

# The E. R. P. and the Problems of Italian Agriculture

by  
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## Agriculture in the Framework of Italian Economy.

1. - The estimate of Italian national income made by Vinci for 1938, shows the relative prevalence of agriculture over other branches of economic activity. (Table I).

Forty-eight per cent of the income earned by agriculture is accounted for by *manual work* (which thus represents more than 17% of total national income) and thirty per cent is accounted for by *rent for land* (representing more than 10% of the total national income).

If moreover we consider that agricultural production consists largely of foodstuffs, the importance of agriculture for a poor country like Italy in which food has always accounted for a large percentage of the total value of national consumption, is evident. In 1938 food represented 56.4% of total consumption as estimated by Vinci, and in 1947 the percentage had risen to 67%.

Population present, classified by Economic Activities (1936)

Regions	Total population present (thousands)	Working Population (a)				
		Total (thousands)	% of total population	% of each group to total working population		
				Agriculture, hunting, & fishing (b)	Industry, transports, & communications	Sundry (commerce, banking, public administration)
Northern Italy	19,897	9,395	47	42	38	20
Central Italy	7,539	3,344	44	50	29	21
Southern Italy	10,051	3,902	39	59	26	15
Islands	4,953	1,705	34	53	28	19
<b>Total</b>	<b>42,443</b>	<b>18,346</b>	<b>43</b>	<b>48</b>	<b>33</b>	<b>19</b>

(a) Consisting of persons over 10 years of age returned for the census engaged in a profession, art, or trade, even if unemployed at the date of the census.

(b) The number engaged in fishing and hunting was very small, 86,000 for all Italy.

Source: *Sommario Statistico delle Regioni d'Italia* of the Central Institute of Statistics, 1947, p. 6.

The 1936 census returns for the population present (Table II), show that persons occupied in agriculture then represented 48% of the country's working population, the figure rising for Southern Italy to a peak of 59%.

Real Italian Income Table I

Income Groups	1938	
	Value (millions of lire)	%
Income from agriculture, forests & animal husbandry	43,100	36.7
Income from industries	40,640	34.1
Income from commerce	9,393	8.0
Income from house property	6,700	6.0
Income from professions & other personal activities	18,200	15.2
Net cost of banking activities	-1,800	-
<b>Total income</b>	<b>115,633</b>	<b>100.0</b>

Source: F. VINCI: *Il reddito del nostro paese nel 1938*, "Rivista italiana di Scienze economiche" January-February, 1943; *Il reddito degli italiani alla vigilia della guerra attuale*, "L'Industria", August, 1943.

## Agricultural development and population problems.

2. - A rural population consisting of 8.8 millions persons in 1936, could dispose of a total productive area of only 28.6 million hectares, of which only 13 millions are of arable land. The density of the rural population—one of the highest in the world (Table III)—is

TABLE III

Number of Persons engaged in Agriculture in various Countries (No. per sq. Km. of arable land)

Country	No. per sq. Km.	Country	No. per sq. Km.
Italy	74	Germany	47
Holland	68	Hungary	38
Bulgaria	59	France	37
Poland	56	United States	25
Belgium	50	Great Britain	7

Source: PASQUALE SARACENO, *Elementi per un piano economico 1949-52*. Report to the Interministerial Committee for Reconstruction (C.I.R.), August 1948, p. 173.

traditionally characteristic of Italian social conditions. When the Kingdom of Italy was formed, this density was already marked and the possibilities for its increase were therefore—apart from sundry unfavourable circumstances—all the more limited. Indeed, from 1870 to 1936 while the population as a whole increased by no less than 15.6 millions (56%) the number engaged in agriculture only increased by 900,000 persons (11.%) (1).

A much larger outlet was afforded by the development of industry, transport, and trade; the number engaged in them rose from 4.3 million in 1871 to 7.7 million in 1936. But

(1) For further details see G. MEDICI: *L'agricoltura e la riforma agraria*, Ed. Rizzoli, 1948, p. 32 et seq.

The percentage of the male agricultural population to total population has therefore fallen from 20.9% to 14.7% (Table IV).

TABLE IV

Population present and engaged in Agriculture

Year	Total population present (thousands)	Engaged in agriculture (males)	
		No. (thousands)	%
1871	26,801	5,616	20.9
1921	36,361	7,085	19.5
1936	42,443	6,307	14.7

the balancing factor—fundamental for our economic and political life—continued to be emigration, which from 1870 to 1939, absorbed more than 18 million Italians, of whom only one half repatriated.

Today, with an annual population increase of 400,000, the situation has grown dangerously worse; emigration is blocked; industry has to face difficult problems of readjustment and its payrolls are burdened by large quotas of superfluous labour; agriculture is suffering from the over-cropping and destruction of the war years. The most recent figures for unemployment, even if estimated prudently, speak clearly (2.3 million persons).

The lack of balance between population and land is one of the features of the Italian situation that make the problem of the development of our agriculture an acute one. We should certainly not exaggerate the relief that our already highly intensified farming can afford to the pressure of population. The fundamental means for reestablishing a balance can only be found in a resumption of emigration and, within the country, by intensified industrialisation.

3. - In Italy plain-lands account for only 21% of the productive area (Table V), whereas in other countries, such as the United Kingdom, France, and Germany, they account for more than half of the territory. Of the 28.5 million hectares of productive area, barely 16.5 can be considered as really suited to cultivation.

This justifies the statement that the results

Territorial Area and Productive Area (agriculture and forests) on 31.XII.1936

Territorial	Area (in hectares)			
	Total	Productive		
		% of territorial area	% of total productive area	
Mountains	11,980,381	10,779,668	90.0	37
Hills	12,569,489	11,970,297	95.2	42
Plains	6,467,790	5,900,787	91.2	21
<b>Total</b>	<b>31,017,660</b>	<b>28,650,752</b>	<b>92.4</b>	<b>100</b>

Source: *L'agricoltura e la riforma agraria*, op. cit.

obtained by Italian agriculture are largely due to the tenacity and skill of the rural population, which is one of the most expert, industrious, and frugal in Europe.

