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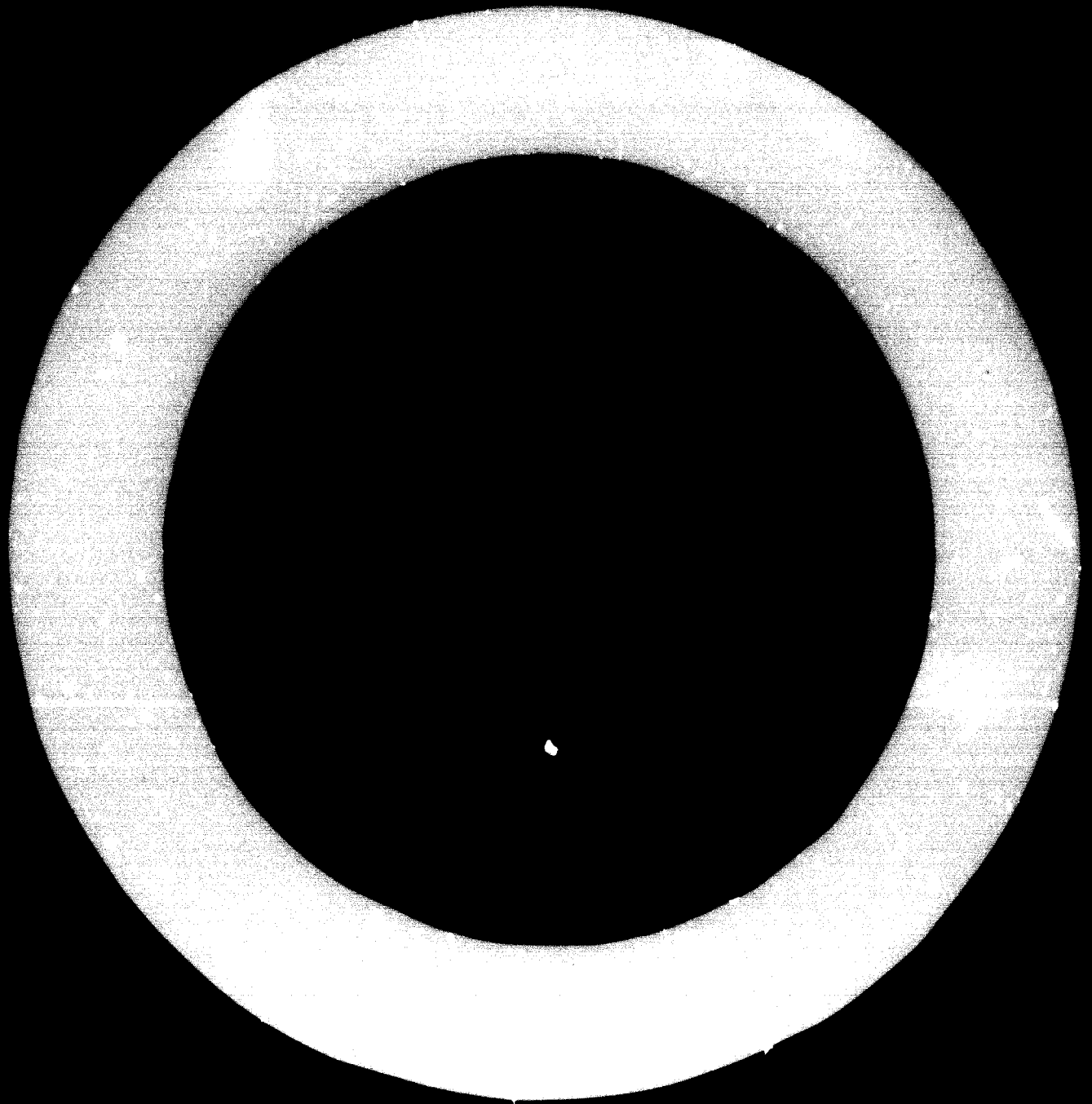
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THE ROLE OF SMALL-SCALE INDUSTRY IN AFRICAN INDUSTRIAL DEVELOPMENT

The East African Experience

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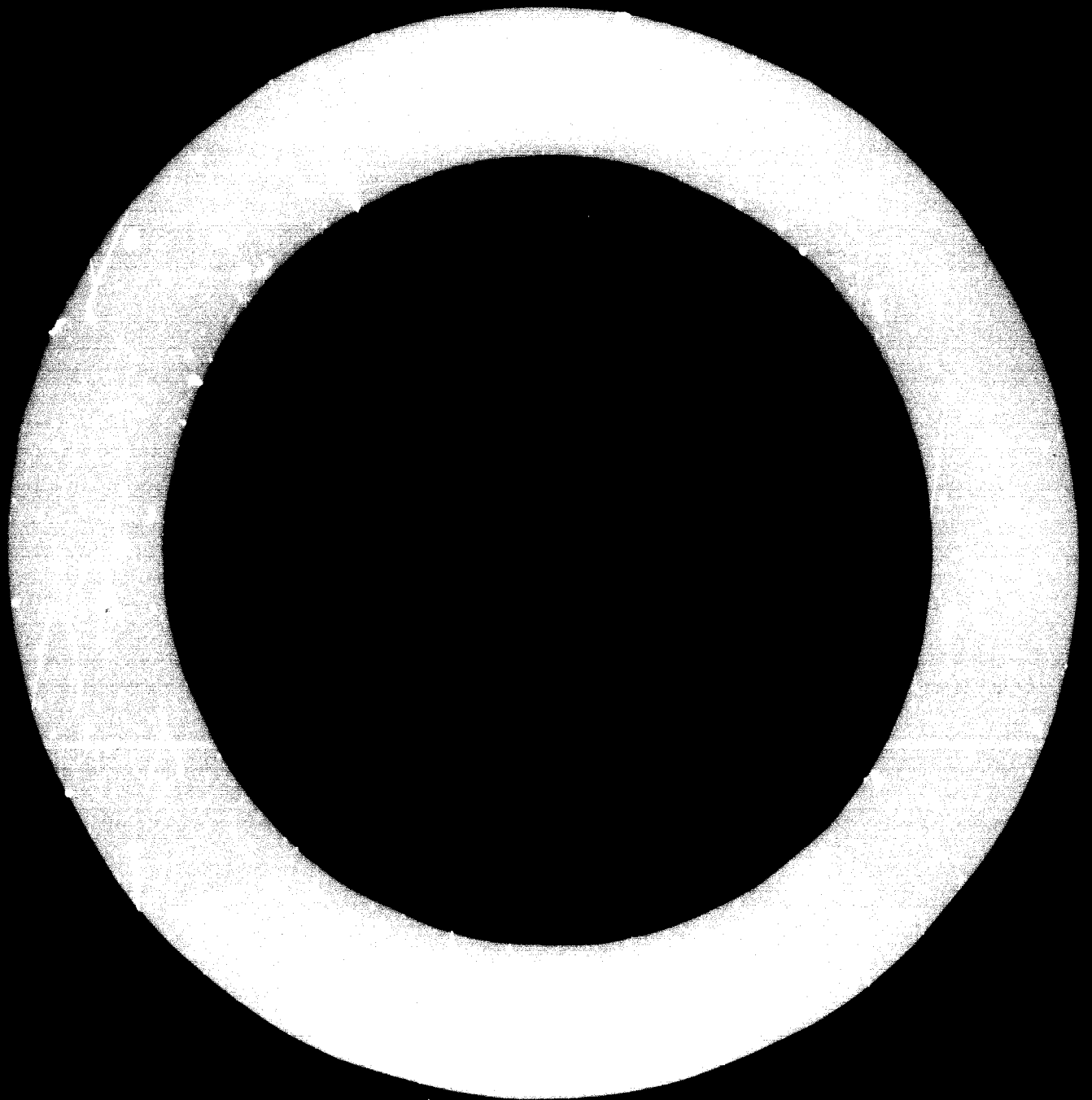
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INDUSTRY

