PROBLEMS OF THE GREEK RURAL ECONOMY *

I. Introduction

Before I try to analyze the structure of the rural economy of Greece and explain its main problems, I would like to examine the position which the rural economy has in the Greek economy as a whole.

Greece is predominantly an agricultural and raw-material producing country. The agricultural character of the country emerges from the data included in the Greek National Accounts and related statistical tables. Thus, according to the latest available figures for 1962, 27.6% of the gross national income at current prices was realized by agriculture, forestry and fishing, 1.2% by mining and quarrying, 17.9% by manufacturing, 10.6% by wholesale and retail trade, the rest being the income achieved in electricity and water works, construction, transportation and communications, banking, public administration, defense, health, education and other services and finally net income from abroad.¹

The agricultural character of the country is also demonstrated when one takes into consideration the composition of its population. According to the data of the population census of 1961, 43.8% of the Greek population (amounting to 8,388,553) was rural, 12.9% was semi-urban and 43.3% was urban.²

The agricultural character of the country is finally proved from the composition of its foreign trade. Thus in 1963, 43.4% of total value of exported goods was the value of tobacco, 23.6% was food and beverages, 18.9% were raw materials and semi-finished goods, 5.6% were minerals and ores, 4.9% were miscellaneous products, 0.4% were off-shore and Nato procurements, and only 3.2% were manufacturing and handicraft articles.³

As the rural sector has a great importance for the Greek economy, it is quite natural that it has attracted the attention of economists, agricultural

* This paper has been presented by its author before the XII International Conference of Social Work (Greek Seminar-Study Tour) held in Thessaloniki from 5 to 9 September 1964.

economists and social scientists and has been the object of concern of the Greek Government. It is therefore necessary to give a general picture of the structure of the Greek rural economy and to present the main problems which have to be studied and find an adequate solution.

II. The Structure of the Greek Rural Economy

The structure of the Greek agricultural economy can be revealed from the following percentages referring to the areas occupied by the main categories of agricultural crops during the year 1962: wheat and other cereals 41.2%, tobacco 2.9%, cotton 4.9%, fodder plants 8.6%, vegetables 2.5%, vines 5.7%, area under trees 13.1%, fallow land 8.8%. From these percentages it can be inferred that, with cereals and fallow land occupying more than 50% of the Greek land, Greece is to be considered as a country of extensive cultivation.

The production of wheat is the most important agricultural enterprise from the point of view of areas occupied, total value, and home consumption.

4. More specifically, the structure of the Greek agricultural economy can be displayed from the following figures, referring to the areas occupied by the main categories of agricultural crops during the year 1962 (in hectares).

a. Crops on arable land 2.818.247.8 73.9%

wheat 1.193.166.3 31.3%
other cereals for grain 550.048.1 14.0%
edible pulse 135,454.2 3.6%
fodder seeds 106,213.1 2.8%
tobacco 122,108.9 3.3%
cotton 207,903.1 5.5%
other crops for industrial purposes 40,659.0 1.1%
fodder plants 371,417.5 9.8%
melons, potatoes etc. 91,267.6 2.5%

b. Vegetables 103,392.8 2.7%
c. Other garden crops 8,617.8 0.3%
d. Vines (grapes and raisins) 243,754.8 6.4%
e. Area under trees (in compact plantations) 552,400.3 14.1%

Total 3,726,413.5 97.4%

Fallow land + 373,501.4 + 9.9%
Area of mixed and successive cultivations — 287,917.7 — 7.3%
Agricultural land for the whole country 3,811,997.2 100.0%


The structure of the Greek rural economy can also be revealed from the following fi-
Before the war home production was quite inadequate to meet the needs of home consumption, and wheat in great quantities was imported from abroad. Since then efforts have been made in order to increase wheat production. The area under wheat has been extended on lands that have been cleared or drained, better methods of production have been applied, more fertilizers were used, better seeds and machines have been employed, plant diseases were successfully controlled. As a consequence of all these efforts, wheat production increased considerably, and Greece is now self-sufficient from this point of view; moreover in years of good harvest we face the problem of exporting surplus wheat.

