always been erratic, and the wool which is supplied by the contractors, who are responsible for collecting it from the farmers, is generally adulterated with sand and dirt. There is also a serious scarcity of water in the area: the only tubewell available to the factory produces 6,000 gallons of water over the 16 hour daily operating period whereas the machinery actually requires 11,200 gallons during this period. In addition to these problems the machinery in the factory is not balanced. The initial washing machine is of

insufficient capacity to match the throughput of the machines which follow it and there are other similar problems. The manager of the business is an employee of the Government and has little knowledge of the technology of wool-spinning. Furthermore, labour relations in the factory have never been satisfactory.

The Government of Baluchistan is currently reviewing the history of losses in order to decide whether it should continue to make further investments in this business or refuse any further commitments to it.

Comment

This case study illustrates the fact that it is not enough to start a business purely on the basis of the need for employment, and that such businesses which are set up and operated by the Government are less likely to succeed than those which are set up by private entrepreneurs who identify an opportunity for profit. The cost and profitability figures also demonstrate the danger of producing apparently precise figures for enterprises of this sort; the superficial accuracy of the data must not conceal the fact that the more important aspects of the business are out of control.

The cost of continuing the operation of this business has been very substantial, and similar resources could have been used to pay the same number of people to undertake public irrigation works or other services which would be of lasting value to the community. Civil servants and the operating methods of governments are generally not suited to small business management.

It is easy, however, to criticise the original establishment of this business; the Government must now make the decision as to what should be done with it. There are obviously serious political implications involved in closing it and the wisest policy may well be for the Government to identify potential entrepreneurs and to sell the business to them. It may be necessary for the Government actually to finance the private individual who wishes to buy the business for this is likely to be less risky, and ultimately less expensive, than continued support of the present loss-making situation. Alternatively, it may be ideologically more acceptable to promote the formation of a producers' co-operative whereby the operation is owned and managed by those who work in it. Here again substantial initial finance may be necessary but if the business cannot survive thereafter the community as a whole will be better served if it goes out of business.

C.A.M. Corporation (Afghanistan)

Local currency: 100 Afghanis = U.S.\$2.70

During 1971 a Mr Zabuli, who was a very experienced businessman, applied to the Ministry of Planning to set up a factory to produce Coca Cola, Fanta and Sprite. There was a substantial demand for these soft drinks from the more wealthy minority of the population and the factory was designed to produce 9 million bottles a year. The project was approved and Mr Zabuli invested a total of 25 million Afghanis in the venture.

The products were of a very high quality because the water used was drawn from a deep well which was dug in the city. As a result the consumers were well pleased with the products of the company.

The main raw materials used by the factory were sugar, CO₂ gas, fruit and flavour concentrates, as well as bottles and crown corks. When the factory was started, sugar was sold for 16 Afghanis per kilo including a substantial Government subsidy; the total cost per bottle was somewhat under 3 Afghanis and the selling price was 4.50 Afghanis.

A year later the sugar subsidy was withdrawn so that the price of sugar went up to 56 Afghanis per kilo and the production cost rose to 5.53 Afghanis per bottle. The Government approved an increase in the selling price to 6 Afghanis per bottle, but shortly afterwards the prices of other raw materials and salaries and wages also increased and caused further problems for the C.A.M. Corporation.

Because of these further increases the cost of each bottle rose to over 8 Afghanis while the selling price remained at 6 Afghanis. As a result the C.A.M. Corporation approached the Government and asked for a price increase sufficient to meet the new higher costs and also to allow for a reasonable margin of profit.

An official in the Ministry of Planning suggested to the Minister that the C.A.M. Corporation's application should be accepted but the Minister did not agree and eventually a special committee was set up to evaluate the C.A.M. Corporation's performance.

This committee included representatives from the Ministry of Commerce, the Ministry of Finance and the Ministry of Planning. The C.A.M. Corporation provided all the information and cost data

that were requested and showed that the corporation could no longer survive in business unless the Government agreed to approve the requested price increases.

The committee was unable to come to any agreement on what should be done: one view was that the corporation should be allowed to increase the price as it had requested; others suggested that the increase should only cover the higher costs and should not include any allowance for profit. Another member held that the Government should reintroduce the sugar subsidy and allow tax remissions on other raw materials for the C.A.M. Corporation so that it would not have to increase the price. A further possibility was to nationalise the C.A.M. Corporation and for the Government then to distribute its product to the public at a cheaper price.

Since the committee was unable to decide between these various options, the matter was finally submitted to the Cabinet High Council where the President and his Cabinet would be able to make a final decision.

Comment

In spite of the fact that this company manufactures a non-essential luxury product, the Government at the highest level appears to have become heavily involved in its future. They must now decide whether to allow the business to collapse by removing the subsidy, to continue the subsidy, or to allow the price to rise to a level where it is economic to sell soft drinks despite the withdrawal of the sugar subsidy.

Subsidies and price controls require substantial investment and administration and they generally fail to achieve their objectives since market forces tend to reassert themselves. With products of this sort, at any rate, the Government should surely restrict itself to ensuring that the product conforms to health regulations and that the working conditions are up to standard. The concern with subsidies and price controls has not only enormously complicated the management of the business but has also diverted Government time from issues which are presumably of more importance to the community as a whole.



A typical blacksmith's workshop (Photo: John and Penny Hubley)

Saite Camara, the Blacksmith (Gambia)

Local currency: 1,000 Dalasi (D) = U.S.\$480

Abdoulie Camara was the most outstanding blacksmith of his time and his son, Saite, followed his father into the trade. Saite was educated up to junior secondary school level, and his father then sent him to a vocational training school to acquire more technical knowledge in metalwork. Soon after Saite finished the course his father died, and Saite, being the eldest son, took over his father's workshop and the management of the whole family business which was worth D6,000 including the tools. The business was owned by the family in common.

Saite soon proved to be very competent in running the workshop. He began to show how he had benefited from his training by manufacturing metal bedsteads and more sophisticated farming tools, such as ox-ploughs and horse-drawn harrows, and he started a completely new line of silver and gold rings and bracelets. Because of the new designs and low prices, the business expanded rapidly, and Saite found it necessary to employ his nephew to take charge of all sales and to keep a record of the business transactions. He also added to his labour force so that he employed 25 people altogether. Saite was thus even more successful than his father.

