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**The Problems of Industrial
Development in Egypt**

By

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Introduction:

The ideas in this paper are the main conclusions of the author's Doctorate Dissertation about: "The Problems of Industrial Development in The U.A.R." (1).

The main thesis of the dissertation is to search whether the process of the post-1952 Egyptian industrialization has followed the most suitable pattern of development which in a course of convenient period of time would create the efficient production apparatus which could provide the economy on flexible self-perpetuating basis with its needs for production and consumption whether directly, or indirectly through foreign trade. Moreover, the thesis examines the factors that have been behind the attained results.

Then, it is clear that the purpose of the study is to investigate and to evaluate critically the industrial experience of Egypt during the period 1952-1969. The main thesis of the study does not ask - mainly - for drawing up a strategy for the future industrial development of Egypt. Nevertheless - as a subsidiary purpose - the conclusions of investigation and evaluation are - modestly enough - to give some directions to be noticed in drawing up the strategy for the future industrialization of the country during the remaining early stages of industrialization.

(1) Hassan Abd-Elaziz Hassan, The Problems of Industrial Development in the U.A.R., Unpublished Ph. D. Thesis, Faculty of Economic and Social sciences, the Central School of Planning and Statistics, Warsaw, 1972.

Industrialization process is a complex one with economic as well as political, social and administrative ramifications. The study is concerned, mainly, with the most important economic ones. It is concerned with such problems as the relative **role** of industry among the other economic sectors, branch structure of industrial sector, **technology** of production, size - pattern and spatial structure of industry. Study of these problems necessitates the study of some aspects of the problem of financing the process of development. The dissertation is concerned with these six problems from the macro-economic point of view.

The studied problems are inter-related and complex as well. Carrying out this task, the study has passed through certain sequence of four steps. Each step in its way of fulfilling its tasks benefits with all the previous ones as well as serves the following ones. The first step prepares the back ground for the subject matter of the study. It is concerned with the Egyptian economy before 1952-Revolution. The second one investigates the solely characteristic aspects of each of the concerned six problems separately. Then, it is concerned with the actual process of industrialization since 1952. The third step analyses the inter-related aspects of these problems with each one of certain macro-economic variables namely, labour absorption, productivity implications, domestic demand magnitudes, domestic supply and its internal consistency and foreign trade structural changes. It studies the process of industrialization and the complex of the main macro-economic variables. The fourth step, through its way of evaluating the Egyptian achievements of industrialization for each of the concerned problems separately, summarizes and combines the previous steps. It includes, more, the theoretical scientific **bases** for evaluating

each of the concerned aspects and ends with a proposed model for the future process of industrialization. The dissertation by its four chapters comprises these indicated four steps respectively.

The main conclusions are simply presented - in the present paper - under the following items:-

- I. Egyptian process of development in regards to the development gap.
- II. Tendencies of accumulation.
- III. Industrial development in regards to the development of the other economic sectors.
- IV. Structural development of industry.
- V. The level of technical progress and techniques of production.
- VI. Size-pattern trends and spatial structure of industry.
- VII. Final comments.

I. Egyptian process of development in regards to the development gap:

A new face of Egyptian history has begun with the emergence of the 1952 Egyptian-Revolution. Enormous changes in the political, social, and economic fields have been taken place. The process of socio-economic development has been considered the way to transfer the economy from its backward stagnated stage to the path of development. Certain importance has been given to the process of industrialization as it is considered the corner-stone of the development process.

The realized recently Egyptian level of economic development can be considered a higher one compared with the pre-1952, nearly, one-half century stagnated level of development. Per-capita real income increased with about its one-third over the period 1952-1969 as against its fluctuated stagnated low level over the period 1913-1952. Nevertheless, the post-1952 process of development, particularly, the process of industrialization has not been enough to narrow the pre-1952 gap between the Egyptian level of economic development and those of the highly developed countries. The Egyptian annual growth rates of G.D.P. were lower than those of the groups of centrally planned economies and developed market economies. The different used indicators have proved that Egypt is, still, in the early stages of industrialization. As a matter of fact, now-a-days, the task is not easy as developing countries are facing not only the problem of underdevelopment but also the problem of technological revolution taking place in the developed countries.