Industrial development in the East African countries is of relatively recent origin. In a statistical survey of the economic activities of the three countries reveals that the proportion of it is accounted for by agriculture and allied activities. Of the three countries, the share of manufacturing in the G.D.P. of Kenya has averaged about 9.5 per cent in the last ten years. The value of manufacturing in Kenya was only \$4.7 million in 1947, but rose to \$18.8 million in 1956 and to \$24.38 million in 1963. In Uganda the value of manufacturing (including manufacture of food products and miscellaneous manufacturing, but excluding sugar manufacture, cotton ginning and coffee curing) fell from \$7.1 million in 1956 to \$5.9 million in 1962. In Tanganyika the value of manufacturing has risen from \$4.0 million in 1956 to \$8.5 million in 1962. The share of manufacturing in the G.D.P. of Uganda was about 5 per cent in 1956, but decreased to 4 per cent in 1962. The corresponding figures for Tanganyika in 1956 and 1962 were 2.6 per cent and 4.1 per cent respectively. In Kenya employment in private sector manufacturing and repairs was 55.4 thousand in 1956, but decreased to 40.7 thousand in 1963. In Uganda reported African employment in manufacturing was 24.8 thousand in 1956, and 24.6 thousand in 1962. In Tanganyika reported African employment in manufacturing was 18.9 thousand in 1956 and 25.0 thousand in 1962.

▲ Among the three countries, Kenya's manufacturing sectors accounts for a relatively larger share of the total G.D.P. than those of Uganda and Tanganyika. Though the value of manufacturing output in Tanganyika more than doubled between 1956 and 1962, its percentage share of G.D.P. was only 4.1, as against 9.4 per cent for Kenya. In Uganda the share of manufacturing in the G.D.P. has actually decreased from 5 per cent in 1956 to 4 per cent in 1962.

In Kenya, though the value of manufacturing has risen steadily since 1956, there has been a slowing down of gross capital formation in the private manufacturing sector. A major problem now facing this sector in Kenya is the emergence of inter-territorial friction concerning the value and composition of her exports to Uganda and Tanganyika.

* Includes Kenya, Uganda and Tanganyika. Statistical information relating to Zanzibar which is now a part of the United Republic of Tanganyika and Zanzibar is sketchy, and is not readily available.

most of the large manufacturing establishments in Kenya have hitherto based their production programmes on the existence of the East African common market. With the appearance of strains within the common market a few manufacturers have branched out into the other two countries. However, most establishments in East Africa cannot afford to replicate production facilities in this way, and hence are facing a somewhat uncertain future. While the common market may still continue to exist as a result of continued negotiations between the three countries, it is not out of place to pose the question whether the three countries should not plan on promoting industries which cater mainly for the national, rather than the whole East African market. If a good many future manufacturing establishments have to depend mainly on a national market, there may have to be some fresh thinking on the scale of output they may have to adopt. In this context, it is not inconceivable that relatively smaller industries may figure prominently in the industrial development of the future. However, it is not the purpose of this paper either to anticipate any further difficulties within the common market, or to use any such problems as the sole or, even the main, justification for fostering the development of the small industry sector.

Industrial Development - Some Basic Issues

1. The role of small industry in the industrial development of East Africa has to be examined not only in relation to the potential part it can play in the expansion of the manufacturing sector, but in relation to over-all economic development. Generally speaking, the considerations which are uppermost in the minds of industrial planners are a progressive extension of the scope of manufacturing activity, the creation of skills, and the widening of employment opportunities. While these are the more obvious end-results of industrial development, there is a need to approach a programme of small industry development from a much broader angle. This is to regard small industry development as a major means of developing and diffusing technological consciousness on a scale that has not hitherto been attempted.

2. The arguments for fostering industrial sector in developing countries are by now well-known and do not bear repetition here. There is no doubt that the rapid development of manufacturing activity occupies a prominent place in the development programmes of most developing nations. However, there is often a tendency to look at programmes for the manufacturing sector mainly in aggregative terms, with emphasis on such aspects as capital investment, value of output, quantum of imports replaced etc. The underlying theme of the aggregative approach is to increase the share of manufacturing in the national product. While a successful programme of industrial development may indeed make a contribution in this direction, some very vital issues such as the detailed breakdown of industrial programmes in terms of size of establishments, employment generation and diffusion, the tapping of local sources of capital - however modest they may be, the adaptation of modern technology to fit in with local resource endowment in terms of capital, skills, and markets, and most significantly, the development of local enterprise etc. receive only marginal attention. In the process, even if industrial development proceeds according to plan in aggregative terms, its impact on the economy often becomes severely restricted. A few large projects based on an almost wholesale importation of capital and know-how may emerge. Though sometimes there may be a token participation either by local governmental or private interests, major decisions are taken by overseas entrepreneurs, particularly in the matter of choice of techniques and location of industrial activity. There would be a concentration of activity in centres which have already proved their attraction in terms of external economies. But it is obvious that, while the contribution of such enterprises is significant, it will still be limited in the sense that it will have no impact in the matter of creating an industrial consciousness on a broad front. What will emerge is only selective bursts of industrial activity which will only have a marginal impact on the industrialization process. Industrial development of this type

will inevitably be motivated by the desire for quick profit, and will taper off, once the most lucrative fields have been exploited. Perhaps the most serious constraint to which such haphazard development would subject a developing economy is to perpetuate the 'enclaves' of development which were a characteristic feature of the colonial period.

