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NOTE

AGRICULTURE IN THE ECONOMIC DEVELOPMENT OF IRAN: LESSONS FROM THE THIRD AND FOURTH PLANS¹

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Abstract — In recent years Iran's agriculture has lagged behind industry and has not been able to satisfy the increased demand for food. This has caused a rapid rise in the import of farm products. An attempt is made in this paper to analyse the performance of the agricultural sector during the Third and Fourth Economic Development Plans (1963–72).

Agriculture in Iran has not received the attention it should have in terms of public investment. Emphasis has been on relatively large industrial projects to the neglect of agriculture. Due to limited funds and questionable policies, the Fourth plan failed to meet its growth target for agriculture.

Besides that, the government has pursued a policy in recent years to keep the price of agricultural products low to protect urban consumers. This has discouraged domestic producers. If there is a need to protect consumers, this could be done by subsidizing the prices of agricultural products.

INTRODUCTION

There has been a tendency in most of the developing countries to identify economic development with industrialization and to allocate insufficient resources to the agricultural sector. The experience of a number of developing countries demonstrates that the expansion of industrialization at the expense of agriculture may impede the development of the economy as a whole. In recent years, Iran's agriculture has lagged behind industry and could not satisfy the increased demand for food and in turn it has caused a rapid rise in the import of farm products. Subsidized imported food and direct price controls through regulations by government has retarded the growth of agriculture in Iran.

This paper attempts to analyse the performance of the agricultural sector mainly during the Third and Fourth Economic Development Plans (1963–72) and to point out some of the deficiencies which existed and poor policies which were implemented in the process.

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THE ROLE OF AGRICULTURE IN THE ECONOMIC DEVELOPMENT OF IRAN

Prior to the growth of the oil sector and the increase in its revenue, the economy of Iran was heavily dependent on agriculture; the majority of the labour force was employed in agriculture and the sector could satisfy the urban population demand for agricultural products. The sectoral pattern of employment which emerged after a decade of rapid economic growth reflects the increasingly urban orientation of the Iranian economy. Agricultural employment (including seasonal employment) remained constant in absolute terms over the past 15 years at around 3.8 million. The ratio of agricultural to total employment declined considerably, as Table 1 shows, from 56% in 1956 to 47% in 1966. According to the 1971 population survey, the percentage of the labour force employed in agriculture has remained around 47.1% during the period of 1966–71 [11].

Table 1. Population actually employed, by major economic sectors, 1956-66 (percentages)*

Source	1956	1966
Agriculture	56	47
Industry, construction, transport	24	30
Trade and services	20	23
Total	100	100

^{*}Source: Iran Statistical Centre [10].

Although agriculture has employed a fairly high percentage of labour force (47%) for several years, yet its share in G.N.P. has been continuously declining and, in fact, it has become the least important sector in this respect (Table 2).

Table 2. Contribution of major economic sectors to G.N.P., 1968-72 (percentages)*

Sector	1968	1972
Agriculture	22.5	16
Industry and mining	22.5	23.4
Oil	17.4	19.5
Services	37.5	41.1
Total	100.0	100.0
100	.50.0	100.

^{*}Source: Central Bank of Iran [4].

In terms of growth rates of major sectors of the economy, agriculture has had the slowest growth during the past decade. The Central Bank report (Table 3) shows that during the Third Plan (1963-67) the growth rate of agriculture was 4.6% against 8.2%

Table 3. Annual growth rates of major economic sectors, 1963 – 72 (constant prices)*

Sector	Third Plan (1963-67)	Fourth Plan (1968-72)
Agriculture	4.6	3.9
Industry and mining	11.3	13.0
Oil	13.4	15.2
Services	8.8	14.2
Overall growth	8.2	11.6

^{*}Source: Central Bank of Iran [2, 4].

overall growth rate. In the Fourth Plan period (1968-72), the growth rate of agriculture was 3.9%, which was below the plan target of 4.4% and much lower than the overall growth rate of 11.6%.

It may be argued that the low growth rate of agriculture is relative and the country needs only a 3-4% agricultural growth rate to keep pace with the rising population and standard of living [6]. However, considering the rate of population growth and the increase in per capita income, one would conclude that agricultural growth has been very slow and has failed to meet the increase in domestic demand. The population growth according to official statistics has been 2.9%, which is high by any international standard. Central Bank figures show that the rate of agricultural growth was 2.1% in 1968 [2] and, therefore, the increase in per capita agricultural production was negative in that year. In 1969, there was no significant change in per capita agricultural production but per capita agricultural population increased by 1.3% during 1963-72.

