OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as "developed", "industrialized" and "developing" are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
Tel: (+43-1) 26026-0 · www.unido.org · unido@unido.org

07253

Distr.
LIMITED

ID/WG.234/14
22 November 1976

ORIGINAL: ENGLISH

United Nations Industrial Development Organization

Intergovernmental Expert Group Meeting
on the Industrialization of the
Least Developed Countries

Vienna, Austria, 15 - 24 November 1976

Agenda item 1

INDUSTRIAL DEVELOPMENT IN ETHIOPIA[1]

Prepared by
Merga Afeta and Kibret Mengistu

1/ The views expressed in this paper are those of the authors and do not necessarily reflect the views of the Government of Ethiopia or UNIDO. This document has been reproduced without formal editing.

id.76-6411

I. General Background:

Ethiopia's economy is predominantly agricultural where agriculture plays a significant role in terms of contributions to GDP as well as the proportion of the population it maintains. Despite its size, however, its growth and dynamism is limited thereby affecting growth and developments in all other sectors including industry.

Manufacturing Industry occupies a modest share of the GDP. In terms of growth rate, however, it has been one of the most dynamic sectors of the economy, with real output growth averaging 8,0% p.a. in TFYP from 1967/68 to 1973/74. In this way, the sector has made contribution to the overall growth of the economy. Employment in the sector, on the other hand, has increased more slowly, at a rate of 3,6% per annum from 1966/67 to 1972/73, although there has been more increase in employment in primary producing sectors stimulated by growing demand from manufacturing firms. A number of the industries constructed especially in recent years, have been relying heavily on imported raw materials and many of these require very high degree of protection if they are to survive. Information on small-scale manufacturing enterprises has been quite incomplete, but indications are that output has grown at a substantially lower rate. Very little policy support has been given to such small-scale enterprises to date.

Ethiopia has had three Five Year Development Plans. Nevertheless due to the nature of the ownership of the productive forces, lack of political will to implement planned targets and a host of economic and social constraints associated with these two problems the developments of the economy in general and industry in particular was limited and slowed down.

It could be stated boldly that whatever developments and growth rates achieved so far were largely gained despite the plan.

The last plan was the third Five Year Plan 1968-1974. The TFYP set <u>seven qualitative goals for the large scale manufacturing sectors:</u>

(i) The first was to encourage the processing of locally available raw materials. This objective has by and large been attained, but in the metals and chemicals fields reliance continued on imported raw materials.

(ii) The second objective was to continue encouragement of import substitution industries. This has been achieved as most of the new industries have been focused on imports substitution and the country's tariff policy has been geared to the support of this objective.

(iii) The third objective concerns the provision of low-cost equipment, supplies and consumer goods to peasant agriculture. This aspect of provision of consumer goods has been fulfilled to a small extent at high prices; in so far as the low-cost equipment and other supplies are concerned the objective has not been met at all. The envisaged fertilizer plant did not materialize and the products of the metal tools factory being costly and therefore expensive could not be made available to the peasant farmers.

(iv) The development of new urban growth centers (besides the old industrial zones of Asmara, Addis Ababa and Dire Dawa) where employment could be provided to local people in manufacturing and processing industries was set as the fourth objective. This objective was a complete failure due to lack of Government policy which would assist the process of urbanization.

(v) The fifth qualitative objective specified that special attention is to be given to those industries which through forward and/or backward linkages, stimulate the growth of other sectors. Cases of significant forward linkages are rare and have not been important in Ethiopia. In the case of backward linkages, the growth of existing food, textile and leather industries has had a significant effect in stimulating the growth of agricultural production to serve as inputs for the manufacturing sector.

(vi) The sixth objective relates to the encouragement of the use of indigenous resources, particularly the abundant supply of unskilled workers, along with a decrease in the use of imported resources. No steps have been taken to provide particular incentives for firms to use unskilled labour. In fact, the tax tariff and exchange rate structures tend to work in the opposite direction, making the use of labour more costly relative to machinery and equipment. This is one of the areas where the Third Five Year Plan and its predecessors has utterly failed in their objectives.

(vii) Lastly is the objective of diagnosing the cause of excess capacity in many of the country's plants and to take appropriate measures to improve the utilization of capacity. Some attempt has been made along this line but the depth and coverage of the study has not been adequate enough to arrive at some conclusive recommendations.