The Approach to Industrialization

3. In this paper, it is assumed that the objective of industrial development is not merely the establishment of a limited number of choice projects, but the creation of conditions under which industrialization will be an ongoing process, reflecting itself in an ever-increasing range of manufacturing activities, some of which will grow into bigger and more complex enterprises. It is also assumed that considerations such as the creation of an industrial tradition on a nationwide basis (as opposed to one or two centres), a progressive diffusion of technological consciousness, and the effective permeation of the results of industrialization on other sectors of the economy will be paramount.

4. If industrialization is approached from this broader angle, many ingredients of the industrialization process will come into sharp focus. It could be possible to see, in clearer perspective, what specific programmes need to be followed in the different phases of industrialization. Several questions, perhaps obvious, nevertheless basic, suggest themselves in any preliminary thinking concerning industrialization. What is industrialization expected to achieve, on the assumption that a given amount of resources can be allocated to it? Should industrialization take the form of establishing enterprises with proven demand, or, should it proceed on the basis of anticipations concerning the future volume and range of demand for goods? Should the emphasis be on commercial feasibility or, in the alternative, on long-term overall advantages to the economy? If the latter, what is the size of the open or hidden element of subsidy that this calls for? Should there be a wholesale transplantation of technology from the more developed nations, or whether there should be an adaptation of technology to the pattern of resource availability in the country concerned? And finally, should industrial development programmes await the accumulation of agricultural surpluses, or whether a new pattern of resource allocation is to be evolved to speed up industrialization?

5. These questions are highly relevant to the pattern of industrial development that emerges in any developing country. It is inevitable, of course, that any emerging pattern would represent an intermixture of enterprises of different sizes, some of which necessarily have to employ the most modern techniques which generate relatively fewer

employment opportunities. But large enterprises, by their very nature are able to identify problems and devise solutions to them. Given the existence of suitable opportunities and incentives, they are able to come up with the necessary know-how, capital and organizational ability. However, small enterprises often start from scratch, and hence need to be assisted in various ways in the course of their development.

The Choice of Technology

6. The choice of technology in industrial development has perhaps not received the attention that it deserves. Too often in developing countries industrial development takes the form of creating technological replicas of the industrial establishments of the advanced countries. While this may provide the satisfaction of establishing the most 'modern' type of enterprises, it may not take account of the sharp differences that exist both in the supply of the different factors of production and their efficiency. In consequence, a technology which may be most appropriate in the context of a developed country gets transferred to a developing country, whose pattern of resource availability is radically different. The emphasis on productive efficiency and commercial feasibility will result in a choice, both of scale and technology, which fails to take cognizance of the differences in the production functions in the two situations. The result may well be that, instead of a pattern of industrial development that reflects the supply and the productivity of local resources, a limited number of technologically advanced enterprises emerge. While this is necessary and, indeed, unavoidable in some cases, an excessive preoccupation with efficiency in the initial stages may actually hamper the spread of industrialization. Industrial development will become narrowly based, and hence the creation of the necessary ingredients for a broad-based industrialization programme may go by default. Moreover, industrial development will depend heavily on external sources of capital and, by implication, little or no attempt would be made in the field of mobilizing domestic capital, however modest its size may be in the initial stages.

7. These comments on the general approach to industrialization are intended to bring into focus the importance of considering the details of a programme, with reference to such aspects as the number and size of establishments, their relative contributions to total product, the distribution of employment etc. The advantage of this approach is that it would help in differentiating between the progress achieved by a few select establishments, and the process of industrialization as such.

13. Structure of Industry in East Africa - 1957-1963

c. The present state of industrial development in East Africa offers some interesting contrasts to the situation obtaining in relatively more advanced countries. Using employment as a criterion, for example, it may be noted that in countries such as Switzerland, Argentina and Japan employment in establishments employing 11-50 persons as a percentage of total employment in establishments employing 11 or more persons, ranges from 27 to 38. In all these countries, the proportion of total employment accounted for by those employing 11-50 persons has shown a slight increase in the past 3 to 4 decades. The situation in East Africa shows some interesting differences. For example in Kenya in 1961, large manufacturing establishments i.e. those with 50 or more employees numbered 174 or 22 per cent of a total of 796, but accounted for 78 per cent of total employment in manufacturing, 80 per cent of the value of production and 82 per cent of net output. During the period 1957-61, the number of establishments employing 5-19 persons increased from 467 to 431, and those employing 20 - 49 persons decreased from 204 to 191. In the same period the number of establishments employing 50 or more persons increased from 169 to 174. Figures relating to 1963, which have recently been published, show a continuation of this trend. The following table summarises the situation during the period 1957-1963.

Table 1: Kenya - Size of Establishment and Employment

Size of Establishment (by Nos. Employed)	1957		1961		1963	
	Number of Establishments	Numbers Employed	Number of Establishments	Numbers Employed	Number of Establishments	Numbers Employed
5 - 19	467	4,933	431	4,662	417	4,629
20 - 49	204	6,289	190	6,021	181	5,668
50 and over	169	36,962	174	39,165	175	39,522
Total	840	48,184	795	49,846	773	49,819

(Sources: Kenya Census of Manufacturing, 1961, and Kenya Survey of Industrial Production, 1963)

6. Details are known in terms of size of establishment and employment therein, but available for Tanganyika and Uganda. It is interesting to note the following figures relating to size of establishment by numbers employed in Tanganyika's manufacturing sector (private), in 1962.

