

THE POLITICAL ECONOMY OF TANGANYIKA'S DEVELOPMENT

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PREFACE

It is amazing that Africa, which by some has been considered the birthplace of human civilization, remained for so long the most unexplored underdeveloped and backward of the continents.

It was not until the European powers, particularly in the Eighteenth and Nineteenth Centuries, made great inroads into the continent and colonised the whole area, that progress occurred. But like most systems, Colonialism carries with itself the seeds of its own destruction; by virtue of the transformations that it involves, the changes it introduces in ideas, institutions and mores and the basic services it implants, indispensable for the activities of the colonial society.

This Thesis examines one of these former colonial territories, Tanganyika in East Africa. Its natural and human resources are considered within a framework of Western development.

In the preparation of this work, my greatest debt is to Dr. K. J. Charles, who had the laborious duty of supervising the work throughout all its stages. An expression of gratitude must be made to the staff of the University Library for their kind assistance throughout the difficult

days of research. The tedious job of typing fell to Mrs. H. Finberg.

The conclusions arrived at, however, are my own, and I alone hold full responsibility.

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Winnipeg,

September, 1962

ABSTRACT

Thesis:

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The purpose of this Thesis is to examine the prospects of Tanganyika attaining rapid, self-sustaining economic development in an atmosphere of free enterprise and active competition.

Since non-economic forces play a crucial role in economic development, this enquiry has naturally extended into a study of the political and cultural forces at work in Tanganyika; hence the title: The Political Economy of Tanganyika's Development.

An examination is made of the resources of Tanganyika and the nature of its developmental problems. Political independence has been achieved, therefore the major area for progress lies in the field of economics.

With vast fertile agricultural lands, numerous products of the forests and considerable deposits of valuable minerals, the present low per capita income of \$ 60 (U.S.) per annum is not justified in purely economic terms.

It was found that racial and class consciousness, the lack of heterogeneity and mobility of the population, and

the failure of political, social and economic behaviour to be highly dynamic and competitive, had a profound influence in confining the society in a morass of under-development.

The solution to this problem was seen to lie in bringing the dispossessed class of negroes into the market economy.

This would entail rapid development in agriculture. Mechanization, better farm management and organisation, improvements in soils, crops and livestock, by such means as fertilisers, selection of seeds and better breeding habits, are a few of the needed innovations. Agricultural development would raise the income in the subsistence sector of the economy, thus creating a market for the goods of the manufacturing sector. This would give added impetus to industrial expansion. It would also release labour from the farms to flow into the towns to form the new industrial labour class. The initial flows would tend to keep wages down, so that entrepreneurial profit can be a greater part of national income and lead to greater expansion. Such agricultural development would also tend to destroy rent, thus shifting entrepreneurial talent to industry. The demise of the landlords would then be sounded and the new industrial elites heralded. The present socio-cultural hindrances to development would thus be broken.

A consideration of important theoretical questions that figure prominently in modern economic literature is also made. International trade is examined to see whether it has acted as an engine of growth and whether reliance can be placed on international trade for development.

The author believes the study has also thrown some light on the question of an agriculturally biased strategy of development as contrasted with a development which places maximum emphasis on industrialization. The study does not provide a simple conclusive solution to this problem. Instead it shows that in some instances like Tanganyika, development should be agriculturally biased, and in others the primary emphasis should be on the development of the manufacturing industry.

The Thesis visualises rapid economic advances in Tanganyika, based on intersectoral development, a non-reliance on international trade as an engine of growth, the building of a solid "infra-structure", and with sufficient Government interference to destroy the vested interests which strangle the economy.

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CHAPTER I

THE NATURE OF THE DEVELOPMENT PROBLEM

The majority of the world's peoples residing largely in Asia, Africa and South America, live in a state of squalor. They are ill-fed, ill-housed, ill-trained, and lack the facilities to earn a decent living from their environment. Their position of degradation has been forcibly brought to their notice, and the advanced countries have become aware of their existence due to the social contacts of the last war, the developments in communication, and, no doubt, the spread of communism. The main problem, therefore, is to raise the living standards of these peoples. Thus the literature of Economics over the past ten years has been increasingly concerned with Growth or Development. Even the advanced countries, see the problems of growth and stagnation in the economy, as a difference in degree rather than in kind from that of the developing nations.

It is difficult to define in precise terms these underdeveloped countries because no two are alike in all respects. Benjamin Higgins distinguishes at least four categories of underdeveloped countries. (1)

(1) Higgins, Benjamin - Economic Development, W. W. Norton, Inc., N. Y., 1959, Pg. 21 f

1. First there are countries which have per capita incomes low enough to put them into the underdeveloped category, but which have unutilized known resources and which are currently undertaking enough industrialization and agricultural improvement to bring substantial increases in per capita income. Argentina, Brazil, Italy and the Philippines fall into this category. They have sufficient domestic savings, plus assured foreign capital assistance, necessary to finance the capital formation needed to raise incomes, yet they are all confronted with bottlenecks such as skilled labour, entrepreneurship, or laggard sectors of the economy which limit the rate of growth. In most of them, growth is very unevenly distributed among social groups and among regions. The problem in these countries is therefore, one of sustaining growth, reducing open and disguised unemployment, and spreading the benefits of growth more widely.

2. Second, there are countries like Burma, China, and Thailand whose per capita incomes are currently very low, which do not appear to have abundant resources relative to the size of their populations, but where per capita income is currently rising. In these countries the rise in income must be accelerated not just sustained.

3. Third, there are countries which are poor and stagnant in the sense that per capita incomes show no rising trend, but which are relatively rich in resources. Indonesia is a case in point. What is needed is a total transformation of the economy.

4. Finally, there are countries which are stagnant and are also poor in resources. Libya and Yemen are typical examples. In such countries the existing economic undertakings must be improved.

Yet, in outlining these four types of underdeveloped countries it is possible to distinguish underlying characteristics which are peculiar to these countries. It has been recognised that they have low capital per head, which gives low productivity, hence low income, and therefore low savings, which keep capital low, - a vicious circle. (2)

But it is doubtful if the classification of Harvey Leibenstein can be improved. (3) The main features of underdeveloped areas have been categorized into Economic, Demographic, Cultural, Political, Technological.

(2) Lewis, W. Arthur - The Theory of Economic Growth - R. D. Irwin Inc., Homewood, Illinois, 1955

(3) Leibenstein, Harvey - Economic Backwardness and Economic Growth, Page 40 - 41

These various factors which characterize underdevelopment go to show the inherent problems associated with pinpointing the essence of underdevelopment. Multiple disciplines must be focussed on these countries in order to appreciate and define their problems. In such a case, therefore, it is necessary to divert attention to the allied disciplines such as Sociology and Psychology to determine why the attitudes of these people are what they are, and what are the motivating factors that will propel people on the road of accumulation and enterprise to faster development.

Jacob Viner has adequately broached the issue when he writes

"It is incumbent on the economist, however, to recognize and to proclaim that economic improvement is not merely a matter of more capital or more acres, or more coal in the ground, but also of growth of effectiveness of management and of manual effort through better political and social organisation. If he fails to do so, he is liable to find himself throwing the blame for national poverty wholly on physical circumstances beyond human remedy, or on factors external to that economy, to the neglect of the internal human, social, political and moral factors which may carry a large part of the true responsibility." (4)

(4) Viner, Jacob - International Trade and Economic Development, Clarendon Press - Oxford, 1953, Pg. 16

Gunnar Myrdal sees development as a social problem concerned with a complex of interlocking, circular and cumulative changes, (5) while Bert Hoselitz states that "What is needed is not merely a theory of economic growth in purely economic terms, but a theory relating economic development to cultural change." (6) The scope of the task, however, has not deterred economists from attempting to define an underdeveloped country with the hope that this will throw some light on the nature of the problem. Eugene Staley suggests that it is

"a country characterized by mass poverty which is chronic and not the result of some temporary misfortune, and by obsolete methods of production and social organization, which means that the poverty is not entirely due to poor natural resources and hence could presumably be lessened by methods already proved in other countries." (7)

Viner defines an underdeveloped country as one

"which has good potential prospects for using more capital or more labour or more available natural resources or all of these, to support its present population on a higher level of living, or, if its per capita income level is already fairly high, to support a larger population on a not lower level of living" (8)

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- (5) Myrdal, Gunnar - Development and Underdevelopment, Cairo, 1956, Pg. 19
 - (6) Hoselitz, Bert F. - Sociological Aspects of Economic Growth. The Free Press of Glencoe, Illinois, 1960, Pg.24
 - (7) Staley, Eugene - The Future of Underdeveloped Countries. New York, Harper and Brothers, 1954, Pg. 13
 - (8) Viner, Jacob - International Trade and Economic Development, Glencoe, The Free Press, 1952, Pg. 125

Higgins, for policy purposes has defined it as "a candidate for assistance through the foreign aid programs of the United States and other Western Nations".(9) Such definitions, however, hardly have any meaning for analytical purposes, hence the difficulty of definition remains. A group of experts have used the term "under-developed countries" to mean "countries in which per capita real income is low when compared with the per capita real incomes of the United States, Canada, Australia and Western Europe". (10) In general under-developed countries in this sense are those with per capita incomes less than one-quarter those of the United States or, roughly, less than \$ 500 (US) per year.

But the sociologists have raised strong objections to the use of this definition inasmuch as quantitative changes in the per capita income cannot and do not reflect qualitative changes taking place in the society. Bert Hoselitz writes

"what we are driving at is more than a mere classification in terms of this highly elusive measure, per capita output. If different stages of economic development are associated with different systems, each exhibiting a particular social structure and culture, we must look for

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- (9) Higgins, Benjamin - op. cit. Pg. 7
(10) Measures for the Economic Development of Under-Developed Countries - Report by a Group of Experts. United Nations - Department of Economic Affairs, N.Y., 1951

further criteria by which to separate economically 'advanced' and 'underdeveloped' countries. These might be associated either with the country's economy, or its culture and social system". (11)

Thus since sociologists are interested in the components of different social systems, each of which corresponds to a particular level of economic advancement, they have attempted to structure the relevant relationships in terms of "pattern variables" in order to state the basic factors comprising a framework in which entire social systems can be studied and compared. The contrast between economically advanced and underdeveloped societies is thus reduced to its basic sociological foundation if the purely economic magnitudes are stated in terms of these pattern variables. In this analysis special attention is given only to those aspects of social behaviour which have significance for economic action, particularly as this action relates to conditions affecting changes in the output of goods and services achieved by a society.

Hoselitz (12) has pointed out that, of Parsons' five pattern alternatives, at least four are applicable to the problem under consideration. These are namely, the choice between modalities of the social object, that is achievement

(11) Hoselitz, Bert - op. cit., Pg. 29

(12) For a full treatment see Hoselitz, op. cit, Chapter 2

versus ascription; the choice between types of value orientation standard, universalism versus particularism; the definition of scope of interest in the object, specificity versus diffuseness; and the private versus collectivity interest dilemma, self-orientation versus collectivity-orientation. When these pattern alternatives are applied to economies at different stages of development, underdeveloped economies exhibit usually:

- (1) a lack of reliance on achievement as a norm for acquiring economic goods
- (2) the prevalence of particularism in the distribution among performers of economically relevant tasks
- (3) diffuseness in the performance of economically relevant tasks and
- (4) an attitude of self-orientation with relation to economic goods.

Hoselitz maintains that

"the main problem in the theory of economic growth which arises as a consequence of relating social, structural and cultural factors to economic variables is to determine the mechanisms by which the social structure of an underdeveloped country becomes altered and takes on the features which characterize an economically advanced country. In particular, economists may query whether this

process of social change is autonomous or whether, and in what form, it is related to change in the more purely economics variables." (13)

But this type of analysis is not quantifiable and therefore not meaningful for architects of development. The problem in its entirety has been recognised. Indeed Schumpeter in 1934 wrote that

"because of the fundamental dependence of the economic aspect of things on everything else, it is not possible to explain economic change by previous economic conditions alone. For the economic state of people does not emerge simply from the preceding economic conditions, but only from the preceding total situation" (14)

What is realised is that development must take place in order to raise the masses of the populace to higher levels of consumption so that the gap between the standards of living of the advanced countries, and that of the underdeveloped will be narrowed in the hope that this will contribute to a lasting understanding among peoples, and world peace. In order to do this output and consumption can be measured in ~~per~~ per capita terms.

There might be a considerable deviation between both. They are antithetical to each other, but in the early stages of development it is necessary to restrain consumption so that a greater surplus will be available for investment. It should be observed, however, that many of the underdeveloped countries such as the oil rich kingdoms of the Middle East and the ore-producing republics of South

(13) Ibid, Pg. 40

(14) Schumpeter, J. A. - The Theory of Economic Development
Harvard University Press - Cambridge, Mass., 1934

America do have large surpluses, but it is not devoted to development. Is it little wonder that these countries have not developed when their surplus is used for such expenditures as Philby noted in the Saudi Arabian experience? "I have sat down to all fresco dinners in the Crown Prince's garden estate at Riyadh, to which every item on the menu had come fresh from America in refrigerator planes." (15) Nor is this unusual. Many travellers are amazed that while "the elites revel in their submarine night-clubs with walls of glass, through which the circumambient fish could watch their dancing," (16), there are thousands dying of hunger and disease in these lands.

The problem in these countries is not one of savings as W. Arthur Lewis believes it is

"The central problem in the theory of economic development is to understand the process by which a community which was previously saving and investing 4 to 5 per cent of its national income or less, converts itself into an economy where voluntary saving is running at about 12 to 15 per cent of national income or more" (17)

but rather one of enterprise as seen by Lord Keynes.

"It is enterprise which builds and improves the world's possessions. Now, just as the fruits of thrift may go to provide either capital accumulation or an enhanced value of money-income for the consumer, so the outgoings of enterprise may be found either out of thrift or at

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- (15) H. St. J. B. Philby - Arabian Jubilee, London, 1952
 (16) For an interesting account of the activities of the elites in these countries see H. Philby, op. cit., and Harvey O'Connor - The Empire of Oil, New York, 1955
 (17) Lewis W. Arthur - Economic Development with Unlimited Supplies of Labour, Pg. 416, Reprinted in The Economics of Underdevelopment by Agarwala, Singh, Oxford Univ. Press, 1958

the expense of the consumption of the average consumer. Worse still; - not only may thrift exist without enterprise, but as soon as thrift gets ahead of enterprise, it positively discourages the recovery of enterprise and sets up a vicious cricle by its adverse effect on profits. If Enterprise is afoot, wealth accumulates whatever may be happening to Thrift; and if Enterprise is asleep, wealth decays whatever Thrift may be doing." (18)

In measuring this enterprise the per capita income is a useful guide because it shows the direction in which aggregate income is moving while the reverse is not possible. It is possible that an increasing population with rising national product may still make people worse off. Again the per capita output rather than per capita consumption is relevant because although the latter might be stationary development may be taking place.

Unfortunately the numerous variables in a developmental framework cannot be isolated for individual study. The whole social, economic and political framework must be viewed. Neither can cause or effect be clearly distinguished. The lack of capital is cause of underdevelopment, but it is also a result of low levels of income, and thus a result of underdevelopment. In such a milieu sweeping changes must be made. The whole psychosociological attitude of the people must be revamped. They have to recognize that man can be a master of his

(18) Keynes T.M. - A Treatise on Money, Vol. II, MacMillan Co. Ltd., London, 1953, Pg. 148 - 49

environment. Rather than glorifying in the eternal, the timeless and the absolute, they have to disdain these and take a rational rather than metaphysical approach to life. New skills will have to be learnt that promote industrialism, rather than those concerned with the military or the reknown of a lawyer or priest. Stable government will have to be maintained so that the fruits of effort can be preserved. The social system will have to discourage the concept of the extended family; break down the rigid stratification prevalent, whether that of class, colour or creed; provide vertical and horizontal mobility for the resources, in short, incentive and unlimited opportunity must be provided for all.

CHAPTER II

TANGANYIKA AND ITS FRAMEWORK FOR DEVELOPMENT

Tanganyika in East Africa is one of the African countries in which the natural resources remain as they have been from times immemorial. The vast deposits of minerals are hardly developed, the forests, rivers and lakes remain unexploited for the welfare of man; fertile agricultural land knows not the plough; while the human resources remain steeped in poverty and illiteracy. There is no insurmountable barrier in Tanganyika to man's ingenuity; it is simply that the science and technology of the Modern world have not been applied to the problems of its underdevelopment.

Geography:

Tanganyika is a large compact block of land in Eastern Africa lying between the great lakes - Lake Victoria, Lake Tanganyika and Lake Nyasa - and the Indian Ocean. (1) The territory extends from 1°S to 11°45'S, and from 29°21' E to 40°25'E. It is 740 miles long and 760 miles broad, with a coastline of about 550 miles.

(1) Handbook of Tanganyika,
Government Printer, Dar Es Salaam, 1958, Pg. 1

Its area is 362,688 square miles, which includes 19,982 square miles of inland water. Except for land near the sea, the average altitude is about 1,000 feet. Indeed, most of the country is a vast plateau 3,000 to 4,000 feet above sea level. This vast backbone of mountains lying across the country has a soothing influence on the climate, so that although the country is so near the equator, there are no true barren regions or steamy forests so often associated with the tropics.

The territory falls into three main climatic zones: on the coast and in the immediate hinterland conditions are tropical and humid, with an average temperature of 76°F. and a rainfall of about 40 inches per year; the central plateau is hot and dry, although with considerable daily and seasonal variations in temperature; in the mountainous regions the climate is semi-temperate, with occasional frosts. The greater part of the country has a one-season rainfall, from about December to May, but amounts of rainfall are generally unreliable, varying greatly from year to year. Only about a third of the country is reasonably well supplied with water throughout the year. Because of the widespread water shortage and also the scourge of the tse-tse fly, less than ten per cent of the land is at present cultivated, although a considerable larger portion is under grazing. Some of the slopes provide excellent land for growing coffee, wheat and tea.

Tanganyika has numerous rivers, although few are navigable for any considerable length, and the small ones may dry out during part of the year. The two main river systems rise in the central plateau, one flowing east to the Indian Ocean, and the other west or south to enter the great lakes. These form the basis of the tremendous hydro-electric potential of the country.

History:

The history of Tanganyika began with the "scramble for Africa" in the 1880's. But it has a story going back thousands of years. Remains of Stone Age culture and of late Neolithic peoples have been found in the South East of the Serengeti Plains, and in the Ngorongoro Crater in the Northern Province. Contact between the inhabitants of the coast and Arabia and India occurred before the Christian era. There is even evidence of early Persian colonization. (2) Arab penetration from Oman began in the 8th century A.D. The Chinese in their search for ivory, gold and slaves sent several expeditions to East Africa. Chinese money has been found in Kilwa in the Southern Province.

A Portuguese expedition led by Vasco da Gama which sailed along the East African coast in 1498 found a

(2) For a detailed discussion of Tanganyika's early history see the Handbook of Tanganyika op. cit.

series of independent towns peopled by Arabs but having no political connections with Arabia. The Portuguese thus established themselves although generally ruling through tributary Arab Sultans. This began a long struggle for supremacy between the Arabs and the Portuguese which lasted through two centuries. By 1729, however, the Portuguese were finally driven out by the Arabs. During the second period of Arab domination the slave trade was enormously expanded. By 1832 Said Bin Sultan transferred his capital to Zanzibar, and it was this dynasty which controlled Tanganyika when the scramble began.

From the 1850's, journeys by missionary explorers were increasing, and in 1884 Sir Harvy Johnston penetrated as far as Moshi and, then, suggested to the British Foreign Office to proclaim a protectorate over the Chagga country. This proposal was refused.