Besides the above qualitative objectives quantitative targets were set for Manufacturing Industry in the TFYP. A planned target of gross value of production of E$700M at constant prices was envisaged in 1974 (i.e. end of the Third plan period) and the actual calculated at current market prices was E$344M. Regarding value added and achievement of E$245M in current prices was obtained out of a plan target of E$230M at constant prices by 1974 which shows that the plan was not fulfilled to a large extent. The target growth rate for manufacturing (in the revised plan 1967/68-1973/74) was 12.3% p.a. The actual showed and under-fulfillment with a growth rate of 8.0% p.a. The causes of this underfulfillment include inadequate flow of investment both for new and old industrial enterprises, and the absence of enter-preneurs capable of introducing better methods of production and marketing, thereby raising the productivity of the existing capital stock. With regard to gross fixed capital investment, the projected figure over the plan period was $515M. and the actual reached a level of $230.1M., i.e. 45% of the investment target in constant prices of 1968.

In the field of employment, the said sector showed a rather modest performance with the actual employment of 60.000 as against the planned target of 110.000. However, with employment growing at just 3,6% p.a. and value added rising by 3,0% p.a. labour productivity increased. This surpassed the plans' anticipation of 1.1% p.a. growth in labor productivity.

Finally, it was planned that exports would reach $60M. by the end of the plan period. Actual manufactured exports showed a value of $40m in 1974 if we take into account a general increase of export prices by 77%.

To conclude, we can say that at the end of TFYP manufacturing industry came to a complete standstill and there was even a fall in production due to exaggerated import substitution policy, under investment, too high protective import duties, which resulted in high prices of locally produced and sold goods, too heavy a reliance on imported raw materials, too little attention was given to putting highly skilled Ethiopian in responsible posts in foreign owned companies, etc. As a result of the failure of successive five years plans many problems came to expression in the form of mass unemployment, mass poverty, famine, high illiteracy rate, shortage of skilled manpower and managerial staff, very old machinery in many industries with frequent break-down for which spare parts could not be found because they were produced any longer, shortage of financial resources, underdeveloped infrastructures, all contributing to the culmination of the present revolution.

Although some qualitative goals were put on paper only and were not realized in previous successive five years' plans, there is no doubt that some of them reflected long-term needs of the country and should be achieved in the future plans like forward and backward linkages, the effective use of indigenous raw-materials, utilization of excess capacities, etc. On the other hand, as a result of a fiasco of economic policy of the previous regime and as the consequence of basic deficiencies in the previous governing system substantial institutional changes had to be made in order to intensify investment, to step-up growth rates, to make a just distribution of national income, etc. To support this, it was necessary to take measures in economic and social policy, organizational approach, legislative matters and in other sectors. So came the nationalization of land and houses, key manufacturing industries, several important transport companies and banks and insurance companies.

A second aspect of the Industry sector is the areas of handicrafts and the major goods in the TFYP for the handicraft and cottage Industries include improvement of productivity through various forms of technical assistance, promotion of co-operative organizations and marketing facilities and extension of credit.

Overall assessment of the sub-sector industries indicates that the growth rate was in excess of the planned. For realiable evaluation, however, information concerning investment, employment and output are very much lacking and the same factors have also made planning of the sub-sector difficult. The objectives of institutional and organizational changes have been virtual failures.

It should be understood that some of the objectives and the difficulties encountered in the industry sector are matters of going concern. They have been passed on to the Third from the first and second plans, and still they may be passed to the future plan periods. Therefore, let us now turn to look into some general problems which had hampered the growth of industry over the past years, i.e. mainly the pre-revolution days. We will also gloss over some of the current problems facing the existing operation of industries in Ethiopia.

II. Specific Problems of Industrialization

One of the major problems of industrialization stems from the lack of a meaningful development plan both at the overall and sectoral levels. Until very recently the productive forces in industry were owned by a few national capitalists and foreign investors and therefore, the decisions in the types and directions of production and investment were not geared to generating dynamic internal growth of industry and/or creating cross sectoral linkages but merely to amassing exorbitant profits. With industries owned by private holders, there is not any effective way of guiding and controlling the sector both for purposes of its development as well as for creating impacts on other sectors. Consequently, investments concentrated in a few lucrative sub-sectors such as good, beverages and textiles.