The population growth has not been the only factor in increasing domestic demand. Continuous rise in per capita income and standard of living of the people have been the other stimuli which has caused increase in the demand for various agricultural products. Per capita income growth has had more impact on demand increase than population growth.

It is believed that income elasticity of demand for food in low income countries is substantially high [8]. A study carried out by the Central Bank of Iran showed that the income elasticity of demand for food in Iranian urban areas was 0.58 [5]. A comparable figure for rural areas is not available due to lack of relevant statistics, but probably it would be higher. The only published estimation appears to be one made by planners in the Third Plan for the projection of demand for food over the plan period. The figure they arrived at, through international comparison, was of the order of 0.8 for rural areas [7]. If we assume income elasticity of demand for agricultural products in Iran to be 0.7, and the annual national income growth rate of 10.1% for the period 1963–72 [4], the average increase in per capita income per annum would be equal to 7.2% and the increase in per capita demand for agricultural products would be, approximately, 5%.

This indicates that the annual increase in demand for agricultural products has been, on the average, 5% whereas the average increase in the supply, as it was mentioned earlier, has been 1.3% between 1963-72. The gap has been bridged by ever-increasing imports of agricultural products in order to prevent a rapid increase in the prices of agricultural commodities.

Agricultural trade and prices

Low rate of growth of domestic agricultural products and rapid increase in per capita income, resulted in an increase in food prices and an increase in the import of agricultural products.

According to the Central Bank figures, the average annual increase of food prices was 3.9% in the period of 1968-72. Although the increase does not seem to be very high, it is relatively high when compared to 3.7% increase in general prices in the same period.

It was pointed out that the import of agricultural products played a major role in preventing rapid increases in food prices. This has introduced a major change in Iranian agricultural trade. For many years, the agricultural sector, second to oil, was a major foreign exchange earner. But as shown in Table 4, the situation has been changed, resulting in an excess of 18,385 million rials of imports over exports during the Fourth Plan period.

Table 4. Value of exports and imports of agricultural products, 1963–72 (million rials) at current prices*

The Factor of the Control of the Con	1963-67	1968-72
Export:		
Livestock	8,687	12,504
Crop	27,549	48,674
Total	36,236	61,178
Import:		
Livestock	7,295	19,401
Crop	11,638	60,162
Total	18,933	79,563
Net export	17,303	-18,385

^{*}Source: Central Bank of Iran [3, 4].

Planning an agricultural policy

Agriculture in Iran has not received the attention it should have in terms of public investment. Emphasis has been on relatively large industrial projects to the neglect of agriculture. In the past, Plan Organization allocated a small portion of its funds to the agricultural sector [16]. The funds allocated to agriculture in the First Plan were so small and projects were so limited that it had very little effect on traditional farming. In the Second Plan, the government directed most of its capital outlay to irrigation structures and multipurpose projects for water and power for urban uses [13]. The benefits to rural people from irrigation as a whole, have been rather minor and the road programme a major expenditure in rural areas, although of help to the farmer in the marketing of his produce, is of much greater benefit as urban connecting lines [1].

The type of development expenditure that characterized the Third Plan (1963-67) was intended to differ markedly from that used in the Second. On the whole, the planners decided to place more emphasis upon "minor" innovations such as improved seed, chemical fertilizers, and improved farming practices. Although the sum of 16.5

million rials (36.7% of total funds allocated for agriculture) was allocated for irrigation, mainly to complete Dez and Sefid Rud dams, there was a major shift in water resources development policy towards small systems instead of large dams [3].

That was what the Third Plan was aimed at but actually, when the government embarked on a nation-wide land reform just before the Third Plan started, the effect was to absorb all the resources of the sector for this programme and to make everyone forget the programmes planners had planned [1]. The Fourth Development Plan (1968–72) began when the nation-wide land reform had been under way for five years. At first, the agricultural sector was to absorb 13.5% of the total plan budget, but this was later reduced in absolute terms by 21% [4]. An important feature of the Plan, which was absent in the previous ones, was a breakdown of the general heading of agriculture into three headings: irrigation, rural development, and agriculture. Therefore, when it was compared with previous plans there appeared to be a reduction in the percentage share of agriculture [14, 16].

