ECONOMIC POLICY ENDS AND AGRICULTURAL ECONOMIC DEVELOPMENT IN THE U.A.R.

By

Dr. OSMAN A. EL-KHOLEI

Dep. of Ag. Econ.

College of Agriculture, University of Ein-shams

INTRODUCTION

Egypt is a developing country. This fact is quite apparent if we apply any of the social, political or economic criterions for the definition of underdevelopment. From the economic point of view, the per capita income in Egypt amounts only to 100-150. Not only the per capita income is meager but also there was acute inequality in the distribution of that income. From the social point of view, the majority of Egyptians are illiterate. Within the agricultural labor force, the illiteracy rate amounts to 92 per cent. A high proportion of the Egyptian population is subject not only to worm diseases but also to malnutrition diseases. The vast majority were lacking the opportunities for training and the necessary environment for moving to higher-level positions. From the political point of view, the constitutional life has proved its failure. The executive power, represented in the Royal Palace, backed by the British troops, largely extended his authorities to the legislative power represented in the Parliament.

A new era has started in Egypt since 1952. Appealing the public, under those conditions prevailing prior to 1952, seems to be a must. Accordingly, the economic policy of the revolution, must reveal to improving the scale of living, economic opportunities, and the well being of the population. Under these unfavorouble conditions the Tinbergen's type of policy «reform» is the type needed in Egypt. Reforms are equivalent to changes in the social, economic and political foundations of the Egyptian community. (1)

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(1) TINBERGEN, Jan, **Economic Policy : Principles and Design**, Amsterdam : North Holland Publishing Co., 1956, pp. 20 et ss.

The Lindblom approach, namely the incremental approach, although it may fit other situations, is far from being susceptible to the Egyptian situation.(2)

The chronic socio-economic problems confronting Egypt were and still are far from being solved by appealing to «agree on fundamentals and offering only incrementally different policies... To proceed through a sequence of approximations... altering variables only by small magnitude.» (3)

Moreover, the Lindblom approach implies fragmentation of policy making, i.e., a political situation characterized by more than one or few policy-making groups in the government, while the Tinbergen approach implies a single policy-making unit for policy formation. The Egyptian situation is much more likely to fit the Tinbergen approach rather than the Lindblom one. Under the new regime, a High Planning Council and a National Planning Committee have been established. The High Planning Council, which is headed by the President, defines and specifies the targets of the socio-economic policy; it also discusses and approves different programs designed to achieve these goals. The National Planning Committee studies, supervises, reformulates or substitutes different socio-economic programs. Its reports about the programs being applied and its suggestions are being discussed by the High Planning Council. In carrying out its functions, the committee surveyed and analyzed the resources of the Egyptian society, the productive and consuming capacities including the international trade sector. It also organizes the financial requirements of the programs undertaken including its requirements of foreign exchange.

I.—Public Policy Ends

Approaches to Governmental Action : There is a quite substantial disagreement between economists concerning the government's functions. On the one hand, Downs states that poli-

(2) LINDBLOM, C. E., « Policy Analysis », **The American Economic Review,** The American Economic Association, June, 1958, pp. 298 — 312.

(3) Ibid.

tical groups do not seek to gain office in order to carry out certain preconceived policies or to serve any particular interest groups; rather, they formulate policies and serve interest groups to gain office. They formulate and carry on policies as their social function, i.e. as a byproduct of their private motive which is to attain income, power, and prestige of being in office. (4) Supported by Lindblom, Downs rejects the idea of the social welfare function hypothesis and that the proper function of a governement is the maximization of such welfare function:

« (1) It is not clear what is meant by social welfare, nor is there any agreement about how to maximize it.

« (2) Even if social welfare could be defined, and methods of maximizing it could be agreed upon, what reason is there to believe that the men who run the government would be motivated to maximize it ? To state that they should do so does not mean that they will.» (5)

Moreover, Lindblom states that:

« Conventionally it is required that the analyst postulate a social welfare function...Policy choices are then made to maximize the welfare function. Actually we cannot postulate a welfare function :

« (1) We lack a general formula or agreed procedure to aggregate individual welfare functions into a social welfare function.

« (2) The references or values of individuals within whom we are concerned are often unknown to us or to individual themselves.» (6)

On the other hand, another group implicitly or explicitly assumes that the proper function of a government is to maxi-

(4) DOWNS, Anthony, « An Economic Theory of Political Action in a Democracy », **Journal of Political Economy**, April, 1957, pp. 135-150.
(5) DOWNS, Ibid.
(6) LINDBLOM, op. cit.

mize the social welfare function. Tinbergen explicitly states this approach. He defines economic policy as actions directed toward the maximization of the ordinary ophelimity functions. In his view, the most specific and most relevant sense of the motion of economic policy will however refer to government. Government looks for «general interest» denoted by (52). This general interest is a function of different variables which may be called «target variables» indicated by Yk or in vector form by (Y). A certain numerical value of Yk will be called a «target.» These targets will be chosen so as to make 52 (Y) a maximum. Acts meant to attain this maximum may also be referred to as the optimum policy. (7)

