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DEVELOPMENT STRATEGY IN COUNTRIES
AT EARLY STAGES OF DEVELOPMENT

by

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I. DEVELOPMENT STRATEGY

1. The developing countries attribute the rising wealth of the technologically advanced nations to their successful industrialization, but appear to overlook that in these countries an agricultural revolution preceded industrial expansion, and that there was no pressing population problem. In the few instances, e.g. Ireland, where the land could not support the population, there were the underpopulated countries of the New World ready and willing to receive immigrants. The conditions under which economic development took place in nineteenth century Europe are altogether different from those now found in developing countries. If the latter territories are to attain economic maturity a different strategy must be employed; not only on account of changed world conditions, but to accelerate the process and to avoid past mistakes.

2. There are many different opinions on what constitutes the correct strategy in any particular case. However, it is generally agreed, the writer believes, that whichever form the strategy may take it should result in the balanced growth of all sectors of the economy. As each sector cannot grow at the same rate - agricultural development is a slow process while industrialization can be relatively rapid - the matter of priorities arises. To which sector of the economy should the bulk of the scarce resources be applied to achieve the greatest development effect? Obviously the degree of underdevelopment will affect the relative allocation of resources, but, in the writer's view, the prime objective of the attack, in all developing economies, should be to increase the income in the agricultural sector. This applies equally to countries with a present surplus of food as to those with a deficit.

3. The developing countries have not only a very high percentage of their populations engaged in agriculture, but frequently a substantial proportion of the agricultural families are living at subsistence level. The marginal savings of the sector are very small or even non-existent. As the extent of the domestic market, for manufactured goods, is directly related to the aggregate marginal savings, it is self-evident that unless

these savings are increased there will not be a market to support the manufacture of import substitutes. There is little prospect of a developing country being able to export consumer durables unless it also has a domestic market.

4. It may be argued, with some justification, that better distribution of the agricultural income would achieve the same result. That would only be true if the agriculture as presently practised in developing countries were efficient, and in general it is far from that. Under present conditions both equitable distribution of incomes and increased efficiency in the agricultural sector are essential for over-all economic growth.

Reasons for Industrialization

5. The question may well be asked: "Why should a country that successfully has developed its agriculture, to the extent that it is able to earn sufficient foreign exchange to purchase all the manufactured goods it requires, wish to industrialize?" There are, of course, many answers - the growing pressure of population, the physical limitations to agriculture, the danger of dependence on one or two major crops, and above all, perhaps, the revolution of rising expectations. To these, particularly in relation to an under-developed country, may be added the time factor, the rate of growth of population overtaking that of agricultural expansion. There are a few under-developed countries with a surplus of food grains, but there are also difficulties in finding an export market. Many of the grain deficient countries have not the foreign exchange to purchase foodstuffs. India, for example, cannot afford to buy surplus rice from Thailand.

6. The development of a progressive and efficient agricultural sector will, by implication, reduce the necessary employment on the land in almost every case. The displaced labour and the natural increment to the labour force must be absorbed in economically productive activities; otherwise the agricultural improvements rapidly will disappear, and the whole vicious spiral will recommence. Even although there may be a large foreign export sector, industry is the only section of the economy that possesses the actual, or potential, elasticity to absorb the redundant labour. Consequently after agricultural improvement and the upgrading of the rural infrastructure priority should be given to industrialization.

7. The approach to industrialization will be dependent, of course, upon the existing level of infrastructure, the capital allocations that can be made, the capacity to mobilize savings, the size of the domestic market, the availability of entrepreneurs and natural resources, and whether political thinking will allow the Government to participate in industry. Always assuming that the requisite administrative talent exists in the Government to effect the necessary promotional measures.

8. It is an axiom that industry cannot exist without capital. Capital is always regarded as a scarce resource, particular in developing countries, but the writer takes leave to doubt that it is quite as scarce as classical economists allege it to be. Certainly it frequently is in the hands of a class that has a vested interest in maintaining the status quo, or held by a mercantile class accustomed to high profits and quick returns. Neither of these groups are prepared to invest in industry unless they anticipate that their positions will be threatened, and are convinced of a stable Government.

9. The Government, therefore, must take positive and effective steps to ensure that a portion of the capital held by these classes (and often either hoarded or dissipated in conspicuous consumption) accrues to the economy by taxation and limitation of imports. A task that can be politically dangerous, and unless delicately controlled can set up inflationary pressures. At the same time measures must be introduced to make investment in industry attractive to both local and foreign capitalists.