Considering the specific conditions of Egypt, it is difficult to say that the recent process of industrialization has followed the most suitable pattern of development. Many considerations have been responsible for that result. The following points refer to the important ones.

II Tendencies of accumulation:

Domestic saving ratio has been stabilized around 12 per cent during most of the studied period with a latter slight increase and a last great decrease to 7.7 per cent during the year 1968/69. Apart from the last decrease, this level may be a reasonable one compared with the ones in other developing countries; but it is small in comparison with the present requirements of development. It is, also, a little bit lower than its average level during the four years prior to 1952. That stabilized domestic saving ratio has occurred inspite of the realized relatively high annual growth rates of G.N.P. and the followed institutional changes. The most important was the adoption of the two required social reforms for accumulation, viz. nationalization and land reform. As a matter of fact, on one hand, nationalization was followed, only, in the later years and land reform has not yet fully utilized as a real source of accumulation.

On the other hand, government policies - with exception during the period 1965/66-1967/68 - were in the form of leaving per capita consumption

levels to be improved. ⁽¹⁾ This attitude was so clear from: keeping the increase of prices in moderate rates inspite of the followed budget deficit policy, less mobilizing agricultural economic surplus inspite of its expansion - as a percentage share of net agricultural output - from 25.0 per cent in 1954 to 55.3 per cent in 1964/65, expanding free and semi-free services in addition to the different measures of redistributing income in favour of lower income classes having higher propensity to consume and the followed - next to 1960 - employment drive policy.

Confining our comments on industrial policies from the point of view of their responsibility on creating consumer demand, it is possible to say that, during the period 1952-1959 a convenient relations were existed from one hand, between the increments of gross value added and the allocated investments to the industrial sector in comparison with the other economic sectors; and from the other hand, between the rates of growth of labour productivity and the rates of growth of wages in manufacturing industry. In contrast, during the period 1959/60 - 1968/1969, the previous two phenomena have been reversed. Then, industrial sector (with its policies) - particularly next to 1960 - has participated in the explained high growth rates of consumption and the stabilized domestic saving ratio.

The government attitude toward consumption may be justified due to the 1952 low per-capita consumption levels. But, as a consequence to the low - in comparison with the requirements of development - and stabilized

(1) Real per-capita consumption increased with average annual growth rates of 5.0, 2.5, 0.1 and 8.9 per cent during the period 1952/53-1959/60, 1960/61-1964/65, 1965/66 - 1967/68 and 1968/69 respectively.

level of domestic saving ratio two consequences have occurred. From one hand, accumulation - as a percentage share of G.N.P. - has leveled more or less around the low level 13.5 per cent (with even a decrease during the last year 1968/69 to 12 per cent); with exception the period 1960/61-1964/65 during which an increasing trend reached a little less than 20 per cent. Apart from the achieved productivity levels, these moderate accumulation ratios - during most of the studied period - have been, greatly, responsible for the explained persistent development gap. It has to be added, even, that the achieved accumulation levels were, partly, financed by foreign savings. From the other hand, high consumption ratios had the effect of more allocating the available resources to consumption objectives instead of productive ones, as well as asked for more importation of consumer goods and less exportation of them.

As a matter of fact, at the end of 1965 the government had changed its policies towards consumption. The new policies aimed to restrict both private and public consumption. However, in 1968/69, these policies were reversed with a return to the old ones, realizing the highest both current and real consumption rates of growth. It was possible to know that the new policies were accompanied by a reduction in the annual growth rates of industrial output, the increase of the stocks of finished products and excess capacities. However, these new policies towards consumption were not the only responsible factors for the occurred adverse conditions, the situation improved, in 1968/69, with the change of these policies. This does not mean that - in the case of developing countries - controlling the growth rates of consumption for the aims of development leads, directly, to

shrinking the economic activities. But, such policies have to be accompanied by directing more economic resources to the productive activities; the case which was not adopted in Egypt. In Egypt restricting domestic consumption was accompanied by another policies restricting, moreover, investment imports (including productive ones) and employment possibilities. The bad consequences were a result, moreover, to the high share of consumer goods in the industrial sector with a large under-construction capacities of these products well as they were due to some deficiencies in the pricing system.⁽¹⁾ The most important is to notice that mentioned by B. Hansen and G. Marzouk:

"reduction in consumption must not be allowed to lead to fall in domestic production. This means... that a reduction in consumption will be a solution only if the consumption in question consists of import goods, or is competing directly with foreign demand for exportable goods, or the resources set free are absorbed in the production of exportable goods, which will also be in fact sold abroad." But, the resulted change due to the policies of reducing consumption may not be as quickly as required. Therefore, "consumption must be cut, but it matters a great deal just how this is done".⁽²⁾

Controlling consumption is not an evil by itself, but the way of its application may not be an easy one. It is important to say that restricting consumption during the take-off stage may be - to great extent - significantly recommended to be able to allocate more resources

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- (1) For instance the prices of durable-consumer goods were raised so high for making a reduction in the domestic demand in order to save more volumes to be exported without examining the availability of real possibilities for exportation.
- (2) B. Hansen & G. Marzouk, Development and Economic Policy in the U.A.R. (Egypt), North-Holland Publishing Company, Amsterdam, 1965, p.237.

to the productive activities; referring especially to the mentioned concerning the great need of speeding the process of economic development in the developing economy.

In short, apart from the low levels of productivity, the most important reason behind wasting potential domestic accumulation has been the government policies of leaving domestic consumption growing with high rates. Apart from population growth; policies of prices, wages, taxes and services have been responsible for consumption expansion. The attitude of the government towards consumption was a result to social considerations, as the pre-1952 per capita consumption levels were low. This attitude may be, to some extent, justified. But the growth of per capita consumption had to be controlled to lower growth rates than the realized ones, with a consideration of the growth rates of productivity in order to give the chance for the ratio of domestic saving to increase. The followed institutional changes might only have the worth effect of keeping domestic saving ratio nearly stable without a decrease as well as transferring the domestic saving from the private hands to the public one.

III. Industrial development in regards to the development of the other economic sectors:

Over the studied period, 1952/53 - 1968/69, the most striking phenomenon is the continued post-1930 tendency of increasing the relative shares of industry, transport, communications and other services in G.D.P. on the account of decreasing the relative shares of the previously dominating sector; viz., agriculture, commerce, finance

and housing. But, the net result of this structural change has been the form of, slightly, decreasing the proportional share of the commodity sectors in G.D.P. Really, the proportional share of the industrial sector has increased with about 4-7 percentage units of the G.D.P., but the decrease in the proportional share of agricultural sector has been higher (7-9 percentage units). The critic point was that the expansion of services was relatively high particularly during the last nine years 1959/60-1968/69.

In 1968/69, the proportional share of the industrial sector accounted for about 21.5 per cent of G.D.P. as against 15 or 17.5 per cent in 1952/53. To this sector a relative shares of - a little less or more of - one-quarter total investments have been allocated. In absolute terms, the yearly volumes of investments have been, nearly, tripled from 1952/53 to 1968/69. But, even, the relative allocated investments to industry have been lower than the planned targets and, greatly, low compared with the experience of socialist countries. The change which has taken place in the pattern of resource allocation - not in accordance to the planned targets - has been induced, mainly, by humanitarian and social considerations. The indicated undesired high expansion of domestic consumption as against the mostly rigidity of prices, might have the influence of miss-shaping the pattern structure of G.D.P. and realizing foreign trade deficit. The increased demand on agricultural products necessitated the allocation of an increased volumes of investments to agriculture, but the limited cultivable land raised the required capital cost and reflected on the balance of foreign trade in the form of increased imports of food particularly cereals. This is nothing to worry about, as long as a portion of the increase in non-agricultural output made possible by a transfer

of resources out of agriculture can be exported, or can replace formerly imported goods. But, when this increase in production is greatly concentrated in services, which can not be exported (except in the form of tourism), and in manufacturing which is often quite insufficient, balance of payment problems are a natural result. Considering the limited possibilities of expanding agricultural production, the blame may be directed, on one hand, to the unplanned expansion of consumption, and on the other hand, to the over expansion of services and the relative insufficient industrial expansion and/or the non-competitive exports of the new industrial output.