Thus the way was laid open for the Germans to take over. They had also been exploring the region; and in 1884 the wily Dr. Carl Peters made twelve treaties with chiefs, whereby their territories were declared German property. During the next few years more land was acquired, including in 1890 a ten mile strip along the coast, by payment of £ 200,000 to the Sultan of Zanzibar.

Arab hostility, however, was considerable, owing to the fear that the German occupation would lead to the abolition of the prosperous slave trade. An Arab uprising was put down in 1889. Perhaps because the Germans were in a hurry to establish themselves; perhaps because they lacked experienced administrators; or perhaps because of their apparently inherent attitude of racial superiority; their regime was ruthless.

From 1891-93, there was war with the Hehe, a martial people near Iringa. Further uprisings culminated in the 'maji-maji' rebellion of 1905-1907, in which a large part of the Southern Province was involved. Bernard Chidzero speaks of the affair thus:

"The Hehe wars of 1894-98 were tragic both in their toll of human life and in their deleterious effect on tribal organisation in various areas of the territory. But the bloodiest rising of all was the Maji-Maji rebellion of 1905-07. Truculent and defiant tribes in the southern part of the Territory revolting against the imposition of the hut-tax, the system of forced labour on plantations and the imposition of an unwanted system of local government broke out in open armed rebellion. It is recorded that in this rebellion burnings were met with burnings, killings with killings, and German forces devastated and laid waste an immense part of southern Tanganyika, by destroying crops and razing whole villages. It is estimated that 120,000 Africans died of starvation, and much of the area became, and remains to this day, tsetse infested and uninhabited." (3)

(3) Chidzero, B.T.G.: Tanganyika and International Trusteeship, Oxford University Press, London 1961, Pg. 9-10

Until 1891, administration had been the concern of a private company; but the need to use regular troops made inevitable the intervention of the German Government, which in that year proclaimed a protectorate over the whole country.

The First World War saw fighting between British and German troops in the territory. However, the result here was not significant. The future of Tanganyika was decided at the Treaty of Versailles. By Article 119 of the Treaty of Peace, Germany renounced all rights to its overseas possessions in favour of the Principal Allied Powers. Tanganyika was then administered by Great Britain under mandate from the League of Nations. Its administration continued to be carried out under the terms of the mandate until 1946, when it became one of the first territories to be placed under the Trusteeship System of the United Nations.

Constitutional Development:

Constitutional development in Tanganyika has followed the general pattern adopted in the United Kingdom dependencies, whereby the indigenous peoples are given by successive stages increasing representation in the legislature and increasing responsibility in the executive. In Tanganyika the final stage of advance to full independence has been reached with a speed and smoothness

which reflect the apparent harmonious relations between the various races and tribal groups in the territory and the political maturity of the African leaders.

In the initial stages of the taking over of the administration of Tanganyika by Britain, the German policy was followed, in which the territory was run by a Governor assisted by an advisory council which met three times a year and by commissioners who had the aid of district advisory committees to which unofficials were nominated.

The German practice, however, being somewhat repugnant to the concept of British democracy, was quickly abandoned; and by 1926 a Legislative Council was established so that "proper ventilation and discussion of legislative measures could be given before they were enacted". (4) The Council consisted of the Governor, as President, thirteen official and ten unofficial nominated members.

While nomination to the legislature was from the start open to members of any race, the need to use English in its deliberations and the lack of Africans with sufficient education meant that for a number of years membership was, in fact, confined to Europeans and Asians.

(4) Quoted in - Tanganyika: the Making of a Nation,
United Kingdom Information Service

After the last war, constitutional advance was rapid in the Territory. Membership of the Legislative Council was increased in November 1945 to fifteen officials and fourteen unofficials. In the beginning of 1948 the Executive Council was remodelled on the "member system" under which groups of government departments were made the responsibility of certain individual members. The constitution was further amended in 1953 to provide for the appointment of a Speaker to preside over the Legislative Council in place of the Governor. By the end of 1954 the Executive Council consisted of the Governor as President, three ex-officio members and six unofficial members, of whom two were Europeans, two Asians and two Africans.

In 1955 the Legislative Council was reconstituted to give equal representation to the territory's three main races in the unofficial membership of an enlarged Council with the retention of an official majority. This new Legislative Council was presided over by a Speaker; and had thirty-one official members and thirty unofficials, comprising ten each of Africans, Asians and Europeans, representing the communities or interests they served. The language 'Swahili' was also allowed to be used in debate.

In addition to these changes, increased responsibility was placed on unofficials by inviting the six unofficial

members of the Executive Council to sit on the Government side of the Legislative Council to concern themselves with certain government departments and to help in answering in the legislature for these departments.

Further development towards responsible government took place in 1957, when the official members of the Executive Council were redesignated ministers as an indication that they would in future concentrate on the making of policy. At the same time, six assistant ministers were appointed. The assistant ministers became ex-officio members of the Legislative Council, with the duty of speaking for the department assigned to them. They were not, however, members of the Executive Council, although they might attend meetings and take part in discussions when matters affecting their departments came before it.

The first elections, based upon a qualitative franchise, (5) took place in September, 1958, when five of the ten constituencies sent their representatives to the Legislative Council. The other five constituencies voted in February 1959. There was, what was known as a "tripartite" vote; that is, for each constituency, there were three seats, one African, one Asian and one European. A ballot paper to be valid had to have a vote

(5) The franchise was based upon an age qualification of 21 years, a residential qualification and, in addition, at least two years of secondary education or an income of at least \$150 a year or the holding of one of certain specified offices in the community.

marked for one of each of the three seats.

Following the completion of the elections, the Governor decided to set up a Council of Ministers in which unofficials were for the first time appointed to Ministerial Office. The new Council had twelve Ministers of whom five were elected unofficials. It assumed the functions of the old Executive Council in advising the Governor on constitutional and legislative matters, although the Executive Council continued in existence with modified powers.

Under the 1960 Constitution a considerable measure of responsible government was introduced. Because the franchise was extended through a lowering of educational and financial requirements, a considerable number of voters were added to the list. The new Legislative Council consisted of seventy-one elected and nine nominated members.

A new Council of Ministers was also appointed with the Governor as President, a Deputy Governor, ten unofficial Ministers and only two official ministers. There is, for the first time, a Chief Minister, who is the Governor's principal adviser and Leader of Government Business in the Legislative Council. He and eight of the nine unofficial ministers have been appointed from among the elected members of the Legislative Council.

On December 9th, 1961, Tanganyika achieved full independence. With this the Governor, Deputy Governor and two official ministers were withdrawn from the Council of Ministers which was renamed the Cabinet. The title of Chief Minister was changed to that of Prime Minister, and the Legislative Council became the National Assembly. Many of the powers formerly exercised by the Governor disappeared, and in most matters he now acts on the advice of the Cabinet.

The two main political parties are the Tanganyika African National Union, and the United Tanganyika Party. They ensure political stability against such groups as the exclusively African National Congress or the All-Muslim National Union of Tanganyika.

Under the pragmatic trade unionist Kawawha, Tanganyika hopes to become a republic in the near future.

The Framework for Development:

In a country so complex as Tanganyika, any plan of development must be carefully weighed. The obvious fact of poverty and illiteracy is present everywhere. With a population of nine and one-half million people and a per capita income of approximately \$ 60.-- U.S. per annum, what else can be expected? Even the concept of per capita income might be misleading partly because of the tremendous inequality of income.

The main problem of Tanganyika is to bring a greater proportion of the people into the income stream, that is, the internal market must be developed. At present only about 450,000 workers, or 5 % of the African population, are working in paid employment. The majority are engaged in subsistence agriculture.

A sensible plan should therefore be aimed at raising the incomes in agriculture to supply effective demand for manufactured goods. This rise in income can come about only through increased productivity in agriculture. This increased production would also supply the foreign exchange needed for industrial equipment, as well as release labour from agriculture to swell the industrial work force and so keep wages down: a most desirable event in the early stages of industrialisation. The enormous profits would thus be available for reinvestment.

Of course, the fundamental premise that free enterprise and active competition can foster economic development without brutality is the core of the framework envisaged. The profit motive is the primary stimulus to growth and improvement. Thus the engine of progress will be the entrepreneur.

The State, however, will have a role to play in Tanganyika's development, but it will be secondary. It is expected that the government will guide and assist private enterprise to achieve maximum productivity.

In this it is quite capable, when it is considered that the majority of the educated class seek employment in the Civil Service. It might even be argued that because of this fact of the harnessing of the entrepreneurial talent by the state, that it should assume the role of the entrepreneur and plan for progress. It is far more desirable, however, that the state should provide the framework by building the substructure of the economy with the emphasis on incentive and opportunity for all. The various routes that the economy can take for development, while at the same time reflecting the scale of preference of the community, can be done best under liberal capitalism.

The table below shows the Gross Domestic Product of Tanganyika and its distribution among the various sectors of the economy. The predominance of agriculture which accounts for about 45 per cent of the total output is shown. By comparison, manufacturing industry represents only about 4 per cent of the total. The average annual rate of growth of gross domestic product during the last six years was in the region of 5 per cent.

Table I

GROSS DOMESTIC PRODUCT OF TANGANYIKA

£'000

Sector	1955	1956	1957	1958	1959	1960*
	Total	Total	Total	Total	Total	Total
Agriculture	72,455	74,363	76,478	75,048	79,964	82,289
Livestock Products	12,651	12,915	14,625	15,027	16,706	18,394
Forest Products	5,259	5,685	5,965	5,285	5,106	5,191
Hunting and Fishing	1,514	1,739	2,144	2,928	3,423	3,578
Mining and Quarrying	5,060	5,024	4,984	6,186	6,572	6,984
Manufacturing	4,085	4,016	5,727	6,750	7,100	7,343
Craft Industries	5,269	5,319	5,617	5,698	5,834	5,916
Construction	8,140	9,305	10,326	10,470	10,028	10,787
Public Utilities	763	903	641	955	1,074	1,130
Transport, Storage and Communications	8,510	9,041	10,181	11,437	12,273	12,798
Distribution	7,641	7,580	7,662	7,814	8,590	8,600
Ownership of Dwellings	2,724	2,889	3,065	3,334	3,542	3,797
Public Administration and Defence	8,712	9,335	10,405	11,326	11,752	13,223
Miscellaneous Services	3,961	4,306	4,535	4,834	5,148	5,381
Total	146,744	152,420	162,335	157,092	177,112	185,411

*Preliminary estimate

CHAPTER III

AGRICULTURE AND MINING

Food is essential to man. Because of this simple fact, agriculture should play a major role in the development of any country. In fact it is the farmers in most developed countries who have sacrificed most for economic progress. Their importance has been adequately estimated by W. Arthur Lewis -

"If agriculture stagnates, the capitalist sector cannot grow; capitalist profits remain a small part of the national income, and saving and investment are correspondingly small. Smooth economic development requires that industry and agriculture should grow together." (1)

Kurihara takes issue with these views, however, stating that an agriculturally biased economic development is technically unsound. (2a) He sees the reallocation of the existing stock of capital as dangerous in the long run. The assumption is made that the agricultural sector is technologically more backward than the industrial sector. Hence the rate of growth of national output is capable of falling as a consequence of a reallocation of capital from the industrial to the agricultural sector when the

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- (1) Lewis, W. A. - Theory of Economic Growth, Richard D. Irwin Inc., Homewood, Illinois, 1955, Pg. 277
(2a) Kenneth Kurihara - Theoretical Objections to Agriculture-Biased Economic Development: Indian Journal of Economics, October 1958

savings ratio remains constant. But the problem as pointed out earlier is not one of savings but of enterprise, and a redistribution of income in favour of the farmers is desirable to expand the market economy.

Again, in a country where the comparative advantage lies in agriculture, the productivity of agriculture may increase so rapidly that both national income and savings will rise faster than if the capital was devoted to industry. This increase will then accelerate industrialization and technical change. Kurihara's analysis is conceived in real terms of a country's resources, and hence is limited when applied to underdeveloped countries receiving foreign aid and developing by creating credit.

Basically development should begin with a country's abundant resources, therefore economic development in most of the African countries, and particularly in Tanganyika, should start with agriculture. In countries such as India, Indonesia and Jamaica, where people happen to be the abundant resource and industrial raw materials are present, an industrially biased development is conceivable. In Tanganyika, however, the advantage lies with its vast fertile lands and wooded mountainsides; the population density being only 26 to the square mile. Development, therefore, should concentrate on agriculture. Moreover, with such a low population density, the long

development of the industrial sector is predicated on intensive development of the agricultural sector to release the labour for the manufacturing sector of the economy.

The aim should be the destruction of rent in agriculture. The economy of these countries is agrarian and largely feudalistic. The aim is to make it industrial and largely capitalistic, hence the necessity of land reform to destroy the existing pattern of things.

John Stuart Mill recognised at an early date the importance of applying new technology to agriculture in order to destroy rent:

"improvements retard or put back the law of diminishing returns from land (or in manufactures compensate for it) and so lower rents. The poorest soil cultivated is now of a better grade than before, and the produce is yielded at a less cost and value; so that the land with which the best grades are compared to determine the rent is not separated from the least grades by so wide a gap." (2)

When rent is destroyed it is to be expected that capital will be diverted from agriculture to industry. It might, however, be exported having been lured into the country in the first instance by high rent. This would be most unfortunate because industry would be deprived of much needed capital with which to expand. Furthermore, if the rate of industrial expansion is unduly low, then

(2) Mill, J.S. - Principles of Political Economy, Abridged by J. L. Laughlin, D. Appleton Co., N.Y., 1907, Pg. 491

the labour force, displaced by technology in agriculture, will flow back to the farms to depress incomes or will create social problems in the towns. Thus there cannot be economic progress in agriculture unless the rate of expansion of the labour force in non-agricultural industries is substantially greater than the expansion in agriculture.

It is possible to make the farmers be the sufferers in any developmental programme. If farm prices are kept low, thus keeping cost of living low, then low wages could be paid by industrialists who would realise a greater profit, hence expand production, particularly if the goods are exported. If wages are low, however, there would be no impetus for agricultural expansion which is dependent on the domestic market. It could be argued, however, that the demand for food is one of slow growth, being a function of the low income elasticity of food.

The emphasis in Tanganyika, however, must be on the internal market, therefore wages in industry should not be kept unduly low, otherwise the products of the farms will not be bought, hence the farmers will have no money with which to purchase manufactured goods.

The centrepiece of economic development in Tanganyika must be agriculture because of the heavy dependence of the economy on this particular sector. Agriculture accounts for about 54.5 per cent of the Gross Domestic Product in

comparison to about 4 per cent by the manufacturing sector. Eighty per cent of its export earnings comes from agricultural and livestock products.

Investments in agriculture have the effect of increasing real incomes in agriculture. As this income rises the much needed purchasing power will be generated in the economy to provide the stimulus for industrial expansion. These investments would also make possible the necessary increase in the food supply on which successful industrialization is built, for continuous industrial expansion requires an increasing amount of agricultural goods flowing into the towns. Perhaps the most important effect of initial investments in agriculture is the fact that it releases labour for industrial production. This flow will facilitate the payment of low wages, thus making possible large profits for reinvestment.

Land reform is a factor that should not be overlooked in the economic development of any country. Particularly in the African countries the system of land tenure is bad. It is based either on communal ownership and use, such as pastures, where several people use the same land; or upon cooperative or collective farming, where several people work together on the same land under a single authority and pool the proceeds. In some cases each person has a right to exclusive use of a particular piece of land, but

his rights to dispose of the land are restricted on the theory that the land belongs to the chief or the tribe. It is only recently that individual ownership has become important.

Of course, the great hindrance this system of land tenure has been to investment, innovation and progress, needs no elaboration. Wherever there is no security, there is no incentive for development. Again if there is too much security, then everyone will revel in mediocrity and no progress will occur. A most important consequence of land reform, however, is its ability to improve the institutional setting within which economic development can take place. It breaks the power of the landlord class, thus leading to political and social upheavals, and the rise of new men of ideas who tend to be more radical and progressive, quite unlike the reactionary conservatism of the old elite.

The importance of high import duties or restrictions in minimising the value of agriculture has been considered earlier by Adam Smith (3). The result of high tariffs on industrial imports is twofold. First, it raises the rate of manufacturing profit in relation to that of agricultural profit. Second, it lowers the real value of the agricultural surplus; that is, it will now exchange for less imported goods. Therefore, capital will be drawn from agriculture or prevented from going into it because

(3) Smith, Adam-The Wealth of Nations, Vol. II/The World's Classics / Oxford Univ. Press, London 1923, Pg. 279-310.

profits will fall in agriculture and rise in other areas of business. Entrepreneurs who are the motivating factor in any free developmental programme will thus make the shift.

It should be noted also that the high import duties will raise the cost of living, depending of course on the goods taxed. These, of course, are usually luxuries. A rise in the cost of living will strongly influence the payment of higher wages. This has the effect of broadening the internal demand for goods and also encouraging mechanization of production. Thus industries will rise up to supply the demand for equipment which will make possible increased productivity and hence the payment for still higher wages.

It is interesting to speculate on the effects of opening the country to agricultural imports. Then agriculture would be destroyed and capital would shift to industry possibly. But there would be no internal market, so this industrial production would have to be for export. If a social revolution does not overtake the country, then it is to be presumed that the export earnings would raise the income level and demand for food to the extent that it would now be possible to produce much of its own agricultural products. It is to be expected that more efficient methods of agricultural production than prevailed previously will be introduced

otherwise only an increase in agricultural imports would take place.

Agriculture in Tanganyika:

Tanganyika is a country comprising very wide variations in climate and soils, and it is possible to grow almost every tropical crop of economic importance as well as many requiring temperate conditions.

Unfortunately, agriculture is not as developed as it should be, even with present existing techniques. One of the main reasons for this is to be found in the peoples themselves. They are still governed by native law and custom, and this has an inhibitory effect on agricultural progress.

All, or virtually all land under native law and custom is regarded as belonging to some particular tribe or community. This applies to about eighty per cent of the land in the territory. Although certain tribal boundaries are made somewhat indefinite by migratory people from neighbouring areas, in general such boundaries have tended to restrict movements of agricultural population on any substantial scale.

Among cultivating communities the most general custom was communal ownership of all land by the tribe or clan. Individuals did not, and largely still do not,

own land but have user rights in cultivated land. In pastoral areas individual ownership and tenure of land is likely to be impracticable because scarcity of water would make provision of watering points on individual holdings impossible or uneconomic; or because large areas of grazing can only be used for part of the year, necessitating seasonal migration of stock for effective use of land.

This system of land tenure has severe disadvantages. Farmers have not the same interest in the care and development of their land as they would have if it were their own freehold property, and if they could not count on readily obtaining user rights in further land from the tribal area. In this state of affairs it is difficult to introduce more intensive, organised farming. Land use planning on an area basis is made very difficult. There is absolutely no means of preventing unproductive or destructive use of land. Again it is impossible to move a large number of people from an overcrowded tribal land unit to one with land to spare. Neither can land be used in such a situation as security for loans.

The Report of the World Bank considers a change in the existing land policy as paramount.

"What is needed is to replace modified shifting cultivation and extensive pastoralism by methods making more intensive and more permanent use of the land. The aim must be to convert African

agriculture from its present status of being little more than a traditional occupation, undertaken mainly for subsistence and resulting in land deterioration, to farming as a business activity on efficiently run planned farms of economic size, justifying the injection of capital, achieving a higher level of productivity and appreciably raising standards of living." (4)

To this end the Report envisages:

(a) Sweeping changes in the Land Tenure Legislation.

