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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

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[illegible]
May [illegible]
[illegible]

[illegible] SMALL-SCALE [illegible]

IN THE

[illegible] REPUBLIC OF TANZANIA

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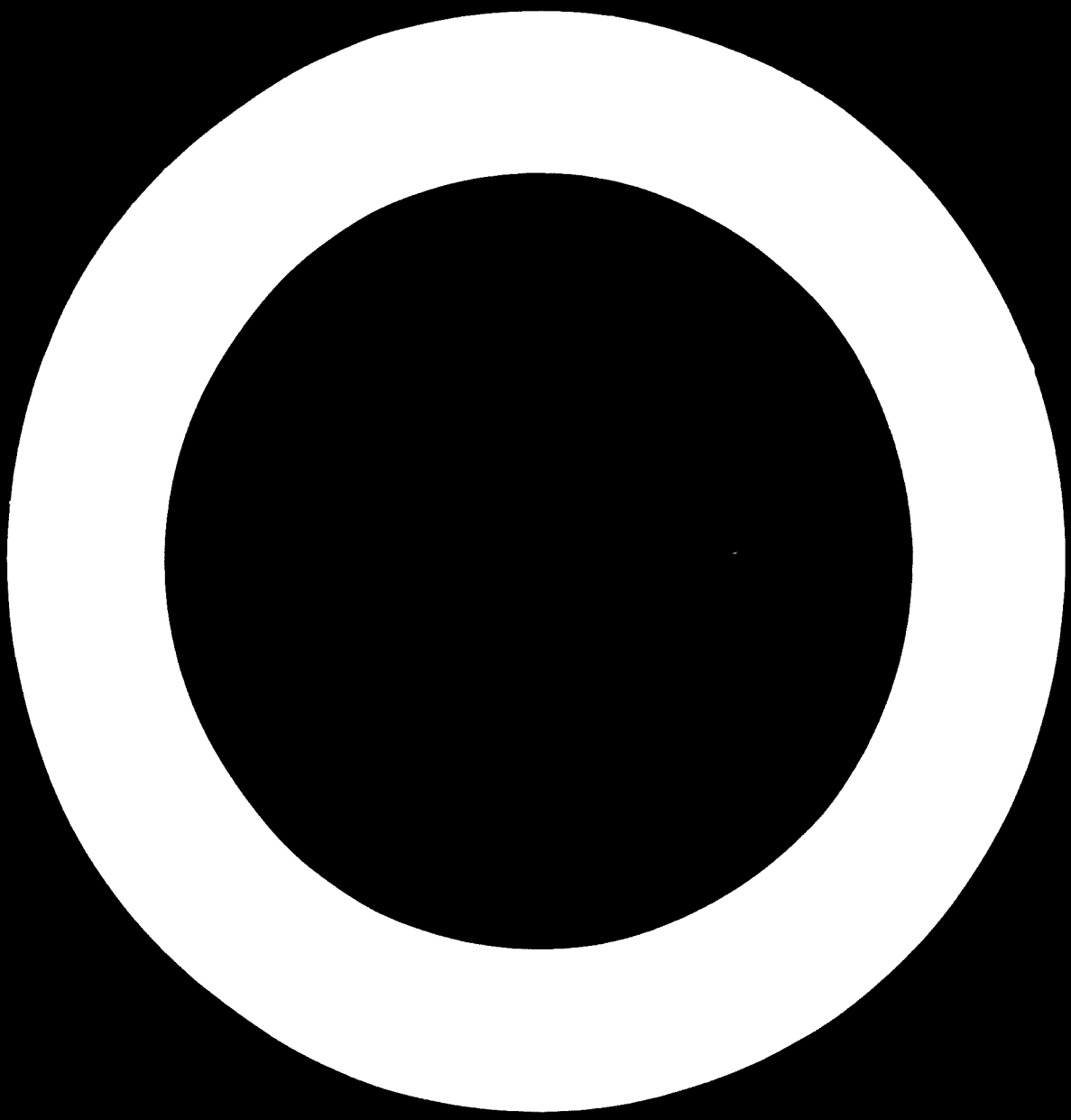

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I. INTRODUCTION

1. An industrial study mission was appointed to visit Tanzania with the assignment of carrying out long-range programming of technical assistance with a particular view to assistance in the formulation of a long term industrial strategy. The mission was organized upon the invitation of the Commissioner for National Industries and Power of the Ministry of Commerce and Industries of the United Republic of Tanzania.

2. The mission was composed of two staff members of UNIDO, Mr. Arno Haneck, Chief, Section for Africa, Technical Co-operation Division and Mr. Ervin Salamon, Chief, Industrial Programming Section, Industrial Policies and Programming Division. The mission arrived at Dar-es-Salaam on 23 February 1976 and left Tanzania on 5 March 1976.

3. The mission would like to take this opportunity to express its sincere appreciation to the functionaries and officials of the Government of the United Republic of Tanzania whom it had the opportunity of meeting during its short stay. (A list of these names is attached as Annex I) The information they gave the mission and the ideas they expressed and suggested was of invaluable assistance for the preparation of this report. In fact, the report records the results of the discussions in the form of potential requests for technical assistance and/or form of job descriptions for individual experts. This has been done so in the belief that this way of presentation reflects in operational terms the Mission's understanding of the conclusions reached at the discussions. It is believed that this form would also facilitate the formulation of official requests for technical assistance.

4. It was not expected to arrive in a definite form on the formulation of the Tanzanian needs for technical assistance. The formulation of individual technical assistance projects as contained in this report is to be understood as a tentative indication both of the priority needs <u>per se</u>, as well as the ways to assist the Government to establish its priorities. It is understood also that the herein contained technical assistance project proposals

are subject to modification as time comes, to put forward eventual requests for assistance. For that matter, this report does not present any commitment on the part of the Government or of UNIDO.

5. In order to file the necessary background information of the proposed project, the report contains an attempt to offer, though necessarily incomplete, some information on the industrial development of this economically promising and vigorous country.