In short, the given relative emphasis to the industrial development was modest in regards to the specific conditions of Egypt. It is worth to remember what was noted by W. Arthur Lewis that countries with inadequate agricultural resources relative to their population - like Japan and Egypt - should export manufacture products and import agricultural products.⁽¹⁾

IV. Structural development of industry.⁽²⁾

Within manufacturing sector the most striking phenomenon is the predominance of consumer-goods industries which accounted, in 1966/67, for about 58 per cent of the contributed gross value added by manufacturing industry. Considering the part of intermediate-goods industries

(1) See; B. Higgins, Economic Development, Constable and Company Limited, London, 1959, p. 357.

(2) For more knowledge about this point, see; Hassan Abd-Elaziz, Structural Changes of The Egyptian Industry, I.N.P., Memo. No. 1052, Cairo, 1973.

which was allocated to consumer industries, the share of consumer-oriented industries goes up to 82 per cent of the gross value added by manufacturing industry in 1966/67, as against about - a little bit more - 88 per cent in 1952. This big share of consumer industrial output, which has witnessed, only, a slight relative decrease through the 15 years from 1952 to 1967 - mostly from 1959/60 - reflected the big relative actual allocated investment shares to both of the consumer-goods industries and the oriented industrial intermediate goods to consumer industries. This given more attention to consumer-goods industries was more than could be justified on long-term considerations. Apart from exports of textiles, the expansion of consumer-goods has been, mainly, an import-substitution character; and consequently for facing the expanded unplanned consumer domestic demand. The expansion of these industries may be justified as they absorbed more labour and more spread them among governorates as well as they characterized by comparative advantages because of the mostly use of domestic raw materials and the availability of their needed skillness. But on the light of the experiences of some other countries and the present conditions of developing countries, these advantages are short-run ones. If it was possible to control the expansion of domestic consumer demand and consequently if it was possible to export these saved volumes; the expansion of these industries would have been justified. But, the occurred case was that the allocated resources to these industries were wasted by the expanded domestic demand. It is right, that import substitution process by establishing these industries was nearly

a complete one as mostly the domestic natural conditions permit; nevertheless they reflected certain burden on the balance of trade either directly through their import requirements of machinery, equipments and other inputs or indirectly, through import needs of the accompanied established intermediate goods industries.

In contrast, capital goods industries accounted for a very small proportional share of the contributed gross value added by manufacturing industry which did not exceed 6.0 per cent in 1966/67 as against 5.0 per cent in 1952. Considering the part of intermediate goods industries which was allocated to the production of investment goods, the share of the investment-oriented industries goes up to about 18.0 per cent in 1966/67 as against about 12.0 per cent in 1952. This small share of the investment industrial production, which has witnessed, only, a slight relative increase through the 15 years from 1952 to 1967 - particularly next to 1959/60 - reflected the small relative actual allocated investment shares to investment-goods industries. This could not be justified on long-term considerations. Basic capital-goods industries which are needed for building the investment base for the process of economic development - represented in machinery building industries - have been, nearly, neglected. Then, the process of development had depended, mainly, with an increasing volumes upon imports of these products.

Intermediate-goods industries, as a percentage share of gross value added by manufacturing industry, accounted for 36 per cent in 1966/67 as against 31 per cent in 1952 and even 27 per cent in 1954. Next to 1954, this category of industry accounted for the highest increase in the gross value added percentage units. A relative big proportional shares of investments have been allocated to this category of industries. In this concern, it is generally known that intermediate-goods industries are more dependent on the availability of raw material endowments. Then, the critic point is that the given attention to intermediate-goods industries was greatly exceeding the given

slight attention to mineral investigation and exploitation processes. Even petroleum exploitation was lagged behind the expanded demand on crude petroleum oil. Only, lately, petroleum exploitation has jumped up. The result of this case was an increase in the burden of raw material imports in addition to the burden of the required imports of capital machinery for establishing these projects. It was, only, partly possible to meet these increased import requirements with a result of an appearance of some difficulties, such as shortages, unutilized capacities, etc. These difficulties were reflected on the levels of productivity and the internal consistency of the industrial complex. The thorny problem is that the most part of the produced intermediate goods has been oriented to the production of consumer-goods industries. Moreover, the production of the intermediate-goods industries was with a little export effect.

