

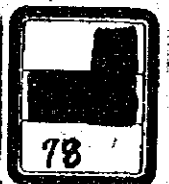
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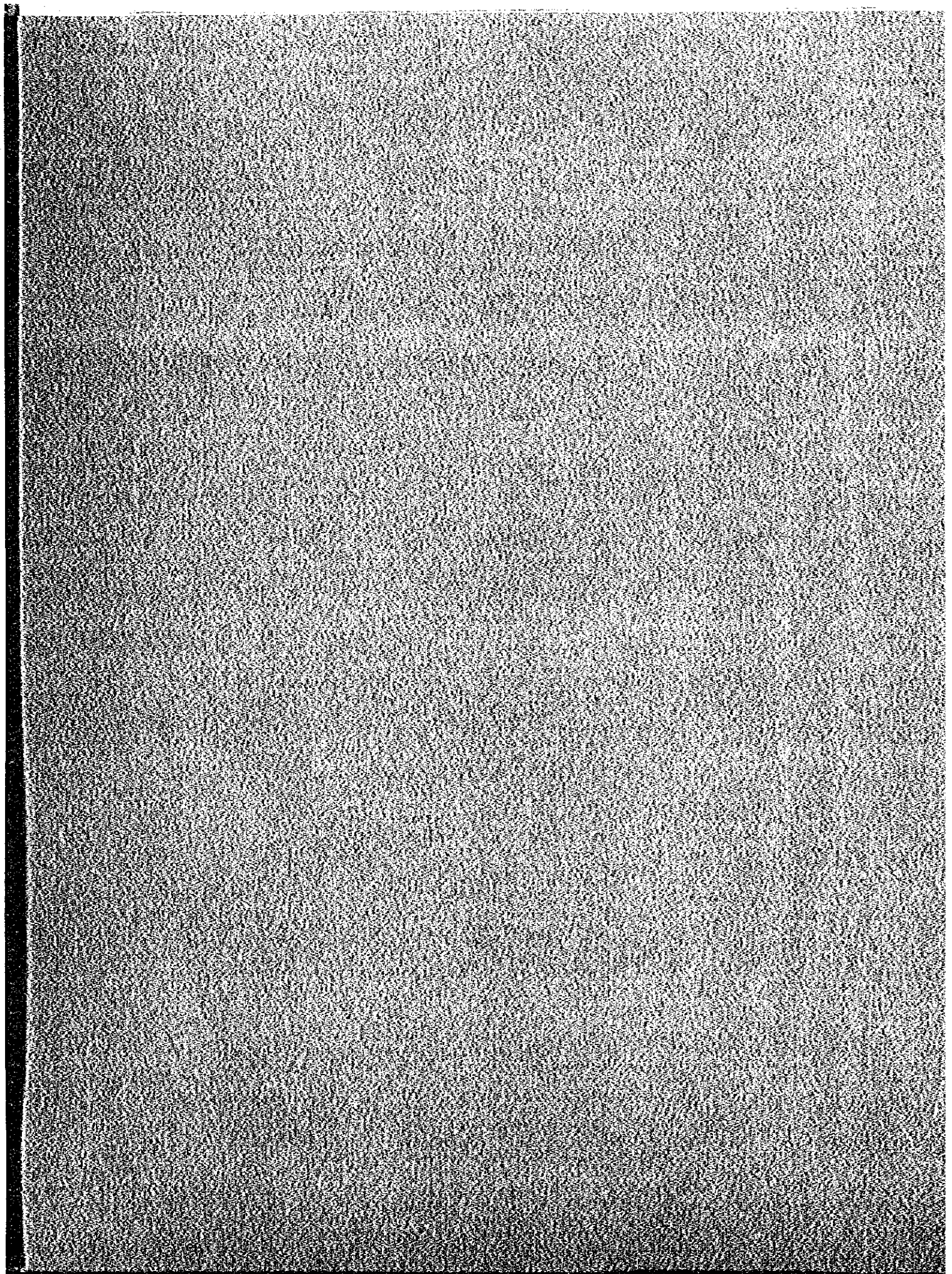
KILIMANJARO REGION INTEGRATED DEVELOPMENT PLAN

TECHNICAL REPORT : INDUSTRY

February 1978


JAPAN INTERNATIONAL COOPERATION AGENCY





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UNITED REPUBLIC OF TANZANIA

KILIMANJARO REGION INTEGRATED DEVELOPMENT PLAN

**TECHNICAL REPORT
INDUSTRY**

FEBRUARY 1978

JAPAN INTERNATIONAL COOPERATION AGENCY

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Apart from the above classifications, our discussion will frequently use some other terminology like "local resources based" and "local market oriented" industries. The former relates to source of industrial inputs and the latter to outlet of industrial products or type of market. This is an operational classification in the sense that it is effective in clarifying the primary incentive in setting up new industry and in expanding existing industry.