6. The mission wishes to express its gratitude to the UNDP Resident Representative in Tanzania, Mr. L. Mattson and the Assistant Resident Representative Mr. P. S Øren for their guidance and active part taken in the mission's work.

II. BACKGROUND INFORMATION

A. The Economy

7. Tanzania, with an area of 362,820 square miles and a population of approximately 1[illegible] million, is the largest of the East African countries. Its population is predominantly rural, with the largest towns being Dar-es-Salaam (2[illegible],000), Tanga ([illegible],000), Arusha (35,500), Mwanza (34,000) and Moshi ([illegible],000). Tanzania came into being on 26 April 1964, as a result of the union between Tanganyika and Zanzibar.

8. Certain macro-economic variables are useful to illustrate the evolution of the Tanzanian economy over the 1964-67 period. Gross domestic product has been increasing at an average annual rate of 6 per cent and the balance of payments showed a surplus on trade account of US$ 5.7 million in 1964 and US$ [illegible],000,000 in 1967, the capital account reflected a surplus of US$ 1.1 million in 1966 and US$ 1.4 million in 1967. Exports in 1968 attained a value of approximately US$ 240 million, the main items being cotton (17 per cent), coffee (16 per cent) and sisal (11 per cent). Imports in the same year were valued at US$ 257 million, consisting chiefly of capital goods (37 per cent), consumption goods (33 per cent) and intermediate products (16 per cent)

9. The economy is largely based on agricultural activity. The following figures refer to crop husbandry in 1967.

	US$ Millions	Growth Rate 1965-69
Sisal	3[illegible]	[illegible] per cent
Cotton	3[illegible]	[illegible] per cent
Coffee	35	15 per cent
Tea	[illegible].5	[illegible] per cent
Pyrethrum	5	2[illegible] per cent
Cashew	[illegible]	[illegible] per cent
Groundnuts	[illegible]	4[illegible] per cent
Tobacco	[illegible]	[illegible] per cent
Sugar	[illegible]	[illegible] per cent

10. In 1968, sales by the mining sector were valued as follows.

	US$ Thousands
Diamonds	19,000
Gold	700
Salt	[illegible],500
Tin	[illegible],000
Others	870

B. **The Manufacturing Sector**

11. A census taken in 1966 revealed the existence of a total of 438 manufacturing establishments which employed 32,594 people and had an estimated value added of US$ 42 million. Approximately 75 per cent of these firms were located in the urban areas of Dar-es-Salaam, Arusha and Tanga. Of a total of 438 firms, 120 were food-processing, 50 textiles, 26 footwear, 28 furniture and 30 printing and publishing industries.

12. Certain factors have slowed down industrial growth during the past few years. Among these are the embargo on trade with South Africa, and the severe reduction in construction activity. Yet, over the 1966 to 1967 period, output by the manufacturing sector has grown at approximately 10 per cent per annum, increasing the number of workers employed from 22,000 to 33,000. During this period, gross capital stock rose from US$ 1[illegible] million to US$ 196 million - largely due to investments programmed by the First Development Plan.

13. The growth of production has been rapid in the consumer goods industry, while considerably less progress has been made by basic industries with the exception of metals and associated industries. The growth of output of selected industries is shown in the following table:

Growth of Output of Selected Industries

(1963 to 1968)

Industry	Unit	1963	1968	1968/1963
Cement	tons		153,883	-
Beer brewing	000 gal.	1,[illegible]	5,413	2.76
Textiles	000 sq. yds.	[illegible]	34,519	5.54
Cigarettes	millions	1,[illegible]	[illegible],137	1.86
Paints	gallons	95,357	317,94[illegible]	3.32
Plywood	000 sq.ft.	[illegible]	10,65[illegible]	5.32
Sisal twine	tons	-	10,454	-
Saw milling	000 cu.ft.	[illegible]	5,029	1.41
Wheat flour	tons	28,37[illegible]	42,235	1.48
Pyrethrum extract	tons	99	187	1.88

(Source. Central Statistical Bureau)

14. The aforementioned growth took place during the First Plan period. This Plan placed an emphasis on the processing of primary products, on the efficient import substitution of certain mass-produced consumer goods (e.g. Textiles) for the East African market, and on the manufacture of building materials (e.g. cement).

III. THE SECOND PLAN

A. Targets and Objectives

15. Tanzania's Second Five-Year Plan is effective from July 1969 to June 1974, and is a part of a larger 20-year Perspective Plan covering the 1960 to 1980 period. The main goals and objectives can be summarized as follows. total GDP will grow at 7.[illegible] per cent per annum from US$ [illegible] million to US$ 920 million, while manufacturing GDP will increase from US$ 54 million to US$ 99 million, at 13 per cent per annum. This means that manufacturing GDP as a percentage of total GDP will be increased from [illegible].5 per cent to 10.7 per cent.

The specific objectives to be attained by the manufacturing sector are to diversify production and reduce its dependence on foreign inputs for the production of essential consumer and capital goods. The share of manufactures in total exports will be increased. Further, managerial and technical expertise will be developed.

16. The Second Plan aims at a 10 per cent annual growth rate of investments through the Government Development Budget at 1[illegible] per cent per annum, para-statal and co-operative investments at 20 per cent per annum, and private sector investments at 7 per cent per annum. In this way, it is hoped that capital formation will comprise 25 per cent of total GDP by the end of the Plan period. The realisation of these investments requires in particular that fiscal policy ensure that revenues grow faster than monetary incomes and that expenditures for non-development purposes be restrained. Further, public financial institutions will be responsible for channeling savings to the public and para-statal sectors. The investment policy has allocated US$ 270 million to the manufacturing sector, representing

25 per cent of total investment planned throughout the Plan period. Approximately 5[illegible] per cent of the Central Government's total investment funds will be obtained from domestic sources.