Among other crops produced in Greece, tobacco, raisins and cotton are to be mentioned, in view of the fact that they constitute the bulk of exported commodities. Tobacco produced in Greece is of the oriental type, its quality is excellent. Two varieties of raisins are produced: currants, which are unique in the world, from the point of view of quality (until recent years Greece enjoyed a monopoly of currants), and sultanas which rank high among similar varieties produced in the Near East.

As regards cotton, it should be mentioned that the bulk of the cotton crop is of the strict good middling quality, its length varying between 23-32 milimeters. It should be added that Greece and Spain are the only European countries producing cotton in appreciable quantities, and that Greece is the only European country exporting cotton to countries of the Common Market. Under these circumstances the cultivation of cotton in Greece is very promising. The same is true with reference to fruits and vegetables. The Greek climate is suitable for their production, and rich crops of delici-

gures referring to the value of various crops and the total value of Greek agricultural production during the year 1959:

<table>
<thead>
<tr>
<th></th>
<th>In million U.S. dollars</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>cereals</td>
<td>196</td>
<td>21.0</td>
</tr>
<tr>
<td>fruits and vegetables</td>
<td>241</td>
<td>25.8</td>
</tr>
<tr>
<td>olive oil</td>
<td>73</td>
<td>7.7</td>
</tr>
<tr>
<td>tobacco</td>
<td>60</td>
<td>6.4</td>
</tr>
<tr>
<td>cotton</td>
<td>40</td>
<td>4.3</td>
</tr>
<tr>
<td>wine</td>
<td>33</td>
<td>3.5</td>
</tr>
<tr>
<td>other agricultural products</td>
<td>22</td>
<td>2.4</td>
</tr>
<tr>
<td>total agricultural production</td>
<td>665</td>
<td>71.1</td>
</tr>
<tr>
<td>animal products</td>
<td>238</td>
<td>25.5</td>
</tr>
<tr>
<td>forestry products</td>
<td>32</td>
<td>3.4</td>
</tr>
<tr>
<td>Total</td>
<td>935</td>
<td>100.0</td>
</tr>
</tbody>
</table>

ous fruits and fine vegetables may be forthcoming when production is carried on on irrigated land.

Among non-agricultural farm products, meat and dairy products, wool, wood and fish should be mentioned. Although meat consumption is small (20 kg. per head per year, as against 50 kg. on average in Western Europe) Greece is not self-sufficient in meat. The same is true with reference to the other non-agricultural rural products.5

Before tackling the main problems of rural Greece, let me remind you that during recent years, especially since the disastrous for Greece war with Turkey in 1922, the Greek agriculture has shown substantial progress. The area under annual crops and permanent plantations has been substantially increased by restricting fallow land, by clearing uncultivated land, by carrying out big land improvement works (especially drainage and flood control works). The cultivation of land has been intensified through the application of improved systems and the use of more manure and fertilizers. The quality of the Greek agricultural products is improved through better methods of producing and processing them, suggested by special Institutes which have been founded in order to carry on research work. On the whole, the Greek agricultural economy was revived, because of measures taken by the Government to foster agricultural activities and improve the standard of living of the farmer, such measures being the protection of home production through