Saite saw that the demand for his products still exceeded the supply, and he thought it wise to approach the Gambia Commercial and Development Bank for some financial assistance in order to expand his business.

He was confident that the demand for his goods would continue to increase and he asked for a commercial loan from the Bank to increase his capacity.

The Bank readily approved a commercial loan of D15,000: Saite spent D10,000 of this on new tools and machinery to enable him to increase his production by five times, D3,000 on more raw material stocks, D1,000 on advertising, and used the remaining D1,000 for his personal pocket money.

By the time the new machinery arrived, however, the situation

had changed considerably: a number of competitive products had been introduced, and the demand for Saite's products was rapidly decreasing. In addition, the cost of raw materials increased which forced Saite to increase his prices and thus the demand for his products was further depressed. At the same time, Saite's nephew, the sales manager and accountant, was found to have embezzled a substantial amount of money, and his other brothers started to demand their shares in the business because they felt that he was keeping all the profits for himself. The bank manager learned of these difficulties, and refused to lend him any more money because he suspected that Saite's business was collapsing.

Faced with all these problems Saite went to the Indigenous Business Advisory Service's (IBAS) office for management and financial assistance. He hoped to benefit from the fact that IBAS had access to the Gambia Government Development Fund (GG/CDF) and could thus guarantee loans extended to indigenous business people by the commercial banks.

Comment

In this case the business has been allowed to grow beyond the managerial capacity of its owner because a lending agency has advanced funds without due regard to their use and with no mechanism for supervising the business.

It may cost as much or more for a bank to investigate and service a small business loan as a big one many times its value. The return in terms of interest is likely to be inadequate and for this reason banks either reject small business loans or sometimes accept a small number for political reasons without undertaking the necessary investigations. A businessman who has prospered through hard work and a good technical foundation may be quite unable to cope with additional funds and may be a ready prey to demands from his family and others for assistance. Only regular and knowledgeable monitoring of the use of funds can prevent this, and this is a task which is more suitably undertaken by a small business extension service than by the bank itself. Small business lending must be closely co-ordinated with extension and training, but it is usually best to leave the final decision in the hands of the lending agency in order to avoid the danger that business people will accept advice and training purely as a means of obtaining a loan. The businessman in this case study is attempting to solve the problems which were in a sense caused by the first loan by trying to obtain a second one. His request should be refused and the business advisory service

should work closely with the businessman in order to help him to put his business back on a sound footing, if necessary by severely contracting the scale of its operations, before considering any further financial advances.

Light Roof Limited (India)

Local currency: 1,000 Rupees (Rs) = U.S.\$125

In order to initiate industrial development in backward areas, the Industrial Development Authority started a scheme for setting up small-scale industrial units in these areas in partnership with local entrepreneurs. One of these units was set up with a Mr Shanker, who held 49% of the equity while the authority provided the balance of 51%. This unit was set up to manufacture light weight roofing sheets which are made by converting municipal sweepings into pulp which in turn is converted into corrugated sheets and then treated chemically to strengthen it and make it waterproof and fire-resistant. This product was designed to replace the traditional thatch used for roofing in the villages and also for making temporary structures. It is extremely light and easy to fix and was sold for about one-quarter of the price of other roofing materials available on the market. Consumers and builders reacted favourably when shown samples of the product.

Details of the plant cost and its capacity are as follows:

Fixed investment	Rs 20,000,000 (including Rs 200,000 for pre-operative and preliminary expenditure)
Working capital	Rs 5,000,000
Credit received from dealers	Rs 30,000
Installed capacity	1,000,000 sheets per annum worth Rs 10,000,000
Cost of one sheet	Rs 10 (including 20% allowance for selling costs)
Monthly expenses on wages and other costs	Rs 20,000
Persons employed	150
Break-even production level	70% of capacity

The unit went into production in 1975 and a senior marketing

manager was appointed to organise the sales. He was of the view that they should concentrate on creating an efficient distributor/dealer network backed by extensive publicity to educate the consumer since it was more or less an unknown product in this part of the country. The Executive Director, however, was of the view that the strategy should in the first phase be to sell the material to the Government and other bulk buyers; once they used the material, he argued, this would in itself generate publicity amongst the general public and then a distributor/dealer network should be organised to cater to the resulting demand. The Board of Directors' view was that the sales efforts should be directed both towards the Government and the general public.

Within six months of going into production the unit had made full use of the credit limit permitted by the bank and had piled up a huge inventory of finished goods so that the Executive Director found himself unable to pay salaries, wages, or raw material suppliers' bills. At this stage the Industrial Development Authority intervened and took over the management of the unit from the Executive Director, but found that it had not only huge liabilities to clear but did not even have funds to place an advertisement for recruiting a new Manager.

The Industrial Development Authority felt that its partner in this venture had mismanaged the production as well as the sales. The Executive Director was of the view that it was the Marketing Manager's fault and the Marketing Manager said that the situation had arisen because the product had no market and the two partners had not allowed him to perform his job properly.

Comment

The controlling interest in this business was held by the Government and this may in part explain the apparent lack of effective management. In a small business it is usually unwise to separate ownership from management, and small-scale enterprises are best managed by one strong individual rather than by a committee or board of directors.

A product which may appear to be socially desirable and economic from a Government point of view may nevertheless have fundamental disadvantages which make it unacceptable to consumers. If a venture of this sort is genuinely to be of service to the community and its customers, it should be an attractive enough proposition for a private entrepreneur to invest in it on its own without Government support and certainly without Government

control. If the operation is intended as a wholly subsidised method of pursuing some social objective, then it may be appropriate for the Government to set it up and operate it as a social rather than as a commercial operation.

In the present situation it may be best for the Government to attempt to dispose of its interest, along with that of the minority shareholder, to a private investor for the best possible price. It may even be worth financing the investor to enable him to purchase the business from the Government since this is likely to be cheaper than long term involvement with a loss-making business, and when the business is operated by one private entrepreneur it is far more likely to be successful.