Other supporters of the social welfare function implicitly assume the existence of such function. Schickele, for example, states that economic policy represents public action to improve the well being of the community. The most fundamental function of economic policy is to keep opportunities open for all to prevent excessive concentration of wealth and economic power and its counterpart, mass poverty and insecurity. In order to develop individual initiative and talent whenever they are found, a reasonable degree of equalizing both opportunities and distribution of wealth has to be achieved. So, Public policies should be formulated to call for equalizing opportunities, strengthening the bargaining power of vulnerable individuals and groups, and restraining the powerful from exploiting the weak in order to reduce the effect of economic and social environment to give the individual better chances to develop his best and contribute his most to society's progress. (8)

These policies can be grouped into two main categories according to their economic nature : Distributive and Regulatory. Distributive policies are formulated to reduce the inequality of income distribution among families, improve the bargaining power among groups, and to achieve to equality in distributing the opportunities among individuals. The formation of distributive policies often, though not always, transfers income from one group (usually the wealthier) to another group (usually the poorer). These policies have been criticized on the grounds that it is unfair to take income from those who earned it and

(7) TINBERGEN, Jan, **On the Theory of Economic Policy**, p. 14.

(8) SCHICKELE, **Rainer, Agricultural Policy, Farm Programs and National Welfare,** New York : McGraw-Hill Book Co., 1954, pp. 40-60.

give it to those who did not earn it. Such an argument seems to be unrealistic if the long-run effects of distributive policies are investigated. These long-run effects are likely to be very beneficial to high income groups as well, since such income transfers support the market demand for consumer goods, and by the same token, the sources of business profits. Regulatory policies establish rules to which groups and individuals must conform in order to assure fair play. Usually these policies do not involve governmental expenditure or direct income transfers. They aim at protecting the vulnerable, strengthening the bargaining position of the weak, opening opportunities.

Every economic policy should be directed toward the improvement of the community's economic welfare. Economic welfare denoted by (32) in Tinbergen's model can be evaluated in two basic norms : maximum social product and optimum income distribution, each of which is a function of other targets. In other words, the welfare function can be written as :
where : $Y = (y_1\ y_2 \ldots\ yk)$, $W = 52\ (Y)$ i.e. Y is a vector of targets, which if achieved, the welfare function (W) is maximized. A type of weights is assigned to the elements of the target vector (Y). These value weights differ from one society to another, as they also differ for different policy makers.

A lot of means are available for the governement to achieve the specified goals. The effects of these means differ quantitatively and qualitatively. The kind and level of the means chosen to achieve a certain target depends on a number of considerations; the most important are the values of the society, the period estimated to reach such target, the nature of the target itself, conflicts and coordination between the means and goals of the economic policy, and the facilities available for the application of such means. Tinbergen denotes these available means by a vector (z) where :

$$Z = (Z_1 \quad Z_2 \ldots\ Zn)$$

A number of uncontrollable variables, denoted by U, where :

$$U = (U_1 \quad U_2 \ldots\ Un)$$

are beyond the policy-maker's command. In addition, use of policy instruments will have side effects on other economic variables, which are not considered as they are not sufficiently

important to warrant concern. These variables are denoted by a vector (X) where :

$$X = (x_1 \quad x_2 \ldots\ldots xn)$$

The basic technical problem is to determine accurately the system of structural relations which connects all the variables and constitutes the model. Given an accurate model, the problem of economic policy is to use the means in a way to achieve the specified goals in spite of the disturbance terms. (9)

In a vigorous and well organized society, all various program objectives should converge toward the dominant policy ends of improving and promoting the general economic welfare. Improving social welfare or in other words maximizing social product and optimizing the distribution of income is too broad to serve directly as specific program objectives. In evaluating a certain policy, it is usual to break it down into various programs, each of which has a specific end, i.e., a well defined objective. It is with respect to this end that we must evaluate the appropriateness of the policy means. Moreover, the end of any program should be compatible with the general economic welfare. The degree of success of a certain program is largely determined by the choice of its specific measures. The end of a program may be fine, but if the measures applied are inappropriate, the whole program may be a failure. In formulating and evaluating a certain policy, all conditions beyond the actor, namely all those technical and institutional circumstances serving as constraints on the policy maker, must be taken into consideration. (10)

Economic Policy Ends in U.A.R. : The previous discussion has shown that the master ends of economic policy have been defined in terms of maximum social product and an optimum income distribution. Descending from this top level of policy ends, a series of goals are developed at a lower level of gene-

(9) FOX, KARL A., « The Study of Interactions between Agriculture and the Nonfarm Economy : Local, Regional and National », **Journal of Farm Economics,** The American Farm Economic Association, February, 1962, pp. 1 - 30.

(10) Op. cit.

rality dealing with more specific maladjustments in the various sectors of the economy. These are major national policies with central goals, each goal is still general in scope. These goals have to be broken down further into more specific program objectives directed at a great variety of situations and concerning various groups of people, regions and commodities. From this dicussion it is clear that ends become means and means become ends, depending on how the investigator looks at them. With respect to the Egyptian region, policy ends are better understood by reviewing economic policy ends announced by President Nasser and his colleagues :

« The revolution announced the following six principles :

The eradication of imperialism and its agents.