(b) An increased concentration of effort on areas and crops in which the greatest increase of marketed production is to be expected and improvement of planning techniques to ensure that public efforts are deployed in the most effective manner.

(c) Reorganisation of extension work on the basis of multi-purpose extension workers and adoption in some areas of a community development approach.

(d) Reorganization of the administration of agricultural credit.

(e) Measures to improve the market outlets for African crops and to increase cash incentives. (5)

With these ideas in mind the Tanganyika Government is allocating nearly a quarter of the expenditure under the 1961-64 development plan to agriculture, including

(4) The Economic Development of Tanganyika, Report by The International Bank for Reconstruction and Development, The Johns Hopkins Press, Baltimore, Pg. 91

(5) Ibid, Chapter 5

water development and irrigation, the provision of extension services, subsidies for the purchase of agricultural machinery, co-operative and veterinary development, and the setting up of an agricultural college.

Because the greater part of the area under cultivation is occupied by Africans growing food crops for local consumption, valuation is difficult. There are no reliable statistics relating to the magnitude of this subsistence production. In a year of good harvests the territory is self-sufficient in foodstuffs. The main cash crops are estimated below.

Table 2

Production of Main Cash Crops

Tons

	Sisal (Fibre, Tow)	Coffee	Tea	Tobacco Fire cured	Flue cured	Cotton Lint	Sugar	Pyreth- rum (dried flower)	Oil Seeds
1	145,200	15,400	1,050	810	1,240	8,500	8,200	300	
2	162,200	14,800	1,100	590	1,060	13,900	10,100	240	57,400
3	168,800	15,200	1,270	380	980	9,000	11,700	290	43,000
4	178,200	19,400	1,600	860	1,590	18,300	10,700	480	54,300
5	176,500	19,000	2,000	590	1,510	21,500	10,400	640	59,400
6	185,700	22,500	2,400	530	1,520	23,600	18,000	740	78,900
7	184,900	20,700	2,800	470	1,600	30,200	18,400	740	99,800
8	196,600	22,500	2,800	800	1,700	30,700	21,000	610	92,800
9	205,273	22,707	3,640	634	2,027	35,352	27,651	766	91,800

Source: Tanganyika Statistical Abstract 1960, Pg. 60

Sisal:

Sisal is the chief industry of Tanganyika, contributing almost a quarter of total export in recent years and accounting for a little under 10 per cent of the total product

of the monetary economy and nearly a quarter of the value of marketed agricultural produce.

Tanganyika is now the largest sisal-producing country in the world and the industry is highly organised. Production is almost entirely carried on by private non-native enterprises, as a heavy capital investment is required. There are three main areas of production:

- (a) Along the railway from Tanga to Moshi.
- (b) Along the Central railway inland for some two hundred and fifty miles from Dar-es-Salaam.
- (c) In the Lindi area in the extreme south.

Exports of sisal have been growing in recent years at a rate of about five per cent per annum. (See Table 2) During the same period world output and consumption has about doubled. While production has greatly increased elsewhere, notably in Brazil, increase of production in Tanganyika is held back by certain local factors.

These fall into two main categories:

- (a) that of finding means of economizing labour.
- (b) that of finding practicable and economic means of increasing yields per acre and, at the same time, maintaining or improving soil fertility.

Despite the fact that few countries can be said to owe so much to any one crop or industry as Tanganyika does to sisal and the sisal industry, yet it would not be advisable for the government to promote expansion in this

area. The evils of monoculture are well known. The industry, however, is well organised and financially strong, therefore there is every reason to believe that it can solve its own problems.

Cotton:

Cotton as well as sisal was introduced into Tanganyika during the German administration, but unlike sisal is grown largely by African farmers.

Production has been increasing in recent years (Table 2). The principal area where this crop is grown is the Lake Province, but output is steadily increasing in the Eastern Province.

The industry is well organised with a price fixing machinery and a price stabilisation fund built up during the period of high world prices. This fund is now administered by the statutory Lint and Seed Marketing Board and has been used to support the price to growers in recent years and for such other purposes as making loans to cooperatives and grants for cotton research and for the construction of roads and bridges in cotton-growing areas.

The Research Centre at Ukiriguru in the Lake Province which has been greatly helped in its work by the Empire Cotton Growing Corporation is doing intensive plant-breeding work in an attempt to develop types suitable

to particular areas while maintaining ginning output and lint qualities.

Cotton production holds the future for many areas of Tanganyika.

Coffee:

In the post-war period the Tanganyika coffee crop, more than four-fifths of which is grown by African small-holders, has been increasing in importance (see Table). Prices have been falling, however, as a result of world over-production, and Tanganyika is now restricting exports to keep within a pre-determined quota.

The main areas of production are:

- (1) Around Bukoba in the West Lake Province. Both arabica and robusta varieties are grown, mainly by Africans. Marketing is through the Bukoba Native Co-operative Union and passed by the Bukoba Coffee Grader, and the coffee is sold either by special arrangement or at the Mombasa auctions.
- (2) Coffee production is also important in the Northern Province. Arabica coffee is cultivated by Africans mainly on the slopes of Mount Kilimanjaro and by non-Africans around Mount Meru and in the Usambara Mountains. Marketing of African grown coffee in the province is controlled chiefly by the Kilimanjaro Native Coffee Union.

Most of the growers' associations and cooperatives through which the industry operates are formed by Africans, and policy is agreed through the Coffee Board, a consultative body on which the various producers' associations are represented.

The coffee industry of Tanganyika is faced with two major problems, namely, low yields and poor quality. Every effort for improvement must therefore be made in these directions. By devoting sixteen of the twenty-eight increased productivity schemes to coffee development, it can be seen that the administration is well aware of its problems.

Other Commercial Crops:

Tea cultivation, which in the past has been almost entirely in the hands of non-African planters, but is now being encouraged among African small-holders, has expanded considerably (see Table 2) since the war.

Nearly all the tea produced comes from the Usambaras in Tanga Province, and in the Mufindi, Tukuyu and Njombe districts of the Southern Highlands Province. While the outlook for tea cannot be called gloomy, it is not particularly bright. According to a Food and Agricultural Organisation projection, by 1965 world supply of tea might well exceed consumption by about five per cent, assuming continuation of the present price level, so that in

practice there may be downward pressure on prices. (6)

Tanganyika, however, by improving the quality of its production and developing a home market might well profit from expansion in this area.

Tobacco:

Although land is available and labour can be trained for increased tobacco production, this is not advisable due to unfavourable market conditions. The present production which is confined largely to European Estates in the Southern Highland Province and the Western Province should not expand in area, but rather in quality and quantity by more intensive methods.

Pyrethrum and Oilseeds are making sharply increasing and somewhat substantial contributions to the economy of Tanganyika, particularly in the export sector. The former, which is grown largely in Arusha and Iringa districts, has become of increasing importance in the production of insecticides. Oilseeds and nuts are providing export earnings valued at over four million pounds per year. The bulk of the product is grown by African farmers throughout the territory.

Livestock:

The rearing of livestock is another area in which African production dominates. Cattle sheep and goats

(6) Quoted by the IBRD Report op. cit. Pg. 379

are kept by the population in considerable numbers.

/See Table 3/

Table 3

Livestock Numbers Thousands

Year	Cattle	Goats	Sheep	Pigs
1951	6260	3480	2340	151
1952	6470	3530	2510	125
1953	6630	4380	3070	15.8
1954	6490	4410	3020	13.1
1955	6755	3878	2739	12.5
1956	7005	4117	2950	11.5
1957	7057	4233	2885	18.5
1958	7417	4124	2805	17.4
1959	7719	4334	2874	14.6

Source: Statistical Abstract 1960 - Tanganyika East
African Statistical Department

Approximately one-third of the territory receives a rainfall of about twenty inches between the months of October and May, and it is this vast region which supplies the pastures necessary for livestock. Unfortunately, due to the mal-distribution of the water supply and the scourge of the tse-tse fly, enormous stretches are uninhabited. In the remaining areas where livestock is reared there are tremendous problems facing the industry.

The Report of the East Africa Royal Commission sees the problem thus: "

"Their pastoral way of life portends both a danger and a deficiency. The danger is that they may turn their lands into desert; the deficiency that, without management of their herds, and in some cases better usage of their lands than mere pastoralism, they will, contribute far less than their lands potential to the growing needs of the community!" (7)

In fact, the Mission from the International Bank for Reconstruction and Development states that the contribution of livestock to the economy may be negative. (8) This is because the problems of management and disease control are further complicated by sociological factors.

As was with crops, so it is with livestock; existing methods have differed little from immemorial times and lead to a combination of low yields and deterioration of the land. In fact, the very nature of land tenure - communal ownership and grazing, coupled with individual ownership of stock, militates against good livestock practice; because it immediately leads to disregard of two essentials, namely adjustment of stock numbers to carrying capacity and pasture management. Neither the individual nor the community exhibits any interest in these matters. There is no attempt to reduce total losses in dry years by the agreed limitation of the number of beasts held by each individual to the number which the land and water supplies could reasonably be expected to support.

(7) East Africa Royal Commission, 1953-1955 Report, London, Her Majesty's Stationery Office, 1961, Pg. 281

(8) Report by the I.B.R.D., op. cit., Page 141

Little effort is made to organize rotational grazing and resting of pastures. The result is gross overstocking in relation to the pasturage available under the existing lack of management. In consequence, the grass cover is largely destroyed, a process aided by the widespread setting of fires, which aid erosion by leaving the ground bare at the onset of the following rains.

Breeding is also largely indiscriminate and uncontrolled, and the stock are therefore of poor quality. Standards of animal husbandry are low, and inadequate attention is given to disease control. As a result, calving rates and calf survival rates are low. These factors combined with the general reluctance to sell stock except in times of drought, make the Livestock industry of Tanganyika a problem one.

(9)

But the excessive numbers of livestock which lead to over-grazing and general deterioration in the practice of animal husbandry must not be considered in isolation. It is part and parcel of the entire social framework of the tribes of Tanganyika. Many of the tribes such as the Masai, Gogo and Barabaig carry on practices that they have indulged in for generations. In the payment of 'lobola' or 'bride price', cattle feature largely. Then, again, large herds are kept for social prestige, with little regard for their quality or value. The keeping of large

(9) For a more detailed treatment of this topic see the Report by the I.B.R.D., Pages 79-83

numbers of cattle forms the basis of the security system of the pastoral tribes in particular. In times of drought they can be exchanged for grain. It must not be forgotten that in many cases the head of the family is not at liberty to dispose of stock which appear to belong to him, because in fact he holds them in trusteeship for the family, and it may be incumbent upon him to retain them in order to be able to provide bride price for his younger brothers or his sons in due course. It is these attitudes and prejudices which at the core form the fundamental problems of the livestock industry.

They have caused Tanganyika to be importing slaughter stock, meat and meat products from Kenya and Uganda to the tune of about £194,800 (1960) per year. If conditions were otherwise, this sale would strengthen its internal markets and it would reduce its imports. Animal hides and skins form one of the major exports.

The potentialities of the livestock industry are enormous. The improvement and expansion of the livestock industry must be one of the major areas for development. This is desirable for many reasons: to provide a better diet for the population, to use to the best advantage areas not entirely suitable for crop production, to contribute to exports and, generally, to raise the income and employment level of the territory. It is gratifying to note that the Government's development plan includes

provision for improved veterinary services, construction of stock routes and other projects designed to help the livestock industry.

Forestry:

About 42 per cent of the total area of Tanganyika is under forest or woodland, but only 141,500 square miles of this is productive forest. Some of the most important commercial species of timber are camphor, podocarpus, mvule, mwinga and mahogany. Their annual production is shown in the following table.

Table 4

Year	<u>Annual Production of Timber</u>				Thousand cu. ft. (solid volume)		
	Mninga Kejaat	Podo- carpus	(Iroko) Mvule	E.A. Camphor- wood	Mahogany	Muhuhu	Miombo
1950	1722.5	1131.2	553.1	327.0	265.2		150.8
1951	2322.1	1403.6	468.0	388.0	441.4		300.8
1952	1498.5	1554.8	952.2	398.7	449.8		908.6
1953	1719.6	1818.6	1430.0	393.7	377.2		442.0
1954	1417.6	1323.6	299.6	340.0	321.9		385.1
1955	1368.0	1110.9	244.1	318.7	253.3	143.3	369.8
1956	1290.5	1061.0	246.3	267.1	209.3	169.4	666.2
1957	1295.2	934.7	316.7	319.9	164.4	160.9	679.6
1958	1193.0	727.1	348.2	287.2	284.8	135.1	572.9
1959	1068.9	809.2	339.1	280.0	220.7	201.0	580.4

Source: Tanganyika Statistical Abstract 1960, Pg. 66

The annual value of forest products is estimated at 15.2 million dollars (U.S.) about 60 per cent in the monetary economy and 40 per cent in the subsistence sphere.

Of the total amount of timber cut, approximately 40 per cent is exported mainly to other East African territories, South Africa, United Kingdom and Japan. Other forest products exported are beeswax and honey, gum arabic, mangrove poles and bark, wattle bark and extract, raffia fibre and gum copal.

The outlook for the forest industry is bright. The growth of demand which may be expected gives scope for a considerable afforestation programme. There is a steady increase in the national income, and this has caused the replacement of poles and grass by timber and shingles in construction. Many forest products such as bark extracts and beeswax are demanded for a wide variety of uses, particularly pharmaceutical and cosmetic, hence the market prospects are very favourable.

With the prospects of a continuously increasing demand for forest and forest products over the next 15 years, the Government has taken steps to consolidate and expand its natural function as a protector of the forests to the benefit of the whole economy and future generations. Forest reserves have been demarcated and are being managed by the Government. It is to be expected that the programme

of afforestation, enumeration and natural regeneration conceived under the 1960/65 plan will be carried through effectively.

Fisheries:

The fisheries of Tanganyika can be divided broadly into two categories, namely the marine fisheries and the lake fisheries. Both are unexplored and undeveloped. Bold government assistance is needed to introduce new equipment and help in the marketing of the produce.

This would have the dual effect of increasing the income and activity of the people and supplying a valuable source of protein. The shipbuilding industry would also receive an early start by making crafts for deep-sea fishing.

The marine fisheries, although they contain as great a variety and quantity of fish as can be obtained in many parts of the world, have not attracted commercial fishing. They thus remain known largely for good sport fishing.

In the lake fisheries the main catch is dagaa which is dried and sent to many areas of consumption.

It is estimated that the catch from Lake Tanganyika is around 10,000 tons annually (wet weight). (10)

(10) Ibid, Page 198

The fisheries can become of great importance in the economy of Tanganyika if the basic requirements of better marketing facilities, good fishing equipment and greater training of people associated with the industry are met.

Mining:

It is generally agreed that the mineral resources of Tanganyika are rich, varied and extensive, but precisely how rich and extensive is a matter of conjecture as there is no real geological knowledge of the greater part of the territory. Mining, therefore, is still in its infancy. (11) The mineral production is stated in the Tables below by value and quantity.

Table 5

Item	<u>Mineral Production: Value</u> £'000								
	1948	1952	1953	1954	1955	1956	1957	1958	1959
Diamonds	1070	4047	1766	3107	3199	2865	3242	4415	4548
Gold	496	886	952	929	941	890	793	854	1197
Lead	-	251	252	203	404	578	417	314	402
Building									
Materials	40	172	219	337	256	294	266	252	209
Salt	86	133	147	179	213	233	215	243	251
Copper	-	72	116	105	212	309	202	337	261
Silver	4	52	81	65	112	186	168	235	177
Mica Sheet	61	144	105	76	77	68	81	51	52
Lime	16	25	25	18	20	20	19	19	16
Gypsum	-	1	5	10	16	18	21	22	14
Tin Con-									
centrates	52	44	35	27	29	12	11	13	51
Tungsten "	-	45	26	8	18	11	-	-	-
Other Minerals	2	4	15	5	6	6	6	11	19
Total	1827	5875	3743	5068	5494	5490	5441	6766	7197

Source: Tanganyika Statistical Abstract 1960, Pg. 68

(11) See; United Nations visiting Mission to East Africa, Report on Tanganyika and Related Documents. Trusteeship Council - Official Records, Fourth Session, Supplement No. 3

Table 6

Mineral Production: Quantity

Item	Unit	1948	1952	1953	1954	1955	1956	1957	1958	1959
Gems	'000carats	148	331	171	330	323	358	373	515	555
	'000troy oz.	58	67	74	74	75	71	63	68	96
	Tons	-	2371	2755	2118	3601	5116	4851	4465	5715
Building materials	'000 cu. ft.	6032	19059	16500	22140	15393	16721	17104	15515	13587
	Tons	11694	15847	17607	21271	25265	27520	25348	29316	30599
Iron	Tons	-	252	485	368	580	1138	1052	1581	1081
Iron	'000troy oz.	25	171	265	212	344	563	521	738	536
Sheet	Tons	71	107	78	78	65	57	66	48	52
Iron	Tons	5135	6577	6479	5098	5851	5204	4026	4136	3631
Iron	Tons	-	495	1713	4440	7812	9450	9707	9212	6758
Concentrates	Tons	132	63	62	54	55	21	20	26	93
Iron	Tons	-	36	31	12	24	15	-	-	-

Source: Tanganyika Statistical Abstract 1960,
Pg. 68

More than two thirds of the surface area of Tanganyika is composed of very ancient rocks of both igneous and metamorphic derivation and less than one third of unaltered sediments. These rocks are pushed up in certain areas to form high mountain peaks such as Mount Kilimanjaro (19000 ft.) in the Northern Province, while in others they drop off into deep troughs such as Lake Tanganyika in the Western Province which is the world's second deepest lake. The great diversity of rock formations present, present minerals equally diverse.

Diamonds:

These come from a district on the borders of the Lake Central and Western Provinces, about 80 miles south of Lake Victoria. The main production comes from the Mavadui Mine discovered by the late Dr. J. T. Williamson. A small adjoining deposit is worked by a neighbouring company, Alamasi Limited. Their quantity and value in recent years can be seen from the tables.

The diamond reserves of Tanganyika are not fully known, but indications are that they will easily support the current scale of operations for many years. At present, mining has been limited to the richest sections in the near-surface gravels, which contain an exceptionally high concentration of diamonds with a high proportion of gem quality.

Williamson Diamonds Limited is owned equally and run jointly by the Tanganyika Government and De Beers. The fixed assets of the enterprise are valued at over \$ 22 million. The Tanganyika diamond producers, Williamson and Alamasi Ltd., entered into an agreement in 1947 with the Diamond Corporation which allots to the territory a quota of 10 per cent of world diamond sales. As Tanganyika's quota is considerably larger than the current output, no obstacle stands in the way of marketing an increased volume of diamond production.

Gold:

Gold has consistently occupied second place in Tanganyika's mineral production in recent years /See Table 5/.

Gold mining is principally confined to four areas: (i) east of Lake Victoria, the site of the Kiabakari mine; (ii) south of the lake, where the Geita mine maintains a substantial output; (iii) the Lupa district in southwestern Tanganyika; (iv) the Singida District in the Central Province, scene of the earliest gold mining operations during the period of German administration.

Approximately 80 per cent of the gold output is accounted for by the Kiabakari and Geita mines. The Kiabakari mine, with a potential output estimated at 4,500 ounces of gold monthly at full-scale operations, is now the largest producer in the territory. The mine was reorganized and modern capital equipment installed during the 1950's. It is now operated by Tangold Mining Company in which the United Kingdom Colonial Development Corporation owns a 51 per cent interest and a private mining concern the remainder.

The Geita mine has an output of about 3,500 ounces a month. Due to rising costs of operation, the postwar years were not very profitable, but the outlook is now brighter following new capital installations in 1959.