Table 2: Tanganyika - Manufacturing Sector (Private)
Size of Establishment and Numbers Employed

Range of Employment	Number of Establishments	Per Cent of Total	Numbers Employed	Per Cent of Total
up to 10	573	59.0	2,316	8.0
11 - 50	295	30.7	6,661	25.0
51 or over	100	10.3	17,728*	67.0
Total	968	100.0	26,699	100.0

* including a combined plantation/processing firm which employed 4,505 persons.

(Table based on figures in Tanganyika Statistical Abstract, 1963)

Though censuses of industrial production were held in Tanganyika in 1958 and 1961, their results are not comparable in view of the differences both in coverage and response. Hence no comments can be offered on trends. However, the 1962 figures show that while establishments employing up to 10 persons accounted for 59 per cent of the total, they provided only 8 per cent of the total employment. At the other end, establishments with 51 or more employees, while representing 10.3 per cent of total establishments, accounted for 67 per cent of the total employment in manufacturing. In Uganda, it is not unlikely that employment in large undertakings would account for a larger

+ The name Tanganyika is used here in view of the fact that, a few figures in relation to industrial production etc. are available only for the Tanganyika part of the United Republic of Tanganyika and Zanzibar.

percentage of the total team in Kenya. In view of the fact that the bulk of the public and private sector effort has been concentrated in the establishment of relatively large enterprises.

10. In Kenya the dominance of large manufacturing establishments employing 50 or more persons is also to be seen in relation to value added in the process of production. An analysis of value added by size of establishment can be made with reference to two aspects: in the first place it is useful to examine value added as a percentage of gross sales; and second, the actual breakdown of value added by size of establishment. In establishments employing 5 - 19 persons, value added amounted to 33 per cent of sales both in 1961 and 1963. In establishments employing 20 - 49 persons, value added amounted to 35 per cent of sales in 1961 and 34 per cent of sales in 1963. In establishments employing 50 or more persons, value added accounted for 37 per cent of sales in 1961 and 40 per cent of sales in 1963. The actual breakdown of value added by size of establishment is indicated in the following table.

Table 3: Kenya's Manufacturing: Value Added-Analysis by Size of Establishment (A.'000)

Employees per Establishment	1961		1963	
	Value Added	% of Total	Value Added	% of Total
5 - 19	1,838	7.5	2,230	7.7
20 - 49	2,680	11.0	3,373	11.8
50 and over	19,879	81.5	22,977	80.5

Table 3, when examined in conjunction with Table 1 shows that, while there was an insignificant increase in the percentage of value added in establishments employing 5 - 19 and 20 - 49 persons, these groups also registered a decrease in employment. However, establishments employing 50 or more registered a small increase in employment, even though their share of value added underwent a slight decrease. This is a significant fact insofar as it helps in focusing attention on the sizes of establishments where employment has decreased.

11. Employment in the private sector manufacturing and repair establishments in Kenya has increased 31 per cent between 1957 and 1963. In 1957 which was the peak year for employment in this field, the number employed was 11.5 thousand. In 1963 the figure was lower.

to 40.7 thousand. As was noted from Table 1, employment in establishments employing 5 - 19 and 20 - 49 persons decreased from 4,933 to 4,629 and 6,289 to 5,668 respectively between 1957 and 1963, while employment in establishments employing 50 or more increased from 36,962 to 39,532 during the same period. Hence it is obvious that substantial proportion of the fall in employment is attributable to the small and very small manufacturing and repair establishments. This is a particularly disturbing trend not only because it marks the arrest of a trend that was promising until 1957, but also because it shows the vulnerability of the smaller establishments.

12. This brief analysis of the structure of industry in East Africa clearly establishes the fact that a lot needs to be done in the matter of assisting the smaller establishments, not only to prevent their further decline, but to enable them to play a more important part in the years to come. It is also obvious that the larger establishments have a greater capacity for surviving difficult periods, both because of their sounder internal organization and their reserves. This is particularly true of the larger establishments which operate on an inter-African or even international basis. The smaller enterprises are mostly of East African origin and, with a slender reserve position, are unable to withstand the ups and downs in the market for their products. These enterprises have to reckon with competition not only from the larger establishments within East Africa, but from overseas sources. While the domestic market may be able to support the production of a variety of items in smaller establishments, it would appear that a comprehensive policy of assistance would have to be evolved to enable them to do so. Some of the possible measures are discussed in a subsequent section of this paper.

The Case for Small Industry Development

13. While the situation in recent years has been such that even the existing smaller establishments are hard pressed to survive, suggestions for the expansion of the small industry sector may appear somewhat facetious. However, the advantages accruing from an orderly promotion of small industries are so unique and overwhelming that it is hardly necessary to make out a special case for them. In the East African situation several irrefutable arguments may be advanced in favour of a vigorous policy for the promotion of small industries.

a) In the first place, most established industrial enterprises, particularly the larger ones, are the result of overseas initiative. Even the smaller establishments are almost entirely owned by non-Africans. Hence, all the initiative has so far come from a very small segment of the population. Whereas, this is probably true of most countries where significant industrial development has taken place, the

African situation poses the problem in racial terms as well. A situation where the entrepreneurial functions in the field of industry is confined to the non-African population is not only unattractive for political reasons, but also for the reason that a dynamic section of the economy will have to be supported by a narrow entrepreneurial base.

b) Irrespective of the state of economic development that a country is in, it is all too common for the small industry sector to be supported by special measures. Even a highly developed country like the United States, the Small Business Administration (set up in 1953) performs a variety of functions to assist small industry, including financial assistance from a revolving fund, negotiating contracts for the purchase of products by the government purchasing agencies, managerial and technical assistance etc. In the United Kingdom a Development Commission has been set up to aid agriculture and rural industries, while the Scottish Country Industries Development Trust deals exclusively with problems of small industry. Similar organizations have been set up in a number of other countries such as Sweden, Japan, Belgium, Denmark, Italy and India. If special assistance for the small industry sector is deemed necessary in such countries where neither capital nor entrepreneurial ability are barriers, it seems obvious that a variety of measures would be a compelling necessity in East Africa.

c) In a situation where the bulk of the industrial production comes from a relatively small number of large firms, there would inevitably be some elements of monopoly or at least oligopoly. The presence of properly assisted, well-managed small firms would be of great assistance in eliminating any monopolistic element.

d) A properly formulated policy concerning small industry would assist in the mobilization of domestic capital however modest the amount of such capital may be. The point is that small industries do provide an outlet for savings, which might otherwise be frittered away. The actual mode of ownership is not very important. Even where savings are very small an enterprise may be established on a co-operative basis.