The eradication of feudalism.

The eradication of monopoly and the domination of capital over government.

The establishment of a strong national army.

The establishment of social justice.

The establishment of sound democratic life.» (11)

The second, third and fifth of these principles imply what was called previously optimizing income distribution. The new Egyptian regime strongly stresses this goal as a public policy end. It believes that social equality is the most cherished ideology. Regarding the second major policy, namely optimizing national product, the new regime has started a huge investment policy within a certain plan for doubling the national income within ten years. (12)

These policy ends and the programs embodied in their a-

(11) SABRY, ALY, « Arab Socialism; Its Pattern and Its Progress », **The Scribe**, Cairo, September-October, 1961, pp. 34 - 36.

(12) NASSER, G. A., « Nasser's Speech in the National Assembly », **The Scribe**, Cairo, February, 1961, p. 3.

chievement are going to be discussed more extensively in the third part of this paper.

Conflicts Between the Major Ends of Public Policy : It has been argued that the relationship between social product maximization and optimum income distribution is a conflicting rather than a complementary one. Such an argument may not be true, depending on the conditions and means employed to achieve both goals. On the contrary, the relation between these two ends may be the other way around, i.e. complementary rather than conflicting. A redistribution of income in the direction of reducing poverty may tend to increase output because of the increase in labor productivity usually associated with rising living standards in the lower income groups through better nutrition, health, and better allocation of resources.

« A poor man may not have enough to eat; being underfed, his health may be weak; being physically weak, his working capacity is low, which means that he is poor, which in turn means that he will not have enough to eat; and so on.» (13)

A better income distribution might also call for greater national product by reducing uncertainty in futur market demand for consumer goods as a result of more widely distributed and better maintained consumer purchasing power.

The relationship between maximum social output and optimum income distribution whether of the complementary or conflicting type can be better understood by an illustration. Take for example the land reform. Land reform has been criticized on the grounds of reducing the national income both because of fragmenting the more efficient, well equipped, better organized units of production and because of its unfavorable effect on the society's savings, which in turn affects investment badly, which results in serious effects on the country's growth and development. Doreen Warriner has discussed the first argument, stating that :

« When we try to apply this argument about the scale of

(13) NURKSE, RAGNER, **Problems of Capital Formation in Underdeveloped Countries,** Oxford : Basil Blackwell, 1960, p. 4.

production to the underdeveloped countries, we shall find that over a very wide range of conditions it has no validity at all... The haciendas in Mexico and many of the latifundia in Southern Italy were not efficient large estates on any standard. They wasted both land and labor.» (14)

On the other hand, if the distributive phase of the land reform is accompanied by preventing fragmentation by any appropriate type of land tenure such as cooperative farming, the effects of fragmentation could be avoided to a large extent. Not only this, but also a greater degree of efficiency may be attained.

Concerning the second criticism, namely the unfavorable effect of the land reform on the society's savings, this argument may not be true if certain measures are taken. On the contrary, land reform may be used as a measure to increase the savings necessary to finance other economic development programs such as industrialization, irrigation, etc. Such measures have been applied with a large degree of success in Japan,(15) at the end of the 19th Century and it is being applied recently in China :

« It is reported that in 1951, of the net profits (i.e. after subtracting costs of production) 8 per cent was retained as public savings, 40 per cent was distributed to members dividends on the land they invested, and 52 per cent was distributed as wages. The savings were re-invested, 60 per cent for production and 40 per cent for welfare, education, medical service and recreation.» (16)

It can be concluded here that there is no necessary conflict between major ends of public action. Moreover, the relation

(14) WARRINER, DOREEN, **Land Reform and Economic Development,** Cairo : National Bank of Egypt, Fiftieh Anniversary Commemoration Lectures, 1955, pp. 10 - 19.

(15) LEWIS, W. A., **The Theory of Economic Growth,** London : George Allen and Unwin Ltd., 1960 ,pp. 224 - 230.

(16) BARANETT, A. D., « Collectivization in China », **Journal of Farm Economics,** The American Farm Economic Association, May, 1953, p. 197.

between these ends may be complementary rather than conflicting. Even if this relation was subject to conflict, different measures can be taken in order to overcome such contradiction. On the other hand, we must bear in mind that the achievement of policy ends is matter of degree, not of all or nothing. This fact reduces the problem of a conflict between two economic policies to the choice of a little more of one at the expense of little less of the other, instead of one or the other. (17)

II.—Justifications for Public Action in the U.A.R.