The Lupa district was one of the most important areas in the early days of gold mining in the territory. Production has now shrunk to comparative insignificance. It is believed, however, that a number of worthwhile veins remain to be found.

Production in the Singida district is likewise small, and several mines formerly worked are now idle. The grade of indicated ore remaining in the idle mines and the geological setting of the district encourage the belief that the area still contains promising exploration and development possibilities.

As in other gold mining territories, development is hindered by the high costs of production and the stable official price. Further expansion would also require heavy capital investments to exploit the present lowgrade ores if rich veins are not found.

Lead:

Uruwira Minerals Limited have been developing a lead property at the Mukwamba Mine, Mpanda, in the Western Province. Through loans and guarantees by the Tanganyika and United States Governments, costly installations were made and a spur railway was built to join the Central Line at Kaliuwa.

Estimates, however, were overoptimistic and the major producing mine was closed in mid 1960 due to the exhaustion

of ore reserves. Mine exploration and deep level drilling, although disappointing so far, are continuing.

Tin:

There is an extensive area carrying widely distributed tin ores and some minor tungsten occurrences to the west of Lake Victoria. In 1950, the Colonial Development Corporation bought out a number of small-scale tin producers in the area and carried out extensive explorations with the hope of being able to work the Karagwe deposits cheaply on a large scale. The fall in the price of tin, however, led to an abandonment of the project.

The only operating tin mine at present is the Kaborispoke open pit mine. In general, it would appear that Karagwe District is best suited to small-scale operations, and the outlook is for a continuation of a small volume of production over an extended period.

Mica:

Tanganyika has long been the chief source of mica in the Commonwealth. Sheet mica of the highest quality is produced there. The principal producing areas are in the Bagamoyo, Kigoma, Kor~~o~~we, Mbeya, Morogoro and Mpwapwa districts. During the past several years, production has declined both in value and quantity.

This is due partly to a weakening of demand for the poorer grades of mica, and partly to an exhaustion of visible reserves with an unwillingness of producers to invest in the explorations involved in searching for new deposits.

Coal:

The existence of large deposits of coal of good quality have been substantiated by surveys carried out largely by the Colonial Development Corporation. The principal deposit lies in the basin of the Ruhuhu River in the Southern Province.

An option for the development of these deposits has been granted to Tanganyika Coalfields Limited, an enterprise in which the Colonial Development Corporation has a major share. Smaller shares are held by private overseas concerns. The formation of the deposits are such, however, that only a small portion can be extracted by cheap open-cast methods. Most of the deposits would require mining by more expensive underground methods.

The major coal reserves of Tanganyika which are estimated at around 1132 million tons appear to be assets for the future, although it is possible that the advances made in the application of atomic power to industrial service might render them useless in the long run. The coalfields are remote from major centres of economic activity and are 500 miles from the coast.

The controlling interests do not see the development of coal at present as a profitable undertaking. There is little doubt, however, that coal could provide the power for an industrial empire in the Ruhuhu basin. The problem will be further considered under iron.

Iron:

It has been established by comprehensive investigations carried out by the Department of Geological Survey that large deposits of iron ore exist in the territory. Conservative estimates place the reserves at 1,200 million tons. Much of the deposits are in the Liganga area about 35 miles from the rich coal-fields in the south-west of the territory.

The ore, however, is in the form of magnetite which is associated with a high percentage of titanium-bearing minerals. The presence of titanium means that the ore cannot be treated economically by standard smelting methods. Alternative methods of reduction do, however, exist, and tests have shown that iron ore of an acceptable composition can be produced from the ore.

The problems facing this industry, however, are best viewed under the problems of the entire mining industry.

Other Minerals:

The production of salt has been steadily rising both in value and quantity. The principal source which has been worked for many years is a brine spring at Uvinza near Lake Tanganyika in the Western Province. Production is carried out by one enterprise, the Nyanza Salt Mines Limited.

A major deposit of phosphate has been discovered at Minjingu Hill east of Lake Manyara in the Northern Province. Development of phosphate production has been entrusted to New Consolidated Gold Fields Ltd. which holds a special exclusive prospecting license over the area and also over an adjacent area where a similar deposit has been discovered. The size and quality of the deposit indicate that a basis exists for substantial development of phosphate production. Reserves of phosphate-bearing rock amount to 10 million tons with a relatively high content of phosphorus.

A large deposit of pyrochlore which contains columbium has been discovered at Panda Hill near Mbeya in the Southern Highlands Province by the Geological Survey Department. In 1955 the Government granted a prospecting license in the area to the Mbeya Exploration Company Ltd., of which 70 per cent is owned by a Netherlands concern and the remainder by the United Kingdom Colonial Development Corporation.

Although the survey shows that there are large reserves which can be exploited by low-cost mining, development has proceeded slowly. Neither has there been any progress made in mining the deposits found by New Consolidated Gold Fields Ltd. in the Lake Manyara area of the Northern Province.

It is believed that the main reasons for such tardy development lie in the fact that world consumption is uncertain owing to the existence of substitutes, and also numerous sources of supply exist throughout the world.

Other minerals of value are copper and silver, which yield fluctuating fortunes, and kaolin, magnesite and graphite which are mined on a small scale.

Mineral Development - Prospects:

The Report of the East Africa Royal Commission adequately views this problem.

"On account of poor communications, inadequate water supplies, inadequate supplies of skilled labour, and, sometimes of unskilled labour, it may not be possible to exploit the minerals economically. For example, the exploitation of large coal and iron deposits in south-west Tanganyika might lead to considerable development. Here long term railway development might set off a considerable chain reaction of mineral, industrial and agricultural development. It is wrong to regard mineral development as simply a question of discovering particular deposits in this or that region. Both the discovery and exploitation of minerals is bound up with the tempo of general economic advance through the opening up of new areas, through urbanization,

through industrialization and the consequent better access to engineering facilities and through greater mobility of labour." (13)

It is futile to expect private enterprise to engage in such wholesale development. The building of a dam at Nyumba ya Mungu would lead to large scale development in the Moshi-Arusha area. It would be possible to irrigate extensive tracts of dry lands to increase agricultural production and generate hydro-electric power for the exploitation of the phosphate mines.

The concept of inter-related development is not fully appreciated by the Government, nor is it appreciated that Tanganyika is at present a marginal area in which the attraction to the investment of capital from abroad has a low priority. There is no sense in the Government granting rights which leaves the minerals of the territory untouched. Diamonds were excluded from prospectors since the major discoveries until 1961, and steps have been taken to restrict the establishment of further salt works. The mineral rights are held by overseas companies who tend to retard the development of Tanganyika's resources because they might conflict with their other mining interests. Diamonds are a clear case in point. It is thus necessary for the Government to take bold action to free the mineral industry from the giants which tend to strangle it and to restore the type of competition in which entrepreneurial

(13) Report of the East Africa Royal Commission, Op. cit.,
Pg. 114

energy and enterprise are rewarded.

By failing to remove available minerals now the people of Tanganyika are depriving themselves of income now and postponing the creation of future income which might result from its accrual in the present. The Report of the East Africa Royal Commission states:

"There is probably no single source from which surplus income for the benefit of the territories could be so readily obtained as from successful mineral exploitation." (14)

It is incumbent on the Government to formulate consistent, clear and unified policies in regard to mining royalties, lease conditions, taxation, access to land for prospecting and mining operations, compensation and like, affairs relating to mining. It is not necessary to take the extreme step of "operating certain mines" as suggested in a statement by the Governor in his report on the Colonial Governors' Conference to the Legislative Council of Tanganyika on 3 December 1947.(15) The Government may, however, hold shares in the mining companies.

It is noteworthy that the mines cannot be said to be worked in the interests of the people of Tanganyika. The United Nations Mission records complaints from the Sukumaland chiefs, the Shinyanga Township Africans and the African Association at Arusha that Native Treasuries

(14) Ibid, Page 115

(15) Quoted in the Report of the United Nations Mission to East Africa, op. cit., Page 38

received no share of the proceeds from mines exploited on lands formerly belonging to them. It was also stated by one of the Sukuma chiefs in relation to the Williamson diamond mine that people who had formerly lived in the present mine area had been "driven away" and "did not receive anything from the land now". (16)

Some Associations claimed that not even the revenues derived from mining by the Government were being spent on social and welfare services for the Africans.

"We are told that taxes from the mines go to the budget of the Territory, but there cannot be much money coming in, since, every time we ask for a school, government says it has no money available." (17)

It is unfortunate that the mines are not exploited more in the interest of the people of Tanganyika. Despite the fact that 15 per cent of the export earnings of the country is derived from mineral production, it is doubtful how much of this sum remains in the territory. Yet the mines contribute a not inconsiderable sum to the revenues of the country in the form of royalties, rents, licence fees and income tax paid by mining corporations and companies. Other revenue is derived from income tax on salaries and wages, expenditure on equipment and stores within the Territory, duties on imports, railway freight charges and so on. The mining industry of Tanganyika

(16) Ibid, Page 87-88

(17) Ibid, Page 88

needs Government assistance to provide a basic framework for the role it must play in a system of multi-sectoral development. The East Africa Royal Commission noted, however, that the Government was doing all in its power to attract capital for investment in mineral exploration and mining. A department of Geological Survey is maintained with an expert staff of geologists, mineralogists, chemists and metallurgists, whose services are available to prospectors and miners. There is a Mining Loans Board empowered to grant loans for the development of properties, purchase of plant and equipment; mining machinery, explosives and certain other supplies are admitted to the country free of customs duties. All mineral rights are vested in the Crown and all royalties and other receipts derived from prospecting and mining form part of the general revenue of the territory. Large scale mineral investigation is now in progress employing the most modern prospecting techniques. With the national emphasis on Africanization, it is to be hoped that the mineral industry of Tanganyika will be brought to the service of her people.

CHAPTER IV

THE IMPORTANCE OF INDUSTRY

Whenever development is being considered in a modern context, it is usual to equate it with industrialization. Development involves the application of machines to the processes of production to increase their output. This increase in output will, no doubt, be marked by a rise in the per capita income of the developing countries, therefore it seems logical to expect the more industrialised countries to have the higher per capita incomes.

Table 7

Distribution of Economically Active Population by Branch of Activity compared with Per Capita Income for 20 Countries

Country	Year	Economically active population			Per Capita	
		Percentage by branch of activity			Income in U.S.\$	
		Agriculture	Industry	Services	1949	1952-54
United Kingdom	1951	5	49.3	45.7	773	780
United States	1950	12.5	37.0	50.5	1453	1870
Belgium	1947	12.5	50.2	37.3	582	800
Switzerland	1950	16.6	47.0	36.4	849	1010
Australia	1947	16.8	38.9	44.3	679	950
New Zealand	1951	18.5	34.8	46.7	856	1000
Canada	1951	19.3	36.0	44.7	870	1310
Sweden	1950	20.5	40.9	38.6	780	950
Western Germany	1950	23.7	42.3	33.1	320	510
France	1946	38.0	30.4	31.6	482	740
Italy	1954	41.2	31.4	27.4	235	310
Portugal	1950	48.5	25.0	26.6	250	200
Ecuador	1950	51.7	27.8	20.5	40	150
Tanganyika	1957	58.7	8.2	33.1	15	40
Mexico	1950	60.9	16.7	22.4	121	220
Egypt	1947	62.8	11.8	25.4	100	120
Brazil	1950	64.4	12.9	22.7	112	230
India	1951	70.6	11.1	18.3	57	60
Phillippines	1948	72.9	10.5	16.4	44	150
Turkey	1950	85.7	7.4	6.9	125	150

*All workers employed in Public Service are included in this group and have not been allocated to the industry in which they are engaged.

Source: (1) Adapted from Industrialization, Balanced Growth, by G. F. Loeb, J. B. Wolters/Groningen, 1957, Pg. 14.
(2) Tanganyika - Statistical Abstract - 1960

Sir William Petty (1623-1687) made this brilliant generalization centuries ago, namely

"The movement of working population from agriculture to manufacture and from manufacture to commerce and services is shown by careful generalization of available facts to be the most important concomitant of economic progress" (1)

The figures available on the distribution of the labour force in several countries, and particularly in the industrialized ones, do, in fact, seem to support this assertion. This distribution is considered one of the most important guides to the standard of living. In the Table the distribution of the economically active population by branch of activity is compared with the per capita income for countries that have the available data. It should be noted that countries with a low percentage of economically active population in agriculture and a high percentage of economically active population in industry are generally countries having a high per capita income. The relationship, however, is not absolute. The decrease

(1) Quoted by Colin Clark in Conditions of Economic Progress, London, 2nd Edition, Pg. 395

in the percentage of man-power in agriculture is a historical fact in all developing countries.

Indeed, Frederick List has stated that "no high state of civilization can be attained without manufactures, an exclusively agricultural people being necessarily rude and barbarous". (2)

In order, therefore, to increase the per capita income and raise the standard of living of any underdeveloped country, industrialization must take place.

It was pointed out earlier that for Tanganyika, development would concentrate first on agriculture

"It matters not whether farmers earn more, by producing more, by getting better prices for what they produce, or by changing the nature of their crops. In either case the way to make industrialization self-supporting is to make the farmers richer year by year." (3)

In Tanganyika, are they getting richer?

Table 8

Exports of Main Agricultural Produce
- Value

Item	1951	1952	1953	1954	1955	1956	1957	1958	1959
Sal Fibre, flume and tow	23696	21709	12773	10902	9956	10823	9482	10349	13057
Cotton lint	2768	4679	4827	3357	5534	7486	6578	7249	6657
Coffee hulled	4503	5541	5809	9992	6897	9221	6969	7359	5709
Tea	234	303	332	504	535	543	601	632	771
Tobacco, unmanufactured	159	135	67	67	89	26	74	44	60
Pepper	44	41	47	40	80	89	83	62	15
Soybean seed	678	881	666	397	310	721	860	812	616
Sunflower seed	453	619	202	323	377	483	598	277	171
Walnut shells	337	534	475	554	869	881	1514	1087	1562
Groundnuts	353	634	69	182	346	1017	1073	779	785
Total	33225	35076	25267	26318	24993	31290	27832	28650	29403

(2) Quoted by Lewis Haney, History of Economic Thought, N.Y., The Macmillan Company, 1911, Pg. 322

(3) Lewis, W. Arthur: Aspects of Industrialization, Cairo, 1953, Pg. 14

Source: Tanganyika Statistical Abstract, Pg. 61

As can be seen from the above table, the farmers who depend on the export market are not getting richer year by year. There is only one crop, tea, which has shown a continuous increase in export earnings over the decade of the fifties. The others have fluctuated widely in income, which is a somewhat unstable base on which to launch an industrialization programme. Neither can an industrialization plan be built on the export crops of Tanganyika, because an increase in the export value of its agricultural products does not mean a general increase in purchasing power. Due to the structure of agricultural production, ownership is concentrated in few hands, which in many cases such as sisal and cotton possessed the capital for heavy initial investment.

Table 9

Showing Ownership of Sisal
in 1956

<u>Nationality</u>	<u>Production (Tons)</u>	<u>Percentage of Total</u>
Greek	59,550	32.03
British	58,170	31.32
Asian	44,698	24.06
Swiss	16,140	8.69
Dutch	3,870	2.08
Italian	1,550	.83
African	1,030	.55
German	1,000	.42

Source: Tanganyika - An Economic Survey,
Borclays Bank D.C.O., Pg. 6

If the value of agricultural export rise in such cases, then the value of imports would possibly increase for luxury goods, or the balance retained abroad increased, due to the increased earnings on foreign investments.

Much of the earnings from agriculture is generated in the sector dealing with home consumption. This again, has shown wide fluctuation, and the earnings are so small that they cannot form the basis of a self-supporting industrial programme.

Table 10

Agriculture: Prices to producers for Principal Crops
£ per ton

Province	Year	Cashew Nuts	Maize	Millet	Sorghum	Rice	Mixed Beans	Cassava	Pi- geon Pea	Sun-flower Seed	Ground- nuts
Northern	1955	37	16	15	16	29	26	15	19	15	-
	1956	40	15	20	15	38	31	15	20	17	-
	1957	27	15	15	20	31	25	15	18	18	44
	1958	26	16	19	19	-	34	12	20	16	-
	1959	37	13	13	17	25	29	14	17	20	53
Central	1955	-	18	15	15	-	24	-	25	19	52
	1956	-	16	16	18	-	23	8	29	18	55
	1957	-	16	-	15	-	28	-	26	18	56
	1958	-	-	18	-	-	22	8	-	12	44
	1959	-	12	17	15	33	24	6	26	17	50
Eastern	1955	-	20	13	16	30	28	12	19	21	50
	1956	-	20	17	22	30	28	10	16	18	45
	1957	-	18	18	-	25	27	-	21	17	40
	1958	-	17	20	20	30	27	14	-	13	44
	1959	-	19	22	15	28	27	15	19	15	43
West Lake	1959	-	17	31	23	17	25	12	20	-	51

Southern	1955	21	-	-	44	26	-	-	25	-	
	1956	18	-	-	36	27	-	-	27	-	
	1957	15	-	21	35	25	-	-	34	39	
	1958	17	-	15	34	24	-	-	16	40	
	1959	14	20	18	36	26	11	31	23	56	
Southern	1955	46	17	20	13	-	28	13	22	17	46
	1956	51	17	-	15	-	25	11	20	17	50
	1957	31	11	17	20	-	25	11	20	14	50
	1958	20	14	-	18	-	22	10	20	12	46
	1959	30	12	15	14	26	24	10	17	14	49
High-lands	1955	19	18	-	31	21	-	-	18	50	
	1956	12	21	-	27	20	-	-	15	-	
	1957	13	28	-	-	22	-	-	17	-	
	1958	12	27	18	26	22	14	-	13	44	
	1959	11	21	19	22	23	14	21	15	45	
Tanga	1955	18	-	-	29	26	-	-	14	-	
	1956	17	-	-	32	28	-	-	16	-	
	1957	17	-	14	31	27	11	-	20	-	
	1958	19	-	18	-	31	12	-	19	-	
	1959	13	-	16	23	29	13	56	20	60	
Northern	1955	15	17	-	22	22	-	22	20	-	
	1956	13	19	-	23	19	-	21	20	46	
	1957	12	15	14	26	19	10	18	15	46	
	1958	12	16	15	30	20	10	18	13	40	
	1959	13	16	14	21	22	9	20	15	44	
Average price per all provinces (weighted according to sales of local markets)	1955	42	18	17	-	29	24	-	19	20	50
	1956	45	16	18	-	30	24	-	18	19	50
	1957	30	14	16	18	30	24	12	20	18	47
	1958	26	15	17	18	35	24	11	25	14	43
	1959	30	14	20	15	24	25	11	19	16	47

Source: Tanganyika Statistical Abstract 1960

The above table shows the prices to producers of the principal agricultural crops. When it is realised that approximately 70 % of the territory depends directly upon agriculture for a living and that the peasant farmers scarcely produce any crop above subsistence demand, the great poverty of the region can be visualised. The East

African Royal Commission roughly estimated that the subsistence activities of the African population came to about £5.1 (\$14) per head a year. The same sources estimated that the net money product from the commercial activities of Africans reaches only £2.9 (\$8) per head per year. (4)

It is obvious that this income can do little to stimulate or maintain industrial expansion.

In order to make the farms richer, their numbers must be reduced. A large scale shift of surplus and marginal farmers into industrial projects is, therefore, desirable. At first these new recruits could concentrate on building the sub-structure of the economy. Roads, dams, irrigation projects can readily absorb the marginal farmers. The remaining farmers faced with increased demand and possibly rising prices will perforce modernise their farms to expand output.