PART 2
Analysis and Conclusions

The Role of Government

These case studies, and the programme from which they originated, are intended to suggest ways in which governments or other large institutions can help, or at least stop hindering, the development of successful small enterprises. They should also, however, confirm the obvious fact that the skill and initiative of the individual entrepreneur are by far the most important determinants of success or failure. It is difficult to avoid the conclusion that some business people will succeed however difficult the circumstances in which they have to operate, while others will fail in spite of a whole array of heavily subsidised and well integrated programmes of assistance. An effective entrepreneur observes his environment and organises his business to take advantage of it, rather than objecting to obstacles which he alone cannot possibly remove.

If, for instance, an entrepreneur observes rapid inflation, recurrent shortages of staple commodities and an apparently random system of import restrictions and controls, all within an unstable political environment, no amount of training or advice can or should bring him to save money for investment in manufacturing industry with a view to long-term profits. He will, quite rationally, opt for short-term gain through speculation and hoarding of essential commodities. No amount of specific small business development programmes can compensate for the lack of effective overall economic management.

Governments are concerned that small enterprise development should coincide with, and contribute to, the objectives of national development. Although regional or other investment incentives, industrial estates and similar devices can make some contribution, these are mainly effective in directing the location and nature of large enterprises. Local entrepreneurs will start and develop their business ventures largely outside the framework of government incentives. So long as the economic environment is appropriate, which it should be in any case, successful small businesses will make their due contribution. Governments should be concerned with increasing their chances of success by introducing well-planned and effectively integrated systems of assistance rather than

by directing them into particular types of business or particular areas.

The foregoing case studies have shown that government sponsored assistance programmes are often ineffective and can even damage the interests of the businesses they are intended to serve; although the government may see itself as a source of help, many small business people look upon it as the agency responsible for incomprehensible or irrelevant regulations whose enforcement provides an ideal opportunity for local corruption. Some small business people may reasonably be excused if they feel that the government is like a man who runs over you with his car and then ensures that you receive the best hospital treatment. You are grateful for the treatment, but you would prefer never to have been injured in the first place. The first priority should therefore be for any government to examine carefully the ways in which all its activities impinge on small business, and to make whatever changes are possible in order to avoid the unintentional discrimination which often arises when regulations etc., which are basically conceived for larger businesses or transferred from industrialised economies, are applied to small enterprises.

The case studies demonstrate the need for well-planned assistance programmes and, perhaps even more important, for co-ordination between the various services that are offered. Staff responsible for implementing the programmes must appreciate that the manager of a small business is usually responsible for all the details of finance, production, marketing and personnel, as well as the long-term direction of the enterprise itself. The manager may not distinguish between these functions in his own mind, but any outside intervention is bound to affect the business as a whole, even if it is nominally concerned only with credit, markets or technology. The responsible official must be aware of this, and must ensure that the business owner, and those responsible for other assistance programmes, appreciate that any change affects the whole enterprise.

It is difficult to implement any form of small business assistance, and it is often even more difficult to devise an organisation structure which economically and effectively co-ordinates all the different services which are necessary. Nearly every government ministry, including Education, Industry, Trade, Works, Information, Transport and Finance may be involved. It is rarely economic to set up a special agency to carry out all these services for small enterprises, since the skills and facilities already exist in one government department or another; the problem is to ensure that they are all available to small-scale enterprises, and that they

are effectively co-ordinated. This depends more on awareness of the importance of small enterprises and common sense and co-operation at all levels, particularly in the field, than a formal commission or other institution at the centre. It is hoped that this publication can make some contribution to this.

The following pages briefly summarise some general conclusions about the various types of assistance which are necessary; the actual policies which are adopted, and the institutions selected to implement them, will obviously depend on local circumstances. These suggestions must be read in the light of the realities of small enterprises, such as have been described in the case studies and as are known to exist in the reader's own country.

Credit Programmes for Small Enterprises

Although it is accepted that 'cash' is not usually the main problem of small businesses, whatever their owners may say, it appears from the case studies that it is an important consideration for which many small businesses genuinely need assistance from the government or financial institutions.

Small businesses are normally set up with the owners' savings and loans from friends and relatives, and funds are therefore limited. The owners often need additional finance to purchase machinery and equipment, and also for working capital. They are unable to secure loans on favourable terms from commercial banks mainly because of their inability to provide collateral or security, and also because of the relatively high risks involved. Sometimes commercial banks find it difficult to grant loans to them because of their lack of any records or accounts for this means that assessment of the business is practically impossible. Hence it is necessary to have a special scheme to provide credit to small businesses. The case of the A & B Soap Manufacturing Enterprise, however, illustrates the dangers of providing credit from more than one source, without any co-ordination between them (see page 5).

The Institution

There are three possible ways to implement such a scheme:

1. An institution can be set up to specialise in small business financing. This can be a most effective way since its sole objective is to serve the financial needs of small business, but the volume of lending may not be sufficient to sustain the number of branches necessary to reach every small enterprise. Such an institution should be staffed by personnel specifically trained in the area of lending to small business. The institution should also be allowed to accept deposits from the public and operate like any other commercial bank.
2. A small business division can be established within an industrial

development bank. In most countries, such development banks are already in existence, and it is quite possible to establish within them a specialised division for the purpose of financing small businesses. Such a scheme requires the blessing and support of top management, and the small business division thus established must be free from any institutional rules and regulations which would restrict its ability to function effectively. The division must be independent enough to form its own policies on matters such as the maximum amount of loans, collateral requirements, amortisation schedules and so on.

3. A small business development fund can be set up within the central bank or other appropriate agency for on-lending through commercial banks. The effectiveness of such an approach will depend primarily upon the extent to which the commercial banking system of a given country is willing and able to function effectively within the context of an overall small-scale enterprise financing programme. Commercial banks have relatively large and competent staff with extensive branch networks offering widespread geographic coverage which reduces the administrative costs of lending to small enterprises.

Subsidised credit

It is generally accepted that credit provided by government-sponsored small business financial assistance schemes should be subsidised. It appears that most governments in the developing countries have adopted a policy of credit subsidy, and in some developed countries such as the United Kingdom, subsidised credit is also used to promote enterprises in needy areas.

Normally credit is subsidised by charging a lower rate of interest for loans than the interest rate charged by the commercial banks and other financial institutions. Subsidies can also be provided in other ways, such as free consultancy and advisory services, product promotions through exhibitions and fairs, free services of small business information bureaus, or by tax concessions, exemptions from import duties and so on.