Egypt, as with other overpopulated underdeveloped countries, is faced with extremely difficult economic, social, and political problems. The population problem is the most extremely difficult under the Egyptian circumstances where the agricultural resources are severely limited. Other problems of backwardness stem from this main problem such as the low per capita income, the inequality of income distribution, the slow rate of the economy's growth, etc. In a dynamic sense, if nothing is being done, the situation is expected to be much more complicated. Standards of living are rising over time, which is represented by the new products constantly emerging as a result of technical progress, which in turn modify existing ways of life and frequently become necessities. In the poorer countries such goods are mostly imported. In other words, new goods and new methods of consumption tend to raise the general propensity to consume. New goods become indispensable and are actively desired as the standard of living rises. (18) On the other hand, the gap between the high rate of population growth and the tiny rate of the economy's growth is likely to get wider over time, which is reflected on the continuously declining per capita income. Rising standards of living, on the one hand, and declining incomes, on the other, opens the way to frustrations and revolting against those who are in office, or at least not backing them; especially if they have political targets in the international or the regional sphere.

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(17) SCHICKELE, op. cit.

(18) NURKSE, RAGNER, **Problems of Capital Formation in Underdeveloped Countries**, Oxford : Basil Blackwell, 1960, p. 62.

Table 1.—Population Trends of the Egyptian society

Year	Population Groups		
	Total Pop.	Agr. Pop.	Agr. Labor Force
1897	100	100	100
1907	116	119	115
1917	131	124	135
1927	146	149	158
1937	164	184	236
1947	196	250	276
1957	220	253	330

The Population Problem : The Population of Egypt, as of 1957, is estimated at 21.5 millions. In 1882 it was only 6.8 millions. Expressed in index numbers (Table 1), it will be observed that the net increase in the Egyptian population is rather phenomenal. In 1957 the total agricultural population was estimated at 16 millions. In 1947 it was only 13.6 millions, while it was 6.8 millions in 1897. The average rate of population growth in the period 1882-1957 is believed to be 1.7 for the total population, and 1.8 for the agricultural population. Such rates of growth are believed to be too high when compared with other countries. (19) Although infant mortality rates are also high, recent improvements in medical service have tended to accelerate the population explosion. (20)

The gainfully employed agricultural population amounted to 7 millions in 1957 and only to 2.1 millions in 1897 and 5.9 millions in 1947. Stated in index form, it can be said that the gainfully employed labor force in agriculture increased from 100 in 1897 to 115 in 1907, to 135 in 1917, to 158 in 1927, to 236 in 1937 and then to 276 in 1947. It was estimated at an index value of 330 in 1957. When classified to its two major components, i.e. farmers, both owners and tenants, and farm

(19) EL-KHOLEI, O., **Socio-Economic Justifications and Implications of Horizontal and Vertical Agricultural Economic Development Plans in the Egyptian Region of the United Arab Republic** (M. S. Thesis) University of Alexandria, 1958, pp. 3 - 10.

(20) RUSTOW, D. A., « The Politics of the Near East », **The Politics of the Developing Areas.** Princeton : Princeton University Press, 1960, pp. 369 - 375.

laborers, the agricultural gainfully employed population is believed to have had about 0.4 and 6.6 millions of each respectively. In other words, farmers would amount only to about 6 per cent of the gainfully employed agricultural population in 1957, the balance, or 94 per cent, being agricultural laborers.

As one compares the annual rate of increase for both gainfully employed agricultural population and the cultivated acreage it becomes immediately clear that there has always been an overabundance of the gainfully employed in the Egyptian agriculture. (21) Thus, while the annual rate of increase for the gainfully employed agricultural population was only 2.6 per cent in the period (1929-57) the annual rate of increase in the cultivated acreage was found to be only 0.5 per cent. Such differential rates of growth are believed to be the main factor behind the large disguised unemployment in the Egyptian agriculture.

> « In 1945, the average male farmer had worked 182 days, a woman and a minor farmer each had worked 144 days.» (22)

Nurkse argues that the problem of disguised unemployment is not restricted only to Egypt, but the same is also true with respect to all overpopulated underdeveloped countries. He states that :

> « These countries suffer from large-scale disguised unemployment in the sense that, even with unchanged techniques of agriculture, a large part of the population engaged in agriculture could be removed without reducing output.» (23)

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(21) EL-ZALAKI, M. M., **An Analysis of the Organization of Egyptian Agriculture and of its Influences on National Economic and Social Institutions** (Ph. D. Thesis), Berkeley, University of California, 1940, p. 85.

(22) MORAD, ALY A., **The 1952 Agrarian Reform Law of Egypt; Its Limitations and Expectations** (Ph. D. Thesis), University of Maryland, 1954, p. 20.

(23) NURKSE, op. cit., p. 32.

One of the major characteristics of the Egyptian agricultural labor force is illiteracy and other social and health defects:

> « The vast majority have worm diseases which enervate their bodies and dull their minds and diminish their ambitions to a sufficient extent. They have no courage to face and adventure into some unknown area where they might improve their conditions... Such diseases of slow death have the unfortunate result of filling up pace with large numbers of persons living more or less below par, and incapable of employing normal human energy for bare self-maintenance.» (24)

These social and economic defects act as invulnerable obstacles to the successful execution of many technological, economic and social programes related to agriculture.

