## ARAB REPUBLIC OF EGYPT

# THE INSTITUTE OF NATIONAL PLANNING



Planning in the U.A.R. (In Agriculture)

Part two

**Economic Conditions of Vertical Expansion In the UAR Agriculture** 

By

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#### A ) Introduction

In the previous paper (1) I have tried to give a brief idea about agriculture in the U.A.R. at various stages within the period of the last twenty years. Mention was made to conditions which existed in agriculture before 1952, measures which were taken by the revolutionary government to develope agriculture, then lastly reference was made to the main features of the five years plan.

As it was mentioned, programs for agricultural development included in the plan are connected either with vertical
expansion or with horizontal expansion. An idea about the
economic conditions according to which the plan maker advised these programs and projects may be useful to extend our
knowledge about the plan. This paper is devoted for the analysis of the main conditions on which vertical expansion in
the first five years plan was based. Such conditions connected with horizontal expansion will be analysed in a succeeding paper.

## B ) Vertical Expansion Programs

Vertical expansion for the development of the U.A.R. Agriculture include/mainly the following programs: -

- A) A soil improvement program.
- B) A program for improvement and diversification of field crops.
- C) A program for improvement and diversification of horticultural crops.

<sup>(1)</sup> See the planning Institute papers no 169

- D) A program for promotion of food industries.
- E) A program for crop protection.
- F) A program for promotion of livestock production.
- G) A program for livestock protection.
- H) A program for fisheries development.
- I) A program for mechanization of agriculture.
- J) A program for promotion of agricultural extention.
- K) A program for consolidation of small holdings.

## C. Analysis of the Programs

## 1. The soil improvement program

Although land in the U.A.R. represents the most scarce factor of production yet many lands were wasted in the past. This waste was mainly due to the following reasons: -

- a) Lack of good drainage.
- b) Continuous cultivation.
- c) Lack of reclamation.

Lack of good draining in fertile lands led to a decrease in its productivity which was estimated to be 30 % compared with other well drained lands. Continuous cultivation for several years led to defficiency in soil components. This defficiency, besides lack of nitrogen and phosphorus impaired the soil fertility. Other scattered lands which penetrate within the present cultivated area were neglected inspite of its need for little reclamation.

The plan maker taking these considerations into idea has advised several projects to improve these lands. Good

drainage has to be supplied to the first group of lands, a double amount of fertilizers must be added to the second group to compensate the defficiency, and the unreclaimed lands must be reclaimed within the five years plan. All these projects will result in raising production efficiency and add to our cultivated area nearly a half million of feddans.

## 2. The program of field crops improvement

Statistics of the U.A.R. crops indicate that during the past years yields of the main field crops were far below the standard. Moreover yields of some of these crops were deteriorating. Measures for improvement which were taken by the authorities within the period 1952 - 1959 have shown good results. But, inspite of these results a wider scope for improvement still exists. Any more efforts to be taken towards improvement are fruitful and worthy. Worthiness of these measures can be seen easily if we know, that field crops represent normally nearly 82% of the total cash value of our plant production and 89% of the value of our total exports.

All these facts taken together, encouraged the plan maker to advise several projects towards improvement. Most of these projects are connected with improving seed qualities, controlling seed production, growing various kinds of crops in the most appropriate areas for its cultivation, supporting and extending technical research work to regional levels.

# 3. The program for improvement & diversification of horticultural crops.

U.A.R. is widely known as a cotton producing country. Cotton is the corner stone of its economy. Risks arizing from our dependance on one main crop are numerous. Naturally any plan maker who is faced with such a situation must think in terms of diversification to lesse, these risks to a minimum. Diversification, can be achieved by creating new markets for other agricultural crops which we can produce.

Past experience within the period 1952 - 1959 has shown that it was possible to increase our exports from fruits & vegetables by an amount of 15 thousand tons and 462 thousand tons respectively in 1959 compared with 1952. Prospects of foreign trade indicate that the European market is able to absorb bigger amounts of our production from fruits & vegetables. This upward trend of our exports encouraged the planmaker to base his policy on increasing our production from fruits and vegetables to meat this prospective demand from abroad and to cover our local consumption.

Besides fruits and vegetables it has been found that medical, perfume oil plants and flowers are widely required for the foreign market.

Several projects were included in the plan to increase & improve our production from these horticultural crops.

## D. Promotion of food industries.

The development programs for our agricultural production, whether the plant or the livestock production included in our five years plan will certainly create a surplus of stocks. Such a surplus devoted for export creates the need for industrilization in order to stabilize its prices. Stability of prices is required to secure our income from foreign currencies. Several projects for the ecouragement of old food industries and the establishment of new ones were included in the plan.

Among these projects are projects for the development of sugar industries, milk products industries, canned food industries ... etc.