Government Action

10. There are three major spheres of positive action open to a Government, all of which are closely inter-related. These are: (1) to stimulate local industry and to attract foreign investment by offering appropriate incentives (including technical aid); (2) to develop the infrastructure essential to industry; and (3) to participate in industrial ventures. It is usual to find that such action is needed concurrently in all three fields. Paradoxically, there is an area where negative action is needed. The ultimate test of a development policy is whether, or not,

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it has succeeded in raising the real national income. Any industrial venture which is not a commercial success will tend to decrease the real income, and is a waste of scarce resources. Government, therefore, must assume powers to prevent the establishment of any industry which cannot be clearly and unmistakably demonstrated to be beneficial to the economy. There, undoubtedly, will be cases where political expediency must override this restrictive measure, but these should be based on the ensuing social benefits and not on autarchical considerations.

11. The first step in the promotion of industrialization is for the government to decide what industries it can afford to promote. This decision must be based on the type and extent of resources, the size of the domestic market and the availability of skills. Capital is relatively unimportant; for if there is a prospect of establishing a profitable large-scale venture finance will be forthcoming. The World Bank has already complained of the dearth of creditworthy projects. The size of the domestic market will be the determining factor in most instances.

12. The classic theory that countries would maximize their incomes if each produced the goods for which it has a relative cost advantage, and traded these for products in which other countries have the relative cost advantage may be partially correct in respect of unrestricted trade between countries at approximately the same level of development. It cannot be true as between an underdeveloped and a highly industrialized country for the following reasons. The industrially advanced country already has a well developed domestic market capable of sustaining an economic scale of production, and increase in the total amount of production can be made at relatively low cost. The price at which it exports its surplus manufactures need not reflect the true cost. Most manufactured durables and semi-durables are the products of horizontally integrated industries. This complex does not exist in the industrializing country. There are tariff barriers to the free flow of trade. To say nothing of the quantum of research and skills which, over the years, has been built into the products of the developed country.

13. The industries which offer the best prospects in a developing economy are likely to be those that can (1) manufacture goods for which there is a domestic market of reasonable size that presently is supplied by importation; provided that the goods can be produced and sold at a price equal or less than that of the imported equivalent; (2) process materials which hitherto were exported in the crude state; (3) make use of self regenerating materials which otherwise would go to waste; and (4) produce goods with a high labour content for which there is an export market. Contrary to popular belief there is rarely any scope for choice between capital and labour-intensive methods in any particular industry. The size of the market will determine the scale of operation and consequently the technology to be employed. The latter should be the most up-to-date for the size of plant.

14. From the above list it will be necessary to choose projects which are not only commercially viable but also provide the greatest benefit to the economy. Such factors as the real value of the currency in relation to convertible currency, the current level of import duties and the extent of the foreign exchange reserves will affect the national profitability and hence the selection.

15. It usually will be necessary to offer certain inducements to prospective entrepreneurs to set up the selected industries. At first these incentives are likely to be of a wholly financial nature and might include such privileges as exemption from income or corporation tax for a specified period; relief from, or refund of, import duty on equipment and materials; a guaranteed allocation of foreign exchange for the purchase of equipment and essential materials; a bonus on goods exported; and even a guaranteed income for the first few years of operation. Almost always it will be necessary for the Government to make capital available on long-term loans at liberal interest rates, and, sometimes to guarantee loans contracted by entrepreneurs. If foreign capitalists are to be attracted the repatriation of profits and capital must be guaranteed, as well as compensation in the event of nationalization. As industrialization proceeds the government will find it necessary to provide training and consultancy services.

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16. The application of high import duties to protect domestic manufactures is a method that has been employed in some developing countries. It is not to be recommended. Although initially it may appear to be successful it is self-defeating in the long term, as it tends to perpetuate inefficient industries, leads to the formation of excess productive capacity in certain lines, and eventually to balance of payment problems. The stagnation of the economy of certain developing countries of Latin America can be attributed, in part at least, to a policy of import substitution behind high tariff barriers.

17. The provision of the inducements, listed above, means that government will not only have to set aside funds, but also to forgo part of its annual revenue. The necessity for the closest scrutiny of the projects qualifying for these privileges is obvious.

18. Just as in the case of agricultural development it was necessary to upgrade the infra-structure so it is with industry. Industry needs roads, water supply, electric power, transport, postal and telecommunications systems. Only the very largest industrial organizations can provide these for themselves. The government must arrange to make good the deficiencies. Fortunately the infra-structural improvements involving the greatest capital expenditure, water supply, electric power and transport, can serve both industry and agriculture. A convenient and economical means of supplying some of these essentials is in the establishment of industrial estates.

