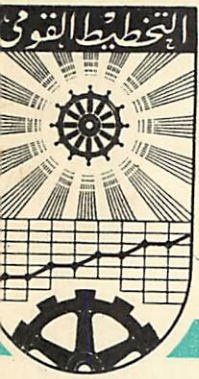


# الجمهورية العربية المتحدة



## مَعْمَدُ التَّخْطِيطِ الْقَوْمِيّ

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SOME IDEAS ABOUT ECONOMIC PLANNING  
IN DEVELOPING COUNTRIES

by

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## I. Preliminary Remarks

The author intends to discuss in this paper some questions out of the wide scope of economic planning seeming to be of importance with respect to the subject of the First International Seminar of the Institute of National Planning at Cairo.

The first question is what objective conditions have to exist, or have to be created by the leading social forces of the nation, not only for the elaboration of a plan corresponding to the objective possibilities within the society but for a successful implementation of the targets of a plan, too. Only if this question is answered in the positive, it is useful and will lead to real success, to discuss methods for elaborating an overall economic plan and managing the economic activity of the different units in which the processes of production and consumption are going on. Even the methods for the elaboration of economic plans are not indifferent to the given social conditions. This, too, has to be recognized fully, whereas this coherence is usually rather accepted with respect to the methods of the State's management of the economic activity.

## II. The Lawfulness of the Process of Economic Development and Economic Planning

It is almost always accepted that the economic activity of men is not a Robinsonade but a social process. However it is not always accepted, that this process is going on within the framework of objective laws, created by the social conditions within the society, and changing with changes in these conditions. The cognition of this total objective lawfulness is a precondition for successful measures in the field of economy.



Each society is characterized mainly in the following way:

- a) with respect to the state of development of productive forces, i.e., the level of technique, implemented in production, and the level of education and qualification of the people, as well as by the extension of the production facilities, generally speaking by the overall level of the productivity of labour;
- b) with respect to property of the means of production, i.e., either private, mainly capitalist, ownership-which excludes the working people from ownership, or ownership of the whole people, represented by the State, and of groups of producers in the form of cooperatives;
- c) with respect to the character of the State; i.e. whether it is the instrument of power of the classes of working people or of the bourgeois class; that is very closely linked with the prevailing form of ownership of the means of production.

Historical experience shows obviously that there exist a lawful coherence between the character of the productive forces and the property relations. The more advanced the technique of production the more comprehensive is the social scale of the process of production, the more is hampering the private ownership of the means of production the extension of economy and the increase of the productivity of labour; i.e., the more increases the objective necessity to remove private and to create social ownership. From the conformity of the character of productive forces with the property relations comes the prime motive for an accelerated economic development. This prime motive is, of course, an internal motive. It is, as was stated in the Background Paper for the Seminar of the 4th November, 1961, of social, and by that, of political character,



and today not to separate from the character and the activity of the State.

As for developing countries, they are usually coming in this state of history by overcoming colonialism, and by democratic revolution. In this process feudal chains were removed and the society is starting and going its way as a bourgeois one. A great number of these countries proclaimed economic planning as an instrument of economic, social and cultural development of the whole population. The results, however, are very different. This is due to the fact, that there was not recognized the above mentioned coherence. Capitalism was increasing very quickly in these countries, and along with that, firstly, the capitalist class on the one hand, and the workers' class on the other hand, were strengthening, i.e., class contradictions increased, and secondly the economic laws of surplus value, and of concurrence and anarchy of production made all endeavours to develop the country in the originally proclaimed manner, i.e., by planning, more and more, and at least completely insufficient. On the other hand, the economic development in developing countries, where there was created a public sector of sufficient and increasing extension, and where there was support of the development of cooperative production in agriculture and handicraft is successful, and leads to the increase of national income, by that of accumulation in production and in increase of the standard of living of the people. The public sector is an elementary form of social ownership of the means of production. If it is sufficiently extended, i.e., includes the main part of industry, the foreign trade, traffic, banking and wholesale enterprises, the process of reproduction within the society is a general social one. With respect to the public sector, the State is the representative of the collective



social owner. Within this sector exists objectively a common economic interest, no more the private profit interests of the different capitalists. If a State is going on to develop the national economy in this way, it will open the prime source for economic development to the advantage of the masses of population.

The above mentioned lawful social coherence exists objectively, i.e., outside of consciousness and independent of the will of man. If recognizing that and policy making on the basis of this cognition, economic policy on the basis of plans for economic development will be successful and lead to an accelerated development, for it removes the hampering of the utilization of the highest level of technique in the process of production step by step, and it will be based on the primary interests of the masses of population by which will mobilized their will to strengthen their efforts to produce more and to improve the production and their qualification, too.

Under the conditions of existence of a public sector of sufficient extension as mentioned above, it becomes possible to manage the whole economy on the basis of a plan successively. On the other hand requires the existence of such a public sector necessarily a centralized management on the basis of an elaborated plan, for reasons of the centralized and unified ownership of the means of production. Otherwise each state owned factory, band, etc., would act as a single capitalist; there would be concurrence and rivalries on the market with the same losses of social work, crises, very small economic development or even stagnation of the economy. etc., like in the capitalist countries of today.