The wages paid to the former marginal farmers will do much to strengthen the domestic market. This will generate a demand for the products of secondary industries such as textiles, footwear and aerated waters, thus forming a sort of multiplier expansion effect. Local demand is greatly needed to build up the present small manufacturing industries.

Over half of the output of manufacturing as shown by the following table is accounted for by certain types of secondary agricultural processing, such as grain and oil

(4) op. cit., Appendix 9

milling and by food products and beverages. Other important manufacturing activities are carpentry, furniture production and sawmilling and motor vehicle repair and general engineering including the repair shops of the East African Railways and Harbours Administration.

Table 11

Net Output of Manufacturing
Industries 1958

<u>Industry</u>	<u>Number of Employees</u>	<u>Net Output £'000</u>	<u>Per Cent of Total</u>
Food, Drink, Tobacco, Milling etc.	6,400	4,485	59
Carpentry, Furniture and sawmilling	8,080	1,599	21
Clothing, Footwear	450	200	3
Motor Vehicle repair and general engineering	2,690	872	11
Brick, block and tile making	890	150	2
Other	1,190	310	4
Total	19,700	7,616	100

Source: Survey of Industrial Production 1958,
East African Statistical Department.

Although secondary manufacturing is an important aspect of Tanganyika's development, yet the country cannot take off into sustained growth except a firm industrial

base is laid by expansion into the heavy industries. The development of the coal and iron deposits of the Southern Province is readily brought to mind here.

Lack of capital has probably impeded Tanganyika's development more than any other single factor. The territory, although it has an abundance of raw materials such as cotton, sisal, lumber and farm products together with numerous minerals such as coal, iron ore and tin, suitable for an industrial base, has not attracted private capital. This is due mainly to its remoteness from the main industrial countries which prefer to develop more readily accessible sources of supply in Canada and Western Africa: but largely also it is a victim of its own underdevelopment. Private capitalists realise that they would not only have to invest in their own industries but also undertake ancillary investments in projects such as education and transportation, which are necessary to the profitable operation of their enterprises.

Industrialization, therefore, cannot wait on private capital, but must receive government attention in many areas. Capital must come from foreign trade, inflation, profits and loans.

The visible balance of trade over the decade of the fifties has been as follows:

Table 12

Year	Balance of Trade £'000
1951	+ 12,225
1952	+ 9,918
1953	+ 7,183
1954	+ 5,813
1955	-6,118
1956	+10,422
1957	+ 1,771
1958	+10,260
1959	+12,762

Source: Statistical Abstract 1960, Government Printer

Unfortunately, due to the structure of ownership in the trade field, the favourable balances have not been used to finance industrialization. The government must take a greater share of this surplus through taxation and use it to build the country.

Inflation has long been recognised as one of the principal means of capital formation. E. J. Hamilton, an economic historian, cites in his article (5) inflationary periods which have resulted in tremendous expansion of output and enormous readjustments in the economy. In the 16th Century, due to the inflow of precious metal from

(5) Hamilton, E. J.: Prices and Progress,
Journal of Economic History, Vol. 12, 1952

the new world, wages rose approximately 150 % and prices 250 % higher than at the beginning of the period. Yet the period showed great advances particularly in trade and commerce. In France in 1740 - 1784, prices rose 64 % and wages 22 %. The period was one of rapid development with the rise of great cities and refinements in the art of spinning and weaving. Brazil during the twenty years 1938-58 has had a persistent inflation of 10 % per annum, yet total real output has grown consistently with no sign of a depression. In France prices doubled in the decade 1948-58 and Gross National Product has grown steadily from 5430 thousand million francs to 17,910 thousand million. The United Kingdom experienced a 50 % price rise and the United States has experienced substantial inflation in the 1945-57 period, but this has been paralleled by a huge growth in their Gross National Products. The United Kingdom rising from £8,411 million to £17.7 million; while the United States rose from \$ 180.3 million to \$ 364 million.

What has been the position in Tanganyika? The following table gives the trend in prices for the major consumer groups over the 1950's. It should be noted that except in respect of cost of living statistics for Dar-es-Salaam, no definite information is available on African income, expenditure, family budgets or standards of living in general. The following table, therefore, because it

omits trends in the rural areas in which a large part of the population resides, can be used only as the remotest guide.

Table 13

Cost of Living Index - (excluding rent)
Dar-es-Salaam
Base: December 1950 = 100

	Food, Drink, Tobacco	Clothing, Footwear	Group Domestic Ser- vants Wages	Phar- maceut- ical Pro- ducts	Trans- port	Amuse- ments	Miscellan- eous	Average Weighted Index of all Groups
December								
1950	100	100	100	100	100	100	100	100
1951	116	109	117	110	106	107	107	114
1952	131	107	126	116	111	117	108	123
1953	134	101	132	115	111	117	107	125
1954	137	103	139	114	109	118	106	128
1955	140	107	148	115	112	120	108	132
1956	144	108	159	116	111	119	109	135
1957	147	109	172	119	128	119	112	140
1958	148	112	177	122	128	121	125	143
1959	149	113	181	124	127	124	125	144

Source: Tanganyika Statistical Abstract 1960, Pg. 127

What has been the position with the Gross Domestic Product?

Table 14

Year	Gross Domestic Product (factor cost)	% Increase	Mfg.	% Change
1955	146,744		4,085	
1956	152,420	3.8	4,016	-1.2
1957	162,355	6.5	5,727	42.6
1958	167,092	2.3	6,750	17.9
1959	177,559	6.2	6,859	1.6

Source: Tanganyika Statistical Abstract 1960,
Pg. 123

From the above statistical data no clearcut correlation between price rises and expansion can be discerned, however, it should be observed that the period of highest growth, 1956-57, has also been the period of the greatest average price increase and also the greatest wage increase.

It is accepted by many that one of the chief means of financing industrialization is through allowing firms to make excess profits, so that this can be ploughed into expansion. The industrialization of Britain was largely financed in this way. The lag of wages behind prices during the second half of the 18th Century widened the margin of earnings that could be plowed back in developing inventions and in building the factory system.

John Nef, however, is skeptical about the impetus to expansion that is given by excess profits. He has shown by a comparison of profit inflation and industrial

trends at times during the price revolution the low correlation between the two in both France and England.

(6) It should be observed that although Nef showed that profit inflation was not the explanation for growth, he did not show that rising prices were not beneficial. It could be that prices and wages should rise together.

In Tanganyika it is necessary that wages should rise to provide effective demand for the products of the factories and farm. Perhaps the doubling of wages would do more for the development of the country than the harm that would occur from the increased money supply. It is quite clear that the oligopolistic firms in the economy have been making huge profits but have not fostered development.

Any attempt, however, to foster development in Tanganyika by "price" or "profit" inflation must be approached with caution. Approximately 80 % of the people are living at subsistence level. The per capita income is about \$ 60 per year. Inflation will, therefore, separate the society greater into the propertyless on the one hand and the rich speculators on the other and so pave the way for fascism and communism as it did on the continent of Europe.

(6) Nef, J.: "Prices and Industrial Capitalism in France and England 1540-1640"; *Economic History Review*, vii 1936-37

The easiest way of obtaining capital for development is by eliciting grants and loans from other countries primarily; and partly from a country's own resources.

The development plan for 1961/62 visualises its source of funds as follows:

Sources of Funds for Development Plan

<u>Grants:</u>	<u>£ million</u>
(1) Colonial Development and Welfare	4.5
(2) Other Sources e.g. Rockefeller, Ford, Nuffield Foundation	3.0
Miscellaneous Local Revenue	1.0
<u>Loans:</u>	
(1) Internal Short-term Borrowing	3.0
(2) Internal Long-term Borrowing	1.0
(3) External Long-term Borrowing	11.5
Total	24.0

Source: Development Plan for Tanganyika 1961/62 - 1963/64,
Pg. 11

If these sources supply the necessary funds, then Tanganyika will have capital to undertake its programmes of industrialization. In accepting loans and gifts, however, countries have to be wary of the "strings attached".

The gross capital formation in manufacturing has been as follows:

Table 15Gross Capital Formation - Manufacturing

Year	Amount	£'000
1955	2029	
1956	1902	
1957	1714	
1958	1986	

Source: Tanganyika Statistical Abstract 1960

Unfortunately, this growth has not followed a steady upward trend. This is to be expected, however, when it is considered that the greater part of the manufacturers of Tanganyika are concerned with refining its raw materials which are dependent on world demand, hence world prosperity. Periods of boom and recession on the world market are likewise reflected in the economy of Tanganyika.

No discussion about industrialization can take place without a full consideration of the labour force of the country: for it is their skills, their desires, their ambition that will make industrialization possible.

Professor Arthur Lewis has outlined a plan of development with excess labour (7) which is quite applicable to Tanganyika. The aim of his plan is to utilise what he terms "unlimited supply of labour" for development. Lewis

(7) Lewis, W. Arthur: "Economic Development with Unlimited Supplies of Labour", The Manchester School of Economic and Social Studies, May 1954.

has defined the term thus:

"Unlimited supply of labour may be said to exist in those countries where population is so large relatively to capital and natural resources that there are large sectors of the economy where the marginal productivity of labour is negligible, zero or even negative." (8)

Thus the wage level is at subsistence, but the supply of labour at this price exceeds the demand. Numerous people are underemployed in agriculture, petty trades and commercial services and domestic work.

Tanganyika fits well into this pattern, where with a labour force of about 2 $\frac{1}{2}$ million people only 435,000 was in paid employment in July 1959.

Table 16

Reported Number of Africans in Employment - July 1959

Main Industry	Adult Males	Adult Females	Young Persons and Children*	Total
Public Services	91731	1977	642	94350
Agriculture, Forestry and Fishing	177506	21207	21486	220199
Transport and Communications	8890	34	16	8940
Commerce	11816	557	199	12572
Manufactures, incl. electricity	18316	815	606	19737
Mining and quarrying	9320	110	130	9560
Construction	10890	47	211	11148
Other Services etc.	14432	1423	707	16562
Total	342901	26170	23997	393068
Unclassified Workers and Non-Africans				1732
Estimated Number in Domestic Services				40000
			Total	<u>435000</u>

*i.e. under 18 years of age

Source: Tanganyika Statistical Abstract 1960

The table above shows the distribution of workers by industry. It gives a good idea of the pattern of employment in Tanganyika. The total number of Africans in paid employment in July 1959 was approximately 435,000 or 5 % of the population. Of that number, domestic servants accounted for 40,000 or rather more than 9 %. If domestic servants and unclassified workers are excluded, the employed African population was composed to the extent of 87 % of adult males, 7 per cent of females and 6 per cent of young persons. About two-thirds of this employed African population were employed in the Tanga, Eastern and Northern Provinces and about 55 per cent were employed in the industries of agriculture, forestry, hunting and fishing. Nearly 25 per cent were employed in the public services. About 60 % of this employed labour force consisted of unskilled male labour. The overall ratio of employed adult male Africans to the number of adult males in the population is about 15 per cent which is a low figure.

There is also considerable variation between the Provinces. In Tanga Province it is relatively high at over 43 per cent though some part of the employed population in this Province is not indigenous to the Province but has migrated or been recruited for employment on the sisal estates. The proportion is also relatively high in the

Eastern and Northern Provinces, but in all the other Provinces the proportion is low and indeed below the average for the whole country.

In certain Provinces a considerable proportion of the African population is self-employed in the production of cash crops, particularly cotton and coffee, for sale in the market. This may have repercussions on the supply of labour for paid employment since the number of Africans who seek paid employment may vary inversely with the output of these cash crops and the prices which are realised.

There is thus at all times a large percentage of the labour force of Tanganyika that is underemployed. It is this labour that will be yielded to the capitalist sector without reducing output. In the developmental process it is the capitalist surplus that will be increased, with subsistence income remaining constant throughout the expansion.

It is possible to conceive of the situation in which the capitalist surplus does not increase relatively to the national income. Here the assumption would be that capitalist employment would expand relatively much faster than the surplus, so that within the capitalist sector profits plus rents are falling sharply relatively to wages. This is highly improbable.

Because real wages are constant, the whole benefit of capital accumulation and technical progress goes into surplus.

Of course, workers are better off in that more of them are employed. It can be said in effect that if unlimited supplies of labour are available at a constant real wage and if any part of profits is reinvested in productive capacity, profits will grow continuously relatively to the national income and capital formation will also grow relatively to the national income.

The process will stop when capital accumulation has caught up with the population, so that there is no longer surplus labour. When capital accumulation catches up with the labour supply, wages begin to rise above the subsistence level, and the capitalist surplus is adversely affected.

The problem of industrialization is essentially a problem of human transformation: the attitudes, hopes and aspirations of the people must change. In the early stages of industrialization it is among the landless, the hungry, the politically powerless and the socially disaffected that the first recruits are most likely to be found. But this cannot last for long. The values of the society must change, so that industrialization is appreciated.

People are either pushed or pulled from the land or leave in response to incentives. Perhaps one of the greatest forces pushing people into factories is the pressure of population on developed resources. In agriculture, there is a given level of technical and organizational development; therefore, the surplus population

is forced to enter industrial production. Unfortunately, where industries are not expanding rapidly enough as in Tanganyika, labour bogs down in agriculture and impedes efficiency and reform. The abject poverty, periodic threat of famine and endemic starvation which is usually associated with multiple divisions of the land also forces people from the land. They usually flow into the towns to form slums, if not provided with productive work. The system of primogeniture also exerts this push.

In Tanganyika the flow from the land has been negligible. In fact, it is remarkable that in a country where the total population in 1957, a census year, was 8,663,000, made up of 4,165,100 males and 4,497,900 females, the population in the main towns, of which there are thirteen, totalled, 221,770 or only $2\frac{1}{2}$ per cent of all the people in the country. Also, only six of these towns had populations in excess of 10,000. The people find security on the land.

Despite the fact that colonial powers tend to pre-empt the best part of the land for plantation agriculture in their colonies as happened in Kenya and Indonesia, this did not happen in Tanganyika. In fact, the opposite seems to be the case, because Europeans and Asians are prohibited from owning large estates in many sections of the country. As a result population remained dispersed and no great commercial or industrial centre was built up. Lack of

transportation and communication also impeded the cohesion of the nation.

Of course, high rewards in the form of wages which would supply goods and services would effect the transition from agriculture to industry. This would provide security and enable the workers to bring their families into the towns. The fundamental problem, however, of cultivating new social attitudes and new wants remains. Some groups accept new ways more readily than others.

This problem of adjustment is enormous. Whenever a basic change in the relationship between man and his work occurs, then inevitably, there must be a change between man and his culture setting. As Margaret Meade has said and shown (9) "Man in his attempt to change nature, changes his own nature", thus leading to numerous conflicts and problems.

The growth of industrialization brings with it urbanization literacy, effective governmental apparatus, leisure and reduced fertility. A new set of value patterns also develops and the new society calls for talents and abilities of a type that the old elite do not possess. In this social upheaval the old system of values is nostalgically exaggerated by the vested interests who face a loss of their prestige and power, but as soon as the

(9) Meade, Margaret: Cultural Patterns and Technical Change, New York, 1953

social code and pressure for conformity begins to break, then the new knowledge which was regarded as subversive to the established order will sweep all before it.

It is characteristic of industrialism that it is constantly subversive of established ways, even its own, and entails a constant emphasis on change and improvement. As noted by Greaves

"It is the urgent pressure of the multiplicity of means and ends in advanced economy that stimulates thought; the consciousness of alternatives makes change or reform one of the ends of effort." (10)

An outstanding problem created by industrialization is one which arises directly out of the lack of mobility in the old society. The old society is rigid, stratified, placing emphasis on stability and security rather than on development. It is usually arranged along tribal, racial or kinship lines. Thus occupational mobility is restricted. In the attempt of the underlings to rise, numerous conflicts result.

Because of the security afforded by the land, the problem of commitment to an industrial way of life is enormous. As Kerr, Myers, et al., have pointed out:

"The problem of commitment is critical. It entails the permanent acceptance of industrial employment and the acclimatisation of the work force at all levels to factory conditions, urban living, formalised rule-making processes and other demands inherent in the industrial order." (11)

(10) Greaves, I.C.: Modern Production among Backward People's. London: G. Allen and Urwin, 1935, Page 59

(11) Kerr, Meyers, Dunlop et al.: The Labour Problem in Economic Development, International Labour Review, Vol. 71 - 1955

All these problems have occurred in Tanganyika in one form or another. In Tanganyika much of the labour which is employed is migrant labour in the sense that it seeks employment for short periods and returns to the tribal area. This does not make for efficient production because labourers do not stay long enough to develop the skills required by an industrial order.

In Tanganyika wages are low.

Table 17

Average Individual Cash Earnings in July of each year
in E.A. Shillings

Industry	1953	1954	1955	1956	1957	1958
Agriculture, live-stock, forestry, hunting and fishing	30	32	31	34	34	36
Mining and Quarrying	38	41	49	57	57	60
Manufacturing	56	57	60	67	75	71
Construction	67	68	75	79	82	87
Electricity, Gas, Water and Sanitation	81	82	79	75	86	97
Commerce	65	69	91	80	89	87
Transport (excluding railways)	107	131	186	121	133	139
Services	53	62	69	70	90	100
Government, E.A.High Commission, local authorities	66	70	81	88	96	102
Total	45	48	53	57	60	62

The low wages have been attributed to low productivity, but the East Africa Royal Commission attributes the governing factor to the fact that the real income which can be obtained in alternative occupations is low; that is subsistence farming is really at subsistence. However low may be the real income of those in paid employment, there is a strong presumption that the real income derived from subsistence farming is lower. This takes us back to the key role of agriculture. Apart from the factors which govern the demand for labour and the wage which employers are willing and able to pay for the labour they employ, the key to a permanent raising of the supply price of labour is to foster an increase in the real income of the peasants, whether they produce for their own subsistence or for sale in the market. The solution of the agricultural problem is important not merely as a means of achieving better land usage and raising real income of the cultivators but also as a means of contributing to the solution of the problem of the urban wage-earner.

Coupled with low wages is low productivity which usually is a result of a lack of skills. The training of labour normally proceeds in association with the evolution of industry but in Tangayika industrial development is slow. The East African Commission believes, however, that a market for skilled or partially skilled

labour exists due to the numerous reports concerning apprentices which broke the contracts of apprenticeship before the completion of their training in order to take up positions which carried skilled or semi-skilled rates of pay. (12)

Perhaps the trade unions of Tanganyika would do well to engage more in the training of labour. The trade union movement, however, is of recent rising. In 1954, the United Nations Visiting Mission drew attention to the virtual non-existence of a trade union movement. In the 1957 Report they recorded 'a vigorous trade union movement' (13). In 1957, there were 25 unions registered with a membership of 35,000. Fifteen are affiliated to the Tanganyika Federation of Labour, the Trades Union Congress of the country. At the end of 1960, 39 trade unions including 380 branches were formally registered. Estimated membership was 65,000. Trade union membership seems small, but it must be remembered that the existing labour force is 435,000 out of nearly 9 million people. In any event, trade union organisation is of very recent date. The Tanganyika Federation of Labour was only formed in October 1955. Mr. Kawawa, the present Prime Minister, was then Secretary.

(12) See: Report: East Africa Royal Commission 1953-1955, Her Majesty's Stationery Office, London, Pg. 148-149

(13) Report on the Trust Territory of Tanganyika, by United Nations Visiting Mission to Trust Territories in East Africa, 1957, T 1345, para. 374

This brings us to the role that the Trade Union Movement is playing in the development of Tanganyika. The trade union movement of Tanganyika is not in the tradition of Business unionism popularized by Gumpers in the United States. It follows closely the new type of political unionism prevalent in the underdeveloped countries of the world. Forbes Burnham, leader of British Guiana's waterfront workers and the People's National Congress has justified this type of Unionism when he states "political action must precede union development, because unions cannot survive until political reform raises the economic level to a point where unions can function". (14) Therefore, the trade union leaders prefer to attain political power and legislate on behalf of unionism rather than make the almost futile attempt to obtain concessions from the major economic forces.