e) Small industries can provide the only effective means of diffusing industrial activity throughout a country. It is unrealistic to dismiss regional claims for industrial activity as being politically motivated. In many cases there would be a legitimate justification for setting up small industries in select centres throughout the country. The presence of a few small industries in an area would have an immense catalytic influence, not only in stimulating interest

in industrial activity, but in an extension of the use of the products of industry, both to satisfy personal demand and the demands for inputs in other activities.

f) Finally, in East Africa the contribution that the small industry sector could make in widening employment opportunity is quite enormous. Though it is generally difficult to argue that the *raison d'être* of small industry should be the creation of employment opportunities, in East Africa this could well be one of the most important objectives. The growth of agriculture would certainly afford increased opportunities for employment. But it is unrealistic to assume that, despite vast allocations to agriculture, employment opportunities would expand to the point where entrants to the labour force could be profitably absorbed and the drift to the towns reversed. It is not that industrial development generally, or small industry in particular would provide the necessary absorptive capacity. But there is no doubt that small industry development has a vast potential for increasing employment opportunities, not only directly, but in an indirect sense as well.

Identifying Potential Industries - Import Substitution

14. One of the vital tasks in the development of small industries is the identification of promising fields of activity. The most obvious and hence perhaps the safest guide in this connection is figures relating to imports of various commodities, some of which would lend themselves to domestic manufacture. Insofar as statistics relating to imports are readily available in East Africa, there is an understandable tendency to turn to import figures in assessing the possibilities of establishing import substituting industries. It may be observed, however, that while the range and value of imports are highly instructive, they are only a partial guide to development possibilities in the industrial field. Quite apart from the obvious fact that not all imported commodities could be manufactured locally, it is relevant to note that import substitution is essentially an exercise in a static context. While imports undoubtedly suggest possibilities of expanding industrial activity, they suffer from the limitation of focusing attention on a rather narrow range of items. In practice, therefore, it is extremely important to plan industrial development on much broader assumptions than those based merely on import substitution possibilities. Import figures provide an indication of the range and value of the commodities that have been previously imported, but do not suggest what is likely to be imported in the future. Moreover, not all imports flow into a country in a steady stream, but will depend on the anticipations of importers, and their policy concerning stocks etc. Further, imports in any given year do not necessarily reflect the volume of demand for commodities in that year. Hence, it would be

is necessary to look closely at the pattern of imports, and to determine which of the commodities are subject to sustained demand over a significant period of time.

15. These observations on the use of import figures as a guide in planning industrial development are not intended to underestimate their importance, but merely to point out the need for supplementing this by techniques which are geared to a dynamic context. Until such time that these techniques have been developed, import figures will continue to provide valuable guidance in the matter of setting up import replacing industries. What may be of some significance to prospective small entrepreneurs is a more detailed breakdown of imports, and that is providing the imports, its volume of sales, value added and employment. Such information, which should not be difficult to collect will be of inestimable value in determining the feasibility of producing these items locally.

Consumer Demand Projections

16. In order to provide the broadest possible guidance to prospective entrepreneurs in a developing country, efforts need to be made in two or three other directions. In this connection, what may be of particular significance in a dynamic setting is a periodic analysis of consumer budgetary patterns, with a special emphasis on the items that are entering the range of consumption at different income levels. In most developing nations, both income and price elasticities are likely to be high for a wide range of commodities, and this particularly so, where demand patterns representing higher incomes are established by relatively wealthier local or, more significantly, immigrant communities, as in East Africa. In the initial stages, the analyses of consumer expenditure patterns would help in identifying the main trends in demand, either at the existing or the increased level of earnings. These patterns could then be subjected to detailed analysis at the micro-level to determine prospective demand for various commodities, on different assumptions concerning the rates at which income is increasing at different levels. Having established some criteria for judging the broad changes in demand, it would then be possible to examine whether the volume of demand for any given commodities would justify the setting up of local manufacturing activities. It is quite conceivable that, by the time any worthwhile results emerge from the analyses of consumer expenditure patterns, the demand for additional items may actually have reflected itself in increased imports. In that event, import patterns will only reflect the findings of expenditure studies. The stage will be set for making reasonable anticipations concerning the future pattern of demand, and for basing future

industrial development on these assumptions. Large industrial establishments are often able to afford the cost of such investigations from their own resources. However, this would be well beyond the meagre resources of most small establishments, and hence they would benefit immensely from this kind of knowledge. Apart from providing a solid basis for the planning of future industrial development, expenditure studies will render it unnecessary to await a reflection of demand patterns in changes in the composition and value of imports.

Demand for Intermediate Goods

17. While changes in the demand for consumer goods would undoubtedly be a valuable guide in establishing a range of industries they would by no means help in determining the entire range. Equally significant would be the possibility of establishing industries to manufacture a whole range of intermediate goods. It is obvious that developing countries would be called upon to devote a substantial proportion of their investment effort towards the creation of basic infrastructure facilities such as transportation, housing and other public utilities. The aggregate investment in these areas would call for a wide range of inputs of intermediate goods, many of which lend themselves to domestic manufacture. The detailed breakdown of such inputs in the light of the anticipated investment in these areas would be highly suggestive in identifying those which could be produced locally. For example, in the case of the construction industry an exercise of this type would provide an idea of the extent of demand for items such as building blocks, electrical fittings, plumbing equipment, roofing materials, floor tiles, wooden fittings, ornamental grills, burglar proofing, metal doors and windows, and a host of other items which could form the basis of small industries. The anticipated investment in education and health could be subjected to a detailed breakdown into components which would demonstrate possibilities of manufacturing items such as classroom furniture, blackboards, chalk, some simpler forms of scientific equipment, hospital beds, theatre equipment, surgical tools etc. The technique would be to start with the aggregate amount of investment and to work out the linkages backwards. In the initial phases, the measurement of demand for various items may be a rough one but, at a later stage, it would be possible to work out more sophisticated input-output tables. The main advantage stemming from this exercise is that prospective entrepreneurs would be able to relate their investment effort not to present but anticipated demand for a wide range of items.