The expansion of chemicals and petroleum industrial branches has occupied the lead from 1959/60. This is a convenient fact as these industries contribute positively to the promotion of productivity which is an important factor for accelerating the process of development. It is important to say that one of the "main directions of technological progress is the increasing share of chemicals industry as well as the growing application of chemical products in all branches."⁽¹⁾ It is not possible, however, to evaluate precisely the expansion of these industrial branches without a study to the product mix of each of them. It is enough, here, to comment that the less existence of capital-goods industries let their output more oriented to consumption needs.

The increase of imports during the early stages of development is a normal phenomenon as well as the occurrence of a deficit in the balance of payments is not a strange feature. But, this external unbalance has to not last for long. The most thorny problem related to the Egyptian case is that while the established industrial profile, the shortage in the available known mineral resources and the limited cultivable-land - all of these considerations - require a continuous increase in the volum of imports, the established industry does not promote an accompanied - enough - exportable products. Apart from the levels of productivity, certain responsibility may return to the

(1) Karl H. Horn, Structural Changes and Productivity, Memo. No. 773, I.N.P., Cairo, 1967, p. 28.

uncontrolled expansion in domestic consumer demand and the lack of sufficient foreign markets and real economic relations with some other countries. This phenomenon has the result of increasing the needs of foreign finance with its accompanied future burden; as well as it let difficult to meet some of the import requirements with the accompanied explained worse consequences.

V. The level of technical progress and techniques of production:

The development of industry was associated, mostly, with great technical progress, but it was not accompanied by worth economic results of technological progress except earlier (1947 - 1960) in traditional manufacturing branches and later (1959/60 - 1964/65) in some of them in addition to very few modern manufacturing branches. The growth rates of the productivity of the industrial sector were, generally, modest, especially those of modern manufacturing branches in addition to those of traditional manufacturing branches during last years. These modest growth rates of the productivity were not due only to certain deficiencies in the policies of industrialization but also to some other factors concerned with the living labour and the system of management and organization of industry. ⁽¹⁾

In 1964/65, the level of capital intensity by manufacturing industry amounted to, nearly, triple that of 1947. This fact clarifies the occurred great increase in the level of capital intensity as a result to the new erected industrial projects. The adopted policy of relatively high capital intensive techniques was followed by labour drive policy. This combination of contrasted policies is not justified economically on both short and long-run considerations.

(1) The influence of the followed, at the end of 1965, shrinking policy on the growth rates of productivity have to not be forgotten.

It had the influence, on one hand, of not reaping the relatively direct higher output due to refraining from the use of relatively less average capital intensive techniques. On the other hand, the long-run benefits of using relatively higher capital intensive techniques (due to their accompanied greater potential economic surplus) have been sacrificed as a result to the adopted labour drive policy for social considerations. If the social considerations were important - and there is no objection against this target -, and if the realization of more economic surplus had not the same degree of importance; it was rather worth to either use less average capital intensive techniques or/and accompany the policy of high capital intensive techniques with an effective policy of encouraging small-scale industrial establishments to be expanded. If one or a combination of these two alternatives were adopted, it would be possible to create more employment opportunities and realize, in addition, more direct increase in value added instead of losing totally the last target especially that the planned investment criteria gave great stress to the targets of increasing national income and expanding employment opportunities.

The participation of the industrial sector in creating employment opportunities was a modest one. Over the twenty years 1947 - 1967/68, industry absorbed an employment share of only 14.9 per cent of the total increase of employment over that long period. To this it is worth to add the fact that, even, a part of about 35 per cent

of the increase in industrial employment, during the period 1947-1960, was due to the occurred average decrease in the weekly working hours per worker from 51 hours in 1947 to 48 hours in 1960. Also, a part of about 17.1 per cent of the increase in industrial employment, during the period 1959/60 - 1964/65, was a result of the occurred decrease in the weekly working hours per worker to 42 hours during that period. Then, considering the volumes of investment, it is possible to say that part of the absorbed labour was a result to social considerations and the rest was with high investment cost.