There have not been definite objectives and policies with regard to the role of industry and its possible contributions to the economy, say in terms of employment. Thus the allocation of resources in industry was induced by rate of return to the investor even at the expense of employment. The main reason which caused this situation was the existing tax, tariff, and exchange rate structures which made imports of machinery and equipment cheaper relative to labour.

A related problem is that partly due to the factors raised above (tariff, exchanges rate, etc.) and lack of clear policy on the interdependence of Agriculture and Industry, many manufacturing industries in Ethiopia rely heavily on imported raw materials and intermediate goods for their operations. Included also are spare parts and similar other auxiliary services so that it has not been possible to stimulate an autonomous and sustained industrial development unhampered by strains arising from costs and supply availability of the above mentioned factor inputs. Agriculture is currently developing in a direction isolated from needs of the industry sector and this lack of policy on intersectoral resource transfers has deprived the industry sector from the benefits of a cheap and continous supply of inputs.

Another policy problem is the absence of a framework for project preparation and appraisal and their implementation in order to determine their priorities in order to enjoy public or private investment. Neither is there a policy for the choice of technology to be adapted in respect of particular projects and programmes in a given sector. This situation has entailed a problem where small-scale industries were neglected despite their potential advantages in terms of employment creation, income distribution, less imported capital and technology requirement, utilization of indigenous skill and resources, etc.

It has to be emphasized that in order to develop the small scale industry sector as well as the modern manufacturing sector, appropriate technology has to be developed and adopted in production processes. Currently, however, the choice of technology is not appropriate and is at a low level (i.e.

compared to producers in similar industries in other countries). The relevance of appropriate technology should be considered not only from the stand point of efficiency and its effect on unit costs but also from the stand point of factor proportions and factor endowments in the economy.

Of considerable importance is the problem of skilled manpower. This problem permeates a whole range of activities ranging from project preparation to their implementation. Managerial skill and financial analysists are very much in short supply and hence industries suffer from lack of proper management and financial allocations. Feasibility studies, engineering designs, specifications as well as supervision of constructions and installation works are undertaken by foreign personnel. This situation has given rise to inflating the capital costs of industrial projects besides the problem that projects prepared and installed by foreign personnel tend to use foreign machinery and technology which often bear little or no relevance to the needs of the economy. This perpetuates dependence on the developed countries for purposes of industrialization with the consequent effect of retarding the development of locally generated and integrated industry.

No less important than the above problems is the capacity constraint facing the development of basic and impact creating industries such as iron, steel and strategic chemicals like fertilizer, petro-chemicals, etc. Economic and technological realities dictate that projects cannot operate below a certain minimum capacity. The problem is this regard is that due to the smallness of the size of the market for the products of the above industries, it has not become worthwhile to incur the required amount of investments in the said types of industries.

This fact has rendered it difficult to make available domestically engineering products, agricultural machinery, electrical equipment and other strategic inputs at reasonable prices and in the desired quantity.

Shortage of domestic savings is yet another factor that has to be paid due attention. Some industrial projects suffer from lack of resources for financing capital costs as well as recurrent costs for experienced foreign personnel and consultants and other operating costs. This has often led to postponement of project executions and implementation delays. In fact, a problem of a more grave magnitude is foreign exchange limitations. In the past, this had arisen due to emphasis of the industry sector on import substituting industries to the neglect of those catering for export promotion. Of course, the former strategy had contributed towards relieving the balance of payments through foreign exchange savings; however, the best opportunities for import substitution have been exhausted. It means that the need to earn sufficient foreign exchange by export to finance the importation of strategic inputs, remains to be achieved.

An issue related to the above points is the feeling in some quarters that local savings and foreign exchange are not constraints to industrialization in Ethiopia. This is too naive a statement. What may be an acceptable qualification is the fact that the above resources are not the strongest constraints. This is different from a condition of no constraint. There are cases in Ethiopia where investible funds have been made available and yet projects do not appear at all. This indicates that the absorptive capacity to readily absorb investments is at a low level. This has evidenced itself through lack of availability of well conceived projects, lack of local budget even when foreign inputs are made available, administrative bottleneck and implementation problems.