5. The following figures indicate the evolution of the volume of various crops produced during recent years (in thousand metric tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>Wheat</th>
<th>Maize</th>
<th>Rice</th>
<th>Cotton</th>
<th>Tobacco</th>
<th>Potatoes</th>
<th>Dry Beans</th>
<th>Melons</th>
<th>Tomatoes</th>
<th>Other Vegetables</th>
</tr>
</thead>
<tbody>
<tr>
<td>1935-38</td>
<td>768</td>
<td>255</td>
<td>4</td>
<td>44</td>
<td>61</td>
<td>148</td>
<td>17</td>
<td>203</td>
<td>109</td>
<td>210</td>
</tr>
<tr>
<td>1948</td>
<td>800</td>
<td>229</td>
<td>9</td>
<td>35</td>
<td>37</td>
<td>319</td>
<td>25</td>
<td>277</td>
<td>201</td>
<td>307</td>
</tr>
<tr>
<td>1949</td>
<td>839</td>
<td>222</td>
<td>21</td>
<td>48</td>
<td>46</td>
<td>394</td>
<td>35</td>
<td>319</td>
<td>298</td>
<td>416</td>
</tr>
<tr>
<td>1950</td>
<td>850</td>
<td>195</td>
<td>32</td>
<td>79</td>
<td>58</td>
<td>347</td>
<td>29</td>
<td>364</td>
<td>301</td>
<td>435</td>
</tr>
<tr>
<td>1951</td>
<td>930</td>
<td>250</td>
<td>56</td>
<td>89</td>
<td>63</td>
<td>412</td>
<td>33</td>
<td>385</td>
<td>328</td>
<td>471</td>
</tr>
<tr>
<td>1952</td>
<td>1050</td>
<td>230</td>
<td>75</td>
<td>77</td>
<td>42</td>
<td>453</td>
<td>26</td>
<td>297</td>
<td>317</td>
<td>490</td>
</tr>
<tr>
<td>1953</td>
<td>1400</td>
<td>309</td>
<td>66</td>
<td>95</td>
<td>63</td>
<td>445</td>
<td>44</td>
<td>407</td>
<td>344</td>
<td>547</td>
</tr>
<tr>
<td>1954</td>
<td>1219</td>
<td>254</td>
<td>86</td>
<td>128</td>
<td>67</td>
<td>442</td>
<td>49</td>
<td>425</td>
<td>409</td>
<td>561</td>
</tr>
<tr>
<td>1955</td>
<td>1337</td>
<td>285</td>
<td>61</td>
<td>189</td>
<td>97</td>
<td>422</td>
<td>46</td>
<td>405</td>
<td>329</td>
<td>593</td>
</tr>
<tr>
<td>1956</td>
<td>1245</td>
<td>238</td>
<td>43</td>
<td>154</td>
<td>82</td>
<td>456</td>
<td>46</td>
<td>407</td>
<td>369</td>
<td>589</td>
</tr>
<tr>
<td>1957</td>
<td>1720</td>
<td>257</td>
<td>60</td>
<td>191</td>
<td>109</td>
<td>507</td>
<td>41</td>
<td>423</td>
<td>435</td>
<td>654</td>
</tr>
<tr>
<td>1958</td>
<td>1786</td>
<td>225</td>
<td>66</td>
<td>187</td>
<td>84</td>
<td>469</td>
<td>43</td>
<td>411</td>
<td>456</td>
<td>624</td>
</tr>
<tr>
<td>1959</td>
<td>1767</td>
<td>290</td>
<td>67</td>
<td>170</td>
<td>80</td>
<td>490</td>
<td>55</td>
<td>417</td>
<td>426</td>
<td>656</td>
</tr>
<tr>
<td>1960</td>
<td>1666</td>
<td>288</td>
<td>55</td>
<td>184</td>
<td>64</td>
<td>423</td>
<td>67</td>
<td>375</td>
<td>462</td>
<td>674</td>
</tr>
<tr>
<td>1961</td>
<td>1528</td>
<td>228</td>
<td>81</td>
<td>288</td>
<td>74</td>
<td>400</td>
<td>52</td>
<td>316</td>
<td>368</td>
<td>506</td>
</tr>
</tbody>
</table>

import duties and quotas, Government buying of some agricultural goods at fixed and remunerative prices, the foundation of the Agricultural Bank of Greece and the improvement of the general conditions of agricultural credit, etc. As a consequence of these measures, agricultural production has been substantially increased.

In spite of achieved progress, many commodities, like meat, dairy products, and pulses are not produced in such quantities which are necessary to meet home consumption requirements. Besides, the export trade of some other goods, i.e. tobacco and currants, faces great difficulties. Conditions under which agricultural production is carried on can be improved and the volume of agricultural produce can be further increased. However the standard of living of the Greek farmer cannot be substantially raised, unless many and complicated problems which beset the Greek agricultural economy, are successfully tackled. We now turn to a brief survey of these problems.

**III. Problems referring to the Factors of Rural Production**

There are two main problems referring to land. The Problem of consolidation of fragmented agricultural land and the problem of increasing the size of agricultural holdings and obtaining the optimum size.