VI. Size-pattern trends and spatial structure of industry:

Egyptian industry is dominated by small-scale industrial establishments; employing less than 50 persons. This sector of establishments (adding the working persons in manufacturing activities outside establishments) absorbed about a little less than two-thirds total manufacturing employment and contributed with about more than two-fifth gross value added by manufacturing industry in 1960. On the other hand, in the same year, large scale industrial establishments - employing 500 persons and more - absorbed about one-quarter total manufacturing employment and contributed with a little more than one-third gross manufacturing value added. The prevalence of small-scale establishments is due to many factors, which may be grouped to three main ones. The first is related to the existence of handicraft industries, where economies of scale are relatively

less important.⁽¹⁾ The second is related to the factors which impede the expansion of small-scale establishments, from which the most important may be the financial one. The third explanation is related to the factors which keep small-scale establishments alive along side the big size ones. In addition to what is mentioned by the first explanation and some government help; high transportation cost - and the related difficulties - give the possibility to small establishments to serve small near markets. Concerning large size establishments, their mentioned importance is a result, firstly, to the modern textiles industry which had the lead till 1960, secondly to some extent to the desire of the government to tolerate, and even strengthen, the monopoly position of large firms, and thirdly to the government - established large - size projects.

The sector of small size establishments has witnessed, however, a continuous relative decrease in its absorption of employment and its contribution of value added, particularly from 1960 to 1964. This phenomenon was a natural repercussion of the new established public large-size projects which has not accompanied by sufficient - in both quantity and quality - submitted governmental help to the large and

(1) This is mainly clear in wood products and furniture, apparel and footwear and transportation means (repairing process) industries as the personal element (especially according to the Egyptian conditions) is more apparent in these industries. These three industries absorbed, alone, a large and increased share of total manufacturing employment by establishments employing less than 10 persons; namely 38.2 per cent in 1960, 40.6 per cent in 1964 and 54.0 per cent in 1967.

spreading small-scale sector of establishments. In certain manufacturing branches, the erection of large scale establishments - located mostly in the traditional manufacturing centres - was accompanied by a relative, or even an absolute, decrease in the activities of small scale establishments that worked in the same fields and located in the other less-industrialized governorates.⁽¹⁾ As a result of this fact, apart from the policies of location of industry; the locational concentration of manufacturing industry has increased widening the existing gap between the relatively developed governorates and the relatively backward ones.

The post-1952 development of manufacturing industry has increased the previous concentration of industries in certain few manufacturing centres inspite of the appearance of new manufacturing centres such as Aswan and Suez. In 1964, Cairo and its two adjacent governorates Giza and Calubia absorbed a little less than one-half total manufacturing employment. Adding employment absorption by the other three traditional manufacturing centres (Alexandria, Beheira and Gharbia) their share of total manufacturing employment amounts to more than three-quarters while the rest small part was distributed - more or less - on the other governorates. Apart from the other industrial policies, the policy of industrial location was, greatly, responsible for this situation. The adherence to economic considerations has been the most important factor behind the attained manufacturing locational

(1) This conclusion is supported by the results of productivity analysis in addition to the other different analyses..

pattern. Nevertheless the social considerations were noticed, lately, in locating some few projects. Moreover, public utilities-investments and the expansion of social services in every place have been to create the suitable atmosphere for establishing industrial projects.

VII. Final comments:

On the light of the results of investigation and evaluation of the Egyptian practice of industrialization and as against the explained development gap, it has been possible to give some directions to be considered during the remaining period of the early Egyptian stages of industrialization:-

1. For the future development, there will be some possibilities for controlling growth rates of consumption without great social pain due to the improvement in the levels of consumption during the previous period. This can be achieved through planning of consumption and the use of different required measures concerning prices, wages, taxes, employment, and family planning.