Having outlined the above general problems which has been besetting the industry sector for the past several years, let us now turn to consider in a very brief fashion some of the current and day-to-day problems of the sector. Prominent among these stands shortage of skilled personnel at study as well as operation levels; then comes organizational problems due to overlapping functions especially on matters for industrial policy. This has caused implementation hazards and problem of decision making. Related to this is the institutional problems of haphazard creation of corporations without clear definitions of functions thus leading to the separation of industries which otherwise would have had logical relationships and linkages as well as prevented the duplication of unnecessary administrative and skill overheads with all the implied costs. Next could be raised the question of high investment costs due among others, rising prices of imported equipment thereby making Ethiopian industries high cost producers when coupled with other factors such as limitations of physical, human, financial and other infrastructures. Present industries, those existing and newly proposed ones, suffer from delays of implementation and unnecessary prolongation of gestation period. These are induced due to delays in the commencing of constructions arising from the acute dearth of specialized contractors and administrative inefficiencies including delays at ports and customs clearance. Finally there are the difficulties arising from high cost of spare parts, raw materials and intermediate inputs for which reliance is still put on imports. Mention should also be made of the unwillingness of importers to readily make available the timely supply of the above inputs and in the desired quantity and flow.

II. Current Changes in the Home Front

With the historic victory of the 1966 revolution, Ethiopia has entered into a new era which establishes the ground work for the construction of a free national economy. Ethiopia declared herself a socialist state and with it the old fetters of feudalism were given fatal blows. The small capitalist sector in industry and other areas no longer became fertile soil for imperialist exploitation. To implement the required economic and social changes, the National Democratio Revolution was launched. In industry, the major production and distribution units as well as financial intermediaries, Banks and Insurances were nationalized. This was a significant and necessary step for undertaking a planned development in the Industry sector. Indeed, a prosperous industry cannot co-exist with a backward agriculture. Hence, in view of the need to cater for the downtrodden masses and the necessity of developing the productive forces and production relationship in agriculture, rural lands were nationalized and made available to the people freely. With these fundamental-preparatory measures industry is logically expected to develop faster and in the desired direction. Moreover, the often required interdependence between agriculture and industry (as well as others) would be more meaningfully attained hence forth.

It is understandable that what affects development in industry are not only forces which operate in the industry sector alone or even in both industry and agriculture, but activities, variables, programmes and policies, etc, which occur in all other economic sectors and social spheres. These factors are duly recognized and an irrevocably determined effort is being made by Ethiopia based on the novel principle of self reliance to generate and make available the necessary local manpower, financial resources, infrastructural facilities, etc. through the minimum program of the NDR to achieve a sustained, dynamic and diversified development of industry including the small-scale sub-sector.

IV. Requirements from the External Front

In the preceding section, an attempt has been made to chart in very broad terms the recent measures taken by the Government to give impetus to the process of dynamic industrialization and the overall economy. Domestic efforts are indeed of prime importance in all types of national endeavours in order to attain a sustained and free national economy. However, in view of the objective realities that the economy is plagued with all the symptons of serious under development namely, mass unemployment, mass poverty, famine, low literacy rate, shortage of skilled manpower, shortage of financial resources, under developed infrastructure, etc. it is inconceivable to think of Ethiopia being capable of launching development activities and overcoming the pangs of economic backwardness purely on its own efforts. Thus the need arises for the mobilization of external financial and technical assistance resources under the most desirable conditions (the word condition being used in the most inclusive sense to include political, economic and social matters) as a strategic supplement to local efforts and resources. It should be noted that the support coming from external sources is a temporary substitute for domestic resources considering the country's objective of self-reliance in future.

With the above words in mind let us then proceed to discuss some of the possible actions and special measures that could be taken by International bilateral and Multilateral organizations to assist the LDC's (as that of ours) to meet their needs for accelerating industrialization :

(i) Technical and financial assistance should be given to the LDC's to assist them to prepare policies and plan for attaining a more rapid industrialization. Such policies should pay particular attention to the establishment of basic industries which form the industrial base of the economy. Emphasis should be laid on those industrial projects which create means of production, generate cross sectoral and interregional linkages, and have the highest possible multiplier effects such as industrial infrastructure projects.

