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THE ROLE OF SMALL-SCALE INDUSTRY IN OVER-ALL INDUSTRIAL
DEVELOPMENT STRATEGY

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TABLE OF CONTENTS

	<u>Page</u>
Integrated development strategy	1
Economic factors	2
Socio-economic factors	4
(a) Entrepreneurship development	5
(b) Industrial dispersal	5
Government's role in small industry development.	7



THE ROLE OF SMALL-SCALE INDUSTRY IN OVER-ALL INDUSTRIAL DEVELOPMENT STRATEGY

It is often stated that the scope and amount of resources to be allocated to small industry development in over-all industrialization programmes of developing countries is a matter for each government to decide, taking into account the nation's resources and potentialities and its economic, social and political objectives. This statement is undoubtedly correct, but, while the decisions on the role of small-scale industry may be different, most of the criteria to be considered in evolving policy decisions are the same. The purpose of this paper is to discuss some of the more important of these criteria.

The term "small-scale industry" is used in this paper to refer to manufacturing establishments with modest capital investment and employment. The size of capital investment and employment which demarcates small-scale industry from medium-sized and large-scale industry is obviously a relative notion varying from country to country depending on the level of industrial development and other relevant factors. While size is the main criterion for defining small-scale industries, it is by their modern characteristics that they are distinguished from traditional industries such as handicrafts and artisan trades.^{1/}

Integrated development strategy

A crucial question confronting countries in the early stages of industrial development is the relative role which should be assigned to the different sectors in over-all development strategy. The choice is very difficult in view of the severe limitations on resources. Often socio-economic and political factors make the problem even more complicated. In many developing countries, large industries have become synonymous with industrial progress and the establishment of giant industrial undertakings

^{1/} See "The Definition of Small-scale Industry", by P.C. Alexander.

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is treated as a symbol of national prestige. Sometimes aggressive "sales tactics" of foreign firms supplying machinery, equipment and know-how induce the developing countries to establish industries which may not be fully economic or of the right priority. In some countries, small industries are treated as only "second best" among the alternatives for industrial development. In some others, small industries are confused with traditional crafts, which leads to an incorrect assessment of the role of both sectors in industrial development.

The place of different sectors of industry in over-all development is ultimately to be decided by their respective contributions to economic development. Their role should be assessed in terms of complementarity with each other and not competition with each other. In a sound industrial development strategy there should be no question of developing one sector in preference to another or instead of another. Industrial development is a total concept in which traditional, small and large sectors coexist and are linked together in complementary relationships.

Economic factors

The contribution of modern small-scale industries to the economic development of developing countries has been discussed adequately in several treatises and books and it is not proposed to describe it in detail in this paper. It would be sufficient to list the most important factors. These are:

1. providing new employment opportunities;
2. introducing new products and helping in diversifying productive activity;
3. facilitating speedy substitution of imported manufactures;
4. developing new technical skills;
5. helping in exports of commodities with special production advantages;
6. helping in capital formation;

7. promoting capital savings;
8. contributing to the efficiency and economy of large industries by manufacturing parts and components and performing certain operations for large industries at a lower cost.

Some of these factors may be predominant in one country while relatively unimportant in another. In taking decisions on the role to be assigned to small industry development, the authorities responsible for industrial planning should take into account the importance of these different factors in the context of the country's over-all economic development.

In any economy, whether developing or industrial, two groups of modern small industries will always have a place. They are (i) industries where production on a small-scale basis presents decisive competitive advantages over production on a large scale; (ii) industries where smallness is only a stage of growth for the unit concerned. One of the major tasks of small industry planning is to identify the types of industries which satisfy these criteria with reference to location, availability of resources and other such factors and to encourage their development.^{2/}

^{2/} Staley and Morse in their book, Modern Small Industry for Developing Countries (McGraw Hill, New York, 1965, pages 100-101), have discussed the forces favouring large and small industries. They have listed the following among the factors which give competitive advantages to small plants:

1. Physical engineering relationships. Products which are light, small and require only moderate precision are generally made on light equipment and by relatively simple assembly operations for which the principle of multiples is achieved at a low volume of output.
2. Products in which skilled labour or high precision are critical.
3. Mass production of specialized components or end items. Division of tasks permits specialized small firms to concentrate on high volume production of components for several large firms, no one of which requires a volume sufficient to sustain a specialized production capacity of its own.

(Footnote continued)

Socio-economic factors

While techno-economic viability is the main justification for small industry promotion, there are also socio-economic factors which support giving small industries an important role in over-all development strategy. The principal of these are the contributions which small industries make to the promotion of entrepreneurship and to the decentralized or dispersed growth of industries.