An important recent development in labour relations has been the growing use of joint consultation. At the end of 1960, there were 271 formally constituted joint consultative committees, representing about 260,000 workers. In addition, the important sisal industry in 1958 established a central joint council, whose constitution provides for joint consultative machinery to be introduced throughout the whole structure of the industry, through the medium of regional and area consultative councils and estate committees.

(14) Quoted by W. Knowles in: "Trade Union Development and Industrial Relations in the B.W.I, University of California Press, Berkeley, 1959, Pg. 148

Perhaps this idea of consultative committees have left the unions more time to engage in political activity. It is my view that trade unions can be the greatest engine of growth in the development of any underdeveloped country. By continually pressing for wage increases they force businessmen to reorganise, introduce technology in order to be more competitive and make them generally more alive and alert to economic conditions. The higher wages increase the demand for more and varied goods, thus broadening and deepening the market.

Trade union activity provides a firm training ground for the future leaders of the society, inasmuch as the unions engage in political activity. It gives to the members the feeling of group solidarity, thus laying the foundation for building national pride and prestige.

In Tanganyika, there is a tremendous lack of able and capable leaders in all spheres of the society. The Report of the East Africa Royal Commission observes

"As in the administration of the territory it appeared that officials were frequently overloaded with burdens and responsibilities for some of which they lacked the requisite knowledge and experience, so also in industry, it appeared that there was an acute shortage of managerial ability, particularly at the intermediate level between those who were responsible for general direction and the general body of workpeople." (15)

(15) Report: East Africa Royal Commission, op. cit., Pg. 151

The leadership of the country both in Government and private spheres have centred largely in the hands of non-indigenous peoples.

Because they were attracted to the country to engage in agriculture and trade originally and found these profitable, they have not ventured into the industrial field. As a result it has remained barren. Leibenstein has argued that it is not that entrepreneurial ability is lacking in underdeveloped countries, but rather, it is that the conditions of underdeveloped countries incline entrepreneurs toward engaging in "zero sum" games which do not raise national income as a whole rather than "positive sum" games. Among the "zero sum games" are "non-trading" activities in order to secure for their interest a greater monopolistic position, increased political power, more prestige; trading activities that do not add to aggregate resources and do not absorb savings but do waste entrepreneurial resources; and activities that do use up net savings, but the investments involved are in enterprises of such a nature, their "social value" is either zero or their social value is very much lower than their private value.

If the activities are to be positive-sum, the anticipation of profits implies expansion of national income. If only a small share of entrepreneurial activity is

devoted to the positive sum activities, the actual rate of growth is likely to be small, and the expectations will be disappointing, redirecting entrepreneurial talents toward zero-sum activities. (16)

In Tanganyika it would appear that entrepreneurship has followed closely this pattern. The Europeans and Asians have engaged primarily in agriculture and commerce and built up a monopolistic position in the economy. They wield great prestige and power, hence they engage in activities which tend to maintain their privileged position rather than foster development. It is to be hoped, however, that with the country achieving independence, the government will use its authority to introduce a greater degree of competitiveness in all spheres of Tanganyika's life.

Fuel and Power:

Industrial development cannot take place without expansion of the fuel and power base of the country. Indeed, Paul Baran has interestingly correlated per capita income with per capita energy consumption.

Table 18

Year: 1950	Consumption of Energy per capita (Coal equivalent in millions of tons)	National Income per capita (in U.S. dollars)
Country		
United States	16,100	1,810
Canada	15,600	970
Great Britain	9,500	954
Belgium	7,770	582
Sweden	7,175	780
West Germany	5,785	604
France	4,755	764
Switzerland	4,685	849
Poland	4,600	300
Hungary	2,155	269
Japan	1,670	100
Italy	1,385	394
Portugal	570	250
Turkey	570	125
India	155	57
Burma	45	36

Source: Adapted from Paul Baran "The Political Economy of Growth", Marzani, Munsell, New York, 1960, Pg. 240

It must be observed from the table that the countries with high energy consumption are invariably those with the highest per capita income. It also happens to be

those which are most highly industrialized. The table suggests that expansion in the power base of a country is one of the roads to economic prosperity.

Tanganyika, before the decade of the fifties, experienced negligible expansion in this field. During the past twelve years, however, electricity expansion has been rapid. There has been not only a relatively high rate of growth in industrial and commercial consumption but also a sharp increase in household use. The large proportionate increases were of course related to a very low initial level of per capita consumption. The rate of expansion has averaged about 9 per cent per year.

Table 19

Electricity - Generating Capacity *
at 31st December

Year	Nature of Plant				Total
	Diesel	Steam	Gas	Hydraulic	
1950	7230	786	75	13660	21745
1951	9178	675	75	14060	23988
1952	9841	620	75	14220	24756
1953	11492	640	75	19200	31407
1954	13716	570	330	19200	33816
1955	15292	620	330	19080	35322
1956	17733	610	-	19080	37423
1957	19512	560	-	19080	39152
1958	19852	560	-	20080	40492
1959	22352	460	-	20200	43012

* Public Utilities only.

Source: Statistical Abstract - Tanganyika, 1960

Tanganyika is fortunate in having in its system of rivers a hydroelectric potential far exceeding its requirements in the foreseeable future. Plans are afoot to construct a hydro-electric power station at Hale on the Pangani River, a few miles upstream from the existing hydroelectric station at the Grand Pangani Falls. Consideration is also being given to the development of hydroelectric potentials near the existing station on the Kikuletwa River and, or at Nyumba-ya-Mungu on the Pangani River.

The use of other fuels in the industrial growth of Tanganyika is seen from the table.

Table 20

Fuel and Power

Item	Unit	1950	1952	1953	1954	1955	1956	1957	1958	1959
Coal and Coke	'000tons	57	72	57	53	5	5	1	1	-
aviation Petrol	'000 Imp. gall.	911	704	1194	445	1032	716	946	728	738
Motor spirit	'000 Imp. gall.	12456	12578	15029	15983	16262	19982	22881	19364	20412
Power kerosene	'000 Imp. gall.	439	927	642	503	428	352	495	230	465
Lamp oil - White spirit	'000 Imp. gall.	2024	4515	4087	4412	6366	5449	8011	6763	7882
Gas oil and fuel oil	'000 Imp. gall.	12514	11323	13342	15782	24693	31376	36385	43167	34377

Source: Statistical Abstract Tanganyika 1960

The above table shows imported fuel and power. Tanganyika has not yet discovered any petroleum, and statistics on the mining of its own coal are non-existent. The decline in imported coal and coke over the past few years, however, suggests greater use of its own resources, or it might reflect a switch from coal to hydro-electric power. For development to take place, power must be forthcoming to drive the machines and churn the wheels of industry.

The industrialization of Tanganyika is a distinct possibility. It has the raw materials such as coal, iron, cotton, sisal, hides, meat, timber, which are just to name a few of the numerous products of the mines, farms and forest. The growth has been slow primarily because of a lack of an attitude for progress for the whole people. The average annual rate of growth of gross domestic product during the last six years was in the region of 5 %. The contribution of manufacturing to the gross domestic product has been about 4 %. With an elected representative government giving to the majority of the population national pride, we hope the resources of the country will be exploited for total development.

CHAPTER V

THE INFRASTRUCTURE

In the economic development of any country, it is not only its resources in terms of coal, iron, waterpower and labour that must be considered, but also the necessary links such as Health and Housing, Education, Transport, Communications and the Sociological climate for advancement. These are best classified as the Infra-structure. Development can take place only if the Infra-structure is expanding and changing to meet the demands of the new age.

Education:

The importance of investing in human resources has been receiving considerable attention in recent literature.

(1) Solomon Fabricant has perhaps caused the greatest stir when he observed that 'increases in measured national income have exceeded increases in measured resources, treated as inputs'. He presents estimates that show the output of United States private domestic economy as having

(1) See articles by:

- (i) Frederick Benham, International Affairs - Vol. 35, No. 2, April 1959
- (ii) W. Arthur Lewis: Education, Economic Development, Social, Economic Studies, Vol. 10, No. 2, June 1961
- (iii) Theodore Schultze: Capital Formation by Education, Journal of Political Economy, Dec. 1960

increased at an annual average rate of 3.5 per cent between 1889 and 1957. Whereas total inputs increased at an annual rate of only 1.7 per cent. For the more recent part of this period, that is between 1919 and 1957, these annual rates of increase were 3.1 and 1.0 per cent respectively. (2) These figures point to the belief that education has a vital role to play in the increase of productivity and consequently economic development.

It is somewhat tragic that in most of the underdeveloped countries where education should be the dynamic factor in initiating change, it has served more to retard the progress of the country. The educational system perpetuates a type of schooling that is not in keeping with the requirements for progress. In Greece, for example, education emphasizes classical studies and the values that connect the country with its Byzantine and classical periods at the expense of vocational and technical preparation. The number of classical gymnasias and the allocation of school time, both on the elementary and secondary levels, between formal, classical, humanistic education emphasizing mainly ancient Greece and its history and subjects relating to national values and instructions in sciences, technology and handicrafts

(2) Fabricant, Solomon: Basic Facts on Productivity Changes, National Bureau of Economic Research: Occasional Papers No. 63, New York, 1959: Table 5

can be taken as indications of the influence of the all-pervasive desire to identify the country with its classical tradition and values.

It should not be expected, however, that education will provide all the answers in vacuo, that is, without growth in the economy. The political struggles in Kerala State in India, riots in Venezuela and many of the South American Republics and the unrest in many countries of the Middle East attest to the dangers of education without development.

In Tanganyika, education has been tardy. The expansion in the number of schools and in the number of pupils enrolled are set out in the following tables.

Table 21

Race and Category	<u>Number of Schools by Race and Category</u>								<u>Numbers</u>	
	1951	1952	1953	1954	1955	1956	1957	1958	1959	
African, Secondary and Post Primary								(1)	(1)	
Primary	101	335	360	305	402	423	361	343	387	
European Secondary and Post Primary	1467	1699	1942	2192	2378	2589	2632	2660	2681	
Indian Secondary and Post Primary	2	2	2	2	2	2	2	2	13	
Other Non-African Secondary and Post Primary	21	24	26	30	30	30	33	32	30	
Other Non-African Secondary and Post Primary	7	8	8	10	38	35	33	32	31	
Other Non-African Secondary and Post Primary	83	90	98	99	114	118	113	125	117	
Other Non-African Secondary and Post Primary	-	-	-	2	3	3	3	4	4	
Other Non-African Secondary and Post Primary	3	3	3	3	4	5	5	5	5	
Total Non-African Secondary and post primary	9	10	10	14	43	40	38	38	48	
Primary	107	117	127	132	148	153	151	162	152	

(1) Number of district schools has decreased; the children were absorbed in middle schools.

Source: Statistical Abstract, Tanganyika 1960

Table 22

African Education - Pupils
enrolled

Category	1951	1952	1953	1954	1955	1956	1957	1958	1959
African Past Secondary ⁽¹⁾ General	49	57	88	112	150	167	183	218	186
Secondary and Post Primary General (2)	2667	2817	2833	2956	1893	2409	2989	3499	4132
Middle (2)	6057	20427	23317	25480	30485	32845	35511	36611	39871
Teacher Training	1144	1465	1837	2172	2442	2689	2392	2007	1467
Technical and Vocational	1091	942	1039	769	929	836	1121	2035	1836
Primary	199990	213991	247173	275628	310089	336079	355632	366690	375008
Total	210998	239699	276287	307117	345988	375025	397828	411060	422500
Males	153121	173495	199196	219173	246329	263552	276268	282270	285667
Females	57877	66204	77091	87944	99659	111473	121560	128790	136833

(1) Pupils attending Makerere College, Uganda and the Royal Technical College, Kenya

(2) From 1955 Standards VII and VIII are transferred from Secondary to Middle Schools.

Note: Standard I to IV Primary
Standard IV to VIII Middle
Standard VIII to XII Secondary

Source: Statistical Abstract 1960, Tanganyika

Table 23

Non-African Education - Pupils enrolled

<u>Race and Category</u>	<u>1951</u>	<u>1952</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>
European:									
Secondary:									
General	107	165	207	200	274	332	341	431	766
Technical and Vocational	-	-	-	-	-	-	-	2	87
Primary	1548	1610	1845	1845	1949	2061	2404	2356	2092
Total	1655	1775	2052	2045	2223	2393	2745	2789	2945
Males	860	916	1075	1097	1193	1278	1462	1503	1494
Females	795	859	977	948	1030	1015	1283	1286	1451
Indian									
Secondary:									
General	2930	3266	3843	4456	4897	5586	6228	6992	7816
Technical and Vocational	-	-	-	-	-	-	-	-	1156
Primary	10699	11247	12127	12707	13716	14461	15339	16217	15872
Total	13629	14513	15970	17163	18613	20047	21567	23209	24844
Males	7599	8092	8882	9533	10358	11126	11960	12626	13617
Females	6030	6421	7088	7630	8255	8921	9607	10583	11227
Other non-African:									
Secondary									
General	188	127	129	144	237	263	325	361	391
Technical and Vocational	12	28	17	11	-	-	-	2	120
Primary	539	600	719	911	823	989	947	958	1049
Total	739	755	865	1066	1060	1252	1272	1321	1560
Males	364	372	442	530	541	633	643	673	812
Females	375	383	423	536	519	619	629	648	748

All Non-African Education

Secondary:										
General	3225	3558	4179	4800	5408	6181	6894	7784	8973	
Technical and Vocational	12	28	17	11	-	-	-	4	1363	
Primary	12786	13457	14691	15463	16488	17511	18690	19531	19013	
Total	16023	17043	18887	20274	21896	23692	25584	27319	29349	
Male	8823	9380	10399	11160	12092	13037	14065	14802	15923	
Female	7200	7663	8488	9114	9804	10655	11519	12517	13426	

Source: Tanganyika Statistical Abstract 1960

The latest census figures for the number of children from 0 to 16 years of age in the main racial groups are as follows:

Africans	3,840,248	1957	African Census
Arabs	9,209	"	Non-African Census
Asians	34,121	"	" " " "
Europeans	5,805	"	" " " "
Goans	1,830	"	" " " "

The figures indicate that there is a tremendous scope of expansion of African education in all areas. Particularly should this be done at the Secondary stage so as to increase the number of students capable of going on to University training. The rudiments of a University has been established in Tanganyika much to the displeasure of many elements of the society who argue that high costs of operation favours the sending of students abroad. A university, however,

apart from its teaching contributes to its community through the participation of its teachers in the life of the country and through its research into local problems. This should be treated, therefore, as only the first step in the expansion of higher education.

The cost of education is great in Tanganyika because of blindly following the British system as in the case of boarding schools for the middle and secondary grades. In some areas this is desirable, while in areas where population is concentrated, day schools with school buses as in the American system would be preferable.

The great hindrance to the educational progress of Tanganyika has been the division of the system according to racial groups. The Africans, Europeans, Indians and others all maintaining their own schools. With the Integration of Education which took place in January, 1962, school space should be more effectively used, thus increasing the number of children attending school and lowering the cost per capita. Abolition of certain practices such as paying £100 per annum per capita to European parents who have children attending courses of secondary education as boarders at boarding school abroad and £40 per annum in the case of children attending courses of secondary education as day pupils, should be a source of saving and equalize opportunity for all. (3)

(3) In 1959 the Overseas Secondary Education grants were:

Boarders	746	£ 74600
Day pupils	38	£ 1520
Total	784	£ 76120

The number^b of children attending primary and middle schools rose from 124,000 in 1947 to about 450,000 in 1960. In 1960, there were 2733 primary schools for Africans and 155 for non-Africans, 369 African middle schools and 29 African and 49 non-African secondary schools. The Development plan for 1961/64 considers, among other things, a priority programme of expanding secondary school and technical training facilities for Africans, continuing the expansion of girls' education, establishing an Institute of Education to carry out research on educational problems and linking school education more closely with agriculture.

The education programme attaches greatest importance to the expansion of secondary education which is the territory's principal need at the present stage of development. The country needs technologists, secretaries, nurses, school teachers, bookkeepers, clerks, civil servants, agricultural assistants and supervisory workers of various kinds. These are the products of secondary schools. It is hoped that the number of secondary school places will rise from 4484 in 1960 to 10,500 in 1964.

Provision for technical and vocational training is going ahead, because to import these types would make costs to industry absurdly high. In 1960 the Government trade schools at Ifunda and Moshi had 460 pupils training to be skilled artisans. There were 62 fulltime students

at Moshi College of Commerce; and at Dar es Salaam Technical Institute over 300 full-time students were taking courses in various subjects, while about 1000 attended part-time classes. There were also over 1400 teachers in training at 32 training centres and some hundreds of students taking courses in agriculture, hand-work, domestic science and homecraft at various centres of instruction throughout the territory.

The prospects for a satisfactory expansion of the educational system appears bright.

Health:

In order to promote the economic development of any country, the health of the nation must receive attention. A people cannot produce efficiently if they are suffering the ravages of diseases such as malaria, tuberculosis, poliomyelitis and yaws. The general debility caused by these diseases will have an adverse effect on productivity. The people will not be able to summon the energy needed to create the surplus necessary for investment, but will always remain at subsistence production.

Most of the underdeveloped countries of the world are characterized by poor Health services; Tanganyika is no exception. The following table gives an idea of the available health services. The number^b of doctors, dentists and nurses must be read with caution, because there is a

single fee for registration and no annual licence. Hence the register may include a number who do not practise or who have in fact left the country.

Table 24

Health Services

<u>Item</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>
Registered Medical Practitioners	327	354	363	385	405	460	500
Private practice	134	148	165	175	182	196	210
Other	193	206	198	210	223	264	290
Registered Dentists	151	22	26	26	29	31	33
Private practice	9	15	17	17	21	19	22
Other	6	7	9	9	8	12	11
Medical Assistants	177	181	187	200	207	232	224
Radiographers	2	3	3	3	3	2	3
Radiological Technician	1	-	-	-	-	1	1
Mental Nurses	10	10	11	11	11	11	11
Registered Nurses	-	673	857	1024	1031	1232	1474
Pharmacists	18	20	20	25	36	38	42
Government Hospitals	52	52	52	53	54	57	57
No. of beds	4637	4835	5206	5484	5716	6047	6087
Government Dispensaries	21	24	22	20	21	20	20
No. of beds	407	460	449	402	421	395	442

Item	1953	1954	1955	1956	1957	1958	1959
Mission Hospitals	30	30	34	33	35	38	42
No. of beds	2377	2404	2701	2911	3161	3469	3939
Mission Dispensaries	76	75	72	69	73	84	88
No. of beds	2249	2378	2231	2538	2720	3076	3141
Industrial Hospitals	14	14	17	21	23	26	30
No. of beds	600	536	662	692	807	874	974
Out-patient Dispensaries	829	863	895	947	981	1083	1059

Source: Tanganyika Statistical Abstract 1960

When it is considered that the health services available in 1959 as indicated by the table were for approximately nine million people, it can be easily visualised how inadequate they were and are. Not only is the service inadequate, but it is also riddled with problems. Hospitals are owned and controlled by three distinct interests, namely Government, Missions and Industries. The table shows their relative importance. There are complaints to the United Nations Visiting Mission of discrimination in the granting of Licences. (4) The Indian community stated that Indian doctors in government service were given a lower status and lower privileges than European doctors

(4) See the Report of the United Nations Visiting Mission to East Africa, Trusteeship Council, Fourth Session, Supplement No. 3, T/ 218; T/218/Addi; T/333; T/376.

possessing the same qualifications and training. It was further alleged that Indian doctors were licensed to practise while in government service under the supervision of a medical officer, but after leaving the service were refused permission to practice. African doctors are negligible, so this problem, if it exists, is not brought to the fore. Segregated hospitals also pose a problem. The above quoted United Nations Mission observed that approximately 18.5 % of the Government hospitals were for Europeans which formed only .002 % of the population.