Considering the mobilization of agricultural economic surplus, it is required, before, to study the difference between rural and urban population in the levels of per capita consumption and the patterns of consumption for the aim of equally distributing the sacrifices of development. It is worth to consider the still existent wide disparities in per capita consumption and income levels.⁽¹⁾ The

(1) It is appeared from one study that 9.8 per cent of the total population have per-capita consumption levels of L.E. 100 or more per year. This small percentage category of population consumes as =

take-off stage, mostly, passes with some pain. This pain becomes as little as possible with the correct planning and the reasonable dependence on foreign savings for a limited transitory period of time. It is important to notice that the different wise possibilities of controlling consumption for increasing domestic saving ratio have to be accompanied by an increase in accumulation and employment otherwise a shrinking in the economic activities will be the case.

2. There is a need for completing the building of the industrial base upon which the development of the economy by its different sectors will depend with a consideration of both of the special circumstances of Egypt and the recent international economic relations. The development of industry supports the development of agriculture by supplying it with the required means of intensifying its production. It has to be emphasized that giving the lead to the industrial sector does not mean neglecting agricultural development. Agricultural production has to be developed - as most as possible - to smooth - as most as possible - the process of development and to participate in reducing the great burden (or tasks) which is required to be satisfied by the industrial expansion. But considering the limited naturally cultivable

= high share of total private consumption as 44.5 per cent. The results of another study have shown that more than 50 per cent of total yearly wages are paid by the public sector. The proportion between the lowest and the highest rates of wages accounts for 1:33 in the government administration and public enterprises.

See; UAR, Ministry of Planning, Following-up and Evaluating the Economic Growth of the UAR in 1966/67, Cairo, 1968, pp. 231:233; and S.Y. Sidhom, Developmental Planning in the UAR, Memo. No. 775, Ministry of planning, Cairo, 1969, pp. 380:381.

land (after the full utilization of High Dam new cultivable lands) and the relatively high productivity of land, there is ceiling - according to the actual technological progress - to the agricultural expansion which let us give the lead to the process of industrialization.

3. Correcting internal and external disequilibrium in the long run depend, mainly, apart from the policies of prices and wages, on the adopted investment policies of allocating investment resources among industries. In this concern the most important is to notice the international political position of Egypt and her relations with other countries. The strategy will be, greatly, influenced by the expected economic intergration which will be resulted from the erection of the Union of Arab Countries. It has to be emphasised that economic integration and co-operation are so important for reinforcing the political Unity. Moreover, real economic relations dependent on the international division of labour have to be constructed with certain erected countries.

Within the frame of real co-operation with certain other countries appears the sound idea of the need of developing "national leading industries". These industries have to satisfy the domestic needs and the demands of exports as far they have to cover imports of products that are not produced by national economy according to the recommended form of international division of labour with certain co-operated countries. Export receipts of industrial products have to consider, moreover, import-requirements of the other economic sectors - such as agriculture products - so long as the industrial sector will play a leading role in the national economy. (1)

(1) For knowing more arguments about the recommended leading industries approach and the suggested structure of leading industries see; Hassan Abd-Elaziz, Structural changes of the Egyptian Industry, Ibid.

4. The selection of leading industries has to avoid the economy of being lop-sided one. It has to give the economy the possibilities of being - in the course of time - a self-sustained and self-expanded one. This of course does not mean a self-sufficient economy.

The point is that leading industries have to attain high levels of productivity as well as they have to raise the productivity of other activities due to their direct and indirect effects and/or what may be called backward and forward linkage effects. Needless to say that the increase in the national average productivity increases the economic surplus and consequently increases the rate of capital accumulation which means an accelerated long-term rate of growth. At the same time, high productivity facilitates the opportunities of more exports which facilitate the possibilities of obtaining more imports needed to the process of development.

The important role which has to be faced by the leading industries necessitates the adherence to science and technology. Leading industries - and their near related ones - have to be in the most economic scales of production, using the most suitable high capital intensive techniques to be competitive ones on the international levels that let their production be able to be exported to meet the imports of the non-produced domestically products according to the selected profile of industry.