The cultivated acreage in Egypt increased from 3.5 million feddans (25) in 1813 to about 4.8 millions in 1894 and then to 5.7 millions in 1956. During the period 1864 to 1956 the net increase in that acreage was estimated at 19 per cent or 0.2 per cent per year. This is a very slow rate of increase especially if compared with the rates of population growth. The crop acreage increased from 6.3 millions in 1894 to 9.7 millions in 1956, i.e. a net increase of 53 per cent during the same period. (26)

Such a differential rate of increase is due mainly to the shift from basin to permanent irrigation :

> « Unlike most underdeveloped countries, Egypt has already had its agricultural revolution, but the fruits of this process have been largely absorbed in maintaining a great-

(24) CLELAND, W. W., **The Population Problems in Egypt; A Study of Population Trends and Conditions in Modern Egypt,** (Ph. D. Thesis), New York : Columbia University, 1936, p. 86.

(25) 1 Feddan = 1.038 acres.

(26) ISSAWI, C., **Egypt at Mid-Century; An Economic Survey,** London : Oxford University Press ,1954, p. 102. See, also, CROUCHLY, A. E., **The Economic Development of Modern Egypt,** London : Longmans, Green and Co., 1936, p. 52.

ly expanded population at the same low (and in recent years declining) level of subsistence, instead of providing surplus necessary to build up other sectors of the economy, notably industry.» (27)

In spite of the backward techniques of agricultural production the productivity of the cultivated acreage is much higher than most of the developed countries :

« Productivity per acre of the main crops in Egypt is appreciably higher than in advanced agriculture in the U.S.A., Canada, and Australia. The contributing factors to higher production per acre in Egypt are : the fertility of the Nile Valley, the genial climate, the regularity of continuous irrigation, the lavish use of fertilizers and the attention given to individual plants in the fields, in an intensive type of cultivation. However, the labor requirements per acre in Egypt are many times as much as that of mechanized agriculture and on output-man hour basis, output in Egyptian agriculture is far below that of the U.S.A.» (28)

The Land-Man Ratios : Consequently the cultivated land-man ratio decreased from about 0.5 feddan per capita of total population in 1897 to about 0.3 feddan in 1957. When that ratio was computed for the agricultural population, the reduction was found to be from 0.8 feddan in 1897 to about 0.4 feddan in 1957. The same was found to be also true with respect to the gainfully employed agricultural population. The cultivated per capita acreage of such population amounted to 2.4 feddans, decreased to 0.8 feddan in 1957. In sharp contrast to the preceding facts, the crop land-man ratio decreased from about 0.7 feddan in 1897 to about 0.5 in 1957. Ratios concerning the per capita agricultural population and the per capita gainfully employed agricultural population from the crop acreage were found to be about 1 to 1 and 3.6 to 1, respectively, in 1897. The same ratios decreased to 1 to 0.5 and 1 to 1.4 in 1957. (29)

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(27) Ibid.

(28) EL-SHAFIE M. A., **Pressure on Land and the Problems of Capital Accumulation in Egypt,** (Ph. D. Thesis), University of Wisconsin, 1952.

(29) EL-KHOLEI, op. cit., pp. 27 - 33.

The per Capita Income : There seems to be wide agreement among economists that the Egyptian per capita money income, which amounted to about $ 120 in 1953, is very low as compared with similar incomes in foreign countries. In 1949 the Egyptian per capita money income was about 7 per cent of the per capita income in the U.S.A., about 12 per cent of that of Canada, New-Zealand, and Great Britain, about 15 per cent of the per capita income of Holland and Australia, and about 17 per cent of the per capita income in Belgium.

The agricultural per capita income amounted to about $ 60 in 1956. In real terms (30) it only amounts to $ 21. Such a per capita is largely related to the cotton price fluctuations.

For example, it approached its maximum during the period 1951-1952 where cotton prices reached its peak during the Korean War. Not only the agricultural per capita income — both money and real — is meager, but also there was a large inequality in the distribution of such income represented mainly in the large degree of inequality in owning the most critical factor of production, namely land.

In the period prior to the land reform (1950) about 27 per cent of the total cultivated acreage, amounting to about 6.5 million feddans, was owned by 2 per cent of the total landowners. This acreage is now subject to the 1952 land reform act which ceiled the maximum ownership at 200 feddans, and its extension in 1961 which reduced that maximum to 100 feddans. These ownerships were mostly divided into small tiny farms operated within a tenancy system. Consequently, the same primitive techniques of production applied in the fragmented small farms also applied in these large ownerships. (31)

This being the case, it should be obvious that there is a dire necessity for raising the Egyptian per capita income by heaps and bounds. In other words, it is quite necessary to in-

(30) 1ç39 = 100.
(31) EL-ZALAKI, op. cit., p. 85.

crease the Egyptian per capita income at a rate that far exceeds the rate of population growth. This could be accomplished through the accumulation and investment of savings. Such savings are to be invested in the various economic activities and in particular those pertaining to the agricultural, industrial, and commercial development of the country.