Land fragmentation, especially irrational land fragmentation, "is the division of land holdings into a great many small, awkwardly-shaped plots, which serves few, if any, considerations of agricultural efficiency or convenience. Indeed, very much to the contrary, since irrational fragmentation frequently entails an extreme subdivision of holdings that is undesirable from almost every agricultural viewpoint." Direct and indirect influences of irrational land fragmentation involve "massive wastages of man-hours, capital and effort to utilize land divided into numerous, tiny, separate parcels. Equipment, animals and labor are unproductively and wearyingly occupied in shifting from plot to plot for no other reason than that the land happens to be held this way." Land fragmentation prevents the application of modern methods of production and the mechanization of agriculture. Irrigation is difficult, rational crop rotations cannot be easily applied when land is severely fragmented. In that case, soil erosion and special diseases also cannot be successfully controlled. Farm fragmentation also causes considerable waste

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7. Cf. Kenneth Thompson, op. cit., p. 10
of scarce land for paths, roads and boundaries, and makes difficult the supervision of growing crops.

Professor Kenneth Thompson of the Department of Geography, University of California (Davis), during the academic year 1961-62 conducted an investigation on the subject of fragmentation of Greek farms. According to the results of his investigation, an acute, pervasive fragmentation and dispersal of agricultural land is observed in Greece. The causes of fragmentation are various and manifold. Professor Thompson cites the most important of them. Thus because of the tremendous physical diversity of Greece, the only equitable division of agricultural properties may be through fragmentation; this leads to piecemeal transfer of agricultural land. Besides the Government has promoted the creation of new farms by the distribution of state-owned land or holdings expropriated from large private or institutional owners; because of over-concern with equitable distribution of land of varying qualities, holdings consisted not of one parcel but of many pieces of land. Land fragmentation is also a consequence of inheritance, coupled with increasing rural population density, because of the desire of heirs to receive equal shares of land of all grades. Also the dowry custom in Greece leads to land fragmentation, dowries being in the form of several plots of land. Excessive land division is also due to real estate being the preferred investment in Greece; this causes a proliferation of minor land transactions, fragmenting rural properties. Finally lack of non-agricultural employment opportunities, combined with limited availability of low-interest credit, encourages land fragmentation.8

All these and some other causes of minor importance have created an "intricate mosaic of tiny fields set in a matrix of roads, paths, and field divisions." According to the results of a research carried on by the Ministry of Agriculture which used the method of sample design, the average number of plots per agricultural family fluctuates between 7.5 plots (in Macedonia) and 12.5 (in the Greek islands) and the average size of plots fluctuates between 0.78 hectare (in Central Greece) and 0.48 hectare (in the Greek islands). It should be mentioned that the average distance of these plots between each other is 2.5 kilometers.9

The rearrangement of fragmented land into regularly-shaped holdings is called land consolidation. It is demonstrated that land consolidation in-

creases agricultural income and the value of agricultural land, from 100 to 200%. However the task of consolidating fragmented land is complex and delicate. According to Professor Thompson, wide variations in soil quality and productive potential is the most important factor in creating difficulties for an equitable and generally acceptable scheme of consolidation. Another important factor is the suspicious attitude of the Greek farmer to the motives and policies of the Government; whatever the reasons of this attitude may be, the distrust is present and constitutes a barrier to attempts of proceeding to a large-scale consolidation of Greek farms. Finally the conservatism of the Greek farmer and his resistance to innovation is a factor responsible for the results of efforts made as yet being meagre and scanty.\footnote{Cf. K. Thompson, op. cit., pp. 15ff.} Thus according to data given by the Ministry of Agriculture, from 1953 to 1963 consolidation has been carried on on an area of only 156,621 hectares. The procedures employed are based mainly on legislative decree 821/1948 which requires voluntary agreement of the majority of owners of land in the area involved. Besides the procedures are complex and prevent the progress of land consolidation. It would seem that more effective measures of land consolidation are urgently needed.

Akin to the problem of land consolidation is the problem of increasing the size of agricultural holdings and obtaining the optimum size. According to the results of the agricultural census of 1950, very small or part-time farms up to one hectare accounted for 28.5% of all Greek farms, and small farms from 1 to 5 hectares accounted for 56.9% of all Greek farms. There are no recent data concerning the size of these farms. It is very probable that during the period 1952-54 the number of part-time and small farms increased because of expropriation of state and institutional land larger than 30 hectares. In more recent years the number of part-time and small farms may have been reduced as a consequence of mass-emigration of farmers, especially of those living in mountainous regions. To-day part-time farms are evaluated at about 25% of all Greek farms. Their number should be further reduced and measures of economic policy should be taken to facilitate such a reduction.