A government subsidy is justified because commercial banks are said to be unwilling to assist the small business sector. As the commercial banks are themselves in business to make a profit, they are reluctant to deal with small enterprises since the administrative costs and the risks are higher.

Subsidised credit, however, may give rise to a number of problems. It makes credit appear relatively cheap so that large

numbers of businessmen are eager to take advantage of this service through the government agency. Eventually credits become grants and revolving funds for loans cease to revolve. Non-viable projects are financed and good money is poured into bad risks. Corruption can easily follow from excess demand and inefficiency in the administration of the scheme. There may be no control over the use of the loans and borrowers may misuse the money and spend it on unwise investments, such as capital-intensive equipment or buildings, or sometimes the purchase of cars or other personal goods. The story of Soli the Blockmaker (see page 13) shows what can be done when credit is treated as one part of an integrated assistance programme rather than as an end in itself.

In Britain the approach of the Scottish Development Agency and the Council for Small Industries in Rural Areas seems to be very successful. Both organisations provide subsidies of one form or another, and offer a package deal in that they provide consultancy and advisory services together with the loan. A loan is granted only after thorough investigation of the project and careful screening of the applicant. Both have well-established consultancy units within their organisations, and they offer training programmes to small businessmen and provide assistance in product promotions through trade exhibitions and fairs. In addition, the Scottish Development Agency also tries to secure contracts from larger corporations and to pass them over to small firms.

Any agency that is set up to assist small enterprises should adopt a flexible loan policy by accepting personal guarantees from applicants who have demonstrated proven skills and experience in running businesses and have a good reputation for efficiency and honest dealing. It may be advisable also to insist that small businessmen maintain business records, so that the credit agency can assess their progress and, more importantly, so that the entrepreneurs themselves can control and manage their businesses more effectively.

Extension Services and Training

Extension is the term used to describe an individual consultancy normally carried out at the place of business, away from the training centre, and aimed at providing advice of all kinds to owners or operators of small enterprises. The managers or owners of these enterprises often lack experience and education in their respective fields of endeavour and this results, in many instances, in ill-designed and unprofitable ventures. The overall objective of an extension service is to enable business people to improve their managerial, technical and vocational skills, and to help them analyse their problems themselves and thus develop methods of solving them.

Requirements and responsibilities of extension officers

The recruitment of extension officers will depend upon the type of consultancy services to be provided. They need not necessarily have a high level of education: preference should be given to candidates with business experience, but if they are not available it is perfectly possible to recruit high school graduates and train them as extension officers, thus providing an effective and economical service.

It is essential that the extension officers should be able and willing to communicate freely with small business people; they should be trained in a practical way with frequent exercises and field attachments and they must learn how to prepare reports and analyse business situations before taking up their positions in the field.

Extension officers must be willing and able to work with business people who may be less well-educated than themselves. The officer and his client should together analyse problems and identify solutions to them, so that the business person believes that he himself has played a part in deciding what needs to be done. He will thus be more willing to implement them, and more able in future to carry out the whole process without any assistance.

In an attempt to diagnose the problems and fundamental needs

of a business, extension officers should not only interview the managers thoroughly, but should also understand the actual running of the business. Where necessary, the information obtained in this way can be used as the basis of a case study depicting the problems as well as the opportunities of the enterprise. Analysis of these problems by extension staff is a useful form of in-service training and can then form the basis on which the extension officer will make clear cut recommendations.

Extension officers should attempt to assist the small businessman in every way possible to ensure the success of his enterprise. For instance, the officer must be capable of identifying any uneconomic concentration of assets in debtors, stocks or under-utilised machinery. The extension officer should also be capable of identifying sources of finance and raw materials as well as markets for the particular commodities. Extension officers must therefore maintain regular contact with other agencies who may be involved, and should be able to refer their business clients to any necessary sources of specialised advice or assistance. They must also work closely with banks or other institutions providing assistance to small business; the case of Saite Camara the Blacksmith (see page 79) dramatically illustrates the dangers of lending money without any accompanying regular advisory service.

Management of an extension services unit

Extension officers must be closely supervised in the field. A proper reporting system should be maintained and the reports submitted by the officers should reflect what improvements, if any, have taken place within their client enterprises over a specified period of time.

Whether the extension services should be provided free of charge depends on the policy and the structure of the unit. If it is administratively feasible a small fee may be levied to cover part of the administrative costs and to enhance the value of the service in the clients' eyes; this may be introduced to the client after an introductory period of service without charge. Clients who are totally resistant to change, like Ahmed the Grocer (see page 67), will probably drop out at this stage. Field experience suggests that some 70% of small business clients will pay a nominal fee for consultancy after a trial period, and those who will not are probably those who are least likely to benefit from it in any case.

Training

Extension services sometimes lead to the disclosure of management weaknesses, indicating certain common areas of deficiency. Classroom training, as opposed to individual extension services, can help improve the technical and vocational skills of some entrepreneurs. A man like Ranaivo the Building Contractor (see page 53) for instance, could probably benefit from a simple course in accounting and financial management, to complement his technical skill.* It is less certain that training can play a major part in changing basic attitudes, and it is doubtful whether training alone could lead people like the tile manufacturers of Gapura (see page 57) to work together in a co-operative rather than working on their own. In such a case, training must be combined with other incentives in an integrated package of assistance.

The first step in training is to identify the training needs of the small businessmen and to ensure that the type of training is suitable for their educational level.

One way of determining training needs is to conduct a survey by interviewing the businessmen themselves. There is a danger that the respondents may not be able to provide accurate answers to the questions; if they were asked to name their major problem, the majority of them would simply say that shortage of capital was the main problem. This may, in fact, not be the real problem at all. They may have excessive stocks of slow-moving items, or have given over-generous credit to their customers, thus tying up all their capital. The interviewers themselves should be trained to distinguish the apparent problem from the real problem.

On-the-spot observation provides another method of identifying training needs. The assessment and reports of the extension officers working in the field to provide consultancy services to small businessmen are very useful and valuable sources of information.