17. In regard to the strategy for industrial development, it can be noted that since the possibilities for import substitution of consumer goods will taper off in the course of industrialization it will eventually be necessary to identify, programme and prepare industrial projects more systematically. This, in turn, will require the elaboration of consistent criteria for project selection to be applied to para-statal projects and to serve as indicators in other cases. Special attention will be paid to the social benefit-cost effects of industrial projects, particularly in regard to the balance of payments and the growth of GDP.

18. Following the principles inherent to the Arusha Declaration, four categories of industries will be distinguished in regard to the ownership:

(i)	State-owned.	industries considered strategic, such as petroleum refining and armaments manufacture,
(ii)	State-controlled.	basic industries in which the Government will acquire majority voting and shares,
(iii)	Joint ventures.	industries upon which a large part of the population is dependent. Either the Government or its appointed agencies will play an active role in these enterprises,
(iv)	Open industries.	industries which will be fully open to private - both domestic and foreign - investors.

The infant industry agreement for protection will be invoked to grant protection on a temporary basis only. The location of industries is to be decided upon by the requirements of regional balanced growth of the East African Community.

19. The Plan does not set any specific growth targets as to the investment or production of the various branches of the manufacturing industry. Estimates of the development prospects of the branches can, however, be made.

20. Project possibilities for erning food, beverages and tobacco are dependent on three factors.

(a) demand expansion, particularly due to larger urban markets for food and beverages,

(b) import substitution, notably in the case of dairy products,

(c) export potential of processed foodstuffs such as canned meats.

It should be noted that this branch is already the most developed sector of the manufacturing sector, and that its future growth is tied to the development of agriculture. It should in fact, be possible to achieve an average annual growth of 7 per cent to 8 per cent.

21. The expansion of the textiles, weaving apparel and leather industries has been particularly significant during the previous years. The problem during this Plan period is to maximize the capacity utilization. Investment will largely be directed towards this aim, permitting a doubling of textile production by 1974. In the longer run, the growth rate will be limited to 6-8 per cent per annum unless export markets can be obtained.

22. In the realm of wood and wood products (including furniture, pulp and paper products), Tanzania has a potential comparative advantage involving a labour-intensive production function. The local factor endowment, together with the forestry development programme, will contribute to the achievement of very high growth rates by this manufacturing branch. Further, the export potential is considerable and the domestic market is growing rapidly. The basic constraint will be the speed with which managerial and technical know-how can be developed.

23. Production of chemical products will develop mainly due to a number of small and medium-size projects for new factories as well as for the solution of existing ones. Ouput, other than oil refining, will more than double over the Plan's duration period. Oil refining products will not grow to any significant extent since increased domestic demand will be cancelled by a lower level of exports. Over the longer term, the production of basic chemicals can grow at a rate higher than that of overall economic growth if there is systematic long-term planning to co-ordinate the growth of inter-related sub-sectors and to phase growth in order to avoid highly expensive over-capacity at some stage.

24. A large part of the investment allocated to the non-metallic minerals sector is to expand the capacity of the cement industry in order to satisfy construction needs. There is still much scope for import substitution in this sector, so that output is expected to double by 1971. Subsequently, growth is expected to fall below 10 per cent per annum.

25. The development of an iron and steel industry is required to maintain the same industrial expansion rate. At this time, investigations are being carried out to assess iron and coal deposits. There are, however, clear possibilities for medium-scale workshops using imported materials.

26. Finally, the metal products and machinery sector will see the farm implements factory built during the First Plan come into full production. In addition, there are a number of small and medium-scale project possibilities, which depend however on the availability of technical and design advice as well as on quality control. The creation of centres affording such advice on mechanical and electrical engineering will thus be an important element in the Second Plan.

B. Investment Projects in the Manufacturing Sector

27. The programme includes industrial investment possibilities consisting of some 385 projects, of which 78 are expansion schemes for existing plants. It should be noted that three-fifths of the projects employ 10 to 70 workers and account for 15 per cent of projected investment and for 10 per cent of output. During the initial stages, the industrial programme is to continue along the lines of the First Plan -- chiefly the execution of ad hoc projects for the production of simple consumer goods, the processing of primary projects, the manufacture of building materials, petroleum refining, as well as the development of industries supplying inputs to agriculture.

28. The following table illustrates the investment opportunities which have been identified either at pre-feasibility or feasibility study stage; they may either be rejected or delayed, while new projects may be added.

Industry	No. of Projects	Investment (US$ Millions)	Gross Output (US$ Millions)	Export (US$ Millions)	Employment Total
Manufacturing of Food, Beverages and Tobacco	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Textile Wearing Apparel and Leather Industries	51	[illegible]	[illegible]	[illegible]	[illegible]
Manufacturing of Wood, Wood Products including Furniture	[illegible]	[illegible]	[illegible]	[illegible]	6,160
Paper and Paper Products Manufacturing	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Chemicals, including Coal, Petroleum and Plastics	[illegible]	[illegible]	[illegible]	[illegible]	3,640
Non-metallic Mineral Products, except Products of Petroleum and Coal	[illegible]	15.7	14.5	3.3	1,320
Basic Metal Industries	3	[illegible]	[illegible]	[illegible]	910
Fabricated Metal Products, Machinery and Equipment	77	22.2	[illegible]	[illegible]	5,050
Other Manufacturing Industries	12	1.1	2.2	1.1	420
Total	385	[illegible]	266.6	108.7	37,620

The sectoral distribution of these projects is as follows.

	No. of Projects %	Investment %	Output %	Employment %
Para-statal Sector	43	84	79	77
Workers' Co-operatives	21	4	5	7
Private Sector	36	12	16	16
Total	100	100	100	100

29. The minimum total investment to meet the overall Plan goals is US$ 182 million, yielding a gross output of US$ 196 million and an employment level of approximately 30,000.

IV. THE LONG-TERM INDUSTRIAL PLAN

A. Aims

30. The fundamental constraints of industrial development in the long run can be pin-pointed as follows:

(i) domestic demand growth for products is limited,

(ii) some industries use a high proportion of imported materials and have created a domestic market for new types of imports,

(iii) export potentials are limited due to competition from industrialized and from other developing countries and due to tariffs in industrialized countries,

(iv) the possibilities of import substitution of simple consumer goods will taper off.