19. Every country has some industry. The common pattern in underdeveloped countries is a few relatively large, often foreign owned, establishments and many undertakings at handicraft level. The large firms can be left to look after themselves. The small concerns provide a reservoir of skills and entrepreneurial talent. They must be encouraged to expand by the provision of easy access to capital and advice. A distinction should be made between full-time units and cottage industries which are operative only in intervals between agricultural occupations. The latter do not possess a good potential for growth. The writer believes that as the income from agriculture increases the number of such undertakings will tend to diminish. The more efficient will change to full-time operation while

the rest will disappear. This is not to say that while they exist they should be denied assistance, but that the main effort to develop this sector should be directed towards converting the full-time cottage establishments or artisan workshops into small-scale industries. Usually this will mean that government must take steps to establish an industrial extension service together with facilities to supply raw materials and market the products.

20. A great deal has been written on whether a government should leave industry to the private sector or enter the field itself. There are two opposing schools of thought. Leaving aside ideological considerations, the balance of opinion is that industry is better left to private enterprise. The truth of the matter is that in a developing country the private sector is not in the position to raise the necessary capital nor to afford the long periods of gestation and low returns, for such projects as water supplies, generation of electric power and long-distance transport. If these necessities are to be provided government must do it, and make provision for them in its development budget.

21. There are, of course, industries of strategic importance which the domestic private sector could not be expected to operate on the scale that government considers necessary for national security, and for which foreign enterprise is not politically acceptable; and industries that government considers to be of immediate economic importance for which, on account of lack of experience or capital or the availability of more attractive opportunities, no interest is shown by the private sector. These are the legitimate fields for government involvement. Where a high tariff barrier exists it may be necessary for a government to set up an industrial unit to break a monopoly. For whichever reasons government may find it necessary and expedient to establish and operate industrial enterprises it is essential that they be run on commercial lines and not subject to bureaucratic control nor political pressures. The history of government enterprises in mixed economies has not been a happy one.

Other Competing Sectors

22. The other sectors of the economy competing for budget allocations are health, housing and education. Up to a few years ago it was the fairly general belief that education was the solution to the problem of under-development. The theory was that a country was underdeveloped because it was under-educated. This completely ignored the historical fact that the industrial revolution in Europe took place in an era of very low educational standards. There can be no question that a cadre of suitably educated personnel is an asset to any developing country. The vital question is how large should that body be. In general, developing countries tend to assign an importance to higher education out of proportion to their needs. In India and Nigeria it is estimated that at least fifty per cent of the professionally qualified personnel is unemployed. This not only represents a waste of resources, but creates a dissident group within the community, and increases social pressures in the urban areas. For these reasons, the writer considers that education should be accorded a low priority, and, in the early stages of development at least, should be work oriented.

23. Of the three, health, housing and education, the first mentioned is the most important. Even simple health measures can effect enormous benefits on the population which redound in increased productivity.

24. Housing is a difficult problem. In the context of a development budget housing means low-cost housing for workers. Private enterprise is always willing and able to build high-price housing, but, even in highly industrialized countries, cannot be induced to enter the low-price field. It, therefore, falls to government to undertake this work. This is a double load. Not only is there the cost of construction, but there is the necessity to augment the social services as well. To an extent government can reduce these costs by a carefully planned distribution of industry, but it cannot altogether eliminate them.

25. To summarize, it is the writer's opinion, that the resources that can be devoted to development should be allocated in accordance with the following priorities:

First Agricultural development
Second Upgrading of infrastructure
Third Industrial development
Fourth Health improvement
Fifth Housing
Sixth Education.

11. PROBLEMS OF INDUSTRIAL DEVELOPMENT

26. In the preceding part of this paper the measures to be taken by a government to stimulate overall economic development were indicated in general terms. It is now proposed to discuss in more detail the actions considered necessary to expand the indigenous industrial sector to be found in every country at the early stage of industrialization.