The content of any training programme must be relevant to the day-to-day operation of a business; various methods of training are available, such as case studies, lectures and tutorials, role play exercises and action learning. It is important to be aware of the level of literacy of the trainees, and to expose them only to whatever they are capable of learning. To ensure that training is effective and

* Two such publications written specifically for the small building contractor in developing countries have been published by Intermediate Technology Publications Ltd, 9 King Street, London WC2E 8HN, U.K. They are *Accounting and Book-keeping for the Small Business Contractor* and *Financial Planning for the Small Business Contractor*. Price £3.95 each in the U.K. See over for other relevant publications.

meaningful, it should be followed by extension services. Extension services and training are complementary. Neither activity can achieve its objective unless it is undertaken in conjunction with the other.

Other useful publications for the small businessman

Consultancy for Small Businesses by Dr Malcolm Harper. This manual is the result of a six-year experiment to provide an economic on-the-spot advisory service to small businesses in developing countries. It provides some solutions to the perennial problems of small-scale entrepreneurs.

£5.95 net

Business Arithmetic for Co-operatives and Other Small Businesses by Trevor Bottomley and the Co-operatives Panel of the Intermediate Technology Development Group. This manual is designed for the staff of co-operatives or anyone interested in learning or revising simple business calculations. Part I provides a revision of the basic rules of arithmetic so that the user can revise his knowledge and skill before going on to the more advanced calculations; Part II describes and explains the main calculations used in business organisation; the Appendix provides practical exercises.

£1.95 net

Both publications are available from Intermediate Technology Publications Ltd, 9 King Street, London WC2E 8HN, U.K.

Appropriate Technology

It is accepted that the industrialised countries are technologically more advanced than the developing countries. Traditional technology in developing countries appears to be less efficient because labour productivity is lower. One way to improve the standard of living of people in developing countries may be to bridge the technology gap between them and the developed countries through industrialisation, so long as the technology which is introduced is appropriate for existing conditions. This can be achieved in two different ways. An indigenous technology can be developed as rapidly as possible, as has been done in China. However, while this approach has the obvious advantages of natural growth, it may take too long, and the developing countries cannot wait if they want to achieve their objective of rapid industrialisation. The other way is to transfer technology from more industrialised countries to developing countries. So long as the technology is carefully selected and, where necessary, modified, the process of technology transfer can benefit the population as a whole.

Technology options

It should be understood that transfer of technology includes not only the transfer of machinery or factories, but also the transfer of 'software' in the form of expertise, and managerial and institutional arrangements which are essential for the growth of an innovative entrepreneurial class capable of taking advantage of these machines and factories.

There are two types of technology, namely, sophisticated or advanced technology and intermediate technology.

The choice of options, however, is not clear cut and is not necessarily mutually exclusive. Intermediate technology may be the answer in some situations while advanced technology may have to be used elsewhere. We shall use the term 'appropriate technology' to describe the best mix of the two options. Appropriate technology may be defined as technology appropriate to a country's factors of

production in that it maximises the use of those factors which are locally plentiful in most developing countries, such as labour and raw materials, while minimising the use of those which are locally scarce, such as capital and skilled management.

According to this definition, it may appear that an intermediate technology which is relatively unsophisticated and labour-intensive is most appropriate to the developing countries. In fact, this is not necessarily so since appropriate technology is not always 'intermediate'. In some industries, such as pharmaceuticals, only sophisticated capital-intensive techniques can produce a product of high enough quality to serve the purposes for which it is needed. On the other hand, there are products which have hitherto been considered impossible to make on a small scale with intermediate techniques which have turned out to be possible with just those techniques. For example, diesel engines are now being manufactured in India by small-scale manufacturers, such as Kisan Engines (see page 37), using relatively low level technology. The choice, therefore, is not straightforward, and every situation should be examined on its own merits within an overall policy of appropriate technology.

Intermediate versus advanced technology

It is unfortunate that many developing countries are not aware of intermediate technology, or that they deem it as an attempt by the industrialised countries to persuade them to accept second-hand or otherwise inferior machinery. Quite often the creation of intermediate technologies requires as much, if not more, ingenuity and technical expertise than the development of more sophisticated equipment. Moreover, the products made using intermediate technologies are not necessarily inferior in quality. Luxury cars which are produced largely by hand are in fact superior in many ways to cars manufactured in mass production capital-intensive factories.

The advantages of intermediate technology are:

1. Intermediate technology often utilises local and therefore accessible raw materials thereby avoiding additional imports which consume scarce foreign exchange. Advanced technology involves massive importation of machinery and sometimes also raw materials resulting in a large drainage of foreign exchange reserves. One school chalk factory in Nigeria not only uses foreign machinery but also imports gypsum, the material from

- which chalk is made, although the raw material and locally manufactured equipment is available.
2. Intermediate technology employs more labour per unit of scarce investment capital, whereas advanced technology is capital-intensive and does relatively little to solve the unemployment problem.
 3. Intermediate technology employs existing local skills and introduces new skills which can be easily acquired in a short period of time. It therefore builds a technology base which is essential for eventual technological takeoff. Advanced technology, on the other hand, employs foreign experts with few local operatives who may only push buttons and never really acquire significant skills, and hence there is very little effective technology transfer.
 4. Machines made with intermediate techniques can be serviced locally and the spare parts made in local workshops, thus providing valuable training for local artisans while at the same time ensuring continuous production. Advanced machines may not have local servicing facilities and breakdowns lead to long work stoppages as spare parts or experts have to be flown in from foreign countries, usually at a very high cost. In one developing country with a sophisticated oil refinery, business activities are frequently affected because of lack of petrol. The refinery often has to wait for spare parts to be flown in from Germany. Mutangangi Kagotho (see page 49), for instance, built his own equipment and could carry out all the necessary development and maintenance himself; massive assistance in the form of credit might lead even an experienced man like him to invest in machinery which was beyond his technical and organisational capacity.
 5. Intermediate technology usually fits into the existing social structure while advanced technology can sometimes be socially disruptive. The installation of large sophisticated sugar mills in Kenya has been accompanied by the massive relocation of villagers in order to make room for cultivation of sugar cane around the mill. This scale of cultivation is absolutely necessary if the mill is to be profitable. On the other hand, small-scale mills with simple, locally-made equipment are fed with cane from existing mixed farms. The mills employ more people and the social structure is not disrupted.
 6. Sophisticated factories in developing countries rarely operate at more than 30% of their capacity because of the poor supporting infrastructure, so that products become very expensive. For example, when a glass factory was established in Nigeria two large standby generators had to be installed for use during

power failures. Small factories using intermediate technology techniques may utilise local power sources and interruptions are less serious since the capital commitment is lower.