Small farms are those the families of which furnish all labor required for the performance of farm work, and depend upon farming for a living. The advantages of small farms are numerous and various. However small farms have not usually the optimum size. Optimum size of a farm is the best size from a social, economic and technical point of view. From a social point of view, optimum size of a farm is that size which absorbs all available work of the farm family and secures full employment of the factors of production,
especially of farm labor. From an economic point of view, optimum size of a farm is that size which assures a remuneration for farm labor equal to its opportunity cost, i.e. to the wage which the farm family would have if they were employed in a non-agricultural sector of the economy. Finally, optimum size from a technical point of view is that size of the farm which facilitates the application of modern methods of production and the mechanization of agriculture.

Now, according to the results of an investigation carried on by the Ministry of Agriculture during the year 1952-53, the average income of 695,000 farm families was 333 U.S. dollars per year. It is evident that these farm families were under-employed and far from receiving income equal to their opportunity cost. Besides, the small size of their farms and the state of unusual fragmentation of these farms did not allow the application of modern methods of production and the mechanization of rural production. Under these circumstances the Greek Government should try to improve the size of the farm, i.e. to increase it and make the farm a self-supporting economic unit, assuring full employment to the factors of production, a reasonable remuneration of farm labor, and an increase of the income of rural population, not through subsidies and all sorts of financial aid, but through the application of modern methods of production and a better utilisation of facilities made available by the execution of irrigation and other public works.

Having examined the problems referring to land, we can now proceed to the investigation of problems relating to rural labor. The problem of underemployment in the Greek rural economy and the problem of technical education of farm labor are the main problems which deserve careful consideration.

Quite recently Greek economists and foreign specialists estimated that there is widespread underemployment in Greek agriculture and deduced that 20-50% of agricultural labor was surplus labor, in the sense that it could be removed from agriculture without calling forth a decrease in agricultural output. In 1962 however a book was published by the Greek professors Peipelasis and Yotopoulos in which the results of a research carried on in the Center of Economic Research were presented, analysed and discussed. Their findings suggest that only in the first two years of the period for which the research was conducted, i.e. the period 1953-1960, there was surplus labor, which could be removed to non-agricultural occupations. Since 1955 Greek agriculture has experienced labor shortage during the peak periods of spring and fall. This shortage oscillated from 2.6% to 7.8% and was due to a persistent emigration of agricultural population and to a rising trend of
demand for labor because of increased surface of land under cultivation and because of more intensive cultivation of the Greek land.\textsuperscript{11}

Now the findings of the two distinguished scholars should be received with some reservation as the authors themselves admit, because of the limitations of their measurements, because of the variety of assumptions employed in obtaining labor required and labor available, and because of the questionable reliability of some data which were used. Besides, recent research done at the University of Thessaloniki reveals that there is still substantial labor surplus in rural areas, especially in Northern Greece, where such research has been conducted.\textsuperscript{12} However the tendency towards full employment of agricultural labor is obvious; it is felt by many big and small farmers during peak periods. We cannot deny that labor scarcity occurs in some areas during such periods. However there is no proof of general scarcity of labor affecting the Greek rural economy as a whole. No Governmental office exists in Greece which could serve as a connecting link between supply and demand of agricultural labor; therefore it is quite possible that surplus labor exists in certain areas even during peak periods, whereas demand is stronger than supply in other areas at the same time. Moreover research conducted as yet with reference to employment and underemployment of agricultural labor assumes methods of production as given; if these methods are improved and machinery is substituted for labor, underemployment may reappear even in peak periods. Finally it should be mentioned that even in highly developed economies, part of underemployment during slack periods should be considered not as seasonal but as chronic surplus labor, in the sense that a better organisation of farm work and change in the structure of production would lead to a diminution of seasonal unemployment and an improvement of the level of employment of agricultural labor.