27. Any observer from an industrialized country first making contact with the indigenous industrial sector of a developing economy usually asks himself four questions: (1) "Why are the establishments so small?" (2) "Why are there so many of the same kind?"; (3) "Why are some industries not represented at all?"; (4) "Why are the products so often of low quality?". The answers to all of these are inter-related. The establishments are small because the market is small and because there are so many in the same line of business. There are so many in the same line because small-scale entrepreneurs are inclined to follow blindly any entrepreneur who appears to have achieved some measure of success. Furthermore, in developing countries, a specific trade often is traditional to a particular ethnic or religious group, and because the current scale of operation is such that it can be started with very little capital. The limited capital available to each entrepreneur precludes the use of up-to-date equipment, and, consequently, the manufacture or processing of certain classes of goods. The lack of capital makes necessary the reliance on traditional handicraft methods, and often the use of cheap, inferior materials. In the utility lines the domestic product frequently is of markedly lower quality than its imported equivalent. This in turn, even if there is a price differential in favour of the domestic product, tends to reduce the size of the available market, and maintains the vicious circle.

28. The foregoing cycle may be an over-simplification, but, at least, it underlines the deficiencies—entrepreneurship, capital, diversification, methods and quality — which must be made good if industry is to develop.

Stimulation of Entrepreneurship

2). Entrepreneurship has been defined as the capacity to assume risks. If this definition is correct, then the underdeveloped countries do not lack entrepreneurs. The number of ventures which have failed, or are dragging out an unprofitable existence, is evidence of that. Entrepreneurship really is the ability to assess and accept a calculated risk. There are thus two aspects. The assessment of risk can be taught, but the capacity to accept risk is a personal attribute. These two qualities are not necessarily found in one person. Industrially there is some truth in the quotation "Fools rush in where angels fear to tread".

30. Because there are two facets to real entrepreneurship the means employed to stimulate it must cater for these two sides. The first is to help the prospective entrepreneur to assess the extent of the risk. In countries at the early stage of industrialization this is a difficult task to accomplish as the concepts of what constitutes the total cost of a project and the cost structure of the product, in the small-scale sector at least, are not fully appreciated. However, much can be done in this direction by a government agency which readily can make available information on cost and sources of materials and equipment, locations for plants, domestic market demands and export possibilities; and is prepared to work out the commercial and technical feasibility of a project with the proposer. Such an agency should possess a series of fully detailed projects which it can present to a prospective entrepreneur.

31. The second is to attempt to reduce the potential risk that is inherent in all industrial ventures. Risk in this context ultimately means the risk to the capital of the entrepreneur. The methods of reducing this risk are by financial, technical, logistical and marketing assistance. The financial aid may consist of putting the entrepreneur in touch with a source of capital, but in most underdeveloped countries a more positive action is needed. It may take the form of a long- or medium-term loan at a liberal rate of interest, the provision of rented premises on an industrial estate, or the making available of equipment on hire or hire-purchase terms. Assistance in the form of loans should not be handled by the agency

responsible for making feasibility studies. It hardly can be expected to take a completely objective view of the projects it is prepared to sponsor. A bank would be the ideal institution to deal with this matter, but, in countries commencing industrialization, the system is not geared to the making of industrial loans. Until such time as a Development Bank is formed, the government should be prepared either to guarantee loans made to industrialists by the commercial banks, or to set up its own lending agency. Either method involves machinery to scrutinize loan applications to ensure that they are commercially sound and in accordance with the economic development policy. An industrial finance corporation is preferable to an industrial development corporation for this purpose as the latter is called upon to exercise many functions which are better kept separate from financing. Initially it will probably be necessary to cater only for small-scale industry. Proposers of large and medium scale projects are likely to be well able to assess the risks involved, and if they are in need of financial assistance it should not be given through the same organization as that dealing with the small-scale sector.

32. To make it less difficult for entrepreneurs to raise the capital they need does not reduce the overall commercial risk of the ventures. It merely spreads it. It is essential to supplement financial help with other forms of aid of which technical assistance is the most important. Indeed, financial assistance should be conditional on the adoption of improved procedures recommended or approved by the technical advisers to the lending agency. This implies that government must build up an organization to provide technical aid. The first steps might be to collect and disseminate information on technical matters appropriate to local industries, and to make arrangements for private consultants to deal with specific problems. Later the service should, indeed must, be expanded into an industrial extension service with research facilities. This might well be the main task of an industrial development board.

Procurement

33. In the developing countries it is common for small industrial undertakings to experience difficulties in connection with the procurement of imported materials and spare parts. The main obstacle is in obtaining

the foreign exchange (or import licence). It is the rule rather than the exception to find machinery idle on account of the lack of spares. Once a factory has been licensed to operate, and it is usual in these countries for a licence to be necessary, the granting of facilities to import essential replacement parts for machinery, up to a specified annual value, should be automatic. It may be necessary in respect of substantial imports of materials to exercise a more stringent control, particularly if the importer has been granted relief from import duty, but once satisfied the materials are for processing and not for re-sale, the permission to import should speedily be given.