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4. Products made in small lots and short runs. Many products cannot be standardized or are varied to suit the requirements of different consumers. Other products have small total markets and cannot bear their share of large firm overheads.
 5. Locational factors and transfer costs. Scale of plant tends to be limited for products whose high transfer costs confine them to a local or regional market and for the processing of resources which are widely scattered and difficult to concentrate in unprocessed form because of perishability or high transfer costs.
 6. Technical excellence in design or innovation in specialized products. Engineers well versed in marketing and in adjusting product development to specialized consumer needs are prominent among the founders of many of the small United States electronics companies which have had remarkable success and growth histories.
 7. Personal relations in the small firm. Close knit management worker relations are frequently cited as the basis for low labour turn-over and high productivity, while close knit management teams often achieve more effective and detailed collaboration than is common in larger, more formalized organizations.
 8. Operation flexibility and lower overheads.
 9. Selling services. Special attention, extra quality, speed, provision of technical knowledge along with a sales contract: these are key ingredients of many successful small manufacturing enterprises. Extra executive attention can quickly be focused on important requests or opportunities, to which the top talent of the small firm is often better attuned than delegated decision-makers in a division or branch of a company.
 10. Rapid response to growth opportunities. Dynamically changing product patterns open many gaps which the small manufacturer with speed of decision and execution can meet ahead of a large competitor.

(a) Entrepreneurship development

Shortage of entrepreneurship is a basic problem of industrial development in all developing countries. This is the cumulative result of shortage of capital, lack of facilities for training and other conditions characteristic of under-developed economies. A common solution to this problem adopted by many developing countries has been to encourage joint ventures with foreign participation in capital and management. But foreign investors are generally interested only in large industries and since such ventures will be comparatively few in number, their influence in fostering indigenous entrepreneurs is rather limited. In most joint enterprises, management remains in the hands of the foreign participants for fairly long periods and the time needed to achieve full managerial control by indigenous entrepreneurs is generally very long. On the other hand, small-scale industries can be started and managed by people with relatively little capital and experience and can become a breeding and training ground for national entrepreneurs.

Experience in some developing countries clearly demonstrates the great potential of small industries in training of indigenous entrepreneurship. People with varying backgrounds and qualifications have started small enterprises - merchants, agriculturists, technicians, workers, and so on - and have over a period of time developed into successful managers of industry.^{3/}

An important role which small industry can play in the field of entrepreneurship training is in helping the transformation of the traditional artisans into skilled workers and managers-proprietors of modern manufacturing units. The overwhelming majority of people engaged in industrial activities in developing countries are the traditional artisans and they are the group affected most by the technological innovations which are part of the industrial-

^{3/} As an example, a study of 52 medium-sized enterprises (employing 50 to 250 workers) in Madras State in India, showed that 85 per cent started with less than 50 workers. A good number of them started as small repair shops with an investment of a few thousand rupees only. Fifteen of the entrepreneurs were formerly merchants, 12 were engineers, 6 factory workers, 5 artisans, 4 cultivators and 6 were of miscellaneous professions. Only 4 were people with experience as manufacturers. J.J. Berna, Industrial Entrepreneurship in Madras State, India, Stanford Research Institute, Asia Publishing House, 1960.

ization process. Thus, the curious paradox of industrialization in developing countries is that the only group of people with background and experience in industrial activities becomes its first victim. Modern technologies and industrialization processes have made the skills of the rural cobbler, carpenter and blacksmith obsolete and their services uneconomical. Thus, technological unemployment offsets some of the advantages of industrial development and creates in its wake serious socio-economic problems. Modern small-scale industries can help in such situations by providing opportunities and facilities to the traditional artisans to play a useful role in the new technological age. The traditional skill of the artisan can prove to be a great asset if he is given proper training in new tools, designs and techniques. There is abundant evidence that the artisan is quite capable of making quick adjustments and absorbing new skills and that small-scale industry development is a major force in cushioning off the impact of technological unemployment.

(b) Industrial dispersal

The role of small industries in industrial dispersal is as important as its role in the promotion of indigenous entrepreneurship. Balanced development of different regions of the country is an accepted principle of economic planning in most developing countries. Industrial dispersal or decentralized development of industries is recognized in most countries as an effective means of achieving this objective. In industrial countries, there are, in general, no physical obstacles preventing existing industries from moving from large cities to small towns or new entrepreneurs from locating their establishments in such areas because even the very small towns and semi-urban areas usually have the facilities necessary for industrial activities. The difficulties are rather of an economic and social nature and positive inducements, including tax concessions and industrial estates and areas, prove necessary to implement industrial decentralization policies. In most developing countries, physical and economic facilities are available only in the big cities and the tendency is for industries to concentrate in these areas. The establishment of

new industries in these areas creates severe strains on the limited infrastructure of the metropolis which even affect the existing industries. The common remedy for this situation is to provide counter-pulls in other areas to attract industries. This involves heavy social overhead expenditures and special programmes of financial incentives and concessions which may often be beyond the means of developing countries. As a result, policies of balanced regional development and dispersal of industries often remain unfulfilled. This has sometimes even political repercussions. Every region in the country is anxious to have its share in industrial progress and the backward regions will not be satisfied with the explanation that industries cannot be located there because of their backwardness. They are, in several developing countries, agitating for special efforts on the part of the central government to break the vicious cycle of backwardness. It is here that the role of small industries becomes very significant. Small industries can successfully make use of smaller concentrations of raw materials or limited markets and thus have a competitive edge over large industries in the matter of location. Some small industries may be able to make better use of certain kinds of skilled labour available in such locations. On the whole, there is greater locational flexibility in the case of small industries and, therefore, they are more suitable for semi-urban or even rural areas.