2. INDUSTRIAL DEVELOPMENT AT THE REGIONAL AND NATIONAL LEVEL

2.1 Historical Review

(1) Independence and the First Plan

The basic structure of the Tanzanian economy immediately after political independence was economic dualism built up of two different economies: modern or export-oriented economy, on the one hand, and traditional or less monetized economy on the other. These economies basically differed both in economic institutions and in resource allocation pattern and did not relate to one another very much. The relationship between them was not such as to encourage a complementary development, but rather to foster the growth of the modern economy closely linked with metropolitan countries at the expense of the traditional economy.

As the best remedy for such a colonial-type dual economy, an active industrial development policy centred on an import substitution approach was chosen on the basis of some political and economic rationalization. Firstly, industrial development is thought of as being the most effective measure for doing away with a colonial-type monoculture economy. Secondly, industrialization was considered capable of ensuring a higher income level than agricultural development. Thirdly, industrialization was expected to absorb more unemployed people than other policies. Finally, industrialization was expected to generate bigger spread-effects in terms of growth poles or growth centers than ever experienced even in developed countries. Such an argument was the background to the First Plan, 1964/65-68/69.

At independence, Tanzania was virtually without industry, a fact mainly due to East Africa industrial allocation policy in the colonial days. Only twenty-two thousand people, or 3.4% of the all those employed, were engaged in manufacturing. Naturally, the First Plan gave first priority to industrial development. Industrial strategy included the following three principles:

- (i) additional processing of local primary products
- (ii) import substitution of mass-produced consumer goods
- (iii) the manufacture of building materials which would be in heavy demand as a result of an ambitious investment program and which could be procured more economically locally because of the high transport cost element.

Starting from a very low level, a high rate of growth in industrial output was achieved. With the increasing capacity created in the first plan period, industrial output could be expected to continue to expand at high rates well into the second plan period. The official gross domestic product estimates indicate industrial growth of 10 per cent per annum in 1960/62-67, but industrial output was estimated to be no more than 8 per cent of this total at the completion of the First Five Year Plan.

However, import substitution started mainly with imported capital and technology, which caused many new complex problems. Foreign or alien companies selected to establish assembly-type factories relied heavily on imported materials. Their technology utilized were generally equipped with capital intensive method, so that they did not have a very great employment impact on the local labour market, which consisted mainly of unskilled labor. It could be

said that there was less linkage between these companies and the local economy than in the case of even colonial companies.

Also, these companies were gathered in urban areas which were more advantageous for the purpose of enjoying external economies, and stayed away from investing in rural areas. Moreover, the emphasis on sophisticated industrial development led to a relative decline in agricultural and food production. Further, the concentration on new industries gave rise to an unfavorable situation for traditional or cottage industries. This is more obvious when their relations are competitive. The agricultural sector was caught in a stagnant situation. The sectoral and geographical imbalances inevitably led to income disparity between agricultural and industrial sectors, i.e. between rural and urban areas. Rural income declined relative to urban income. Rural people, 90 per cent of the total population, were caught in a vicious circle of low productivity and low income. Further income disparity stimulated a rapid drift of rural people to towns, where they eventually concentrated. However, the urban economy was by no means ready to provide full productive employment opportunities to migrants. A significant part of migrants remained unemployed in towns. The effect was the emergency of a new type of unemployment and underemployment problem in the country.

Another serious problem was the effect on external position, since these industries, in addition to being dependent on imported technology, used a high proportion of imported materials. Further, the products of import substitution industries were limited in the overseas market because other deve-

loping countries had established similar industries were the most highly protected in the industrialized countries. The eventual outcome was unfavorable effects on the balance of payments, which made it more difficult to obtain capital goods and intermediate goods for further industrial development. This was even more the case when the process of import substitution was completed. In this sense, to attain sustained growth, industrial strategy should have been changed.