34. The fault lies in the bureaucratic methods of government, and frequently in the lack of co-ordination between departments. Although the real remedy is to streamline government procedures, a development corporation greatly can assist by certifying the bona-fides of the applications, and in expediting the processing of the documents.

35. The majority of manufacturing industries depend on some imported, intermediate materials. Even if there is no difficulty or delay in obtaining an import licence, there is the time interval between placing the order and its receipt. Not only is this interval subject to great and unforeseeable variation, but frequently a great deal of time and energy is wasted in clearing the materials through customs. For these reasons and to ensure continuity of work manufacturers are forced to place orders for relatively large consignments; often for six-months or a years requirements at one time. The maintenance of a material inventory of this size besides being an unnecessary expense is a non-productive use of capital. There is little point in endeavouring to inculcate principles of inventory control when lead times are subject to a variation of well over one hundred percent.

36. It is not possible to influence suppliers' delivery times, but usually it is possible to reduce the period goods are retained in customs. Often this is due to an inappropriate classification system. The writer knows of one case where it was impossible to obtain customs clearance for a tool used to affix bolts or studs to concrete. Because a blank cartridge was

employed to provide the penetrating force the instrument was classed as a firearm. There are, however, a considerable number of intermediate products in common use. If an organization is set up to purchase and hold stocks of these items the above-mentioned difficulties are overcome. Commercial stockists in fact do this, but the often excessive profits naturally accrue to the dealer, and frequently the supplies are inadequate, highly priced and inequitably distributed. An agency of government established to provide a service of this nature can substantially assist the small-scale manufacturer and, in consequence, the economy. In many countries this is successfully done for fertilizers, seeds and agricultural implements through co-operatives. It is not yet common in the industrial field although it is known to be practiced in both India and Indonesia. Co-operatives, where they exist, are probably the best media; however such purchasing could be an appropriate function of a development corporation.

Marketing

37. Manufacturers in the small-scale sector almost invariably pay more attention to the mechanics of production than to the techniques of marketing. Rarely are salesmen employed to seek out bigger and better outlets. Goods are expected to sell themselves. This seldom happens. Sales are made principally to middlemen who by the size of their purchases and command of the channels of distribution are able to control the market and dictate prices. Frequently they handle competing imported lines which are more profitable and these are pushed at the expense of the local product. Higher CIF price and import duty hardly affect the issue. Imported articles have a cachet in underdeveloped countries.

38. There are very few manufactured articles that have remained entirely unchanged over a long period. Improvements in design and material are continually being made. Unless the manufacturer in the developing country keeps pace with these changes he is liable to find his market greatly reduced, if not altogether lost. One has only to look at the quality of the hand tools, for example, which are currently offered for sale in underdeveloped countries, to realize that it is only their low price and a certain inherent conservatism that makes them salable.

3. The assistance that the small manufacturer needs is: - (a) Finding larger and more profitable outlets, (b) the design of his product (including packaging) to bring it up-to-date, and (c) improving and standardizing the quality of his product. The last is the most important. Without a standard quality it is virtually impossible to organize marketing, particularly with reference to the export trade. In the opinion of the writer, the upgrading and standardization of the quality of domestic manufacturers of substantial volume should be the first problem to be attacked in the field of marketing assistance.

40. Quality is not easy to define; it depends on a number of factors, but, in the present context, the test is "Are the manufactures consistently satisfactory for the purpose intended?" In other words; are they made to an acceptable specification? An underdeveloped country cannot expect to produce its own standard specifications overnight. It can, of course, adopt the specifications of one or other of the highly industrialized countries. This is usually the best policy, particularly if there is a prospect of being able to export to one of these countries. There is, however, no legal compulsion on manufacturers to produce goods in accordance with standard specifications (except in so far as these goods may be subject to such legislative measures as Pure Food and Drug Acts, Factory Acts and the like). It is necessary, therefore, to encourage manufacturers to comply with voluntary standards. The award of a national quality mark which may be used only on goods of, or superior to, the national standard can assist in this connection.