With reference to technical education of rural labor, may I remind you that the level of general education and especially that of technical education is rather low in this country. In spite of innate intelligence and wit which characterizes the Greek population, their education is deficient. Farmers, especially those living in mountainous regions, ignore most of the techniques of modern agriculture, they do not know how to organize the farm and ex-


\textsuperscript{12} Cf. A. L. Adamopoulos and E. G. Papageorgiou, \textit{Farm Management Research and Planning in Northern Greece}, Department of Agricultural Economics, School of Agriculture and Forestry, Aristotelian University of Thessaloniki, 1963 (in Greek, summary in English) passim; G. Kitsopanides. Farm Planning in Western Macedonia, Greece, in: \textit{The Journal of Agricultural Economics}, Dec. 1963.
ploit opportunities in the market of agricultural commodities. This is due to the fact that elementary schools in rural areas function on the basis of the general programm of elementary education which is valid for all the schools of the country. Not many lectures of a more or less technical character are given to the farmers' children, little effort is made to instil on the boys' and girls' souls the love of the country-side and their determination to avail themselves of opportunities existing in rural areas and to improve their standard of living. Besides elementary and high schools of the classical type, some agricultural schools are functioning. These agricultural schools are however rather few and inadequate to meet pressing needs for broad technical education in rural areas. Under these circumstances the full exploitation of present possibilities existing in the Greek countryside and the continuously added facilities in the form of irrigation and other public works is open to question. Economic policy should therefore proceed to a thorough reorganization of the present system of elementary and high agricultural education and devise means for conveying to the Greek peasantry the scientific discoveries of recent times concerning rural activities.

With reference to the last factor of production, i.e. capital, the main problems which are involved are those related to the execution of irrigation works, to the mechanization of the Greek agriculture, and to the organization of agricultural credit.

The climate of Greece being very dry, substantial increase of production of agricultural commodities cannot be expected unless extensive irrigation works are executed. In 1962 the extent of irrigated land was estimated at 520,285.7 hectares, i.e. 13.6% of agricultural land. The Ministry of Agriculture had planned an increase of irrigated area to 610,000 hectares for 1964 and 850,000 hectares for 1970. However there are serious doubts whether the last figure will be reached, the reasons being, according to Professor Zolotas, the inadequate organization of the civil service which has been entrusted with the execution of irrigation works, and the unusually long procedure of the expropriation of land necessary for this execution. Now if the rhythm of accomplishing the works is not hastened, one cannot expect that the targets set by our agricultural policy could ever be achieved.

The mechanization of agriculture is necessary to improve labor productivity and to alleviate situations of stringency during peak periods. Besides, the mechanization of agriculture, because of the substitution of draft-aminals

for machinery, facilitates the development of stock farming and the production of dairy products and meat necessary to improve the diet of the Greek farmers and citizens. Now Greece has made substantial progress from the point of view of the mechanization of agriculture. Whereas in 1939, 1033 threshers and only 20 harvester-threshers were used, in 1961, 2150 threshers and 1950 harvester-threshers were put into service.\textsuperscript{15} Further increase of agricultural machines is to be recommended only in so far as emigration from rural areas brings forth an acute scarcity of labor. Capital being a scarce factor of production, it would be uneconomic to substitute scarce capital for relatively abundant labor.

As regards the problem of better organization of agricultural credit, may I remind you that the Agricultural Bank of Greece, founded in 1929, is a semi-public institution, providing the farmers mainly with short-term credit for the purpose of supplementing the borrower’s working capital. Medium and long-term credits to finance the acquisition of livestock, machinery, buildings, land and other physical facilities do not exceed 20\% of total credits awarded by the Agricultural Bank. However the main problem concerning the organization of agricultural credit is the high cost of money lent by the Bank. The Agricultural Bank, being financed by the Bank of Greece, pays an average rate of interest of 1.60\%, but charges the farmers with an average rate of interest of 7\%. The difference of 5.40\% constitutes the cost of money, i.e. the cost of distribution of credit through the Agricultural Bank. It would seem that in European countries the cost of distributing money to farmers is much lower. It is necessary that the expenses of the Bank be squeezed as much as possible. It is necessary also that the process of cashing the money and paying off the debt be simplified as much as possible, and more generally that the dealings of the Bank with the farmers be carried on easily, quickly and smoothly through avoiding unnecessary bureaucratic methods.