(2) The Arusha Declaration and the Second Five-Year Plan

In order to bring about a basic transformation in such a colonial-type economic structure, the Arusha Declaration was adopted in 1967. The basic principles of the Declaration are Tanzanian socialism and self-reliance, which include nationalization of the major means of production by peasants and workers, equalization of income between agriculture and industry and between different people, and rural development for establishment of a socialist society Ujamaa in the form of villages. As far as industrial development is concerned, first focus is on the development of nationalized large industries by public organizations called parastatals on behalf of peasants and workers. Second is to develop industries which provide basic items such as food, shelter and clothing to satisfy the basic needs of life for the majority of Tanzania. The third is village industries development for rural development.

The idea of the Arusha Declaration was introduced in the Second Five-Year Plan, 1969-1974. A central concern of the Second Five-Year Plan, getting over the problems created by import substitution in the

First Plan period, was to prepare industrial strategy for sustained growth. Its reply was that the increasing priority of industrial strategy should have been given to the development of basic intermediate and capital goods industries through structural change. Basic principles of industrial strategy in the Second Five-Year Plan were as follows:

- (i) To expand the range of products manufactured and lessen dependence on foreign sources of supply
- (ii) To increase the manufactured element in exports
- (iii) To shift trade dependence away from overseas towards internal and African markets and sources of supply
- (iv) To develop managerial and technical expertise in the operation of industry and the introduction of modern technology

Two industrial groups set about achieving these objectives. The major role was intended to be played by the parastatal sector, the National Development Corporation, in accordance with the expansion of public control following the Arusha Declaration. The small remaining portion, only about 16 per cent of total industrial investment, was expected to be undertaken by the private sector, including small industries and craft workshops. These activities were thought to have many advantages. For instance, they require very little capital investment, they can be carried out in villages and small towns in the country, thus improving the quality and variety of life in rural areas. However, the situation was severe as shown in the statement of the President:

We shall continue to expand simple manufacturing, the processing of primary commodities, and the provision of basic construction materials; but we have now reached the stage where we must think seriously about the next and more difficult phase of industrialization.

It is a more difficult and complex task to carry out structural change in line with increasing priority to the development of capital goods and intermediate goods industries. Against this counter-arguments are sometimes offered:

- (i) the size of the national market for basic industries
- (ii) the level of technology required is high and not yet available in the country
- (iii) the capital intensity of these industries is high, which is a drawback in a country where capital is scarce

These questions can be refuted, but they are plausible. The requirement of the next stage of industrialization is complex, so that the preparation for longer term industrial strategy will have to be based on the identification and preparation of new industries. Initially, this was expected to be ready during the first half of the Second Plan period, which would provide the framework for detailed preparation of the Third Plan.

(3) Preparation of the Longer Term Industrial Strategy

After going into the Second Plan, many relevant papers were prepared to elaborate longer term industrial strategy. To begin with, in 1971 the Party issued the Guideline (Mwongozo) which expounded the principles of management of industries on socialist lines through worker participation. Afterward, it was further clarified by emphasizing a collective leadership of Management Committees instead of Boards of Directors.

Subsequently, in 1973, the Party issued Guidelines on Small Scale Industries, which stressed the importance of establishing these industries in villages as part and parcel of development of the rural economy. Further, according to these guidelines, priority should be given to the development of small scale industries for the following reasons:

- (i) these industries enable many more people to engage in productive activities and provide additional income opportunities to village farmers in the dry season
- (ii) these industries will play an important role in achieving a technological revolution in rural areas
- (iii) these industries are essential in the implementation of our policy of self-reliance, from the family, to the Ujamaa village level, to the national level
- (iv) these industries are essential to step by step elimination of the disparity between rural and urban areas
- (v) if ancillary and other small industries are developed systematically, the cost of industrial production will be reduced

Furthermore, the Guidelines revealed the unique definition of small scale industries in the context of Ujamaa socialism and self-reliance:

A small industry is any unit whose control is within the capability of our people individually or cooperatively in terms of capital required and know-how; it includes handicrafts or any organized activity based on the division of productive labour.