Economic Factors Related to the Backwardness of the Egyptian Economy :

The capacity of the Egyptian economy to save, as is the case in all underdeveloped countries, is rather meager. Investments amounted only to about 150 millions on the average in the period 1948-51. This is only about 5 per cent of the national income which amounted to about 2400 millions dollars during that period. All such investments will not help in developing the country as it is apparently overtaken by the population growth. Its effect could no more than slow down the steady decline of living standards imposed by the current explosive population growth. The most difficult obstacle confronting these underdeveloped countries is the extreme limitation imposed on its capacity to save :

> « On the supply side, there is the small capacity to save, resulting from the low level of real income. The low real income is a reflection of low productivity, which in its turn is due largely to the lack of capital. The lack of capital is a result of the small capacity to save, and so the circle is complete.
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> « On the demand side, the inducement to invest may be low because of the small buying power of the people, which is due to their small real income, which again is due to low productivity. The low level of productivity, however, is a result of the small amount of capital used in production, which in its turn may be caused at least partly by the small inducement to invest.» (32)

Not only are savings meager or small in the Egyptian eco-

(32) NURKSE, op. cit., pp. 3 - 5.

nomy but also they take undesirable forms. Thus a big share of such savings is spent on the disposition of gold and jewelry.

> « The bulk of money savings by the majority runs into boards of currency and precious metals instead of being directed towards economic development.» (33)

Since 1887 and till 1947 most of the Egyptian savings were directed in buying British Treasury Bonds. In 1919 the Egyptian savings invested in these bonds amounted to L.E. 90 millions, increased to L.E. 150 millions by the end of that year. During the Second War the Egyptian savings invested in Great Britain amounted to L.E. 430 millions. It is quite clear that such an investment plan in the British bonds instead of nourishing the sectors of the national economy is responsible to a large extent for the present stagnant condition of the Egyptian economy.

Full utilization of the Egyptian gainfully employed agricultural population is not quite evident. This may be due to the dominance of small size farms in the Egyptian agriculture. The majority of all Egyptian farms, which amounted to 1.25 millions in 1956, were classified as small size farms, i.e. farms of less than 3 feddans each. There were about 847.000 of these farms in 1956 with a total acreage of about 899,000 feddans. In other words, small sized farms amounted to about 62 per cent of all Egyptian farms put together and occupied only 14.5 per cent of all the cultivated acreage in the country. Holders of such small farms are believed to supply most, if not all, of its farm labor requirements in such a manner that they really constitute a large segment of the gainfully employed agricultural population in Egypt.

Similarly, the so-called family-farms, i.e. farms with acreage between 3 and 10 feddans, are of such a size that they cannot effectively utilize much of the modern technological, economical and sociological improvements in agriculture. Not only

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(33) EL SHAFEI ,op. cit., and HAMONDA, K. A., **Economic Aspects of the Application of Cooperative Farming in Egypt,** (Ph. D. Thesis), University of Minnesota, June, 1955, p. 222.

that, but where the small size farms are to stay as a dominant characteristic of Egyptian agriculture, it might happen that the latter will become self-sufficient in the very near future. Self-sufficiency would stand as an obstacle to the development of both industrial and commercial sectors which rely rather heavily on the so-called cash crops. The same would also hold true with respect to foreign trade.

Most of the techniques applied to Egyptian agriculture are rather old and obsolete. Such techniques rely heavily on the use of both human and animal power rather than on the power of modern machines and tools. In 1952, it was estimated that about 73 per cent of all the power required by Egyptian agriculture was derived from human and animal sources. To this it must also be added another fact relating to the farmer's more or less complete ignorance of the most needed and basic principles concerning such agricultural operations as fertilization, drainage, soil conservations, irrigation and other similar operations.

Obstacles that may be responsible for such an unhealthy state of conditions are numerous. Among such obstacles are : (1) lack of capital at the farmers' level, (2) the absence of well set-up extension programs, (3) the scarcity of skilled laborers and technicians, (4) the predominance of the small site farms in Egyptian agriculture, and (5) the rather sticky nature of old customs and traditions among Egyptian farmers. (34)

III.—Compatibility of the Egyptian Agricultural Development Policies to Policy Ends

Since 1952, the country has been subject to excessive social claim for distributive and cumulative justice. Too much emphasis has been put on distributive justice. Examination of current agricultural policies in Egypt will center around these goals namely optimizing the income distribution and maximizing the national income.

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(34) EL-KHOLEI, op. cit., pp. 33 - 80.

that, but where the small size farms are to stay as a dominant characteristic of Egyptian agriculture, it might happen that the latter will become self-sufficient in the very near future. Self-sufficiency would stand as an obstacle to the development of both industrial and commercial sectors which rely rather heavily on the so-called cash crops. The same would also hold true with respect to foreign trade.

Most of the techniques applied to Egyptian agriculture are rather old and obsolete. Such techniques rely heavily on the use of both human and animal power rather than on the power of modern machines and tools. In 1952, it was estimated that about 73 per cent of all the power required by Egyptian agriculture was derived from human and animal sources. To this it must also be added another fact relating to the farmer's more or less complete ignorance of the most needed and basic principles concerning such agricultural operations as fertilization, drainage, soil conservations, irrigation and other similar operations.