Creating such social conditions the State is mobilizing the main forces, and opening the main source for the economic development of the country. In this way has - in the author's opinion - answered the question with respect to the prime motive of economic development, as was questioned in the "Background Paper".

Beyond that there is a secondary motive, viz., economic assistance from outside the country. However, as it is properly stressed in the "Background Paper", foreign economic assistance can be a double-edged sword. Such aid can be a real one only, when there are two conditions: a low rate of interest firstly, and advantageous conditions of repayment in time as well as in products with relative high internal productivity of labour on the one hand, and international prices which secure at least full compensation of the internal cost of production, i.e., avoiding any loss of national labour. This underlines expressively what has been said in the "Background Paper" (page 2) to this problem. Are the above mentioned conditions not fully given, credits from abroad will become necessarily serious obstacles far outweighing such foreign "aid". It is well known that credits from imperialist countries have all the mentioned negative characteristics whereas credits given by socialist countries fulfill the mentioned positive conditions for the credit taking developing countries.

Provided that there is a third motive of importance on that depends the growth rate of economic development. This is the ability to elaborate an optimal plan for economic development. The optimal plan is characterized in this manner:



1. Such a plan puts the State authorities in a position of management to achieve a steady and maximal increase of the overall productivity of labour and by that of national income and standard of living, too.
2. Such a plan is framed by the given social, natural (natural resources, population and disposable manpower), technical (and scientific) conditions, and economic starting conditions at the beginning of the plan-periods as well as by the political conditions and aims (national and international).

To be able to elaborate such a plan provides that there is full cognition of the lawful coherence of the objective economic laws and their manner of effect under the given social conditions, particularly the lawfulness of the process of expanded reproduction. The knowledge received by the study of this objective coherence shows to what extent, and in which degree of exactness an overall economic plan can be elaborated, and implemented, too. The better the conditions and their cognition, the more exact can be the methods of elaboration and implementation of a plan, and the greater will be the results.

It needs not be proved again that real planning of economic development—which includes necessarily the implementation of the plan targets — is completely impossible in the developed capitalist countries like the more or less great imperialist states in Western Europe and America. What has been called planning there is nothing as prognosticizing some rough tendencies, and experience of history shows not only that all experiments of so-called "planning" in this area have failed, except some short periods of war — economy with absolute government control and compulsion. And, besides that, by no means was achieved a real and durable improvement of the



social and material conditions of the masses of the people. The interests of each capitalist and monopolist is contradictory to the objective social interest, and denies objectively and economic activity according to an overall plan in general, and to the interests of people, too. What has been called "planning" in these countries were state-monopolistic measures to sure the interests of the ruly grand-bourgeois class and sometimes feudal remainders to detain the decay of capitalism as a social system, and to oppress and exploit the working people and foreign nations.

In the young developing countries, having liberated themselves from colonialism and feudal restraints, are existing very different conditions that in the mentioned socalled old capitalist countries. As it has been mentioned above there are relatively good conditions to avoid the painful way of capitalism, which today usually leads to a state in which such countries remain in their role of poor raw-material producing appendages of the great and industrially high developed imperialist countries, which profit by the terms of trades (they dictate the prices) as well as by high interests for credits and by high profits from capital export. Some governments of developing countries did recognize that and try to complete their national sovereignty by getting to the political independence the economic independence. They create the main condition for an accelerated and planful economic development in the form of an extensive public sector in the sphere of production and circulation and support the unification of small producers in agriculture and handicraft into cooperatives in order to enable them to rise their productivity of labour to a great extent and rapidly.

Under such conditions overall state plans for economic development becomes possible to be elaborated more and more



exactly, and with an increasing success with respect to implementation. In this way a planned economic policy contributes to achieve the great aims of humanism.

### III. The Elaboration of an Optimal Plan of the National Economy

Provided what has been said about possibility and necessity of economic planning in developing countries, it seems to be scientifically correct to discuss about the problems of elaboration and implementation of plans in such countries. Of course, it is difficult to a certain extent for the author to discuss about that, because he does not have sufficient experience about the economy of such countries, and there might be lack of knowledge with respect to the existing concrete conditions. For that it may be allowed to discuss only about the problem of optimalization of the plan of national economy (or of an overall economic plan as it is sometimes called) on the basis of the premises that the public sector is predominant in the economy and the Government tries to guide strongly the economic activity in the cooperative and private sectors.

Within the frame of a paper it is necessary to discuss this problem of optimization in using a lot of simplifications with respect to the high variety of practice, and it requires sometimes a very brief description of the economic background of the described methods.