\textbf{IV. Problems referring to Production and Trade of Agricultural Commodities}

The main problem concerning agricultural production is the problem of changing the structure or composition of production. It has been already noted that production of agricultural commodities has substantially increased in recent years. However the increase is general, all agricultural crops are now

produced in increased quantities; the structure of production has remained almost unchanged. It is necessary however that certain crops requiring much labor and capital, i.e. cotton, fruits, vegetables, tobacco, dairy products and others be produced in greater quantities; the reason being that land in Greece is a scarce factor of production and should be intensively cultivated. In case of more intensive exploitation of the Greek soil, not only more labor will be employed and incomes of farmers will be raised, but also crops will be produced, the elasticity of demand of which is much higher than that of traditional products, like cereals. The change of composition of agricultural production has been a chief aim of the Greek Government's agricultural policy for many years. Thus the five-year programme for the economic development of Greece (1960-1964) published in 1960, anticipated for the period ending 1969 an increase of 96.6% for the production of cotton, 26.7% for animal products, 21.7% for fruits and vegetables, 15% for tobacco and wine, 8.3% for olive oil and only 3.9% for cereals. However such changes in the composition of agricultural production have not been achieved as yet, the reason being that the Greek Government for reasons of social equity and in order to contribute to an increase of the income of wheat growers, continues to apply the policy of wheat concentration at prices much higher than prices of wheat paid in foreign markets. Under these circumstances producers of wheat and some other protected agricultural commodities have no incentive to move to other crops, most of which are exported and are thus subject to the vagaries of foreign markets. It is necessary therefore that the Greek Government changes the system of subsidizing the Greek farmers and inaugurate such a system of protection that will provide them with incentives for growing crops, the production of which we wish to see rapidly increasing.

The problem of changing the composition of agricultural production is associated with the problem of changing the composition of exports. Greek exports are characterized by the fact that they consist of a small number of agricultural commodities, mainly tobacco, currants, raisins, cotton and olive oil, which are sold to a small number of countries, mainly to Germany, the United States, Great Britain, Italy, France and the U.S.S.R. Our traditional exports of tobacco, currants and olive oil are subject to keen foreign competition and the disposal of these products in foreign markets encounters great difficulties. Exports of cotton is more hopeful. There are great possibilities of exporting Greek cotton, especially to countries of Western Europe, because imports of Greek cotton in these countries represent a very small percentage

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(slightly more than 1%) of their total imports of cotton, and because Greece is the nearest and more natural supplier of European manufacturers with cotton. Fruits and vegetables are already an important item of the Greek export trade and can become a more important one. Soil and climatic conditions of Greece are very favorable for the production of fruits and vegetables, especially those types which grow earlier or later than those cultivated in other parts in Southern Europe, and which West Europeans are eager to buy. On the other hand demand for fruits and vegetables is growing very fast and this can be explained by the high income elasticity of demand for them. The main problems facing the drive for exports of Greek fruits and vegetables is the problem of reducing both production and marketing costs, the problem of improving the quality of them, the problem of growing those types of fruits and vegetables which are mostly demanded in Europe, finally the problem of standardizing their production and of organizing the adequate processing and rapid transport of them. Such problems have not been solved as yet, therefore the composition of exports has not been substantially modified and the total value of Greek exports has remained stationary for many years, although the total value of imports into Greece of foreign goods is swelling at a rapid rate.

V. Conclusions

I have tried to depict as briefly as possible the structure of the Greek agriculture and the main problems referring to the factors of rural production and to production and trade of agricultural commodities. May I add as a conclusion of this report that the structure of Greek agriculture corresponds to the structure of the agricultural economy of a country being in the process of economic development, and that the above mentioned problems are problems which could be considered as partial problems of economic development. In the five-year Programme for the Economic Development of Greece 1960-1964, most of these problems have been envisaged and a solution has been sought. A new programme for the economic development of this country is now being prepared by the Ministry of Coordination. Economic development of Greece means however industrialization of this country. Of course possibilities of improving the Greek agriculture, i.e. increasing agricultural production and raising the standard of living of the farmer are manifold and various. However, Greek economists and the Greek public opinion are convinced that it is mainly through changing the structure of the Greek economy as a whole that the problem of economic development could be solved.
Production of agricultural commodities should be increased, but industrial production should be raised at a faster rate, through increasing industrial investment and removing labor from rural areas to industrial centers.

I began my report by demonstrating that Greece is predominantly an agricultural country. Let me end it by suggesting that Greece ought to become a country both agricultural and industrial. It is only in the process of development and industrialization that the problems of Greek agriculture will find an adequate solution.

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SUPPLEMENTARY READINGS