Obstacles that may be responsible for such an unhealthy state of conditions are numerous. Among such obstacles are : (1) lack of capital at the farmers' level, (2) the absence of well set-up extension programs, (3) the scarcity of skilled laborers and technicians, (4) the predominance of the small site farms in Egyptian agriculture, and (5) the rather sticky nature of old customs and traditions among Egyptian farmers. (34)

III.—Compatibility of the Egyptian Agricultural Development Policies to Policy Ends

Since 1952, the country has been subject to excessive social claim for distributive and cumulative justice. Too much emphasis has been put on distributive justice. Examination of current agricultural policies in Egypt will center around these goals namely optimizing the income distribution and maximizing the national income.

(34) EL-KHOLEI, op. cit., pp. 33 - 80.

Extensive Agricultural Development Policies : These policies are designed mainly to maximize the net national product by extending the most critical factor of agricultural production, namely land. The area susceptible to cultivation through more efficient use of the Nile water, better irrigation and drainage techniques is believed to reach 4 million feddans. Not all of these lands are located within the Nilotic lands, namely the Valley and Delta, but more than 50 per cent of it is located within the Egyptian deserts. Different projects for storing and more efficient use of the Nilotic waters are being studied. The storage programs do not only include those within the Egyptian borders, but also those outside the country. The long-run water policy pertains to the complete efficient utilization of the Nilotic waters. One of these programs, namely the High Dam has been put under construction recently. The fruits of such a program are not going to be restricted to agriculture but also to the industrial sector as well by providing huge electric power. Concerning agriculture, this project is not only going to ensure the water requirements necessary for reclaiming 1-3 million feddans (nearly 30 per cent of the cultivated acreage) but also it is going to affect favorably the already cultivated acreage through better drainage, better resource allocation through providing the necessary water requirements for extending the rice acreage to about 700,000 feddans, and by shifting the balance of the basin irrigated acreage (0.5 million feddans) to permanent irrigation. Such a project was really a matter of death or life to the Egyptian economy which was and still is, confronted with a lot of extremely difficult problems. It is sufficient to indicate how huge such a project is by reviewing its expenses. The execution of the High Dam is going to cost about 1,350 millions which amounts to nine times all the annual Egyptian investments prior to 1952. The completion of this project is expected to terminate by 1969.

Regardless of the High Dam, the present programs are being executed to put under cultivation an area of about 300,000 feddans. In this regard, it should also be noted that an area of about 1/2 million feddans of unreclaimed land is still scattered within the present area of Egyptian farms. Still another area of about 1.3 million feddans (23 per cent of all cultivated land in Egypt) of already cultivated land is said or believed to be sub-marginal. Most such land is located in Lower Egypt.

Within the borders of the Libyan Egyptian Deserts another reclamation project is being executed. The New Valley project pertains to reclaiming an area parallel to the Nile Valley on the underground water. Estimates concerning the acreage susceptible to cultivation under this project are largely crude, but underground water capacity is going to be the limiting factor.

Intensive Agricultural Development Policies : These policies pertain mainly to increasing the net national product through better reallocation of the agricultural resources. The execution of these policies started in 1958. It includes a substantial number of programs, each dealing with a certain aspect. In general, these policies rely heavily on programs concerning the development of better seeds and soil improvements. It also considers the possibilities of improving drainage facilities and attaining some sort of technological and economic efficiency in Egyptian farming through certain forms of diversification on the one hand and specialization on the other, the reduction of marketing costs and the improvement of credit facilities available to farmers as well as achieving a better control of plant and animal diseases and pests.

Other programs deal with food industries and fishing and pertain to a much further stress on certain other purely agricultural economic measures, including the consolidation of fragmented and small holdings, the agricultural disguised unemployment, agricultural prices and the reorganization of the Bureau of Agricultural Economics in the Ministry of Agriculture and all other similar departments, divisions or sections in the various other ministries and organizations so they could all cope with the requirements of the reform involved in such and agricultural policy.

Distributive Agricultural Policies : These policies call mainly for an optimum income distribution. The major program embodied under this category is the 1952 land reform act. This act limited the maximum level of land ownership to 200 feddans The excess land subject to the act, the confiscated lands of the Royal family, and lately (1956) the nationalized lands previously owned by British and French owners were redistributed bet-

ween the tenants of these lands and the landless laborers. A High Committee has been established in 1952 to take care of applying the act. Cooperatives have been set up within these previous estates to put on the relevant plans of production and to carry on its application. The government, through the High Committee, largely facilitates these cooperatives with credit, seeds, machinery, insecticides, etc. Agricultural production and marketing operations are performed cooperatively. It is apparent here that there is an overlapping between the distributive goal and the maximization goal. The maximum limit of ownership has been reduced by the latest socialistic acts of July, 1961 to 100 feddans. The act and its extension (1961) has transfered to tenants and landless laborers about 27 per cent of cultivated acreage.

Other distributive provisions have been embodied in the 1952 act. The second major distributive measure was the ceiling of the cultivated land rents. The act fixed the maximum rental value at seven times the land tax. As a result of this, about 120 million dollars has been transfered from the landowners to tenants. (35) A third and unimportant provision embodied in the 1952 act was the setting of minimum wage levels for the agricultural laborers. The unimportance of this provision as a distributive measure is indicated by the fact that it has not been applicable till now. The difficulties facing the application of this provision are numerous and invulnerable. Some of these difficulties are embodied in the social and political structure of this group of the gainfully employed population in agriculture. Not only the labor unions of this group do not exist, but also it might be too difficult to organize such unions under the present situation.