## E. A program for plant protection

U.A.R. agriculture suffers mormally bigger losses as a result of the various diseases which attack different crops. The total annual loss amounts sometimes to nearly 62 million pounds. For cotton only, losses can be estimated by 25% of its production the value of which runs normally up to 40 million pounds. The remainder represents our losses in wheat, maize, fruits, and other crops. The avoidance of such losses means a remarkable addition to our agricultural income.

Past experience in combating diseases proved that lack of co-ordination between the various efforts devoted in this direction was a major reason for our failure to lesson our losses. If efforts are co-ordinated fruitful results can be

achieved. Co-operatives with the supervision and support of the ministry of agriculture have advised a program for plant protection which is hoped to fulfil the purpose.

#### F. The Program for Promotion

#### of live Stock

Statistics of animal production during the past years indicate that inspite of the continuous increase of our population animal production did nt keep pace with this increase. The limiting factor for the increase in our animal production at a reasonable rate, is mainly due to limitation of areas cultivated with green fodder. The area cultivated with green fodder is limited by the system of our crop rotation. Clover, which is the main green fodder on which animal production depends, competes with wheat cultivation. Besides green fodder limitations, U.A.R. animals are not high yielding qualities. Accordingly any policy to be determined for the increase of animal production must depend firstly on the exploitation of our present resources.

Projects which lead to any increase in the production efficiency of our animals must be undertaken. Breeds of high yielding qualities must be "imported for animal breeding purposes. Speciality of cattle in one purpose must be followed. Cattle must be devoted only to milk and meat production. Farm work normally carried out by animals must be replaced by machines. Protection of animals against diseases must be undertaken on a wide scale. The five years plan advised several projects to fulfil this purpose.

## G. The program for livestock protection

Losses in animal production caused by attack of various diseases amounts normally to 25% of its value. Lack of adequate medical veterinary services was one of the reasons responsible for this loss. This inadequacy of medical services in addition to the inability of small farmers who own 75% of the U.A.R. animals for paying treatment expenses caused these big losses.

If free medical treatment are widely spread all over the country most of these losses can be avoided. A program for free medical treatment and care was advised and it is hoped that it will fulfil its purpose.

## H. Promotion of Fisheries

It was amazing that before planning, U.A.R. was unable to cover its local consumption from fish and fish products inspite of the vast fish resources which the country possesses. Our resources from both the Mediterranean Sea& the Red sea, the buge lakes and Nile were not exploited. Our annual production from fish never exceeded 100.000 tons per year.

Inefficiency of fish production was mainly due to, ignorance, inadequacy of modern fishing equipments and lack of organization between various producers engaged in production.

To overcome these difficulties several projects were introduced in the plan which are hoped to lead to a big increase in our production.

## 1. Mechanization of Agriculture

The efficiency of the U.A.R. agriculture was normally impaired by the fact that most Egyptian farmers who are mainly small landholders were used to apply old fashioned techniques in cultivation. The result of this policy led to higher costs of cultivation and a smaller yield per feddam.

Raising the efficiency of production requires the introduction of new techniques in agriculture. The use of Modern mechanization must be one of these techniques. The introduction of mechanization leads to an increase in our income through reducing costs of cultivation, increasing and improving yields per feddan. It also helps, as montioned before to devote our livestock for the production of milk & meat.

The plan was based on these ideas. Co-operatives must be in charge of a program for mechanization. The part of the government will be the assistance of these co-operatives in excuting such a program.

One may argue how the plan maker advises mechanization in such a heavily densed populated country. Naturally the logic of such a question is acceptable, if mechanization leads to a higher ratio of unemployment. Studies which were undertaken proved that such an effect will not prevail. Mechanization will lead to an unemployment of nearly a quarter of a million of people at the start, but in the same time it will create gobs for 110,000 people. The net unemployment created by mechanization estimated to be 140,000 will be absorbed in other industries particularly agricultural ones.

## J. Promotion of Agricultural Extention

It was noticed that in spite of limited agricultural extention services which were undertaken before planning good results were achieved. On the basis of these results a program for extending extention to all parts of the country was included in the plan. Well equipped extention service units will be established within the five years plan.

#### K. The program for consolidation

## of small holdings

Figures of land tenure in the U.A.R. reveal that the predominant type of Egyptian farms are the small size farms. Number of such farms exceeds one million. Fragmentation of holdings was an important reason for defficiency of agricultural production. Irrigation, plan protection, mechanization, marketing, ...etc were impossble to be undertaken on economic basis.

Increasing the efficiency of agricultural production urged the need for consolidating these holdings. A system of land consolidation was established. A ten years plan is required to achieve the target. Co-operatives are supervising the program. Farmer/are persuaded to join Co-operatives inorder to benifit from this project.

## L. The program for the development of

#### Economic studies

Economic studies are the support of any plan maker to overcome difficul ties which he may face in any stage of excuting the plan. A program of extensive economic studies was advised. The agricultural census, the use of modern statistical methods for the estimation of crops, agricultural surveys, commodity research...ect. Were among these projects.

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