Of major concern is therefore the formulation of a long-term strategy for industrial growth. Great priority should be given to the long-term development of basic intermediate and capital goods industries.

31. During the first phase of the Second Plan, a long-term industrial plan will be prepared in order to provide the framework of the Third Plan. As stated in the Second Plan,

> "A central concern of the Second Plan will be the fashioning of a longer term industrial strategy through the identification and preparation of projects in new industries meeting the more complex requirements of the next stage of industrialisation."

With the growing complexity of the industrial sector, future industrial programmes will probably place increasing emphasis on the inter-relationship of projects.

32. The drafting of the long-term Plan requires that a decision be taken as to the most desired industrial structure at the end of the period, and that the intermediate steps to achieve the objectives chosen be specified. This will involve studies of potential demand for intermediate and final products related to both Tanzania and East Africa. Similarly, the country's export potential must be evaluated. To meet this demand, further knowledge is necessary on the country's natural resources, power, capital availability and technological processes.

33. To start off with, preliminary studies should certainly be made in order to obtain an optimal industrial structure. [illegible] made from different five year programmes which constitute parts of the long term plan. This will involve matching future supply and demand for the various products. To this end, long term [illegible] and a series of projections made. At the [illegible] plan possible require particular skills. These will be supplied by [illegible] MINCOM, INDCENTRE, see institutions responsible for planning, [illegible] university economists, the development division of the [illegible] and by technical assistance, particularly from UNIDO.

34. Technical assistance will be aimed at evaluating the potential for new industries in a work programme geared to Tanzanian objectives. It follows that the institutions responsible for the short term planning must be involved in the drafting of the long term plan. Further, a senior industrial economist is required to supervise the plan in all its stages. He would be responsible either to DEVPLAN or to MINCOM, but would have to maintain an adequate liaison between these two Ministries. A technical steering committee will be formed representing MINCOM, DEVPLAN, the Central Statistical Bureau, the Treasury, Agriculture, INDCENTRE and the Economic Research Bureau of the University College. This committee will initiate and co ordinate the different research studies required.

B. The Preparation

35. The technical work will involve an analysis of the present industrial structure and the identification of the best structure desired, as well as the means of achieving this end. The difficulty, of course, arises as to the industrial structure desired at the end of the long-term Plan. Particular attention must be given to the problem of exports, bearing in mind the East African Community and also the possibility of its being enlarged. Tanzania will, in fact, have to find a place in the rapidly changing and growing world market for manufactured goods. This involves quality production at internationally competitive prices, and the development of industries primarily for export purposes.

[illegible] and [illegible], as well as of the [illegible] of the [illegible] of [illegible]. Special considera[illegible] [illegible] constraint.

[illegible] appropriate time horizon [illegible] would increase six or eight [illegible] domestic product should be [illegible] industrial sector would thus [illegible] generate the overall growth [illegible].

[illegible] of the market for final products [illegible] categories of consumer [illegible].

[illegible] The [illegible] examined in the rate of growth of total IDP and in the [illegible] of [illegible]. The minimisation of capital costs [illegible] industrial programmes. The following [illegible] might be made, inter alia

> Either the concentration on a few industries particularly for export purposes, or the concentration on a wide range of small scale industries dependent only on the local market,
>
> Either emphasis on the production of capital goods to overcome the constraint of foreign exchange requirements, or emphasis on simple short efficiency neglecting the production of capital goods,
>
> Either [illegible] the maintenance of a high employment [illegible] of the growth of output.

4. The second stage of the programme will study in detail the possibilities for each industry or complex under the alternative assumptions in relation to the requirements of the [illegible]. Studies would be required to cover at least the following industries

[illegible] and leverages

[illegible] and [illegible]

[illegible] and metallurgical industries

Transport equipment

[illegible]

[illegible]

Consumer goods

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Petroleum and petroleum [illegible]

Heating

[illegible] and wood products

[illegible] metallic minerals, particularly [illegible] and [illegible]

Further studies will be required of Tanzania's [illegible] reserves and the Stiegler's Gorge power potential. From the completion of these studies more rational choices can be made. However, it is not possible now to suggest what the concluding steps of the study should be. Yet, it is particularly important to note that the final document must have room for adjustment to the uncertainties of the future, particularly in the realm of technical change, shifts in world markets, and so on. Technical assistance is likely to be requested from UNIDO in this area.

4. UNIDO might be requested to assist the Tanzanian Government in setting up the framework and a detailed course of action for the identification and formulation of a long term strategy for industrial development. Please see attached job description, Annex 2). In supporting the long-range programming exercise a stock of respective programming data will be required which are presently not available to a satisfactory extent. UNIDO might be requested to assist the Government also in providing the respective expertise. Please see attached job description, Annex 3).

[illegible] PLANNING

[illegible] stages

[illegible] development, [illegible] economic projections,

[illegible] stage [illegible] targets are [illegible] which are evaluated [illegible]

[illegible] stage [illegible] on [illegible] costs,

[illegible] decision is taken by the Ministry of [illegible] which is also responsible for [illegible] ensure implementation

[illegible] stages [illegible] under the responsibility of the Ministry of [illegible] Affairs and Development Planning (DEVPLAN), the Ministry of Commerce and Industries (MIW) and the National Development Corporation (NDC).

[illegible] Ministry of Economic Affairs and Development Planning

[illegible] Macro Division. The Bureau of Economic Analysis deals with public finance, credit and monetary questions, prices, incomes, wages, investment, regional co-operation schemes, etc. The Para-statal section [illegible] coordinates the Para-statal Management and Investment Programme.

Sectoral Programmes Division. The Industrial Section formulates sectoral programmes and provides a liaison with NDC, the private sector and other investment agencies. It also engages in the long range industrial planning and in establishing investment criteria.