Agricultural Inputs

18. In view of the fact that the modernization of agriculture occupies a high priority in the development programmes of most developing nations, this sector would call for substantial allocations of capital. The experience of other countries in similar or slightly higher stages of development should provide some guidance as to what the ingredients of a modernization process are likely to be. Though there is no formula which lends itself to universal application, it should not be difficult to project the demand for some items such as implements and tools, pesticides and insecticides, fertilizers etc. Here again the advantage would be that the setting up of domestic production facilities would be related to anticipated rather than the current need for these items.

Inter-industry Flows

19. A further approach to small industry development would be the study of inter-industry flows. The technique in this case has to be a much more sophisticated one, insofar as one has to visualize not only the general pattern of industrialization, but the demands that will be made for intermediate products, as industrialization advances. The Kenya Census of Industrial Production, 1963 shows that for the manufacturing sector, imported material - defined as "material in the same form as when it was imported (i.e. it has not been processed, treated or assembled in Kenya), whether or not imported directly (including imports from Uganda/Tanganyika)" - accounted for 42.5 per cent of the total value of inputs. While this is an over-all figure, 'this conceals a wide variation between industries.' The estimated value of all inputs in manufacturing was £37.2 million in Kenya in 1963, of which over £15.5 worth was imported. The percentage of the value of inputs which was imported ranges from 5 to 95 as between different industries. Some of the industries which used large quantities of imported inputs (percentage figures in brackets) were - tobacco (90%), textiles and clothing (95%), paper and products (95%), printing and publishing (95%), footwear (85%), rubber products (95%), paints (90%), soap (67%), metal products (90%), cordage, rope and twine (50%). It is to be noted, of course, that not all imported inputs could be produced domestically, either because of the non-availability of the material or, in some cases, the small volume of demand for them, even though they may have formed a large proportion of the input of a given manufacturing unit. However, what needs to be worked out is the volume of demand that will be generated on the assumption that demands for the various final products will increase, as a consequence of an over-all increase in the value of investment. The increased volume of demand for various intermediate products may

would justify the setting up of manufacturing units locally to provide the supplies of these products, in the same way that an increased volume of demand for consumer goods would make it worthwhile to satisfy a part of such demand from domestic production.

Inter-relation of Small and large industry

20. In planning a policy of industrial development, one of the important issues concerns the inter-relation between large and small industry. Historically, the emergence of the giant corporations was the result of an organic growth process - the stages being hand production to cater for local demand, small industries, medium industries, large enterprises, and finally giant corporations of the joint stock type. The transition to each succeeding stage depended on a number of factors which influenced the scale and the techniques of production. Thus an increase in demand both from local and overseas sources, developments in transportation, invention and innovation which resulted in technical breakthroughs, new sources of power, and financial institutions capable of mobilizing vast amounts of capital have all been instrumental in facilitating growth. On the other hand, in many developing countries where an industrial tradition was lacking, the beginning of industrialization took the form of transplanting fairly large enterprises from developed countries, using sophisticated techniques of production based on their cumulative knowledge and experience of several decades or even centuries. However, while in the industrialized countries themselves the growth of large-scale production paved the way for the emergence of numerous medium and small-scale enterprises, a corresponding development has not taken place in the less developed countries. It is this which explains the main structural difference between the industrial development in the respective groups of countries. This is a deficiency which would and should be remedied through a judicious combination of incentives and deterrents. If this problem is tackled properly and vigorously, it would be possible to induce the growth of relatively small enterprises, directly as a consequence of or in association with large industrial undertakings. It would then be possible for industrialization in developing countries to move to the most recent structural pattern of the advanced countries, without the need to go through the various transitional phases noted in the case of the latter. The difficulties arising from a shortage of capital and skills, as well as small markets will still remain, but will certainly be less insuperable than they were a hundred, fifty or even twenty years ago. The approach which would be most practical is to look at large and small industry not as alternatives, but those among whom a complementary relation could be worked out. Unfortunately, it is the experience even of countries like India which, in recent years, have made rapid strides in industrialization, that there is no automatic influence of a catalytic nature

spreading from the larger to the smaller undertakings. This may be either because the smaller enterprises are not responsive enough, or because the larger units find it more attractive and perhaps even cheaper to go in for imported inputs. Hence the inter-relation between the two would have to be worked out, where feasible, as a matter of deliberate policy. One practical method of doing so would be to tie in the incentives offered to larger undertakings to the extent to which they are prepared to subcontract with local firms for the supply of intermediate goods. What is being suggested here is not a blanket clause which applies to all large industries, but to those who could obtain some of their inputs locally, without serious detriment to their production programmes. In doing so, the larger undertakings may have to reckon with delays in supplies, occasional variations in quality and even slightly higher costs. But improvements in all these aspects will be a function of the volume and regularity of output in the small establishments. Even if large industries should occasionally have to suffer through reliance in domestic supplies of intermediate products, the long-term gain not only to the industrial sector but to the economy as a whole is quite immense. Among other things, it would facilitate the spread of industrial activity, diffuse skills and widen employment opportunities. An equally significant contribution would be the broadening and deepening effect on local entrepreneurial ability.

Incentives for Small Industry Development

21. In many developing nations, there is often a desire to create conditions which will attract large-scale investment in industry, from overseas sources. A whole range of incentives of various types are offered to facilitate the flow of investment capital. While this is a perfectly valid strategy for capital-short countries, it is equally vital to offer corresponding incentives to investors in small projects, whether of local or overseas origin. The full potentialities of large industry can only be realized when the ground is simultaneously prepared for the setting up locally, of a number of small, ancillary units. Should difficulties arise through want of local capital or entrepreneurial ability, this could be overcome to some extent through active government participation. The question arises, of course, as to how a government, with its meagre resources, could participate significantly in the task of providing finance for a large number of small enterprises. The answer may partly lie in shifting public investment funds to promising small and medium industries. In East Africa the commitment of public funds to bodies such as the Development Finance Co. of Kenya, the Uganda Development Corporation, and the Tanganyika Development Corporation - all of which are interested mainly in large and medium ventures - is substantially in excess of allocations to schemes which are aimed at assisting small industry development.