Developing countries should choose appropriate technologies, and should only opt for sophisticated technology after a careful and thorough study of alternatives indicates that the latter is appropriate in that special circumstance. In such an instance, local intermediate technology workshops should be encouraged to provide supporting and sub-contracting services.

Institutional suggestions

For a developing country to introduce the concept of appropriate technology and to achieve rapid industrialisation, it is suggested that a technology development centre should be established. Such an organisation can be charged with the responsibility of introducing intermediate technology to replace or supplement existing methods of production, and of developing appropriate technologies which will maximise the utilisation of local resources. The organisation should also serve as an information centre, providing information on the availability and the development of appropriate technologies both locally and overseas. The technology development centre could concentrate its activities on the following four broad areas:

1. *Upgrading traditional methods of production* One important aspect of improving local technology is to make techniques that are already in use more widely known so that they can be copied, or adapted by others. Beyond this, many traditional techniques can be improved by the application of modern knowledge and materials. The traditional method of kneading clay by walking on it can be improved by simply soaking the clay in pits. Similarly palm oil processing has been upgraded by the introduction of a simple mechanical digester in place of the old method of pounding the fruits with a pestle and mortar.
2. *Scaling down and redesigning high-cost technology* Brick plants, for instance, can be redesigned to produce 20,000 bricks per day instead of the 100,000 per day put out by a fully automated brick factory. The basic equipment of a hydraulic or pneumatic press is the same; the difference is that labour is used in place of automated flow-lines and specially designed lifting mechanisms. Similar successful adaptations include the

replacement of modern high capacity rotary kilns by smaller capacity vertical shaft kilns in cement plants.

3. *New product design* New products can be designed to bridge the gap between, for example, the giant combine harvester and the sickle. The National College of Agricultural Engineering at Silsoe designed 'The Snail' which may be able to fill the gap between the tractor and the hoe. There are numerous instances where modern machinery cannot be used in developing countries due to financial and other constraints, and yet primitive implements are increasingly unacceptable to those who must use them and unsuitable for improved agricultural practices.
4. *Establishing sophisticated technology* As was mentioned earlier, sophisticated technology may in some instances be appropriate and the technology development centre should screen applications and accept the establishment of such factories where it is appropriate. These might include the following:
 - a) In the electronic industry, a mass production factory may be established to produce transistors and other critical electronic components, which can be used by smaller labour-intensive firms in the manufacture of radios, televisions, computers and calculators. This system has been successfully implemented in India.
 - b) In some areas, common facilities can be built even when they are capital-intensive, especially if such facilities can significantly increase the quality and production capacity of surrounding small-scale factories. For example, high capacity kilns can be built to fire bricks and other ceramic products made by villagers with hand moulds.
 - c) Multi-nationals can be encouraged to set up mass production, capital-intensive factories, like automobile assembly plants, in the developing countries, on the understanding that such factories will subcontract the manufacture of components to local workshops. In this regard, the appropriate technology group should undertake the development of such components and assist local entrepreneurs to manufacture them.

Whenever necessary the centre may have to undertake the tasks of adaptive engineering, establishment of pilot plants, making of prototypes and helping entrepreneurs to establish the production units. The centre should be able to train the entrepreneurs and demonstrate the commercial viability of new technologies.

A technology development centre with its team of technical specialists has to keep in touch with existing and prospective

entrepreneurs and guide them in the selection of technology and machinery. The success of such a centre depends on its ability to work closely with other institutions in the country, such as research and development organisations, industrial extension services, and financial, technical and managerial training institutions, since entrepreneurs need these facilities for establishing their own units. The problem of Pipat Castings in Thailand (see page 33) was technical rather than financial, but very close co-ordination will be needed between the lending institution and the technology centre in order to ensure that the true nature of its problem is identified.

Conclusions

To encourage the adaptation and to effect the transfer of technology, it is suggested that:

1. Foreign machinery and processes should be introduced only after a careful and thorough study of the alternatives available.
2. Substitution of imported equipment and components by locally made indigenous products should take place gradually as the technological base of the country expands.
3. Care should be taken not to import oversized or highly sophisticated plant and machinery if it is not relevant to the country, or if only part of the capacity will be utilised while the remaining part of the plant will remain idle.
4. The purchase of second-hand machinery should be encouraged in industries where it is appropriate.
5. Innovators and inventors should be properly rewarded.
6. Appropriate technologies should be encouraged by incentives, such as subsidies, income tax rebates or tax holidays.
7. The use of appropriate technology should be promoted through open-house discussions, industrial clinics and training courses.

Organisation and Co-operation

An enterprise can adopt various forms of organisation. The simplest one is sole proprietorship which is not only the oldest form of organisation, but also the most prevalent among small enterprises. It covers not only single owner businesses, but also family concerns where no legal agreement has been made between the partners.

'Informal sector' enterprises are sole proprietorships, where the individual operating unit does not have a well-defined place of work and the business may not be of a continuous nature. According to the ILO/UNDP employment mission report on Kenya, the 'informal sector' has the following characteristics:

'It is the sector to which entry by new enterprises is comparatively easy, enterprises in this sector rely on indigenous resources and are family-owned, they operate on a small scale, in unregulated and competitive markets, and use labour-intensive and adapted technology; their workers have skills acquired outside the formal school system.'

It is evident that a sole proprietorship is easy to operate, requires relatively little capital and does not demand highly sophisticated managerial skills. In most developing countries, the vast majority of small businesses are sole proprietorships. This type of organisation often enjoys good informal labour relations and provides personalised services to its customers. However, one of the serious problems of sole proprietorship is that very often the enterprise ceases to operate once its proprietor dies since it has no existence independent of its owner. Sole proprietors have great difficulty in securing funds except from non-institutional sources.

A partnership is very similar to a sole proprietorship except that the enterprise is now jointly owned and controlled by more than one individual, thus providing more capital and management. However, unless there is a good understanding and co-operation among the partners, progress and growth of the enterprise will be very slow, and any disagreement may lead to dissolution and collapse.