41. In the case of a country of extreme underdevelopment the adoption of internationally acceptable standards may be premature, but the necessity to improve quality may be even more pressing than in a slightly more advanced country. Generally it will be found that substantial improvements in quality can be achieved by the introduction of elementary hygienic procedures in processing plants and by the choice of the correct materials in manufacturing units. To give two examples: The greater part of the olive oil produced in the Antalya Province of Turkey is unfit for human consumption on account of the conditions under which it is produced in numerous small mills. It can be used only for making soap. The best quality oil could have been made, using the

existing equipment, if the fruit storage areas and the plant had been kept scrupulously clean. In Indonesia a few of the factories making agricultural implements use for the cutting edges steel that cannot be hardened. The result is tools that quickly wear out and are difficult to sell.

42. Assistance in improving quality should be the joint responsibility of an extension service and a marketing organization: the former with regard to methods and materials, and the latter in the dissemination of information on the requirements of the market.

43. To assist the small-scale manufacturer to reach a wider market the marketing organization should arrange for domestic products to be as widely publicised as possible. This can be done by arranging exhibitions within the country; by including such goods in displays at trade fairs, airports and rail terminals, or by opening permanent display and sales premises at local centres. The national and local governments are potential purchasers on a large scale of this class of products. In some countries this market is reserved for the small-scale sector. While it is sound economic policy for a government to obtain its necessities, wherever possible, from local manufacturers, to make it an obligation to do so is wrong for it tends to make the suppliers less competitive. Small-scale industry should endeavour to supply the needs of government, but to establish undertakings with only that end in view appears to be wrong. Government policies can be subject to sudden changes, and there is always the danger of political pressure being exerted to direct orders to particular areas. There is a further point to be considered. Most governments are notoriously slow payers. Manufacturers often have to wait several months for their bills to be settled, and this the small-scale industrialist cannot afford to do.

Institutions and facilities

44. The degree of development, usually, will determine the type of institution or institutions - development corporation, co-operative, finance* corporation, development bank etc. - most suitable to dispense assistance. The writer considers that there are two basic principles to be observed, to separate financing from other forms of assistance, and to establish as few separate organizations as possible. The reasons in respect of financing

have already been given. As for the latter: there are tendencies for government staffed institutions to persist after the reason for their existence has vanished, and for a multiplicity of small organizations with only slightly different functions to be formed.

45. On account of the complexity - size and variety - of industry as compared with agriculture it is more difficult to form industrial co-operatives. Although such co-operatives, supported by a co-operative or development bank, could supply all the assistance needed for development. In the early stages of industrial expansion the entrepreneurs, in all but the traditional lines, are too few for co-operatives to be formed with any hope of providing the help required. Furthermore for co-operatives to be successful the initiative should come from the industrialists. To impose these institutions from above, unless there is personnel already trained in their management, reduces the chances of success.

46. For these reasons, the writer believes, two organizations should be established; a finance corporation to make loans, and a development corporation to provide the rest (exclusive of vocational training) of the assistance required. Both institutions to be autonomous, within the broad economic policy laid down by government, and, if possible their staffs drawn from banking, commerce and industry.

47. The function of the finance corporation would be to examine the applications for loans submitted to it by industrialists through the development corporation. The finance corporation would have before it completed studies, prepared by the development corporation, on the technical and commercial feasibility of the loan projects, and would grant or withhold a loan on consideration of these studies and the effect of the project on the national economy. Its viewpoint would be essentially that of a commercial bank prepared to issue short, medium and long-term loans.

48. The development corporation would have three broad groups of functions: - Promotion, implementation and legislation. The first would include the preparation of technical and commercial feasibility studies either on its own behalf in respect of branches of industry in line with the develop-

ment policy of government, or for prospective entrepreneurs: the collection and compilation of information likely to be of interest to industrialists; the arrangement of contacts between local industrialists and foreign investors; the organization of exhibitions and the operation of sales centres. The second would consist of an industrial advisory or extension service supported by research facilities; the establishment and management of industrial estates; the building of advance factories; the construction of warehouses and the stocking of common-user materials; the operation of plant hire or hire-purchase schemes, and, in certain cases, the supervision of credit granted by the finance corporation. The legislative function would be concerned with the application and operation of such instruments as a Pioneer Industries Act or an Enterprises act; the alienation of land for industrial purposes; leasehold and hire-purchase agreements.

49. It is neither desirable nor possible for a development corporation to be created to perform all these manifold activities right from the start. The organization should be sufficiently flexible to allow functions to be added as they are needed and staff becomes available. The preparation of feasibility studies for selected industries and the establishment of an advisory service should have priority over all others.