When setting the strategy for small scale industries, the following elements should be borne in mind:

- (i) the utilization of our raw material resources in order to enhance their value added
- (ii) the use of available technology
- (iii) application of more effort than capital
- (iv) provision of more services
- (v) the need to produce commodities to meet the requirement of the people in the villages, districts, regions and in the country generally; and to eventually be able to export such commodities for additional income
- (vi) expensive buildings are not necessarily required

The Party's Election Manifesto of 1975 clarified that industrialization should be considered as one of the most important tools for attaining self-reliance and that the emphasis must be placed on industries which utilize local raw materials. The Manifesto further stressed the importance of basic metal industries which would lay a foundation for the manufacture of machines and equipment needed in the economy and endorsed the direction of structural change which gives increasing priority to the development of capital goods and intermediate goods industries.

Furthermore, in dissolving Parliament in 1975, the President presented a detailed list of industries which should be stressed for strengthening future self-reliance. They are those industries which meet basic requirements of the country such as:

- (i) all consumer goods giving priority to such things as sufficient clothing, adequate housing and basic public services like water, schools, dispensaries, etc.
- (ii) simple intermediate goods as are within our capacity in terms of skill and raw material availability
- (iii) goods which we can export and thus obtain foreign exchange
- (iv) products from small scale industrial units with appropriate technology instead of using sophisticated technology too expensive for our economy

However, needless to mention, a consistent and detailed explanation of the strategy framework, particularly the development framework of capital goods and intermediate goods industries, has not been made. This is to be included in the coming Third Five-Year Plan.

2.2 Industrial Sector in the Third Five-Year Plan

(1) General View

Since as yet the Third Five-Year Plan has not been announced, it is not possible at the moment to present a general framework of the plan. Hence, the present discussion will be limited to only a few aspects of the Plan.

It is generally expected that the Third Plan will include the following elements as goals:

- (i) industrial growth
- (ii) structural change
- (iii) employment generation
- (iv) greater equality of income distribution
- (v) greater equality of regional development
- (vi) worker participation in industry
- (vii) increased self-reliance

Among these objectives, the highest priority will be given to structural change, in keeping with the direction identified in the Second Plan, which means the transformation of a colonial-type dual economy to one of self-reliance.

As a matter of fact, it is obvious that structural change will be a vital core in the formulation of the industrial sector as well as of the whole economy. The problem is how to define this structural change in terms of industrial planning. This was clarified in the Second Plan in the sense of achievement of structural change of the industrial sector by putting emphasis on the development of basic industry. Basic industry will comprise, firstly, the industries which provide the basic needs of the people, such as food processing,

textiles, clothing, footwear, and building materials, and, secondly, intermediate goods and capital goods industries which supply materials and machinery and equipment to other industries.

With regard to the rest of the objectives above, once a set of basic industrial activities is selected, they will be spontaneously determined in one way or other, depending on the choice of production technology.

In achieving structural change, there are many complex problems to be borne in mind. For this purpose, Tanzanian resources will be concentrated, in accordance with the principle of "developing Tanzanian resources to meet Tanzanian needs," on the development of basic industries which supply most of the materials necessary for modern industrial development. The second consideration is the timing both of the selected industries and of strategy.

The former is important in the sense that the rate at which structural change can be achieved will depend on the growth in Tanzanian demand for specific commodities, related technical requirements, economies of scale of the industries, and the coordination of linkage effects as well as the existing industrial structure, which this strategy would reduce in importance. The latter is related to the balancing of the basic consumer needs, the coordination of present and future industrial structure, and balancing of the technical requirements of production such as forward linkage. In any case, timing will be important in achieving smooth structural change.

The final and most important element is the choice of technology, which will directly affect industrial growth, employment, and regional dispersion of industry. Some relationships among these objectives are rather contradictory. Generally, in most producer goods industries the choice of technology is restricted, technology is capital-intensive or labor-saving, and a lot of infrastructure is required which is available only in urban areas. Of course, there is an optimum solution for reconciling these conflicting relations. This is development of small-scale industries in relevant areas. Above all, the intensification of industrial linkage between small and large industries is crucial in the sense that labor-intensive small industries will be adopted wherever possible. The choice of small industries will facilitate the spread of industrial development through regions and districts.

The problems of greater equality of income distribution and worker participation in industry can be considered from many angles, but as far as income equalization is concerned, small industry development will be effective by dispersing more income opportunities over the country.