The Capital of these development corporations is augmented through the financial participation of overseas agencies such as the Commonwealth Development Corporation and West German Development Corporation. The capital resources of the territorial development corporations are invested in a variety of ventures, industrial and non-industrial, either as the sole means of capital or, more usually, in association with local or foreign private enterprise. What is being suggested is that, where feasible, governments should withdraw part of their capital from these corporations (or at least cut down on future allocations), and make the balances available to small industry. Any reduction of the governments' share capital in these bodies will not make a big dent, while the investment of capital thus released to smaller industrial undertakings may go a long way in meeting the capital needs of the latter, particularly if it helps in attracting matching capital from private sources. In this case of the large foreign firms, such a policy may well give rise to the question whether they would not, in the process, acquire a stranglehold on the economy, if the government ceases to be a partner. This eventuality could be remedied through an unambiguous provision for the acquisition of a part of the capital stock by the local government, as and when the latter's resources permit. The problem arising from the lack of entrepreneurial ability for small industry development could be tackled through agreements with foreign private enterprise, or personnel from bodies which are specially designed to assist small industry. The dependence on such personnel could be lessened through schemes for the training of local counterpart personnel.

East Africa - Policy for Small Industry Development

22. In recent years, policy concerning the development of the small industry sector has received increasing attention in East Africa. In each of the three countries there has been continuous discussion on the role that small industries could play in over-all industrial development. It is difficult, however, to compare these policies with those in countries in a more advanced stage of development. There is, first of all, the difficulty of definition. The East African countries include, within the purview of small industries, all kinds of manufacturing activity which satisfy the criterion of low capital investment. Thus village industries, cottage industries, and the crafts - all fall within the small industry category. In Uganda, a small industries scheme has been administered by the Uganda Development Corporation, which operates through a system of loans and follow-up service. In Tanganyika, assistance to small industry (very broadly defined) came, until recently, from the African Productivity Loan Fund. In Kenya, assistance to small industry comes from the Industrial and Commercial Development Corporation (ICDC) which operates a revolving loan fund.

23. If the definition of small industry suggested in the U.S. document No. 11/10 is applied to East Africa, it would appear that the present schemes of assistance cover projects mostly outside the definition. The use of power, & capital-employment ratio of 100,000 - 200,000 shillings as illustrated the coverage of the present schemes, some of which have advanced loans amounting to 100,000 - 2,000 shillings (100 - 200). The Small Industries Development Fund operated by the Uganda Development Corporation has a loan ceiling of 100,000 (100,000), though in some cases this could be extended.

24. The operation of schemes of assistance to small business cover two distinct, but related aspects i.e. small industry and commerce. In practice, the two aspects are often inseparable in view of the fact that a small industrialist can hardly succeed if he is not also endowed with good commercial sense. However, there are differences in the technical abilities and functional characteristics of the two occupational groups. Hence, though the grouping of these two activities has served administrative convenience, it may not have been always helpful in identifying either the inherent problems or the potential role of the small industry sector.

25. Schemes of assistance to small business have understandably concentrated largely on the promotion of African entrepreneurs. The virtual absence of Africans in fields both of commerce and industry (but more particularly the latter), have left the governments with no alternative but to try and promote their entry into these fields. However, this has also compelled governments to proceed very cautiously and to relate schemes of assistance to the present state of ability of the Africans. The African entrepreneur is new to the field of industry and often lacks the combination of attributes that make a successful entrepreneur. Even when he has the technical competence he may be wanting in business acumen, and may also have been unable to produce the small outlay that was expected of him. Hence loan operations have been confined to very small schemes, and this has not provided an opportunity to review the possibilities of encouraging the setting up of industrial ventures of the type that are discussed in this paper.

26. The country with perhaps the most experience with the administration of schemes of assistance to small industry is Uganda. The Small Industries Development fund was created within the Uganda Development Corporation (UDC), 'to provide assistance to individuals or groups of individuals in setting up enterprises or in expanding existing enterprises in conditions where normal sources of individual finance are not available and entrepreneurial ability is lacking'. The conditions governing loans were that (a) they would only be made for specified

purposes such as establishing or expanding manufacturing industries or service industries, so that prospective borrowers would have technical skills obtained through experience or training, adequate commercial knowledge to manage the business and keep proper books of accounts, and provide evidence of character and integrity. Such an application for loans would be followed by a full investigation to determine the sources of its success, so that the applicant provides a reasonable security besides a charge on the assets to be created by the loan, and finally, so that adequate supervision by UDC or its agents would be assured. Besides, the UDC laid down a detailed procedure for processing applications from the time they were received to the time they were either rejected or, in the alternative, investigated and finally approved. A number of additional precautions were taken which had the effect of transferring the absolute minimum of cash to the applicants.

27. Despite the fact that the UDC took every possible precaution in the matter of granting loans, its experience has not been a happy one. An extract from a UDC Board Memorandum in 1961 reads as follows:

"The failure so far of most of our projects under the Small Industries programme could be attributed mainly to lack of commercial knowledge, integrity and sense of business responsibility on the part of those to whom loans have been granted. The Corporation, on the other hand, has been greatly handicapped by lack of properly established Small Industries Section whose specific responsibility would have been to supervise and follow up the progress of these projects."

28. It is somewhat ironical that the UDC which in some ways is regarded as a model for the rest of Africa in the matter of ensuring public participation in economic development has met with dismal failure in the matter of assisting small industry development. Apart from the difficulty of attracting the right kind of entrepreneurs, there have been serious problems in supervising projects after loans were advanced. When loans were made for the setting up of small ventures in places far removed from Kampala, the cost of a visit by a UDC official has sometimes amounted to a fifth to a quarter of the value of the initial loan. The pressure from relatives of loan recipients has resulted in directing loan proceeds to purposes other than the ones for which they were intended. When loan officers have delayed visits to distant areas so as to cover a few projects on a 'round-trip', this has resulted in long gaps between visits and the consequent neglect of the enterprise by the loan recipient and, in some cases, facilities for maintaining equipment in a state of good repair have been lacking, particularly in outlying areas.

29. The experience of IIC in the matter of assisting small industry development has important lessons for other African countries. While much of this experience is depressing, it may not reflect the situation that may develop in the case of the small industries that are being discussed in this paper. If at all, it would only help in differentiating between schemes aimed at assisting proven entrepreneurial ability and creating the ability as such. In any future programme of small industry development, it is well to remember this distinction. For the cost any scheme aimed at creating entrepreneurship from scratch will have to be regarded as a net social cost, and not the cost of the enterprise as such.