50. In Part One the types of industry are listed that are considered to offer the best prospects in an underdeveloped country. The question is sometimes asked: "Should not small-scale industry be oriented towards agriculture?" The writer does not believe it is possible to give a categorical answer. Certainly in a country where communications are difficult and the market is fragmented, industry, which under these circumstances undoubtedly will be small-scale, must rely principally on local materials which in the main will be agricultural. That it should be a supplier to agriculture is another matter. The industrial inputs of agriculture are fertilizers and implements; neither of which are the products of small-scale industry. It is true that some agricultural implements are made by small undertakings, even village blacksmiths, but the productivity is low and the quality often leaves much to be desired. There already is a tendency among these establishments

to enter the field of servicing. In such communities the small-scale industries should be directed towards meeting the needs of the local market e.g.: Bakeries, Rice and Flour milling, Oil expression, Weaving, Dressmaking, Tailoring, Tanning, Boot and Shoe making, Furniture making, Brick making, Cart building, Blacksmithing and the servicing of transport.

51. Where communications are good and there is a national market, small-scale industry will be less concerned with the processing of agricultural products, although it will still be carried on, particularly in relation to perishable products. The sector will tend, and indeed should be encouraged, to produce more durable items: oil lamps, cooking stoves, cooking utensils, office furniture, moulded plastic articles, spare parts for bicycles and even motor transport, coach building, assembly operations etc.

52. There is a no-doubt-understandable tendency among governments to seek easy and visible solutions to their industrial development problems. One that appeals to many is the creation of industrial estates. The line of thinking is: the device has been successful in both developed and developing countries; so why not here? Not all industrial estates, even in countries with great experience of them, are successful. The reasons are not far to seek. In such cases they are either incorrectly located, too large or do not supply the necessary services on the scale required. The scale can be too great or too small.

53. There is no doubt, in the writer's mind, that the industrial estate device can be successful in promoting the development of industry, particularly small-scale industry, in any developing country; provided it is designed in accordance with the needs of that country and the scale of industry it is intended to accommodate. The main impact of an industrial estate is on existing industry. It follows, therefore, that everything that is needed to help existing industry should be built into the estate, and available to the tenants at a price they can afford to pay. If, as usually is the case in a developing country, the estate is for small-scale industry then it is necessary to provide workplace accommodation in advance of the demand. Where advance factories have been constructed and failed to attract tenants, either the site of the estate has been badly chosen, or the cost of the accommodation is too high.

54. The full benefit of any financial and technical assistance granted to any industry cannot be realized unless there are available adequate labour, with the appropriate skills, and competent management. In some cases an industry may be able to train its labour, but usually the task will devolve on government.

55. The changes in the industrial structure will involve the increase in the mechanization of existing industries and the introduction of new ones. In general an increase in the extent of mechanization does not demand a radical change in skills. The experience already acquired is relatively easy to transfer from the old method of working to the new. This may be arranged by demonstrations which, frequently, the suppliers of the equipment are prepared to provide, or by arranging for a few key workers to obtain operational experience on similar equipment in some larger plant.

Training

56. The expansion of the industrial sector will call for an increase in the number of skilled personnel, although the proportion of skilled to semi-skilled (and unskilled) probably will decrease. The newly established and the enlarged enterprises will tend to draw tradesmen from the smaller undertakings which are not able to pay comparable wages. The loss of the latter cannot quickly be made good by recruiting and training raw labour. There is consequently the need for a supply of labour that has received basic craft training. This can be provided by vocational schools.

57. There are three points the writer would like to make in relation to vocational schools. The first is that the schools should cater for the actual needs of the existing and immediately foreseeable industries both qualitatively and quantitatively. There are pronounced tendencies to provide a wider-than-necessary curricula, and for too many students to be trained. In one instance a Principal boasted to the writer that as many as 30% of his trainees found jobs in their trades. Secondly, the schools should not replace the apprenticeship system. Lastly, facilities should be provided for the upgrading of skills and the introduction of new skills to workers in industry.

58. Some form of apprenticeship exists within the industries in most developing countries, yet there is always a relatively large number of in-

adequately trained persons engaged in skilled occupations. This is due, in part, to some employers regarding apprentices as a cheap form of labour to be discarded when it attains a level of skill and be able to demand higher wages. The "apprentice" then enters the labour market as a "tradesman". Because he is prepared to accept wages lower than the prevailing rate for skilled workers he is usually able to find employment. This in turn depresses the rate for real tradesmen and so perpetuates the system. A national apprentice scheme could regulate the conditions of employment and the training of apprentices; increase the levels of technical competence; and reduce the number of vocational schools needed.