(ii) A stepped up program of assistance should be designed for the specific purpose of the development of rural industries which would enable the fuller utilization of local resources and the development of appropriate technology.

(iii) Strong support should be given to the LDC's in order to alleviate the shortages of high-level and middle-level advisory and operational personnel through local training programmes, fellowships, workshops etc.

(iv) Both bilateral and multilateral donors should co-ordinate and programme their assistances to the LDC's in a common pool with the view to creating a strong impact on the development of the industrial sector rather than continuing the present practice of the dispersion of assistance in a whole array of activities.

In respect of special measures, donor agencies and organizations should:

(i) assist in making the necessary studies and investigations to increase the country's stock of knowledge on resource basis, project availability, absorptive capacity and identification of bottlenecks, etc. Study should also be made on resource recuirement for project development including the magnitude, role and type of assistance inputs; and

(ii) help initiate a program of economic and technical co-operation between the LDCs and the developing countries and between them and the industrialized nations with the view to exchanging information, experience and knowledge on problems of industrialization. The donor agencies should in particular create forums for such co-operations as well as assume the responsibilities of developing policies and programs as well as supplying funds in order to facilitate implementation of co-operation schemes mutually agreed upon.

In more specific terms UNIDO and other multilateral agencies and bilateral donor organization should concentrate their efforts on the areas of planning and programming of the industrial development of the LDCs, expand the existing flow of assistance as well as improve the present conditions of such assistance, and adapt workable skill development measures aimed at curtailing the effects of manpower constraints in industry. These points could be a little bit more elaborated upon in the interest of details.

Hence, in respect of planning and programming multilateral and bilateral donors should:

(i) Increase the provision of technical assistance to the LDC's in the planning of their industrial sectors (through advisory services) as well as in implementing various projects and in the actual operation of key functions at plant levels;

(ii) Preparation of special programmes and projects especially tailored to the needs of the LDCs. In this programme could be included the establishment of small and medium sized factories, workshops, industrial estates, etc. Equally important are measures aimed at enabling utilization of local natural resources, development and adaption of appropriate technology, rural industrialization and employment creation;

(iii) Assist in the investigation of the causes of excess capacity and their solution in existing industries both in the context of National and Multinational economics of the LDC's; and

(iv) Formulate policies and programmes of co-operation among the Developing countries as a step towards a more rapid industrialization. Assistance in the implementation phase is an importance aspect of the proposal:

As regards financial problems, the following measures maybe considered:

(i) the overall financial and technical assistance flow should be augmented through the expansion of allocations from existing sources as well as tapping of new ones;

(ii) Creation of a co-ordinating machinery to rationalize and program all assistance to the industrial development of the LDCs; and

(iii) Improvement of the present terms and conditions of assistance through such measures as local cost financing, lifting or reduction of counterpart obligations, free foreign exchange purchase in case of bilateral grants, provision of multiannual assistance, financing projects beyond pre-investment stages to include the actual production phases, etc.

Finally, in the sphere of training, vigorous efforts have to be made by donor organizations to make it possible for the LDCs to take over the positions presently assumed by the expatriates as well as make available a continous flow of industrial skills in accordance with the demands and growth of the sector.

Hence, (i) the nature of training offered in the existing educational institutions has to be evaluated and restructured in the light of existing and future industrial requirements;

(ii) training measures should focus on those approaches which yield the maximum possible multiplier effect (e.g. through training of local instructors, insisting foreign instructors rather than sending trainees) to ensure a continous flow of local experts; and

(iii) designing and implementation of accelerated training programmes to cater for the immediate needs of the sector.

It may be reiterated in conclusion that the task to be undertaken by international donor organizations and the assistance anticipated from them do not singularly provide a miraculous panacea to the industrialization process of the LDCs. The main efforts have to be carried out by the LDCs themselves. A key step in this direction is the need to adhere to a properly formulated development plan. This would involve several development approaches, techniques, models, etc. which have to be carefully considered and applied. Of course we will not dwell on these as this paper is not a strategy outline intended to discuss such modalities. However, the point has been raised here simply to stress the significance of a planning approach with its implications in terms of administrative reforms, organizational restructuring, economic and policy changes and political imperatives.

B-267

77.06.28