#### 1. The Characteristics of an Optimal Plan of the National Economy

An optimal plan of national economy has the following main features: It secures - under the above mentioned political aims and conditions as well as the natural, technical, and economic starting conditions - full proportionality with up-building of rational but sufficient reserves, and maximal effectivity of the total fund of productive labour spent by the society as a whole



(or with other words: a maximal increase of the productivity of labour within the whole society) over a certain period of time which is usually fixed by political aims or can be connected with economic projects of outstanding importance for the whole country (e.g., a huge valley project like the Assuan High Dam.)

Full proportionality is to be achieved by an elaborated and interconnected system of balances embracing the whole process of production, circulation, distribution, and consumption, foreign trade, reproduction of manpower, and creating-reserves. Such a system of balances has been developed in the socialist countries in the form of the Balance of National Economy.

Of course, the higher the degree of proportionality, the less will there be disproportions and frictions during the process of implementation of the plan, and the smaller will be the losses of productive labour. However, this is not the true problem of effectivity of productive labour. This consists rather in the fact, that - under conditions of full proportionality - with the same fund of productive labour today a different increase of the volume of the social product (in its structure according to needs) can be achieved tomorrow (that means: after the average time of construction of investment). Whereas proportionality is today possible to achieve with a sufficient elaborated system of overall balances, maximal effectivity in the abovementioned sense is still a problem. Some economists propose special methods to measure economic effectivity of single investment-objects compared with others; other economists propose special methods to measure the proportionality of foreign trade. However, all these proposals consider the economic effectivity of one investment-object or one commodity in foreign trade isolated from the whole process of national economy. This is the main defect of these methods. The task is to determine the overall economic effectivity of each combination of all possible variations (variants) of



1. development of technique, technology, and social organisation of labour in all (existing and newly rising) branches,
2. of foreign trade, and
3. of increase of the standard of living.

The elementary condition for each combination of variants is full proportionality, of course. Provided that the overall economic effectivity for each combination of variants becomes evident with the increase of the productivity of labour of the whole national economy. This can be measured by the coefficient of saving of productive labour for the disposable national gross product of the plan-year compared with the labour that would have been necessary for the same mass of products in the year before. I.e., the criterion of overall economic effectivity is "maximal saving of labour (-time)". This proves "That all economy is lastly 'economy of time'". It is evident that a plan, starting from the above mentioned frame of given conditions and securing full proportionality as well as maximal overall economic effectivity serves best to the great national aims. Recognizing that the methodology of the Optimal Plan has been developed.

## 2. The Mathematical Model of the Balance of National Economy for the Optimization of the National Plan

The model that has been described in the following sections has to describe the total causality of national economy by its main features by means of the quantities of the economic categories, and with the help of functional relations in the form of mathematical expressions (proportions and equations). This can be done with scientific exactness only in that way that every functional relation describes a direct causal relation. Otherwise the relation between two (or more) quantities and its change with the changing conditions cannot be calculated



exactly within the balance-system. This is the first elementary requirement for exact planning and utilization of mathematical models in economic planning. The second one is that the model must be formulated in such a manner that it allows calculation of combination of variants as said above. Thirdly it has to provide for full proportionality for each combination of variants, and for the calculation of the criterium of overall economic efficiency, in order to compare the different combinations and to find that combination what serves with highest effectivity best to the fixed national aims.

Full proportionality means - in short - that production and import is equal to internal demand and export, that capacity and manpower are in proportion to each other and with respect to production (in each branch), that demand and supply of manpower balances, that the balance of payment is balanced, and that national income balances with investment (accumulation) and consumption. On these requirements has to be based the model of the Balance of National Economy in order to find out the optimal plan for the national economy. Furthermore, this model has to be built up for a year's plan, and a long-range plan has necessary be a sequence of exactly interrelated year-steps. The most important link between the year-plans is long-range investment which began in the present or a previous year and becoming producing in one of the following years.

The model consists of three parts:

1. A system of balance equations providing for proportionality.
2. The equation for the criterion of overall economic effectivity.
3. A system of equations for the calculation of the national value of each product for which is in the first system a special balance.



The first one includes seven kinds of balances:

- a) balances of production and consumption of all material products (single products and groups of products),
- b) balances of the development of the fixed capital stocks of all branches,
- c) balances of the development of the circulating capital stocks of all branches,
- d) balances of manpower, total and of all professions,
- e) balance of payment,
- f) balance of consumption (especially standard of living),
- g) balance of national income.

The model shall be described with the following main simplifications:

- a) There are only five branches of production, each producing only one kind of product:

Branch No. Zp 1, producing product No. P 1 = investment goods

Branch No. Zp 2, producing product No. P 2 = raw material

Branch No. Zp 3, producing product No. P 3 = food

Branch No. Zp 4, producing product No. P 4 = other consumer goods

Branch No. Zp 5, producing product No. PG = gold.

- b) There are only two kinds of professions:

Profession No. E 1 = skilled workers

Profession No. E 0 = non-skilled workers

- c) Foreign trade occurs with only one country:

Country No. X 0 = the own country

Country No. X 1 = the foreign country.