Regional Planning Division. It analyzes economic data pertaining to potential regional development, and is responsible for the Ujamaa villages.

b. **Ministry of Commerce and Industries**

4. **Administrative Division** [illegible]

National Industries and Power Division [illegible]

Industrial Property Advisory [illegible] promotion matters

Industrial Studies and Development Centre [illegible] organisation prepares feasibility studies and [illegible] on the implementation [illegible] regional aspects

Export Promotion Bureau [illegible] services and provides [illegible] on these problems

c. **The National Development Corporation of Tanzania (NDC)**

46. The National Development Corporation originated in [illegible] as the Tanganyika Development [illegible] Corporation, it was later renamed [illegible] NDC as from January [illegible] state owned but works outside the machinery of the Government [illegible] making organisation. From the time of its [illegible] investment has increased by Sh. [illegible] million to Sh. [illegible] million. Income has risen by Sh. 6 million per year to Sh. [illegible] million. It participates in 70 companies employing over 20,000 people. Its interests spread to all sectors of the economy, particularly since the Arusha Declaration of February 1967. The Arusha Declaration marked the point at which Tanzania embarked upon the road to socialism and defined the following three main areas of investment:

[illegible] developed [illegible]

[illegible] ensuring a satisfactory return [illegible]

[illegible] seeks the partnership of private foreign [illegible] foreign research and specialist [illegible] strengthening [illegible] necessary [illegible] projects, which has ex[illegible]

[illegible] of magnitude, have been [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] development [illegible] company in which [illegible]

[illegible]

[illegible] the [illegible] capital [illegible]

[illegible] have resulted in some major reforms

[illegible] order to concentrate its activities entirely on the industrialisation of the country the size of the [illegible] has been reduced from [illegible] to [illegible] companies. The companies which formed part of the [illegible] in 1969 are outlined in Annex [illegible] which also lists the recent projects in which [illegible] is involved

[illegible] A well [illegible] was created. [illegible] appointed to the [illegible] which is chaired by

Chairman [illegible]

Deputy Chairman [illegible]

Members [illegible]

[illegible] Minister [illegible]

[illegible] As a result of the changes [illegible] streamlined. Its headquarters has the [illegible]

Chief Executive Officer [illegible] the Board. The General Manager's [illegible] Departments are responsible to him.

General Manager's Office [illegible] Assistant who prepares [illegible]

Planning and Finance Department [illegible]

The Development Department [illegible] co-ordinate and implement projects which have been approved by the Board.

The Operations Department [illegible] the performance of specific [illegible] and to assist broad [illegible] Management.

Accounting Department Chief Accountant, [illegible] advice to the Group Companies.

Administration Department [illegible] Director of Administration
Insurance Manager
Public Relations Manager

Programme Development Department Director of Executive Development, initiates policies and programmes for developing managerial skills.

Personnel Manager
Training Officer [illegible] assists in planning and implementing training programmes for the Corporation.

[illegible] are special

[illegible]

[illegible]

[illegible] marketing and [illegible]

[illegible]

[illegible] equipment, [illegible] particularly [illegible]

[illegible] production [illegible]

[illegible] establishment of research facilities serving [illegible] product design [illegible] testing [illegible] chemicals [illegible]

[illegible]

The National Small Scale Industries Corporation

The National Small Scale Industries Corporation (NSIC) is responsible for implementing the five year development plan for this sector. Its present activities include the setting up of industrial workshops, marketing and the hire purchase of machinery. It further engages in promotional and commercial activities. In the future, the NSIC's planned objectives are:

- to promote the establishment of industrial workshops and estates,
- to help to obtain raw materials in bulk and to market finished products,
- to assist in the execution of new projects and to obtain machinery and other equipment,
- to participate financially in those projects which are of economic importance to the country,

- to diffuse technical and other information,
- to promote the development of traditional and non-traditional cottage industries,
- to strengthen the agro-industrial base of the rural economy.

In particular, the NSIC will give an industrial bias to [illegible] in the Ujamaa villages and organize [illegible] appropriate artisans' skills.

53. Two suggestions have been made to the mission regarding the further development of small scale industries. Firstly, INDCENTRE should expand an even focus on the preparation of feasibility studies and other basic studies for small-scale industries, whereas the large industries would remain the responsibility of IDC. Secondly, a small industries promotion bureau should be set up to promote small and cottage industries, particularly in the Ujamaa villages. It would consist of these sub-divisions.

(i) Consultancy Sub-division
(ii) Investment Sub-division
(iii) Programming Sub-division

The Consultancy Sub-division would include an Industrial Intelligence Service, an Advisory Service, a Study and Research Service and an Industrial Diagnostic Service. The Investment Sub-division will promote investment in small-scale enterprises in complete co-ordination with INDCENTRE and will assess new project proposals financed by the NSIC. The Programming Sub-division would prepare technical reports on the various stages of the establishment of a project. Technical consultants to the Small Industries Promotion Bureau will, together with INDCENTRE, prepare:

- Market Survey Reports
- Feasibility Studies
- Site Selection Reports
- Technical Reports on Capital Structure and Commercial Profitability
- Foreign Collaboration Reports
- Reports to be presented to foreign and indigenous collaborators and investors
- Management Advice

As a result of these proposals, UNIDO could eventually be requested to offer technical assistance in this important field.

VI. RESEARCH FOR INDUSTRIAL DEVELOPMENT

54. A national research plan for Tanzania is under preparation. The Ministry of Economic Affairs and Development Planning, in co-operation with other ministries is assigned to prepare the draft for this plan. The draft will be formulated in various working parties which represent the different interests in the field of research. It is not envisaged that the research plan would be elaborated in such a detail that it would cover all areas of research. However, it should still be formulated in a way that additions and revisions could be evolved from it and that it could serve as a basis for further action in depth. Assistance for the preparation of the national research plan has been offered by the Institute for Development Research, Copenhagen.

55. The importance of the various forms of industrial research is being recognised throughout all the institutions which the mission visited. It was repeatedly stressed that applied research resulting in product development constitutes one of the critical bottlenecks in industrial development.