A warning must be entered here about stretching the argument of locational flexibility too far. It will be wrong to presume that small industries can be started anywhere without reference to locational factors. Availability of raw materials at economic rates, facilities of transport, communications, skilled labour and a good market are as important to small industries as to large industries. The special advantage of small industries is that most of them can be successfully operated even in conditions where these facilities are limited.

Government's role in small industry development

The importance which small industry development should have in over-all industrial development programmes depends on the development objectives and policies of each country and its own problems of industrialization. But

whatever may be the relative importance of small-scale industries, the governments concerned have to assume a major role in their promotion and development. No doubt small-scale industries should ultimately survive by their own competitive strength and viability, but, in the developing countries, circumstances demand and justify special programmes of promotion and assistance on the part of the government to permit their establishment, modernization and self-sustaining activity and growth.

While industries of all sizes are in need of support and assistance from public agencies in developing countries, the need for such assistance is greater for small industries on account of their basic handicaps. These are not only the weaknesses due to smallness, but also the limitations of the class of people who own the small industries. These limitations are common in all developing countries; the chief among them are difficulties in getting credit, raw materials, skilled workers, good factory accommodation and technical knowledge. A large industrialist may have to face some of these problems, but he usually has the resources to secure the services and facilities he needs for efficient management. In an industrial country a small entrepreneur with inadequate resources of his own does not suffer any serious handicaps on this ground because established institutions will generally take care of his needs. He can go to the banks for credit on easy terms. He will normally have little difficulties in getting factory buildings or in arranging facilities such as power, fuel, raw materials and transport. He will have no difficulties in getting advice on technical or marketing problems as there are private institutions to provide such facilities. But in developing countries, there are no such private institutions or agencies to provide these essential services and facilities and the small entrepreneur with his limited resources finds himself seriously handicapped on this account. It is here that the government has to step in with its promotional role.

Experience in developing countries which have been implementing development programmes for small industries clearly demonstrates that assistance has to be provided in an integrated and comprehensive manner if it is to be effective. This does not necessarily mean that the government should be the sole agency in providing all the measures of assistance needed by small industries. In some cases it may be adequate for the government to lend support to semi-public or private agencies in extending assistance measures for small industries. For example, the government need not undertake a programme of direct credit assistance to small entrepreneurs if private banks and other credit institutions can be encouraged by credit-guarantee schemes, subsidies on interest rates and similar supporting measures to advance loans to small industries. Private companies or co-operatives of small industrialists can be assisted by the government in establishing industrial estates to provide factory accommodation and common service facilities to small industries. Such government assistance may be in the form of allotment of government lands, extension of facilities for transport, communications, etc. or advance of loans on liberal terms. As regards technical services and counselling, training of workers and managers, it is usually necessary for the government itself to provide these as private agencies may not be forthcoming to undertake such responsibilities. Quite often the government's role need be only that of "pump-priming" as its initiative may encourage private agencies to assume such responsibilities in due course. In all cases, however, it is the duty of the government to ensure that small entrepreneurs get all the facilities and services they need in an integrated manner, whether these are provided by public agencies or private agencies, or by voluntary efforts of the entrepreneurs themselves.

Another major contribution which the government has to make in the promotion of small industries is to adopt proper legislation which will facilitate the growth of a healthy small industry sector as an integral part of the over-all industrial structure. In some developing countries, the Government adopts special incentives and measures of protection and tax relief for the artisan trades on the one hand and large industries on the other. Some of the protective measures for traditional trades prove to be positive

disincentives to their modernization and transformation into small-scale industries. Customs concessions, rebates in income taxes and other such measures are frequently designed to encourage the establishment of industries with relatively high minimum investment and employment. In certain countries, promotion efforts are principally directed towards attracting foreign investments. Thus, government policies of industrial development may militate against the growth of a middle group in the industrial structure, and revision of existing legislation or adoption of new laws may be a prerequisite to any programme of development of small-scale industries.

The role of the government in the promotion of small-scale industries as outlined in the preceding paragraphs has sometimes been criticized as too protective. Small-scale industries have been called a "spoon-fed" group which cannot survive without government support and the government itself has been criticized for interfering too much with private initiative. But these criticisms are based on an incorrect understanding of the nature of the government's role in this field. As stated earlier, one of the principal objectives of small industry development is to promote the emergence of a healthy group of private entrepreneurs. The government's role is limited to the extent and time needed to help these entrepreneurs to stand on their own. While the government measures of assistance may continue over a long period - and, for this reason, should be institutionalized - it will not be the same industrial units which will receive such assistance. As far as individual industries are concerned, assistance is given only until and for such time as it is needed. Experience shows that most small industries outgrow the stage of needing government assistance very quickly. But new entrepreneurs will need such assistance and thus the government's role of providing assistance continues.

Here again, the promotional role of the government will be progressively reduced as the country advances and private agencies and institutions come up to provide the services and facilities needed by industries.

Smallness does not confer any privileges or advantages in development programmes, but it is the duty of the government to ensure that smallness does not perpetuate any handicaps either.