59. The upgrading of the standard of management is perhaps the most difficult, particularly in regard to the sector that is most in need - the small-scale undertakings. The average owner, owner-manager or manager of a small-scale industrial enterprise does not realize his managerial techniques are in need of improvement. He is more likely than not to resent any suggestion to that effect. The methods that have been tried in relation to large- and medium-scale industry are not applicable to the small-scale sector in developing countries. Course, seminars, discussion groups etc., do not work for the simple reason that the small-scale entrepreneur is too busy, and there is no one that he can delegate to attend.

60. In the small-scale sector there is no distinction between top and middle management. There is often an attenuated form at shop-floor level, but generally management is concentrated in one person. The absence of specialization in this function is the most easily defined characteristic of small-scale industry. If the level of management is to be improved, the first thing is to determine what, under the circumstances, are the main attributes of a successful manager. There is little doubt that these are leadership, an ability to control costs and a sense of the market. Nothing, or at least very little, can be done to inculcate leadership. It is possible to develop the ability to control costs and, perhaps to a lesser extent, a flair for the market.

61. To most small-scale entrepreneurs accounting procedures are merely the collection of data to enable an audit to be made, or for taxation purposes. The concepts of using itemized costs to price his products, and to control the cost of production are foreign to him. This, however, can be taught. The first approach is in the keeping of simple but complete and accurate accounts. An effective method used in Nigeria was to refuse a loan to any concern in which the accounts were not kept in such a form as to show the current financial position. Applicants who failed to qualify for this reason were instructed in the proper methods by visiting inspectors from the Department of Commerce and Industry. Once the accounts were in order the application was eligible for reconsideration. Periodic inspections also were made to ensure that borrowers continued to keep their books in the correct form. Another method is by the publication of accounting instructions in clear, non-technical language. Cost analysis is not really applicable to the small-scale sector as it ultimately depends on the computation of standard times, or on the comparison of coefficients of performance which are not available in a developing economy. It is sufficient if manufacturing costs can be broken down by operations that permit comparison with past performance. This can be done by the issue of instructional booklets. In both instances the preparation and publication of the pamphlets is an appropriate task for the development corporation. Anything that goes to show an entrepreneur that he is not making as large a profit as he might has an immediate impact.

62. It may be more difficult to develop a feeling for the market. This is largely intuitive, but, at least, the latest market information and trends can be made available to the entrepreneur through the promotional section of the industrial development corporation.

63. There is another field where training is of great importance; at shop-floor management level. In the small-scale sector in developing countries the foreman occupies an unique position. Very frequently he is what would correspond to the technical or production manager in a larger organization. Often he is the only technically experienced person in the firm, for more often than not the owner or owner-manager has only commercial training. He

is a key factor in training workers in new procedures. Evening courses in men management, blue-print reading, workshop calculations and new production methods can pay good dividends. Indeed, if time or finance does not run to the provision of both vocational schools and foremen training, preference should be given to the latter.

6A. A complaint frequently made by members of business consultancy firms is that their terms of reference prevent them from re-organizing the top management - the board of directors - of the company of their client, where reform often is most necessary. There is a parallel between this situation and governmental assistance to industry. A government may be ready and eager to help industry, but is it really organized to do so? Far too often measures which are excellent in themselves are so hedged about by departmental interpretations and restrictions that they become of little value. Conflict between departments can nullify concessions; what one gives another takes away. If a government is seriously concerned to develop industry, it first must look at itself.

Appendix
Factors affecting the
G. N. P.

Factor	Class
Size of traditional agricultural sector	I
Character of basic social organization	I
Extent of literacy	I
Extent of mass communication	I
Significance of indigenous middle class	I
Degree of modernization of outlook	I
Effectiveness of democratic institutions	II
Freedom of political opposition and press	II
Degree of fractionalization of political parties	II
Basis of political party system	II
Strength of labour movement	II
Degree of administrative efficiency	II
Degree of centralization of political power	II
Extent of social mobility	II
Strength of traditional elite	III
Extent of nationalism and national unity	III
Extent of leadership commitment to development	III
Extent of government participation in economic activity	III
Degree of social tension	IV
Stability of political system	IV

66% of inter-country variations attributable to these four classes of factors

- 41.5% attributable to class I
- 18.5% attributable to class II
- 4.8% attributable to class III
- 1.4% attributable to class IV



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