56. The creation of appropriate facilities (institute or centre), to meet these needs of the industry might be subject to technical assistance from UNIDO. The activities of such institutions would comprise.

(i) Research for development of products and manufacturing equipment, improvement of products and of manufacturing processes and the design of products,

(ii) Manufacture of prototype products and manufacture of equipment,

(iii) Development of the respective technologies and testing techniques,

(iv) Market research for new products;

(v) Testing of products and raw materials as well as of technological processes;

(vi) Identification and selection of appropriate manufacturing technologies with a particular view to agro-industries and to the Ujamaa villages.

VII. INSTITUTE FOR STANDARDIZATION

57. Within the National Research Plan for Tanzania, the Government is considering to establish an Institute for Standardization with a particular view to export-oriented industries. The necessity for standardization of industrial products was especially emphasized by the National Development Corporation and by the Ministry of Industries. The Institute for standardization should serve both public and private enterprises, and will, in particular, be expected to.

(a) co-ordinate and unify the specifications and ultimately the national standards in the country with a view to facilitating trade and co-operation in the economic and industrial fields and raising the production and quality of manufactured goods,

(b) unify basic measurements units and methods of sampling, testing and reporting.

The mission informed the Government agencies of the interest which the East African Community has expressed in establishing a Regional Centre for Standardisation. The Tanzanian Government authorities emphasized the necessity for introducing national standardization and to co-ordinate these activities with a possible Regional Centre for the Community as a whole.

VIII. MAINTENANCE AND REPAIR - AGRICULTURAL EQUIPMENT

58. During a meeting with The Hon. . N. M. Bryceson, M.P., Minister for Agriculture, Food and Co-operatives, the mission was informed about the lack of maintenance and repair facilities for agricultural equipment in Tanzania. It was emphasised that, in particular, mobile units would be necessary to serve the maintenance and repair needs of both the state-owned and private farms.

The Minister expressed great interest in UNIDO's programme for maintenance and repair. He decided to request as a first phase two mobile maintenance and repair units as well as expert services for the operation of these units and the training of local personnel. (Mobile maintenance and repair units could be financed from the UNIDO Trust Fund (Voluntary Contribution from the USSR).)

IX. LIST OF PARAGRAPHS AND ANNEXES REFERRING DIRECTLY TO TECHNICAL ASSISTANCE

Industrial Planning and Programming	-	Paras. 33, 42 and 51
Research and Product Development	-	Paras. 51 and 56
Small-scale Industry	-	Paras. 51, 52 and 53
Mechanical and Mining Industry	-	Annex 5
Studies on Iron Ore Reserves	-	Para. 41
Construction Engineering	-	Annex 7
Chemical Industry	-	Annex 8
Standardization	-	Para. 57
Maintenance and Repair	-	Para. 58
Marketing	-	Para. 51 and Annex 8
Accountancy	-	Annex 9

ANNEX I

LIST OF PARTICIPANTS [illegible]

I. Ministry of Agriculture [illegible]

1. The Hon. [illegible], M.P.
   Minister for Agriculture, [illegible]

II. Ministry of Economic Affairs and Development Planning

1. P. Waite, Economic Adviser
2. Dr. O. Mphawa, Economic Adviser, [illegible] Division
3. Dr. J.D. Rae, Economic Adviser, [illegible]
4. Philip C. Packard, Economic Adviser, [illegible] Division
5. Mr. F.A. Kyamba, Director, Regional Programme [illegible]

III. Ministry of Commerce and Industries

1. The Hon. A.K. Babu, M.P.
   Minister for Commerce and Industries
2. Mr. J.P. Mwaluko, Principal Secretary
3. Mr. S.K.G. Visram, Economist, Planning Section
4. Mr. N.W. Nshau, Commercial Industrial Officer, Promotion and Small-scale Industry
5. Mr. A.S. Kanwal, Adviser, Small-scale Industries

IV. National Development Corporation

1. Mr. C.G. Kahama, General Manager
2. Mr. Piroz R. Karim, Director of Development
3. Mr. Michael S. Bergin, Director of Operations.

ANNEX 2

Draft

REQUEST FROM THE GOVERNMENT OF TANZANIA FOR
SPECIAL INDUSTRIAL SERVICES

Job Description

Post title: Industrial programmer

Duration: 1-2 months

Date required: August 1970

Duty station: Dar-es-Salaam

Duties: The expert will be attached to the Ministry of Economic Affairs and Development Planning or to the Ministry of Commerce and Industry*, and will be expected to:

1) Assist in setting up the framework and the course of action, and in determining the administrative and substantive prerequisites for the identification and formulation of a long-term strategy for the industrial development of the country.

2) Based on these findings, advise on further multilateral technical assistance which would be required in carrying out the identified tasks.

Language: English

Qualifications: Advanced degree in economics with extensive experience in industrial programming in developing countries, preferably with reference to the East African region.

Background information: The Government intends to prepare a long-term industrial development plan which will determine long-term industrial strategies and provide the basis and framework for the Third Five-Year Plan commencing in 1974. The aim of the long-term plan is to systematically and comprehensively identify, phase and develop industrial opportunities with due regard to the long-term economic growth objectives of the country, the creation of an integrated industrial structure and the mobilisation of the country's resources. The initial phase of the plan preparation is the scheduling of the planning procedure, the determination of administrative and substantive prerequisites and the formulation of appropriate tasks to be undertaken by the various government bodies and institutions.

* Yet to be determined.

ANNEX

Draft

REQUEST FROM THE GOVERNMENT OF TANZANIA FOR
SPECIAL INDUSTRIAL SERVICES

Job Description

Post title: Industrial planner/programmer expert

Duration: 11 months

Date required

Duty station: Dar-es-Salaam

Duties: The expert will be expected to assist the Tanzanian Ministry of Economic Affairs and Development Planning (DEVPLAN) in assessing the current availabilities of, and reviewing existing institutional procedures as they effect, data and other informational inputs as required for all planning purposes, with particular reference to the industrial sector.