The close-knit family system which is prevalent in many developing countries can be a useful base for mobilising more capital and labour than are at the disposal of the original entre-

preneur. But family involvement can often lead to disagreement: problems like those of Saite Camara the Blacksmith (see page 79) are all too familiar, and lead businessmen to resist requests for employment from family members in spite of considerable pressure.

One feature common to both forms of organisation is that in several countries, due to the difficulty of raising capital and establishing markets, they only survive at the mercy of the unscrupulous middlemen or 'Cukongs', as they are called in Indonesia, who more or less control the business either through credit or through their monopoly of the necessary markets or raw materials.

An enterprise can also take the form of an incorporated company. A company is a legal entity, and there are several advantages of incorporation as a limited company. First of all, the liability of the members is limited to the amount paid on the shares held by them. The risk of the business is shared among the shareholders instead of being held by an individual or the partners. On the death or bankruptcy of any shareholder, the continuity of the business is not affected. Any shareholder may dispose of his share of the business without affecting its continuity. However, incorporation requires paperwork and has to comply with government regulations and procedures. Management becomes more cumbersome, and confidential information becomes more difficult to protect. Whether an enterprise should take the form of a sole proprietorship, partnership or incorporated company depends upon the size and nature of the business, and in some countries useful attempts have been made to devise new forms of organisation especially for indigenous small enterprises.

Sometimes a small enterprise, whether it is a sole proprietorship, partnership or limited company, cannot undertake any useful marketing activity, because it is too small. Marketing activities are left in the hands of middlemen, who become not only the buyers of the products, but sometimes also the suppliers of the raw materials, and thus gain exclusive control over the small businessmen. In order to overcome this situation it may be necessary for a group of small businessmen to come together and form an association or co-operative to compete with the powerful traders and middlemen, in the same way as farmers form agricultural co-operatives to purchase inputs and process and market their crops. Co-operatives can be a powerful and important tool in the promotion of small-scale enterprises. Governments can help small businessmen by providing guidance and assistance as well as training in co-operative management.

The primary objective of co-operation is to help small units to

solve their problems in the area of production, by providing common facilities and machinery which are beyond the reach of individual small enterprises, by bulk purchasing of raw materials enabling the small producers to reduce production costs, and in helping to upgrade and standardise the products for local and international markets. Another advantage of forming a co-operative is that the members, through the organisation, can reach the sources of raw materials and the markets for their products directly, rather than buying or selling through middlemen. It is also more economical for extension officers to deal with co-operative organisations rather than with small businessmen themselves as unorganised individuals.

There are different types of co-operative. Depending on the needs of the members, they can form a co-operative credit union to help solve the problem of finance, or a group of producers can get together and form a producers' co-operative to help solve their marketing and supply problems.

The concept of co-operation is sound in principle, but in actual practice it is extremely difficult to implement. Problems such as poor management, mistrust among members, lack of control of the co-operative, and dishonesty of the manager or staff are very common in industrial as well as agricultural co-operatives. The best policy is not to force the small businessmen to form a co-operative. It must arise out of the needs of the small entrepreneurs who take the initiative to form such an organisation. No co-operative can be successful if it does not arise from the initiative of its members. It may be that even such a group as the tile makers of Gapura (see page 57) will have to be in far worse straits than the situation described in the case study before they will appreciate the benefits of co-operation.

Supporting Services

Industrial development of any backward country or area depends not only on direct programmes such as financial assistance, but also on supporting services which create the environment necessary for any meaningful industrial activity.

We can divide the supporting services into eight categories:

- Infra-structure development
- Supply of raw materials
- Establishment of information centres
- Incentives and tariff restrictions
- Assistance in imports
- Assistance in marketing
- Industrial estates
- Liaison and co-ordination with government departments.

1. Infra-structure development

The creation of infra-structure should not be equated with industrial activity; it should be looked upon as an input necessary for the generation of industrial activity on any reasonable scale in a hitherto underdeveloped area.

Infra-structure can be divided into two broad categories: the core or basic services and the supplementary services. The first category includes services like transport, power generation and distribution arrangements, and communications such as telephones, and efficient mail services. These basic services are essential before any industrial development can take place. The supplementary services consist of facilities such as industrial areas or estates, housing, schools, hospitals, banks and storage and warehousing facilities.

2. Supply of raw materials

Regular availability of raw materials at reasonable prices is a common problem faced by most small-scale industrial units in the developing countries. It thus becomes necessary for small industrial

units to purchase and stock more than adequate quantities of raw materials, which means locking up a substantial amount of scarce working capital in inventory. If the supply is erratic the entrepreneur is distracted from his main task of managing the unit. Hence there is a definite need for some kind of agency to undertake procurement and distribution of raw materials so that small industrial units are able to obtain their requirements regularly.

Depending upon the conditions prevailing and the political ideology of the country, such an agency can be undertaken either by the private or the public sector, or by both, so that there is no monopoly. However, for those items that are very scarce, it may be necessary for governments to have control over their distribution; it is also administratively more convenient to entrust the handling of such materials to a public sector trading organisation only so long as the administrative costs of running such an agency are sufficiently low to justify its existence. It should be noted that such a measure only ensures equitable distribution of the available quantity of raw materials and does not necessarily meet the industry's full requirements.

3. Establishment of information centres

Small-scale business people sometimes run into difficulties or do not find solutions to their problems partly because of their ignorance. They may not be aware of the assistance and services which are available to them. For example, the government may have a special financial or other assistance scheme for small entrepreneurs, some government regulations or tax policies may have an effect on small businessmen, or commercial banks may have various loan programmes available to small firms, but it is not easy to inform small business people of their existence.

Hence some sort of information centre may be established to collect and disseminate information of interest to small entrepreneurs. The information must be presented in such a way that it is easily understood by, and readily available to them. The types of information must include, among other things, government policy, rules and regulations concerning small businesses, training programmes offered by various institutions, alternative technology and production processes available, domestic and export market information, supply of machinery and raw materials, and government documentation requirements.

The information centre can publish monthly newsletters carrying

news about the latest legislation and policy changes, and innovations and technology related to small enterprises. The centre can disseminate information through mass media such as newspapers, radio or television, and particularly through training courses and extension officers. It can also serve as a meeting place for producers and buyers.