It can be concluded from the previous discussion that some of these policies emphasize one of these goals, while others emphasize the second goal. However, there is no clear cut way to state that this policy aims at increasing national income, and that policy is designed to achieve a better income distribution.

(35) Minister of Land Reform, **Report of the Ministry of Land Reform in the Egyptian Congress,** Cairo : Cairo Publishing Company, 1957, p. 47.

For example, the land reclamation policies aim directly to increase the social product, while indirectly it calls for a better redistribution of incomes since the government's policy is to possess this reclaimed land to landless farm laborers and tenants. Moreover, there are other policies which first started for redistributing income, yet now they equally emphasize both goals, such as the land reform policy.

Non-Agricultural Development and Distributive Policies :

In the sectors of the Egyptian economy other than agriculture a lot of measures have been taken, some of which are of the maximizing nature, others are of the distributive nature. Although these programs are not designed for agriculture, they affect the agricultural sector indirectly. Some of these programs affect agriculture much more than others, such as the education and health program which is designed mainly to serve the arable sector. This program was financed from the funds acquired from confiscating the assets of the Royal family which amounted to about 240 million dollars. The funds were devoted to establish collective centers, each of which consists of a hospital, a primary school, and a socio-athletic center. These centers were distributed between the villages according to population density in such a way that each center serves about 100,000 persons. In the industrial sector, the government has recently started the second five-year plan for industrialization. During the first five-year plan a lot of industries have been introduced in the Egyptian region, such as the steel industry, automobile industry, paper industry, etc. Other industries have been largely expanded, such as fertilizers, textiles, sugar, etc.

The development plan is not restricted to agriculture and industry only; but it contains the execution of several mining, petroleum and commercial programs. An example of the commercial programs is Nasser's project for improving navigation in the Suez Canal, financed by the International Bank, which has been recently completed. As a result, bigger petroleum tankers can now cross the canal. In the field of mining and petroleum industries, the programs are mainly carried by the assistance of the foreign companies. The industrialization program is largely financed by foreign loans, especially Russian.

Other non-agricultural distributive policies have been largely applied in the non-agricultural sectors. The socialist acts of 1961 nationalized the banking system, the insurance companies and the import agencies. Some of these agencies have been nationalized after the Anglo-French-Israeli aggression on Egypt in 1956.

Other industrial corporations, especially in the building and construction industries, and cotton trade associations have been nationalized. By the provisions of these acts, the laborers of any corporation are given 25 per cent of the corporation's net profits; they are represented on its boards, and they participate in its management. Minimum wages, medical care, social security and maximum working hours have been implied in these acts. The value of different agencies brought in under governmental or semi-governmental control amounted to about 1500 million dollars. An extensive educational and training program is being undertaken.

Although the educational program has started in the early fifties, it has been largely extended under the new regime.

CONCLUSION

The previous discussions revealed that raising the recent low Egyptian agricultural per capita income to achieve the maximization goal of economic policy depends on the expansion of the Egyptian agricultural productive capacity by the reclamation of more of the cultivable lands and more efficient reallocation of the present agricultural resources.

To achieve the optimality goal of income distribution, different measures have been undertaken. The governmental policies devoted to the achievement of the maximization goal imply certain measures for the achievement of the optimality goal of income distribution. Other measures, namely the land reform, equally emphasize both goals of economic policy.

To ensure a healthy equilibrium between the various sectors of the Egyptian economy, other developing and distributive programs are being applied in the non agricultural sectors of

the economy. Such a policy will avoid any serious disequilibrium between the various major sectors of the Egyptian economy. (36)

One of the major defects of the Egyptian economic policy as a whole is that till now it has not been effective in utilizing the large scale disguised unemployment for providing the development programs with its labor requirements at a cheap cost. According to Nurkse, the disguised unemployment is estimated at 40-50 per cent. (37) More sophisticated work shows that in 1957 the disguised unemployment in the Egyptian agricultural sector is estimated at 2 millions, or about 30 per cent of the total farm labor force estimated (in that time) at 7 millions.(38) The state of disguised unemployment implies a disguised saving capacity. There will be a real capital formation if this surplus of labor may be employed in more productive fields, assuming that consumption is kept constant or at least increases at a rate beyond the rate of accumulating capital resulting from employing this idle labor force.

Although there has been a tendency in the last years to adjust the military service act to be compatible with such utilization of the disguised unemployment, till now such an adjustment has not taken place.

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(36) MEHREN, G. L., « Market Organization and Economic Development », **Journal of Farm Economics,** The American Farm Economic Association, December, 1959, pp. 1310 - 1311.

(37) NURKSE, op. cit., pp. 34 - 38.

(38) EL-ZALAKI and Others, **Farm and Non-Farm Unemployment in Egypt,** Alexandria : Department of Agricultural Economics, University of Alexandria, 1957.

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