30. More recently it has become official policy to foster entrepreneurial ability before public funds are committed to any specific venture. The Small Industry Training and Research Centre in Kenya is aimed at meeting this need. Candidates who successfully complete a course at the Centre may apply to the ICDC for loans, though there is no guarantee that loans will be forthcoming. In Uganda it is proposed to set up a Management and Technical Training Centre with the collaboration of international agencies. In Tanganyika an Industrial Studies and Development Centre has been set up as a U.N. Special Fund project, to determine the feasibility of industrial projects. However, so far as African enterprise is concerned, the fact will remain that any rigidity in the granting of loans will exclude the bulk of the applicants, and hence entrepreneurial ability would have to be rather narrowly based. The political repercussions of such a development would be far too disturbing even to comprehend.

The Promotion of African Enterprise

31. For both political and social reasons the development of African enterprise seems a pressing necessity of the times. Unfortunately, it is recognized that there is no short cut to the creation of entrepreneurial ability, particularly in the industrial field. However, it would be undesirable in the extreme to adopt an attitude of defeatism in this matter, or to think of a sequence of events such as the Africans replacing the non-African in trade in the first instance, gaining the much-needed commercial experience, and then entering the industrial field. Quite apart from the fact that this sequence may just not work, it will create a lengthy time-lag before Africans can assume responsibility for a wide range of economic activities. Since individual African initiative in industrial development is beset with numerous difficulties, it is necessary for governments to step in and prepare the ground for the subsequent entry of Africans. A governmental stake both in finance and management of small enterprises would ensure a collective representation of African interests, and at the same time provide for the maximum possible training of

Africans in all aspects of small industry development. As the government lacks the necessary expertise for initiating and operating small industries, this could be obtained through the co-operation of international agencies, or countries which have successfully set up specialist agencies for small industry development.

Industrial Estates

32. All three countries in East Africa propose to set up industrial estates as a means of assisting small industry development. In Tanganyika it is proposed to set up a Small Industries Corporation as a subsidiary of the National Development Corporation. Schemes of assistance will cover three distinct types of operations. A cottage Industries Board is to be set up to assist the very small industries and the crafts. A Workshop Project is also planned, and will be run on the lines of an industrial estate by providing common facilities and services. Arrangements are also being made to set up industrial estates, which will cater for small establishments using modern production methods. The financial institutions that are likely to play an active role in these projects are the National Development Corporation which will provide loans amounting to 75 per cent of the cost of a project, the Tanganyika Development Finance Company, the Workers' Investment Corporation, and the Industrial Promotion Services, which is a private agency. In Uganda, the government has already made an application for assistance from the U.N. Special Fund, for setting up industrial estates. In Kenya, it is proposed to set up an industrial estate in the near future, under the auspices of ICDC, and plans are also being drawn up for a total of five estates to be set up in different parts of the country. It is also hoped to augment the capital of ICDC to enable it to play a much bigger part in assisting small industry development. In all the three countries facilities for technical training have already been considerably enlarged. In the coming years, the proposed management and Technical Training Centre in Uganda, the Small Industry Research and Training Centre in Kenya and the Business Training Institute in Tanganyika will all play a significant part in conjunction with the effort of technical and trade schools, polytechnics and the highly successful in-service training programmes of various enterprises in the public and private sectors.

National Policy - Incentives and Deterrents

33. The development of the small industry sector is also conditioned by a favourable national policy in fields other than those just discussed. It is to be noted that finance is not the sole or even the main bottleneck in the development of small industry. In Africa,

in the most developing areas, measures of special assistance would be needed to insure the unimpeded progress of this sector. For example, there would have to be a deliberate policy of ensuring a sustained demand for the products of small industries. This could be done in various ways, such as reserving a part of the market for the output of small industries, a government stores purchase policy which discriminated in favour of small industries, and the imposition of restrictions on the expansion or the further establishment of such large ventures whose products are likely to be in direct competition with those of small industries. In a situation where both the volume and the range of demand for products is undergoing a steady increase, it would be futile to argue that special measures of assistance to small industry would have a disincentive effect on the large industry sector. After all, such measures have been adopted in a number of countries whose industrial development is way ahead of that in Africa. What is important is to plan future industrial development in a manner where the large and small industries will complement one another.

34. While on the subject of incentives, it may be appropriate also to emphasize the importance of deterrent measures in order to prevent the haphazard development of small industries. Not infrequently one encounters a situation where a government may be favourably inclined to protect domestic industries through a levy of stiff tariffs on imported goods, which are either in direct competition with domestic products or which are offered for sale at such low prices that they would automatically bar the setting up of local industries. In East Africa, instances are not lacking where the promise of tariff protection has resulted in a prompt proliferation of domestic enterprises which turn out the same products. In this event it is possible to move from a situation where no domestic production of a commodity existed, to one where two or more enterprises begin to compete furiously for the domestic market. Before long, an excess capacity is created, competition becomes cut-throat, and losses are encountered all-round. Not only does this represent an avoidable loss of scarce resources, but starves other, potentially profitable enterprises of badly needed resources. If governments are called upon to assume such wide-ranging responsibilities as are suggested in this paper, it is imperative that they also arm themselves with some powers of direction, both to prevent an over-concentration of investment in select fields and to ensure a reasonable distribution of capital and entrepreneurial ability among potentially attractive fields of activity. It is unrealistic to assume that governments simply cannot afford to discourage any type of investment. In the long run, such an unqualified approval of all investment could easily saddle the governments with serious problems which they would be ill-equipped to tackle. One possible line of action would be the setting up of

Industrial Licensing boards which would approve applications only after a careful review of the need for additional establishments in the light of the anticipated demand for products.

Conclusion.

35. In conclusion, it may be observed that the development of small industry in East Africa requires a multi-dimensional approach as is suggested in this paper. Any attempt at an unqualified application of the criterion of economic efficiency would prove far too narrow in a field of development which has implications of a social and political nature as well. If small industry development is approached with a precise connotation in mind, it would help in identifying the precise role it can play not only in industrial development but in national development as a whole. It is also necessary to devise a multiplicity of suitable measures for small industry development and not simply to attempt at meeting what are seemingly the basic needs, such as capital. Further, it is necessary to depart from the notion, which is often expressed, that special assistance to small industry would be tantamount to putting a premium on inefficiency. The experience of a number of countries clearly shows that not only can small industry hold its own, but could be the most effective means of reinforcing and widening the industrialization process.



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