4. Incentives and tariff restrictions

Incentives are often given to local industries to protect them from competition from foreign firms. There are instances, however, where incentives for one sector of the economy turn out to be disincentives for others. For example, incentives designed primarily for large industries may not allow the smaller units to enjoy the same benefits. Small units may not be able to take advantage of fiscal incentives, thus making them less competitive. It is important to be aware of such situations and to remove any unintended discrimination against small enterprises by government development programmes. Small enterprises may even be given special incentives so that they can compete with foreign firms as well as with local large industries.

Incentives, however, must aim at helping the small firms to become more self-reliant and independent in the long run, and should avoid making them over-dependent on assistance so that incentives eventually become a form of subsidy. It is therefore advisable to make incentives temporary rather than permanent. Among the common types of incentives offered to small enterprises are tax holidays, exemption on import duties, conversion of tax into long term interest-free loans, and tariff protection.

5. Assistance with imports

Small enterprises import raw materials as well as machinery and equipment for the production of their products. The process of importing is time-consuming and the procedures involved can be very tedious and complicated. The activities required range from locating the foreign supplier to obtaining import licences, arranging for payment and delivery of goods, and customs inspection. Small-scale enterprises with limited financial and manpower resources often find it difficult to cope with these activities. Assistance can be provided in the form of bulk purchases on behalf of small enterprises, or help with individual orders when imports are

restricted. Preference may be given to small enterprises through special allocations although this often leads to the enterprises abandoning their legitimate business in order to trade in scarce imports.

6. Marketing assistance

As in the case of purchase of raw materials, small enterprises lack expertise in marketing their products. The government can assist them either by actually buying and selling their products, which is a short-term solution, or by creating a favourable environment to enable small enterprises to do the selling themselves. This strategy involves providing training, guidance, advice and assistance in promotion and marketing.

7. Industrial estates

Many governments have set up special industrial estates for small-scale enterprises. Physical facilities can be provided economically for a number of businesses at the same place, and other services such as common workshops, training, technical advice and consultancy or marketing assistance can also be more conveniently provided for a group of businesses than to the same number scattered in many different places.

These estates can often be very useful, but they are difficult to administer and relocation to an industrial estate may make it more difficult for a small enterprise to sell its goods or to attract the necessary labour, as shown by the cases of the Candy Factory in Ethiopia, the Leatherworks in Lesotho and the Printing Works in Pakistan (see pages 17, 21, 69).

Industrial estates, like credit, can be dangerous if used indiscriminately. Physical facilities of this sort are a useful part of any assistance programme, but they must be made available only to such enterprises as can really benefit from them, and not merely to those which appear to need better buildings.

8. Liaison and co-ordination with government departments

It has been argued that the government should remove restrictions and allow small enterprises to flourish on their own without help. However, this is not practical. Politically governments must be seen

to show concern for the small enterprises, as in the case of Great Britain today. Furthermore, the government has a responsibility to assist and develop small industries as they contribute substantially towards employment as well as national output.

It is therefore advisable to have an agency set up to assist small enterprises in dealing with various government departments, such as obtaining licences and filling out documents. Such agencies can also help the small businesses on legal matters. The agency should operate in the same way as a travel agency: administrative and government requirements and procedures are handled on behalf of the small businessmen, so that they can concentrate their efforts on the actual running and operation of their businesses.

An agency like this should, of course, be closely related to any information centre. The whole 'package' of financial, training and technical information and supply and marketing services must be co-ordinated and integrated as part of a national plan to assist small enterprise.

The vital entrepreneurial role of the individual must not, however, be smothered by assistance programmes which are too generous or too comprehensive. Mr Banda in Sri Lanka (see page 61) virtually ceased to manage his own water colour paint business, and as a result he was incapable of responding to the new markets and products which were made available to him. External assistance must develop the ability of the entrepreneur rather than supplant it.

Quarterly Journal—Appropriate Technology

Conventional technical and scientific journals may be difficult for the layman to understand, but the technologies described in *Appropriate Technology* are essentially simple and easily understood by most people, without specialist knowledge. In addition, most technical articles are accompanied by sketches, photographs and working diagrams. For those interested in the Intermediate Technology Development Group, each issue of the journal has a special section, 'I.T. News', reporting on the progress of projects, consultancies and other aspects of the Group's work.

Appropriate Technology is for men and women working at all levels in the development field. Through this journal a real and practical exchange of information takes place, keeping people in touch with progress and innovations being made all over the world.

The following are articles from past issues:

- Design for a Simple Effective Baby Incubator
- The Lorena Mudstove—A Wood Conserving Cookstove
- Where Shall We Dig the Well?
- Small-Scale Paper Making
- An Overhead Treadle Lathe in the Windward Islands

What reviewers say:

'If you are working in a developing country and can afford only one journal, this is the one to get. Highly recommended.'

Ken Darrow & Rick Pam, 'Appropriate Technology Sourcebook', Volunteers in Asia

'The more I see of *Appropriate Technology*, the more impressed I am with its contents, editorial standards and no-nonsense production.'

Artur Isenberg, Editor, 'Kidma'

'Excellent and well-deserved reputation.'

Alternative Sources of Energy

'Extremely good and informative publication, that has turned out to be one of our most important sources of reference.'

Inglesea Evangelica Luterana en el Peru

Orders and Prices (as from April 1, 1979)

Subscriptions: £6.50, airmail; £5.00, U.K., Europe and surface mail. Back numbers and single copies (except Vol. 1, Nos. 1-4) are available at £1.25 per issue U.K., Europe and surface mail, or £1.65 airmail. Microfiche editions of complete Volumes 1, 2, 3 and 4 are available at £5.00 per volume (4 issues), including postage.

All orders (except those from U.S. and Canada) should be sent to: Intermediate Technology Publications Ltd, 9 King Street, London WC2E 8HN. Publications list available on request.

Orders from U.S. and Canada should be sent to our North American agents: International Scholarly Book Services Inc., P.O. Box 555, Forest Grove, Oregon 97116, U.S.A.

North American prices are as follows: Subscription \$12.50; single copies and back numbers: \$3.50 per issue; microfiche: \$12.50 per complete volume.