(2) Selection of Industrial Investment

On the basis of basic industry strategy, a set of rules for selecting industrial investment will be proposed:

- (i) basic industries - those which use domestic resources to produce essential commodities for consumers or domestic industries

- (ii) export industries/import-substitution industries - those which can earn or save foreign exchange with lowest possible expenditure of local resources
- (iii) small industries - those which can be carried on in small plants achieving high industrial growth, greater employment and greater regional equality in accordance with the first two rules

These industries given higher priority can be classified into larger or national industries, district industries and village industries in terms of their size and market pattern. As a result of the Arusha Declaration, the development of national industries will be the function of the National Development Corporation, especially in the case of capital and intermediate goods industries. In other words, the NDC has been called upon to concentrate its efforts on developing basic industries such as iron and steel, metal working and engineering, chemicals, pulp and paper, and packaging, in line with long-term industrial strategy. In this sense, the emphasis of the NDC will shift from light industries to heavy industries.

Long-term industrial strategy (amount of public investment)

	1970	1995
food, beverage, tobacco	40%	20%
textiles, leather	25	18
wood, paper	12	15
chemicals	10	14
non-metal minerals	3	3
metals	10	30

As far as small industries are concerned, the Small Industries Development Corporation (SIDO) is to be responsible for their development. According to SIDO's schedule for the coming five years, the major projects are as follows: 14 industrial estates, a ceramics complex, a leather goods complex, development of appropriate technology, training projects, and so on. However, there are no active projects which correspond to long-term industrial strategy and basic industrial development.

(3) Some Remarks

The focal point of long-term industrial strategy is to carry out structural change in the sense that the main emphasis of the industrial structure will be shifted from traditional export industries and consumer import substitution to capital and intermediate goods industries. Actually, this is not an easy task, and many problems await us. One of them is to attain structural change side by side with industrial growth, employment generation and geographical equalization of income. However, in many cases these objectives are rather contradictory. For the smooth achievement of structural change, a careful coordination of concurrent objectives will be required. According to long-term industrial strategy, a decisive solution reconciling these objectives is to adopt small-scale methods of production which can utilize labor-intensive technology and can be located throughout the region.

If small-scale industries will play such a vital role in the strategy, careful and deliberate small industrial policy in relation to basic industries will be required. One important point is to intensify and organize various types of industrial linkage between smaller industries and larger industries in areas of basic industry. These policy measures will certainly figure decisively in structural change for the future.

2.3 The Role of Industry in the Kilimanjaro Region

As discussed in the previous section, the most characteristic point in the Kilimanjaro economy is heavy dependence on coffee production, which is concentrated in the upper land. Another feature is dense population in the limited upper land. Under these circumstances, when population growth is considered as a dynamic factor, it is envisaged that income generating potentiality will be limited, the economy will be vulnerable and unstable, and the shortage of land will become acute. These are problems which the Kilimanjaro economy faces now and will continue to face in the future.

In order to overcome these problems, generally there are four prescriptions: (1) to raise agriculture productivity per acre with the existing crop pattern by using fertilizer, small machinery, etc.; (2) to diversify agriculture in terms of crops, for example, by introducing new vegetables and fruits into the region; (3) to re-settle some of the population to new settled areas in middle and low lands of the region; (4) to introduce additional non-agricultural activities such as forestry, livestock, fishery, and small industries, small industries being the most important.

Which prescription is most feasible and promising? In view of the dominance of agriculture in the Region, it goes without saying that agriculture should be emphasized. Even so, there are many constraints. In some areas, land is much too limited to introduce additional crops. Transmigration, regarded as a large scale and effective solution, is confronted with many problems, including social factors such as reluctance to leave one's native place, the large amount of money which is required for new settlement, and the time required for such a move.

In this connection, industrial development will attract much attention.

The reason why industrial development is emphasized is not confined to the pessimistic situation in the agricultural sector. Generally speaking, industrial development should be encouraged in response to economic growth. With income growth, a large portion of consumer demand shifts from agriculture products to industrial goods. It necessitates a change of economic structure in the direction of industry. As a matter of fact, the Kilimanjaro Region is somewhat backward in terms of industry since there are few ties between smaller and larger industries and there is a lack of producer goods industries vital for normal industrial development.

As previously discussed, the government is stressing the necessity of structural change toward a self-reliant economy in the Third Five-Year Plan. In terms of government policy and the industrial development context, industrial development of the Region is imperative. This is all the more true considering the agricultural structure, the shortage of arable land, and the dense population prevalent in the Region.