The expert will be responsible primarily for assisting DEVPLAN at two levels:

1) For immediate operational purposes, to locate and advise on the preparation of that data which is required to support the entire range of planning (macro) and programming (micro) activities of the Ministry in the field of industry.

2) To assist in developing appropriate systems and institutional channels for supplying the full range of data required to support these activities on a regular basis.

The expert is expected to be able to:

1) Develop in a short time a complete familiarity with all existing sources and systems of indigenous data.

2) Contribute actively to the development of improved, regularized information programmes to support industrial planning and programming at overall, sectoral and project levels.

[illegible] experience in [illegible] [illegible] with operations [illegible] is desirable. [illegible] data environment [illegible]

[illegible]

[illegible] Development Planning [illegible] macro-planning, but [illegible] sectoral (industrial) [illegible] programme implementation. [illegible] Statistical Bureau. Thus, [illegible] principal supplier [illegible] make use of an industrial [illegible] fully familiar with both supply [illegible] data problems.

[illegible]

[illegible]

[illegible] GOVERNMENT OF TANZANIA [illegible]
[illegible]

[illegible]

[illegible] [illegible]

Duration [illegible]

Date required [illegible]

Duty station [illegible]

Responsibilities [illegible] in co-operation with [illegible] Group company management [illegible] expected [illegible] departments [illegible] academic and/or [illegible] industrial development planning [illegible]

Duties The [illegible] adviser will be expected [illegible] and [illegible] methods [illegible]

1) The making of industrial studies, [illegible] investment priorities, and the evaluation of [illegible] expansion programmes of the Group industrial companies, taking into consideration inter alia Tanzania's [illegible] East African Community.

2) The selection and evaluation of potential industrial projects, the introduction and use of improved methods for evaluating projects, and the training of selected personnel in project evaluation.

3) The collection of data on the pattern of industrial development and the collection of foreign trade and other data needed to evaluate potential industrial projects in Tanzania.

4) The preparation for industrial promotion purposes of information on promising industrial investment opportunities in Tanzania, and the negotiation of agreements with potential investors, consultants and contractors.

[illegible]

[illegible] experience in these [illegible] requirements.

[illegible] experience in [illegible]

[illegible]

[illegible]

Post title [illegible]

Duration. [illegible]

Date required [illegible]

Duty station: Dar-es-Salaam [illegible]

Responsible to The [illegible] in cooperation with UNIDO's [illegible] expected to [illegible] departments [illegible] engineering [illegible] in order [illegible] processes, equipment [illegible] Tanzania [illegible]

Duties: The industrial [illegible] provide [illegible] undertaking [illegible] the development [illegible]

1) The evaluation and implementation [illegible] from the standpoint [illegible] the selection [illegible] equipment) and from the standpoint [illegible] of their end products, both [illegible] markets.

2) The selection of engineering design and construction companies and equipment suppliers, the preparation of technical specifications for plant bid tenders and the evaluation of completed tenders and the inspection of delivered equipment and completed plant to check on its compliance with contract terms.

3) The improvement of the productivity of existing plants in Tanzania through the use of improved operating methods and better machine utilisation and maintenance.

Post title

Duration

Date required

Date started

Responsible to

Duties

1. The evaluation and [illegible] from the [illegible] the selection [illegible] equipment) [illegible] of their and [illegible] market.

2) The selection of chemical engineering design and construction companies and equipment suppliers, the preparation of technical specifications for plant bid tenders and the evaluation of completed tenders and the inspection of delivered equipment and completed plant to check on its compliance with contract terms

ANNEX I

REQUEST FROM THE GOVERNMENT OF TANZANIA FOR
OFFICIAL DEVELOPMENT ASSISTANCE

Job Description

Post title: Construction Engineering Advisor

Duration: One year, with possibility of extension

Date required: July 1981

Duty station: Dar-es-Salaam, with travel within the country

Responsible to: The construction engineering advisor will be responsible to the National Development Corporation (NDC) of Tanzania and will work in close co-operation with NDC's Director of Development and Group Company Management. He will also be expected to maintain close contact with other government bodies in Tanzania and with professional bodies and construction engineering firms in the industrially advanced countries in order to keep informed of the latest techniques, materials, equipment and labour practices in the construction industry, both in Tanzania and in other countries.

Duties. The construction engineering advisor will be expected to provide guidance on, and recommend methods to be used in, undertaking the following activities relating to the economically and physically sound construction of industrial plants and related buildings and facilities, financed by NDC or the Group companies:

1) The review of an evaluation of architectural plans and cost estimates for the construction of industrial plants and related buildings and facilities.

2) The selection of architectural firms, engineering design and construction companies, and/or construction contractors for industrial plants and related buildings and facilities.

3) The scheduling of construction and the selection of construction materials and methods to be employed.

[illegible] quality and progress of construction [illegible] construction materials and [illegible] with contractors [illegible] compliance with contract terms and construction schedules.

[illegible] selection of suitable sites (considering land, water, [illegible] transportation) for industrial plants, [illegible] local construction materials, local building [illegible] and local construction labour.

Educational and professional qualifications: A university [illegible] degree. Considerable practical experience in the construction of a variety of industrial plants and related facilities and in the selection of construction materials, construction methods and construction labour. Construction experience in the chemical, mechanical and mining industries would be highly desirable.

Other useful experience: Previous work experience in the less-developed countries would be an asset.

Language: English, some knowledge of Swahili would be an asset.

ANNEX

Draft

REQUEST FROM THE GOVERNMENT OF TANZANIA FOR
SPECIAL INDUSTRIAL SERVICES

Job Description

Post title: Industrial Marketing Adviser

Duration: One year, with possibility of extension

Date required. January 1971

Duty station: Dar-es-Salaam, with travel within the country

Responsible to: The industrial marketing adviser will be responsible to the National Development Corporation (NDC) of Tanzania and will work in close co-operation with NDC's Director of Operations and with Group company management. It will also be expected to maintain close contact with other Government departments and academic and professional bodies concerned with industrial development planning and its collection.