An average annual increase of 5% in agricultural production was envisaged in the course of the Plan. The target was to be achieved, as it was stated in the Plan, by "maximum utilization of land already under cultivation, the cultivation of virgin land, the establishment of large agricultural units and joint-stock farming companies, the expansion of animal husbandry, the wider application of extension services and employment of modern techniques". Apparently, in the Fourth Plan, a new approach was made to the development of the agricultural sector: intensive farming on a strictly commercial basis. Attainment of the presupposed production target was to be met by the establishment of large agricultural units and the encouragement of the private sector to embark on agricultural ventures. The Agricultural Development Bank was strengthened financially to mobilize sizable private resources for the initiation of commercial farming. The corresponding line of action for those benefiting from land reform, took the form of fostering the establishment of farm corporations. After credits for peasants buying their land at the end of the reform programme, the largest slice of the Plan's agricultural budget (\$147 million out of \$880 million) was put towards the establishment of large agricultural units, which means either farm corporations or agro-businesses. The Fourth Plan failed to meet its growth target of 4.4% for agriculture and, instead, 3.9% growth rate was attained. Apparently, one reason was that the Plan had placed much hope on large-scale agricultural units to contribute to total agricultural production but during the new period their contribution turned out to be negligible. According to an estimate made at the end of the Fourth Plan period, agro-business companies and farm corporations were cultivating 110,000 ha, or 1.5% of the total cultivated area; they employed 0.3% of the agricultural labour force and produced less than 2% of the total agricultural output [9]. Another reason, possibly, was that these two forms of agricultural organizations, as mentioned earlier, received the largest proportion per ha of available grants and credits at the expense of small cultivators. The small farmers neither received their fair share of the resources nor the needed attention and services.

The Fifth Plan was begun when agriculture, as pointed out earlier, traditionally a source of foreign exchange earning, changed its position and the country became a net importer of agricultural products. The ever-increasing gap between farmers' income led the policy-makers to lay more stress on agriculture in the Fifth Plan. The agricultural budget increased substantially to reach 121 billion rials, four times the amount allocated

to agriculture in the Fourth Plan. The growth target for the agricultural sector was set first at 5.5% in the original plan. When the Fifth Plan was revised, due to four-fold increase in oil revenue, a prime beneficiary of the revision of the Plan was the agricultural sector. The revised plan set a 7% per year growth rate for the sector, twice as much as its normal growth and 40% more than the highest growth rate agriculture ever achieved in the past decade. To achieve the target fixed investment from public sector funds in agriculture increased from 121 billion to 239.6 billion rials [12].

With more funds available in the Fifth Plan, a wise agricultural policy is a key factor to the success of the agricultural sector. With the completion of the three stages of the land reform and clarification of the legal status of persons engaged in agricultural activities, the government is in a proper position to undertake adequate policies for rationalization and modernization of the farming system. In this respect the Fifth Plan has not undergone major changes. The major policies have been based on the belief that small and scattered farmers by themselves cannot quickly achieve the large increases in production. Therefore, the government has continued to adopt the policy of establishing large agricultural units such as agro-businesses, farm corporations and meat and dairy complexes in order to take advantage of the so-called economies of scale. In the meantime, the rural cooperatives provide services and cheap credit to members of cooperatives.

With the growth of farm corporations being slowed down, hoping to increase their number to 140, cultivating 280,000 ha, the major emphasis has been placed upon what is called agro-industrial units [15].

Besides that the government has pursued a policy in recent years to keep the prices of agricultural products low to prevent the inflationary effect of rising food prices and to protect consumers either by controlling the market of main agricultural products such as wheat, or by importing directly to sell in the domestic market at subsidized prices.

Whatever the justification for implementing the policy to control prices of agricultural products, it must be borne in mind that the development policies should not be implemented at the expense of agricultural producers. A policy must be pursued to let prices of agricultural commodities increase at a reasonable rate compared to prices of other goods so as to provide an incentive for farmers to increase their level of production by investing more capital on their lands.

Moreover, the domestic prices of agricultural products must reach, gradually, the level not much below prices prevailing in the international market. The policy aimed at depressing the prices of agricultural products would weaken any incentive to increase production and, obviously, is contrary to the stated objectives of the government to develop the agricultural sector and to increase agricultural production. If there is a need to protect consumers, this could be done by subsidizing the price of agricultural products and compensating the difference between the market and actual price to producers. Parallel to providing adequate prices to offer sufficient incentive for the necessary increase in production, an attempt must be made to provide marketing facilities and credit. Otherwise, the increase in prices would be ineffective at the farm level and only help to widen the marketing margin of agricultural products.

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