The Development Plan for Tanganyika 1961/64 recognises the problems and limitations of the Health services. It states "The aim of the medical services is to bring all available resources, whether of central or local government or of voluntary agencies into an integrated plan so as to provide a balanced and efficient curative and preventive medical organization covering the whole country. Once this has been achieved, it can be used as a foundation for implementing more ambitious schemes to improve public health and to prevent disease." (5)

Progress has continued to be made and the health services absorb a substantial share of Government expenditure. The total amount provided in 1960/61 was approximately £2.4 million of nearly £27.0 million including expenditure on capital projects.

(5) Development Plan for Tanganyika 1961/64,
Government Printer, Dar Es Salaam, Pg. 18

The demand for health services generally is evidenced by the increase in admissions to hospitals and dispensaries which has shown a steady rise over the past few years.

/See Table/ In-patient admissions in 1960 totalled 291,782, while there were over 19,000,000 out-patient attendances. Comparative figures for 1956 were 241,000 and 13,000,000 respectively.

A steady hospital building programme is being carried out, and in the past four years 11 new hospitals have been completed and opened, and additions and improvements have been made to a number of others. The new hospitals include the Princess Margaret Hospital and Medical Training Centre, Dar Es Salaam, which came into operation with 468 beds early in 1960 and was increased to over 600 beds in 1961.

Plans for the extension of the curative services during the next 2 years include the provision of a further 533 general hospital beds, 372 beds for tuberculosis cases and accommodation for a further 450 mental patients, making the total number of hospital beds in the territory approximately 16,000. The government's aim is to bring all districts up to the standard of one hospital bed for each thousand of the population.

Special programmes of disease control are being carried out or planned in connection with most of the major diseases, such as tuberculosis, sleeping sickness, malaria, yaws and poliomyelitis. The World Health

Organisation and the United Nations Children's Fund supplies substantial assistance in the form of medical supplies and the services of experts.

The training of medical staff is regarded as of vital importance to the extension of the health services, and training facilities are being improved as rapidly as possible. The progress in health services, although slow, disappointing and frustrating by our standards, must be considered inevitable during the next few years, when it is realised that the maximum part of the limited resources of the territory must be invested in economic and educational development, whose object is to produce the greater resources needed to sustain adequate social services including adequate medical services.

Transport and Communications:

It has long been recognised by advocates of development that improved transport and communications are fundamental to all other types of expansion. This is even moreso in Africa, where a rugged terrain coupled with unfavourable climate leaves vast resources untapped and social intercourse at a minimum. Lord Lugard pinpoints the problem, when he states that "the material development of Africa may be summed up in one word - transport". (6)

(6) Sir F. D. Lugard: "The Dual Mandate in Tropical Africa", Edinburgh, Blackwood, 1922, Pg. 5

For the development of a modern market economy, potentially productive areas must be associated with local and export markets. Without economic transport facilities, the continuance of the system of existing subsistence production is unavoidable, because goods can be moved only over very short distances. Low transport costs with dependable service is, therefore, vital to the opening of new resources, and the fostering of social and political intercourse. Defence, both internal and external, favours the movement of men and materials throughout the country, and this requires adequate transport and communication. In developing areas, transport facilities should always be provided to anticipate and stimulate economic development.

In Tanganyika, these facilities are woefully deficient in many areas. The sparseness of the population, distributed as it is over this vast territory, does not favour efficient transport facilities. There are only $9\frac{1}{4}$ million people for the 341,150 square miles of land area. There are only 11 towns with over 10,000 people, and Dar Es Salaam, the capital, has only 128,740 people. Transport facilities must, of necessity, span wide areas.

The topography of the country does not favour transport development. The grain of the rift zones and of the many scarps run north-south, in opposition to the major east-west routes. The terrain is mountainous. Except for a narrow belt along the coast, the country lies at an altitude of over 1000 feet. The rivers flow into the

Indian Ocean or the Great Lakes. Many of them cease flowing during the dry season, and only Rufiji, entering the Indian Ocean opposite Mafia Island, and the Kagera flowing into Lake Victoria, are navigable by anything larger than a canoe.

In the past 12 years, remarkable progress has been made in developing all kinds of communications. Between 1947 and 1960 road mileage (excluding village roads) increased from 16,500 to about 20,500, and some 330 miles of new railway were built. Port facilities have been developed on a large scale in comparison to what it was previously; particularly at Dar Es Salaam and Mtwara. The net registered tonnage using Tanganyika ports rose from 2,020,000 in 1947 to 6,417,767 in 1959-60. In the same period, cargo tonnage handled at the four major ports rose from 655,800 to 1,147,351 tons.

The tables below outline the expansion for the periods mentioned.

Table 25
Mileage of Classified Roads

Year	Township Roads	Other Settlement Roads	Settle-ment Roads	Territorial Main Roads	Local Main Roads	District Roads	Total
1950	338	87		3039	3055	10,493	17,012
1952	459	89		3040	3589	10,459	17,636
1953	502	112		3427	3525	10,874	18,440
1954	502	112		3456	3584	11,103	18,757
1955	502	118		3506	3915	11,150	19,191
1956	502	126		3506	3993	11,055	19,182
1957	490	135		3517	4319	10,934	19,395
1958	490	135		3593	4521	11,029	19,768
1959	490	138		3588	4781	11,033	20,030

Source: Statistical Abstract 1960, Tanganyika

Table 26
Shipping - Cargo Handled at Main Ports Tons

Year	Imports	Exports	Transshipment	Totals
1952	655	494	11	1160
1953	669	486	8	1161
1954	699	469	17	1185
1955	872	578	17	1467
1956	753	694	26	1473
1957	651	623	43	1316
1958	645	655	28	1328
1958 (1)	518	480	8	1006
1959	512	533	8	1053

(1) From 1958 onwards cargo tonnage is shown as dead weight tons of 2240)

Source: Statistical Abstract 1960, Tanganyika

Table 27

Air Traffic
Passengers and Freight at 3 main Airports

<u>Item</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>
Movements	11300	13323	15159	12628	11705	11252
Passengers						
Set Down	36887	33632	39124	46213	40070	40004
Picked up	37765	36754	39591	43685	40343	41078
In Transit	35341	58674	52462	53600	50632	50398
Freight (Kgms.)(1)						
Set Down	873626	732369	801372	761678	756317	715624
Picked up	817281	804436	700169	715014	645477	608465

(1) "Mail" is included with "Freight"

Source: Statistical Abstract 1960, Tanganyika

Table 28

Growth of goods traffic on the Railway System

<u>Year</u>	<u>Central Line</u>	<u>Tanga Line</u>	<u>Southern Province Line</u>	<u>Total</u>
1920	30,000	14,000	-	44,000
1925	108,000	30,000	-	138,000
1930	176,000	73,000	-	243,000
1935	157,000	78,000	-	235,000
1940	150,000	89,000	-	239,000
1945	207,000	148,000	-	355,000
1950	406,000	183,000	-	589,000
1954	667,000	237,000	55,000	959,000
1955	777,000	354,000	91,000	1,222,000
1956	842,000	408,000	90,000	1,340,000

Source: Handbook of Tanganyika 1960, Pg. 351

Railway:

Tanganyika has about 1,600 miles of railway. The Central Line runs from Dar Es Salaam due west right across the territory to Kigoma on Lake Tanganyika, a distance of 773 miles. This line provides an outlet at Dar es Salaam for the productive area of the hinterland of the coast and also for through traffic from the Belgian Congo. Unfortunately, much of the country which the line serves is not economically productive.

A branch line runs from the Central Line at Tabora up to Mwanza on Lake Victoria, a distance of 236 miles. This line enables the coffee and cotton of the area to reach the coast. The Lake Province is also served by lake steamers which call at the ports of Mwanza, Musoma and Bukoba and connect them with the Kenya railway at Kisumu.

Another branch runs from Kaliuva on the Central line to Mpanda, 125 miles away to serve the lead mine there. Since the branch was opened in August 1950, a considerable quantity of agricultural produce has come out of the area in the immediate vicinity of Mpanda. Throughout its length it traverses dense bush country infested with tsetse fly, a factor which considerably reduces the revenue therefrom.

The Tanga line, 272 miles long, connects the port of Tanga with Arusha at the foot of Mount Meru. There is also a connection to the Kenya railway and to the port of Mombasa. The Southern Province Line runs inland from the port of

Mtwara to Nachingwea. It is 132 miles in length, and most of it traverses fertile country, from the rich coastal fringe largely devoted to the growing of sisal into the arable Lukuledi River valley. Work was completed in 1960 on the construction of a branch railway, 44 miles long, from Kilosa in the Eastern Province, due south to Mikumi. This branch is on the route surveyed for a railway which it is hoped will one day extend to Mbeya and eventually to Northern Rhodesia.

Roads:

Roads in the territory are divided into four categories: territorial main roads or trunk roads which measured 3774 miles at the end of 1960; local main roads, 5176 miles; district roads, 10,833 miles; and roads in municipalities or townships, 495 miles. In addition, there are over 8,000 miles of village roads of varying standards maintained by local authorities. / See Table 25 /

The road development plan aims at completing a grid of three trunk roads from north to south and three from the coastal belt westward.

North South:

- (a) Mombasa, Tanga, Sagara, Dar es Salaam, Kilwa, Lindi,
Mtwara
- (b) Kenya border, Arusha, Dodoma, Iringa, Mbeya,
Rhodesia border

(c) Uganda border, Bukoba, Kasulu, Mpanda, Sumbawanga,
Rhodesia border.

East West:

(d) Tanga, Korogwe, Moshi, Arusha.

(e) Dar es Salaam, Morogoro, Dodoma, Singida Biharamulo.

(f) Mtusara/Lindi, Songea, Mbeya.

Secondary and feeder roads will also receive attention.

In addition to new construction, a major effort is being made to improve existing roads. The 1961/64 Development Plan allots £3,217,000 to the development of Territorial Trunk Roads and £950,000 for Feeder Roads in agricultural areas.

Harbours:

The table shows the quantity of cargo handled at Tanganyika's main ports from 1952 - 59. The years of greatest prosperity were in 1955 and 1956.

Important reconstruction work has been carried out in three of Tanganyika's main ports in the last few years. The Southern Province railway and deep-water berth at Mtwara was opened in July 1954. The bulk of the traffic in this port will consist of timber, sisal, cashew nuts, grain and tobacco.

The capacity of the port of Tanga has been doubled by the reclamation of 110 acres from the sea and the building of a 700-ft. literage wharf with a new transit shed,

marshalling yards and cranes. This extension should, with the increased capacity now available on the railway, form an adequate outlet for the sisal production of the Province. Three deep-water berths in Dar es Salaam port were completed in 1956. The new berths will enable the port to handle at least 500,000 tons additional cargo per year.

Air Services:

The Tanganyika Government controls 51 aerodromes and minor landing grounds. There is an internal network of services linking the smaller towns in the territory, and regular scheduled services connect Dar-es-Salaam with other territories. A new airport, capable of accommodating all types of large aircraft likely to use it in the foreseeable future. The 1961-64 development plan allocates £193,000 for the further construction and extension of airports.

Despite the fact that Tanganyika has about 1,600 miles of railway and 7,000 miles of good and reasonably good roads, the area of 362,688 square miles is still inadequately served. Approximately £1,000,000 from the annual capital budget of between £5,000,000 and £6,000,000 is now being spent on roads. Perhaps £20,000,000 of capital expenditure would raise the transport facilities to a satisfactory standard. (7) Despite the numerous problems

(7) See the Handbook of Tanganyika, Page 348, for a commentary on this sum

facing expansion, considerable progress is being made.

Sociocultural Factors:

The process of economic development is not restricted to economic change but is essentially a transformation of the human agent and his social environment, within which economic activity unfolds. The values and institutions of the society influence economic life through a variety of channels: example, consumption, attitudes, modes of economic organization, labour efficiency, attitudes toward entrepreneurship and the general outlook on life.

In underdeveloped countries irrational behaviour tends to persist even if rational pressures are present, because the holds of irrationality creates strongholds of vested interests that condition political actions or communal customs, and partly because inertia is often more satisfying than action.

The Western ethic has been essentially characterized by rationalism, empiricism and a scientific mentality. The general outlook has been cosmopolitan and utilitarian rather than parochial and esoteric; typically interpersonal relations are guided by impersonal rather than by sentimental and personal considerations. In underdeveloped countries there is a de-emphasis of the material and of the present as contrasted with the esoteric; the spiritual and other-worldliness hardly stimulates one to hard work.

Apathy, acceptance of poverty as the natural lot of the majority of peasants and the low value assigned to work, compounded by long periods of foreign oppression, frequent destructive wars and domestic mal-administration, have consequently created a spirit of futility of effort, a sense of defeat and a reluctance to plan ahead in many poor regions.

In the less developed economies such as Tanganyika, where people are tied to the land for generations, kinship obligations and bonds are more fundamental than in the relatively mobile advanced economies. The extended family performs functions and provides services that in the industrial societies are taken over by impersonal social institutions. The institution of the family affects economic life directly. It does so, for instance, by influencing the general outlook of people; by encouraging thrift to accumulate capital for a dowry; or by discouraging savings, since the income of the productive members of the family may have to be spread thinly to meet the needs of even remote unproductive relatives; by limiting business organization within the family; by restricting alternative employment and requiring continuity of a family firm; or by sanctioning nepotism in business and government.

In Tanganyika, the sociocultural problems outlined above have manifested themselves to some degree. It is probably, however, in the system of land usage that the sociological problems are greatest.

Originally occupation followed the normal Central and East African pattern: the tribes cleared small patches of virgin bush to plant crops urgently required. Their herds grazed on the adjacent lands. When the crops deteriorated the people moved on and repeated the process somewhere else. The original abundance of land and its free use have through the centuries created a special and personal feeling about the land. Without land the African feels insecure. From time immemorial he has grown accustomed to a system whereby the use of land is governed by native tradition and custom and where the collective will of the tribe not only guaranteed individual rights but replaced any need for individual ownership. This basic concept has been slowly modified in some areas in three ways. One, the population has increased and so has the stock. Two, tribes have tended to stake out territorial boundaries. Three, cash crops have been introduced.

Stock is regarded as an investment and the measure of a man's status. The increase in the number of animals has, in practical terms, little positive significance, but of course they use more land. This land is used unproductively and in time deteriorates. As the tribe tends to move less, the land deteriorates, and it becomes increasingly difficult to accommodate the growing population or to settle outsiders.

Cash crops were introduced to provide surplus income. Cultivation at present, however, is generally quite unrelated

to any system of crop rotation or any other means of preserving fertility or the prevention of erosion.

These three factors, increased populations, tribal land boundaries and cash crops, have tended to cause the old tribal subsistence system to break down in these areas and, moreover, have been responsible for the subdivision of land into tiny holdings often below the size of efficient farming units. In addition, the common land has become nobody's responsibility: increasing stocks of cattle have reduced fertility, and excessive grazing has accelerated erosion.

The East African Royal Commission points the way in which future progress should be made. Broadly speaking, the Commission concluded (8) that the aim of future policy should be towards individual ownership and that means should be found for the transfer and disposition of land that would allow access for economic development without ignoring property rights.

In Tanganyika, there is a desire by some Africans to throw off the customary tribal restraint. Those who migrate to the city or the large agricultural estates in search of work usually find the tribal laws too repressive and hence seek the freedom of their new society. For the more mature men, however, their wages are incapable of supporting a wife and family in the city, hence they still

(8) East Africa Royal Commission: Report, Chapters 22 and 23

retain a foothold in the tribal area. Many social problems arise from this labour migration.

The Indians in Tanganyika can be considered the social deviants in the society. Not being fully accepted by the European elements who dominate the Government services, big business and vast estates; and not willing to be swallowed up in the illiterate mass of negroes, they have become the dynamic, entrepreneurial class. They form the commercial class, the skilled artisans and the educated middle class. It is this class, fighting to maintain its social status from the encroachment of the Africans, that is leading the way in industrial change. As factory owners, clerks and highly skilled workmen, they occupy a dominant position in the economy. With rapid development, however, their position will be lost.

The socio-cultural problems in Tanganyika are not insurmountable. Whenever industrialisation occurs with a tremendous surge, then all these sociological problems will be forced to the background. These problems only arise because change does not take place fast enough or large enough.

The building of a solid infra-structure is fundamental to the establishment of a sound economy. The architects of Tanganyika's development programme are well aware of this. As a result, about one-third of total capital formation has been mainly directed towards building up the infra-structure of the economy.

CHAPTER VI

THE ROLE OF INTERNATIONAL TRADE IN TANGANYIKA'S DEVELOPMENT

Much of the modern literature on International Trade and Development have expressed doubts concerning the beneficial role that trade has to play in the developmental process. (1)

The Classical Theory of International Trade founded as it was on the principle of Comparative Advantage advocated that a country should specialize in the production of those commodities in which its comparative advantage was greatest and import those commodities for which it was least. The Hecksher-Ohlin Theory emphasized production and trade according to factor endowments. Both theories thus committed the underdeveloped regions to be hewers of wood and drawers of water for the advanced industrial countries.

The belief was held, however, that international trade which was used as an engine of growth in the nineteenth century, could likewise be used in the twentieth. Adam Smith had favoured the views that international trade widens the market, makes possible the division of labour and raising of the general level of productivity within the country, improves the skill and dexterity of the workmen, encourages technical innovations, overcomes

(1) See for example:

- (a) H. Myint: The Gains from International Trade and the Backward countries, Review of Economic Studies, Vol.22.No.2
- (b) Gunnar Myrdal: Economic Theory and Under-Developed Regions, London 1957

technical indivisibilities and enables the trading country to enjoy increasing returns and economic development. Most of his disciples propagated this view.

It is apparent, however, that the theories of the Classicists have no relation to the facts on this issue. The nineteenth century expansion of international trade was not achieved as mentioned above, but by the transference of labour from the subsistence economy to the mines and plantations, and by an increase in the working hours and in the proportion of gainfully employed labour relatively to the semi-idle labour of the subsistence economy.

The entrepreneurs believed as expressed by S. H. Frankel that "the indigenous labour was merely an undifferentiated mass of low grade man power to be used with a minimum of capital outlay".(2) Thus, when the local labour supply was exhausted, the typical reaction was not to economise labour by installing more machinery and by reorganising methods of production, but to seek further afield for additional supplies of cheap labour. This was why the nineteenth century process of international trade in the underdeveloped countries was characterised by large-scale movements of cheap labour from India and China. This has led Professor L.C. Knowles to believe that the British colonies had not only one "mother country", but three, namely England, India and China. (3)

(2) S.H. Frankel: Capital, Investment in Africa, Oxford University Press, London 1938, Pg. 1242-46

(3) L.C. Knowles: The Economic Development of the British Overseas Empire, Vol. 1, Pg. 119-20, Quoted by Myint in the article below.