Duties: The marketing adviser will be expected to provide advice on, and recommend methods to be used in the following planning tasks:

1) The development of accurate definitions and statements of marketing problems, market position, product suitability, field selling operations, distribution, marketing costs, pricing, packaging, advertising, and similar activities, directed toward the profitable growth of industries in Tanzania, serving domestic and/or foreign markets.

2) The selection, design, review and implementation of marketing research programmes and projects to be carried out by NDC or the Group companies.

3) The structuring of market surveys and the collection and analysis of survey data to formulate alternative courses of action.

4) The location of new factories, from the point of view of marketing distribution patterns.

[illegible] building up of a body of relevant economic statistics [illegible] marketing, including national and regional per capita income, population, purchasing power stratification, cost of living, international commodity market movements, trade statistics, etc.

[illegible] marketing, consultants [illegible] marketing issues with investors, marketing units, the Government departments [illegible] and the electorate [illegible] international [illegible] large group company products.

Educational and professional qualifications:	Advanced degree in economics or marketing. Considerable practical experience in market research and marketing, policy development, preferably in developing countries. Excellent practical experience equivalent to that for the degree requirement.
Other useful experience:	Experience in training or supervising others in market research work in developing countries. Practical experience in African countries would be an asset.
Language.	English, some knowledge of Swahili would be an asset.

A[illegible] X

[illegible]

REQUEST FOR THE SERVICES OF [illegible] SPECIALIST [illegible]

[illegible]

Post title: Industrial accountant

Duration: One year, with [illegible]

Date required: January [illegible]

Duty station: Dar-es-Salaam, with travel within the country

Responsible to: The industrial accountant will be responsible to the [illegible] Development Corporation [illegible] Tanzania and will work in close co-operation with NDC's Director of Operations, the Group Internal Auditor, [illegible] company management.

Duties. The industrial accountant will be expected to provide guidance on, and recommend methods to be used in, the following accounting control planning tasks:

1) The development of a Group-wide standardized accounting system and its use by all Group companies.

2) The improvement of the collection, processing and presentation of financial and operating data needed for management of each of the Group companies.

3) The development of accurate, consistent, adequate and prompt reporting by the Group companies of information needed by NDC.

4) The training of Group company management and accounting personnel in the need for, and use of, the desired accounting systems and methods by means of organized seminars and personal consultation.

Educational and professional qualifications: Advanced degree in accounting and a certified public accountant (CPA) rating. Considerable practical experience in developing and implementing accounting control systems in industry.

Other useful experience: Work experience in the less-developed countries is desirable. Experience in guiding and supervising others would also be an asset.

Language: English; some knowledge of Swahili would be an asset.

ANNEX 10

NDC PARTICIPATING COMPANIES ([illegible])

Subsidiaries	Business	Holding %	Date of incorporation
Subsidiaries			
Friendship Textile Mill Ltd.	Textile manufacture	100	April 1966
National Printing Co. Ltd.	Printing	100	May 1967
Ubungo Farm Implements Manufacturing Co. Ltd.	Industry	100	June 1968
National [illegible] Industries Corporation Ltd.	Home industries	80	November 1965
Steel Rolling Mills Ltd.	Industry	60	October 1966
Tanganyika Instant Coffee Co. Ltd.	Coffee processing	80	December 1963
Kilombero Chipboard Ltd.	Wood	80	May 1967
Tabora Matu Products Ltd.	Wood	75	March 1968
Tanzania Diamond Cutting Co. Ltd.	Diamond cutting	75	April 1966
Tanzania Tanneries Co. Ltd.	Skins and hides	75	February 1968
General Tyre East Africa Ltd.	Tyre manufacture		
Coastal Dairy Industries Ltd.	Dairy produce		July 1966
B.A.T. Tanzania Ltd.	Cigarette manufacture	60	January 1965
Kilimanjaro Breweries Ltd.	Brewing	60	September 1961
Tanzania Fertilizer Co. Ltd.	Fertilizers	60	July 1966
Tanzania Shoe Co. Ltd.	Shoe manufacture	60	October 1965
Tanganyika Meerschaum Corp. Ltd.	Smoking pipes	56	August 1955
Tanganyika Packers Ltd.	Meat processing	51	November 1947
Tanzania Breweries Ltd.	Brewing	51	1922
Tanganyika Tegry (Plastics) Ltd.	Plastics manufacture	49	July 1948
Metal Box Co. of Tanzania Ltd.	Container manufacture	50	July 1948
Mtwara Cashew Co. Ltd.	Cashew nut processing	50	January 1968
Tanzania Cashew Machines Ltd.	Invention	50	January 1968
Tanzania Portland Cement Co. Ltd.	Cement	50	January 1959

Company	Business	[illegible]	[illegible]
Tanzania Publishing House Ltd.	Publishing	[illegible]	[illegible]
Tanzania Tobacco Processing Co. Ltd.	Tobacco processing	[illegible]	[illegible]
Tanganyika Extract Co. Ltd.	Pyrethrum processing	[illegible]	[illegible]
Mwanza Textiles Ltd.	Textile manufacture	[illegible]	[illegible]
Tanita Co. Ltd.	Cashew processing	30	[illegible]
Tanzania Bay Corp. Ltd.	Sisal processing	[illegible]	[illegible]
Tanganyika Creameries Ltd.	Dairy produce	[illegible]	April [illegible]
Blanket Manufacturers Ltd.	Blankets	30	[illegible]
Sikh Saw Mills Ltd.	Timber processing	[illegible]	[illegible]
Mining, Construction			
Nyanza Salt Pans Ltd.	Salt mining	[illegible]	[illegible]
I.P.S. Building Ltd.			
Williamson Diamonds Ltd.	Diamond mining	[illegible]	March [illegible]
Tanzania Gemstones Industries Ltd.			
Others			
Industrial Promotion Services Ltd.	Finance	[illegible]	March [illegible]
Tanganyika Development Finance Co.	Finance	[illegible]	December 1962
Tanzania Elimu Supplies Ltd.	Educational distribution	50	March 1967

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