5. What is mentioned before about leading industries approach can not be except a one important part of the suggested guide lines for our future strategy concerning the profile of industry. There is a need to make better balance between short and long-run requirements of economic

and social development. It is required to face certain particular conditions of the economy and to attain certain targets such as utilizing some available local resources, creating more employment opportunities, satisfying certain domestic needs, realizing - with relatively limited resources - quick rise in the standard of living of certain parts of the country, etc. Therefore, even with giving the most emphasis to certain leading industries and the existence of a real economic relations with some other countries there is a place for some other industries to be developed. The development of these industries is, mostly, for domestic consumption. For realizing the indicated tasks, it is recommended to develop these lines of production with less capital-intensive techniques and in small-scale establishments. (1)

Of certain importance is the need - during the early stages of industrialization - to encourage the different kinds of small - scale industries, viz. traditional ones (household, artisan and handicraft industries) and modern ones (small factories). A change in the relative emphasis among these kinds occurs with the more forward proceed in the

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- (1) The recommended approach of the simultaneous development of certain leading industries and encouraging small - scale industries is an important one during the early stages of industrialization to - from one hand - push ahead the process of development against the recent international conditions, technological revolution and backwardness, and to - from the other hand - face the problems of surplus labour, increasing the development gap between the different parts of the country etc. This approach is thought by the author to be better than the approach of what may be called "industrialization through intermediate technology".

process of development. Gradually the most relative emphasis will be shifted to the modern one and to change artisan industry to a repairing one. Nevertheless the case will be different from one industry to another. (1)

The organization of the sector of small-scale establishments requires a sound study to be able to develop this important part of the Egyptian industry. It is important to stress the need to find a form of what may be called a division of labor between large-scale and small-scale establishments and to create a cooperation between them by means of what may be called subcontracting system. This is not an easy task. It requires sound economic and technical studies which have to be done by the (existent) Institute of Small-Scale Industries, in Cairo, in Cooperation with the Institute of National Planning (2).

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- (1) It is worth to mention, however, that it is found from a study of the modern small-scale factories that they may use more capital per unit of output than larger factories.

P.N. Dhar and H.F. Lydall, The Role of Small Enterprises in India: Economic Development, Institute of Economic Growth, University of Delhi, Delhi, 1961.

- (2) The author has done certain effort in this respect. see; Hassan Abd-Elaziz, An Economic Study to Some Aspects of the Wooden Furniture Industry in the U.A.R., I.N.P., Cairo, 1964. (in Arabic) and I.N.P., Studying the Factors Influencing The Increase in the Labour Productivity of Cotton Textiles Industry - Hand Loom Textile Factories, Unpublished Study, Cairo, 1966. (in Arabic)

6. Concerning location of industrial establishments the previous recommendations lead us to the idea of locating large industrial establishments in the most economically suitable locations. The limited available economic resources, during the early stages of industrialization, necessitates the adherence to the economic considerations, mainly, in locating the main important huge industrial establishments. But this solution has to be accompanied by some different measures to diminish its accompanied worse consequences. It is possible - and recommended - to consider the social considerations relating to the relatively less important industrial investments and the more free locating industries. But, the decision should have an economic sense or in other words it has to be at least economically rational from the long run point of view. The correct policy of developing relatively backward governorates has to be based on thorough research of the profitability of the economic development of various areas, according to local conditions and raw material resources. Such research should replace economic activization forced through regardless of costs. Small-scale establishments have to be expanded and encouraged to improve the economic development of the relatively more backward governorates. According to local conditions of the different areas, the economic level may not only be improved by the development of industry but also some other economic activities such as tourism, transport, agriculture, etc. must be developed and have to be considered. It goes without saying that stratigical considerations have to be wisely considered within the decision of location.

7. As regards the realized low levels and growth rates of the productivity and the attained modest volumes of gross value added in comparison with the allocated investments to the industrial sector a lot of policies and measures have to be mentioned. In so far - in the present paper - the different indicated recommendations have, only, considered the problem from the angle of the policies of industrialization. This is not enough as the phenomenon of low productivity has not only been a result to certain deficiencies in the policies of industrialization. Different other policies and measures have to be done concerning the factor of living labour and the system of management and organization of industry. These considerations are not, however, the subject of the present study.

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