During the booms output had to be expanded as quickly as possible along existing lines, and there was no time to introduce new techniques or reorganise production, during the slump it was difficult to raise capital for such purposes. Hence Myint concludes

"instead of a process of economic growth based on continuous improvements in skills, more productive recombinations of factors and increasing returns, the nineteenth century expansion of international trade in the underdeveloped countries seems to approximate to a simpler process based on constant returns and fairly rigid combinations of factors." (4)

The total volume of resources was increased by transport and communications, not a given volume made more productive. It was argued by the entrepreneurs that local labour was subject to high rates of turnover and, therefore, not amenable to attempts to raise productivity. (5) The capitalists were not willing to invest heavily in housing, health and education or to engage in a more egalitarian distribution of income, so that the underdeveloped countries could share in the benefits of increasing trade. Instead they allowed immigrant labour and foreign capital to flow in.

These expanded output in all the underdeveloped countries. In Lower Burma, for the 30 year period 1870-1900, the area under rice cultivation increased by more than three times, while the population, including immigrants from Upper Burma,

(4) A. Myint: The Classical Theory of International Trade and the Underdeveloped Countries, E. J., Vol., 68, 1958, Pg. 321.

(5) See S. H. Frankel, op. cit.

doubled. Cocoa output of the Gold Coast expanded over 40 times during the 25 year period 1905-30. Even higher rates of expansion in cocoa production can be observed in Nigeria. (6) In Tanganyika, in the period 1925-1960 the output of cotton expanded 15 times while that of sisal 20 times.

Despite these phenomenal increases in output the underdeveloped countries remained underdeveloped. It has been argued that due to foreign investment and immigrant labour, a substantial part of these earnings has had to be remitted abroad in the form of export surpluses on the trade account. (7)

Burma's export surplus averaged one-third of the total value of her exports from 1870 to the first World War and rose to one-half of the total value of exports in the Inter-War period. During this period the remittances of Indian labour have been estimated at R's 30 million, out of an average annual export surplus of R's 250 million. Indonesia's export surplus averaged one-third of the total value of her exports from 1876-1939, and surpluses ranging from one-third to one-quarter of the total value of exports can be found in many African countries after 1920. The export surplus of Tanganyika for selected years is as outlined in Table 29.

(6) For an elaboration of this argument see H. Myint's analysis in the article quoted immediately above.

(7) H. Myint: The Gains† from International Trade and the Backward Countries, Review of Economic Studies - Vol. 22, 1954-55

Table 29

Value of Visible Balance of Trade for
Selected Years

Year	Net Imports	Exports	£'000 Visible Balance of Trade
1936	3357	4026	669
1937	3924	4443	519
1938	3449	3118	-331
1939	3040	3284	244
1940	3001	3966	965
1941	3656	4471	815
1942	3688	6030	2342
1943	4616	5396	780
1944	5629	6961	1332
1945	6737	7719	983
1951	28121	40346	12225
1952	37495	47413	9918
1953	28427	35610	7183
1954	31962	37774	5813
1955	43531	37413	-6118
1956	35885	46307	10422
1957	39275	41045	1771
1958	33568	43828	10260
1959	34456	47217	12762
1960	37817	56601	18784

Source: (a) Statistical Abstract for the
British Commonwealth 1936-45
Cmd 7224: Her Majesty's Stationery
Office, London 1947, Pg. 141

(b) Statistical Abstract for Tanganyika
- 1960, Government Printer

The same trend is apparent. From 1936 - 60, the export surplus has ranged from $\frac{1}{2}$ to $\frac{1}{4}$ of the total value of exports, yet development has been neglected. For development to take place, there must be internal changes in the economy.

Underdeveloped countries have a high elasticity of demand for foreign capital, but when this foreign

capital comes in, there is a tendency for the great bulk of the extra output to go to foreign capitalists, unless counteracted by domestic measures. If the extra foreign capital is fully offset by a reduction in home owned capital, then the country will be worse off in the future than if the extra foreign capital had not come in. (8)

Bold government action is thus needed to tackle the Balance of Payments problems and bottlenecks that would develop in the economy.

Because of the structure of the underdeveloped countries, whereby their economy is dominated by large monopolistic firms, the beneficial effects of international trade do not flow to the inhabitants of the country. As Myint puts it:

"The backward peoples have to contend with three types of monopolistic forces: in their role as unskilled labour they have to face the big foreign mining and plantation concerns who are monopolistic buyers of their labour; in their role as peasant producers they have to face a small group of exporting and processing firms who are monopolistic buyers of their crop; and in their role as consumers of imported commodities, they have to face the same group of firms who are the monopolistic sellers or distributors of these commodities." (9)

The monopolistic buyers of labour and peasant produce meet the pressure of competition in the world market by cutting prices rather than output and by pressing down on the internal economies of the backward countries while

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- (8) See G.D.A. McDougal: "The Benefits and Costs of Private Investment from Abroad",
The Economic Record, March 1960
- (9) H. Myint: "An Interpretation of Economic Backwardness",
Oxford Economic Papers, Vol. 6, No. 2, June 1954

maintaining their normal profit on an unreduced volume of output. In times of price fluctuations, it is the natives who suffer. Dr. Atallah has adequately viewed the problem: of the whole economy thus:

"The reliance of the underdeveloped countries on their exports of agricultural products to derive a large share of their income is one major cause of their weak economies, because it makes them sensitive to the slightest price fluctuations and imposes additional hardships on their populations. It is the more so, since the prices of primary commodities are known to be subject to wild fluctuations which, although in the upswings, bring unusual prosperity, can in the downswings assume the proportion of catastrophes. In the 1930's farm incomes in the whole world were cut to one-half or one-third of their previous levels; and apart from the general depressions, particular price slumps have been experienced frequently for individual commodities, such as coffee, rubber, cocoa." (10)

W. Arthur Lewis in a brilliant article (11) has shown that not only do the underdeveloped countries suffer from price changes, but also from productivity changes. In the advanced countries of the world, productivity increases mean higher wages and expanding welfare for all. Not so for the underdeveloped.

"Increases in productivity are lost in the terms of trade. Take for example the case of sugar. This is an industry in which productivity is extremely high by any biological standard. It is also an industry in which output per acre has about trebled over the course of the last 75 years, a rate of growth of productivity which is unparalleled by any other major industry in the world - certainly not by the wheat industry.

(10) M. K. Atallah: "The Long Term Movement of the Terms of Trade between Agriculture and Industrial Products, (Rotterdam, 1958), Pg. 1

(11) W. Arthur Lewis: Economic Development with Unlimited Supplies of Labour, Manchester School, May 1954

Nevertheless workers in the sugar industry continue to walk barefooted and to live in shacks, while workers in wheat enjoy among the highest living standards in the world." (12)

The workers in the sisal industry of Tanganyika find themselves in a similar position as the above-mentioned sugar workers. Using Lewis' analysis, we find that the reason why wages are what they are is that wages in the sisal industry are related to the fact that the subsistence sectors of Tanganyika's economy are able to release as many workers as the sisal industry may want, at wages which are low, because food production per head is low. However vastly productive the sisal industry may become, the benefit accrues chiefly to industrial purchasers in the form of lower prices for sisal. To raise the price of sisal, the productivity of the subsistence food economy must be increased.

The belief that the terms of trade move against the underdeveloped countries has been the subject of much controversy. (13) To some of the authors the movement of the terms of trade has been for a long time a decreasing trend to the detriment of the agricultural products. (Prebisch, Singer) For others, long cyclical movements are discernible. (Clark, Aubrey) Those who see that the prices

(12) W. Arthur Lewis: op. cit., Pg. 42

(13) Consult articles by:
 (a) Hans Singer, (b) H. Myint, (c) M.K. Atallah - mentioned earlier,
 also Gottfried Haberler: "Critical Observations on some Current Notions in the Theory of Development",
 L'industria, No. 2 (1957)

of the agricultural products have been and are still falling in relation to the prices of the industrial products explain this by the failure of the prices to adjust themselves to the productivities in agriculture and industry, (Prebish, Lewis), by the relative decrease in demand for agricultural products and the relative increase in the demand for the industrial products as well as by the downward rigidity of the agricultural supply. (Singer)

The long cyclical movement in prices is explained by investment cycles which alternate between the agricultural and the industrial countries. One landmark in this cyclical movement is the Industrial Revolution which resulted in a heavy deterioration of the prices of industrial products. The factors thought to be most important in the long-run determination of the terms of trade are the supply and demand for agricultural and industrial products, and the different conclusions about their future movement depend on the different estimates of these magnitudes.

The terms of trade are a satisfactory measure of the gains from international trade accruing to the people of a country only in so far as they receive the whole of the earnings from the exports of that country as a territorial unit. Of course, due particularly to foreign investment and sometimes immigrant labour, a considerable part of these earnings is sent abroad in the form of export surplus.

It is possible for the external terms of trade of a backward country to be improving, while the relative share of incomes or the per capita income accruing to its indigenous population is falling.. The converse is also true. Internal factors, such as the degree of monopoly in the economy, the conventional pattern of the division of labour into non-competing racial groups for differing sectors of the economy and the socio-cultural attitudes of the people are far more important in determining economic progress.

Higgins has noted that within a country the terms of trade of the rural sector to the industrialised sector is important. (14) Favourable developments such as improved techniques, higher world market prices for the industrialised sector, will not increase the demand for the output of the rural sector. Indeed, in so far as the rise in income of the industrialised sector is shared by domestic workers, the demand for output of the rural sector may even fall, as these workers substitute imported consumers, goods for home-produced ones. On the other hand, any favourable development in the rural sector will increase the demand for industrial products imported into the sector and reduce the demand for output of the rural sector.

It is interesting to note that "Giffen's paradox"

(14) Benjamin Higgins: Economic Development,
W. W. Norton Co. Inc., New York, 1959, Pg. 382

may operate here. For example, the favourable income-effect of a fall in rice prices in the Malagarasi River Basin of Tanganyika, following upon increased yields, may be so strong that the demand for rice falls and demand for more "luxurious" imports into the sector increases. A large share of the incomes of everyone in the rural sector is spent on rice. When rice is cheaper, they can afford to substitute other foodstuffs and manufactured goods which they consider superior. Thus improvements in rice culture benefit the rest of the country more than they do the rice-growing rural sector itself.

The deterioration of the terms of trade of the rural sector in its relations with the industrial sector of the same country must be reflected in the terms of trade of the rural sector with the rest of the world. Thus it seems as if there is a trend toward deteriorating terms of trade between the rural sector of underdeveloped countries and the rest of the world. Since the majority of the population is occupied in the rural sector, it is possible that their per capita income might fall.

It must be observed that an increase in demand for manufactured products leads to a further increase in demand for the durable capital goods required to produce them, thus creating secondary rounds of activities through the multiplier-accelerator mechanism; an increase in demand for primary products can only lead to an extension in cultivation, which is bound to come to a stop as soon as

the extensive margin of natural resources has been reached. Thus, although the table below shows a rising trend in most of Tanganyika's exports, the beneficial "spread effects" have not permeated the economy.

Table 30

Item	<u>Domestic Exports</u>						
	1954	1955	1956	1957	1958	1959	1960
Sisal	10902	9956	10823	9482	10349	13057	15442
Coffee (not roasted)	10003	6905	9237	7142	7576	5745	7326
Cotton	3357	5534	7486	6578	7249	6657	8827
Tea	504	535	543	601	632	771	1151
Meat and Meat Pre- parations	800	492	346	515	907	1512	1942
Hides, Skins and Furs	1531	1235	1199	1223	1200	1919	1836
Cashew Nuts	554	869	881	1514	1087	1562	2126
Groundnuts	182	346	1017	1073	779	785	1053
Other Oilseeds, Nuts and Kernels	172	1376	2246	2329	2035	2014	2178
Wood and Timber	364	399	456	603	472	405	598
Diamonds	3107	3199	2865	3242	4415	4548	4653
Gold	901	864	742	678	705	1067	1231
Lead, Ore and Con- centrates	371	623	1352	1129	895	829	1077
Tobacco	66	89	26	74	44	60	90
Other	2406	3777	5665	3248	3385	4356	5324
Total Domestic Exports	36229	36199	44884	39431	41730	45287	54854

Source: Development Plan for Tanganyika 1961/62-1963/64,
Government Printer,
Dar Es Salaam 1961, Pg. 6

The exports are primarily agricultural products and mineral resources. From these, no secondary rounds of activities are developed, and the dynamic gains from specialisation in industry, which are likely to be greater because it has a greater educative effect on the people of the country than agriculture, are lost.

The expansion of trade under these circumstances might even aggravate the poverty of the country. Myrdal has suggested that (15)

"The freeing and widening of the markets will often confer such competitive advantages on the industries in already established centres of expansion, which usually work under conditions of increasing returns, that even the handicrafts and industries existing earlier in the other regions are thwarted."

Thus in Tanganyika, the rudimentary industries such as metal and weaving were destroyed with the advent of the Germans at the close of the nineteenth century. The country had to import all its manufacturing needs.

Table 31

Section	<u>Net Imports from Overseas</u>						
	1954	1955	1956	1957	1958	1959	1960
Food	2326	2358	2366	2550	2108	2343	2306
Beverages and Tobacco	418	452	286	291	288	274	268
Crude Materials							
inedible	119	142	145	128	108	113	129
Mineral Fuels, Lubricants and Related Materials	2669	3061	3434	4076	4125	3670	3934
Animal and Vegetable							
Oils and Fats	72	196	224	257	154	143	194
Chemicals	1278	1902	1782	1711	1871	2050	2251
Manufactured goods	13698	18684	13138	16545	12491	13182	13911

(15) Gunnar Myrdal: Economic Theory and Under-Developed Regions: London, 1957, Pg. 29

Section	1954	1955	1956	1957	1958	1959	1960
Machinery and Transport Equipment	7438	12285	10396	9558	8629	9065	10881
Miscellaneous Manufactured Articles	2636	3081	2764	2850	2530	2575	2865
Miscellaneous Transactions and Commodities	1307	1371	1351	1308	1264	1042	1078
Total Net Imports	31962	43531	35885	39275	33568	34456	37817

Source: Development Plan for Tanganyika 1961/62-1963/64,
Government Printer

The present pattern of production in Tanganyika reflects the past policies of the colonial powers, which often took special measures to hamper the growth of indigenous industry. Most financing, transporting, storing, insuring and processing of industrial raw materials occurred outside the colonial country. As a result, unnatural advantages developed. Instead, therefore, of increasing production of primary goods for export, the true advantage of Tanganyika may lie in improving the productivity of the rural sector and in developing manufactures.

CHAPTER VII

CONCLUSION

This survey of the economy of Tanganyika brings to light some of the basic problems in the field of development.

Here is a country rich in fertile farmlands, rich in mineral resources and possessing abundant power, yet the economy has exhibited only slow growth over the years. It is only over the last eight years that the average annual rate of growth of gross domestic product has been in the region of 5 %.

Neither can it be said that it is the rate of population growth that has impeded the development of the country. The natural increase of the population is estimated to be in the region of 1.6 per cent a year.

The relative stagnation in the economic welfare of the Tanganyikans lies in more fundamental causes, such as colonialism, the high degree of monopoly in the economy, the inherent nature of tribalism to retard progress and the non-competitiveness of the racial groups in the society. It should be remembered that

"the growth of income per head in Western Europe and North America in the last few centuries is

very rightly associated with the growth of economic freedom - of freedom of the individual to change his social status or his occupation; freedom to hire resources and combine them in ways which increase output or lower cost; and freedom to enter trades in competition with others who are already established in those trades." (1)

For Tanganyika, therefore, to take off into sustained growth, the economy must first be freed. They have already attained political freedom, but the crucial factor of economic freedom is yet to come.

In achieving this, the Government has to play a key role. Sectional interests must be divorced of their privileges and the total community brought into the stream of progress.

The foundations of this progress has been well laid. By examining the rate of growth of gross fixed capital formation for recent years, it will be seen that it has been high, in the region of some 16 per cent of total gross domestic product.

(1) W. Arthur Lewis: The Theory of Economic Growth, Allen, Unwin, 1954, Pg. 78

Table 32

Gross Fixed Capital Formation
by Industrial Use

£'000

Sector	1954	1955	1956	1957	1958	1959	1960
Agriculture	2109	2127	2262	2314	2128	2261	2949
Livestock	-	-	-	-	-	-	-
Forestry	-	-	-	-	-	-	-
Hunting and Fishing	32	45	141	223	225	129	135
Mining and Quarrying	1129	922	1064	1193	1309	529	651
Manufacturing	1011	2029	1902	1714	1986	1918	2372
Construction	1167	1756	1513	1541	1464	1336	1586
Public Utilities	602	243	367	749	219	376	376
Transport, Storage and Communications	5612	6472	3994	3809	2665	4174	4273
Distribution	1131	2014	1879	2002	1874	1498	2092
Ownership of Dwellings	7981	7782	8252	9100	8726	8368	8258
Public Administration and Defence	4715	4998	5667	6125	5896	5075	5631
Miscellaneous Services	469	531	573	763	909	913	1040
Total (at market prices)	25958	28919	27614	29533	27401	26577	29363

Source: Tanganyika Statistical Abstract,
1960

About one-third of total capital formation is made by the public sector and the remaining two-thirds by the private sector.

About two-thirds of public capital formation is accounted for by expenditure on transport, communications (road and railway building), irrigation, rural and urban water supplies and school building. In fact, public investment has been mainly directed towards building up the "infra-structure" of the economy.

Private capital formation has taken place mainly in plantation, agriculture, manufacturing, building industry and transport and distribution.

Development will come in this country. One of the economic objectives facing Tanganyika is the task of widening the base of the economy, and one of its aspects is the need to accelerate the transition from subsistence to market production. Subsistence activities which do not enter the market economy represent some 40 per cent of the gross domestic product. In many parts of the territory, subsistence production predominates, while in certain areas such as the Northern and Lake Province production for sale is relatively more important. The great majority of the African peasant farmers are in an intermediate position, depending upon subsistence production for most of their food and selling crops to pay for other goods and services.

The commercial crops are mostly for export. Exports take about a quarter of all of the goods and services produced in Tanganyika and generate about 40 per cent of money incomes in the territory. From 1952, the volume of exports grew at an annual rate of 5 per cent. On the whole, imports expanded at a slower rate than exports, hence the steady growth of the favourable visible trade balance in recent years. / See previous tables /

Much of the capital required for development must come from export earnings.

As was noticed earlier, however, the earnings from exports were not developing the country as it should. Here, then, is a justification for Government intervention in the economy with an emphasis on industrial expansion. The progress of agriculture with its emphasis on exports has failed to give the country the rapid development it requires. It is, therefore, left for the Government of the country to direct the energy and resources of the territory on the required path of intersectoral development. This demands an expansion in manufacturing to provide the machines and commodities for the agricultural sector, absorb the surplus labour from the countryside and create the market for internal agricultural produce. In this way, a rapid transition from a subsistence to a monetary economy will be achieved. The economic welfare of the majority of the people will be raised.

In the proposed development of such an exchange economy a Central Bank is vital to regulate credit and currency in the best interest of the nation and to ensure steady growth with stable prices and a rising standard of living for all. The setting up of a Central Bank should, therefore, be a top priority of Government. The financial and economic wisdom of the Bankers would be a great boon to the total development envisaged for the country. Credit could be created to bring the resources of the country into production under wise guidance.

Economic advance has been moderate in Tanganyika, and stark poverty is still the lot of the majority of the inhabitants. Politically, the country has moved in a decade from a tribally based administration to self-government. The future of the country depends upon how far the spirit and good sense which won independence can be harnessed to the economic problems of the territory. Tanganyika needs large scale investment and economic assistance if living standards are to be raised. But the effectiveness of such assistance will depend upon the determination of her people. The leaders of the major political party, Tanganyika African National Union, realise the challenge they face: the slogan of the party is "Independence - and hard work".

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