Nor have large capital investments been lacking, as witness the Valley of the Po, the Valley of the Arno, the Apulian Tableland, the Pontine area, etc. In some of these zones (the Valley of the Po, the Valley of the Arno) the land reclamation and improvement works which were started about the end of the Xth century and have been continued in very recent times, have given good results. But taken as a whole, and apart from special conditions in some more fortunate zones, capital investments have been scanty.

#### Agriculture and Industry.

4. - The problem of the relations between agriculture and industry in Italy is an old and sad one, as it has contributed to accentuate the contrast between the industrial North and the agricultural South. Elsewhere (2), I have had occasion to show why there are no fundamental reasons for conflict between agriculture and industry, but only reasons for collaboration, as agricultural progress is strictly dependent on industrial development. Agricultural literature and our more recent experience alike confirm this truth. The improved standard of living, i.e. the increase of *per capita* income, is closely connected with the reduction of the population living on the farms and the increase in the numbers engaged in industry, trade, and the liberal professions, as has been the case in the United States and Great Britain, and, until 1939, in Germany, as compared to such prevalently agricultural countries as Poland, Bulgaria, and China.

If industry can complain of the protection granted to agriculture and of the direct government interventions in its favour (these however are of recent origin) agriculture has much more serious grounds for complaining of the protection granted to industry.

(2) See: *L'agricoltura e la riforma agraria*, op. cit., p. 34 et seq., and *Agricoltura e Industria*, in "Critica Economica", No. 9-10, Dec. 1947, p. 51 et seq. Report Submitted to the 1st National Meeting of the CER, May, 1947.

Recent enquiries have shown that notwithstanding the interventions in her favour from 1929 to 1940, the position of agriculture as compared to industry has grown worse (3).

#### Landed property and agrarian progress.

5. - The division of landed property is much greater in Italy than is generally believed. The areas in which small holdings farmed by their owners predominate are very extensive. Even in the zones of large landed estates (*latifundia*) the progress made would surprise those who do not know the places, and whose ideas on the matter date back to the classic works of Sonnino and Franchetti, or to the *Parliamentary Enquiry into the conditions of the peasantry of Southern Italy and Sicily* made in 1911.

At the present time the distribution of the land between small, medium sized and large properties is made in the following ratios:

- small freehold holding . . . 54 %  
of the national income  
from landed property;
- medium freehold holding . . . 32 %  
of the national income  
from landed property;
- large estates holding . . . 14 %  
of the national income  
from landed property.

This is due not to hasty land reforms but to a gradual process of evolution which it is the duty of the Government to foster and promote.

This explains why miraculous results should not be expected from the agrarian reform in general and from that consisting in a land-ownership reform in the strict meaning of the term. They should not be expected, because of the characteristic features of our agrarian economy, and because land-ownership as a whole is already very much subdivided (4).

(3) Ministry for the Constituent Assembly - Report of the Economic Committee submitted to the Constituent Assembly - II Industry - III Appendix - Questionnaires and Monographs: LUIGI FEDERICI: *Relations between costs and prices in industry and agriculture in Italy*, p. 127 et seq.

(4) See: *L'agricoltura e la riforma agraria*, op. cit., p. 67 et seq.

In a large part of Italy the agrarian reform has been under way for centuries. For centuries the slow but steady subdivision of landed property has been going on, closely connected as it is with the assiduous work carried on to drain marshes, level and irrigate sandy downs, and plant trees and bushes.

Summing up, we might say that an agrarian reform problem, understood as a revision of our agricultural systems and of farm leases, exists in all parts of the country; but the problem of a *land tenure reform* exists only in those zones where large estates enjoy privileged positions (a monopoly of the territory) and where they do not fulfil any *economic and social function* (5).

The need of securing the transfer and division of estates, is felt above all in some of the areas of Central and Southern Italy where large landed estates (*latifundia*) are the rule.

If these transfers and divisions are to be lasting, a whole series of public work (roads, drainage, etc.), are necessary so as to afford the peasantry an environment favourable to the formation and permanent efficiency of the new farms. All this entails large-scale Government intervention, in the form of large investments followed by a steady action of technical and financial assistance to the new farm units. Only thus will it be possible to assure that increase of productivity without which the "agrarian reform" would be void of meaning and doomed to failure, even in its social aspects.

The special characteristics of Italian economy make it desirable to give some details on this problem of the formation of *small holdings operated by their owners*.

Statistics show that holdings of less than 50 hectares (small and medium sized) are those in receipt of the highest percentage of income from land, and they confirm and define the well ascertained fact that, generally speaking, the more intensive and active forms of farming are found in the areas in which land-ownership is subdivided (Table VI).

(5) Therefore in Italy a general problem of land tenure reform does not exist such as that which existed in many of the countries of East Europe after the 1914-18 war.

TABLE VI

*Distribution of Land-ownership and Land-rents in Italy*

Ownership	Areas (%)	Taxable land-rents (%)
up to 50 hectares	56.44	70.97
from 51 to 100	7.44	8.52
from 101 to 1,000	22.57	17.00
over 1,000	13.55	3.51
	100.00	100.00

Source: *L'agricoltura e la riforma agraria*, op. cit., p. 94

The criteria by which the problem of an agrarian reform must be solved vary from one zone to another, owing to the structural characteristics of landed property and the systems of farm management.

#### Agricultural trade balance and general trade balance.

6. - a) In 1913 Italian agricultural economy rested on solid foundations in regard also to international trade, and the balance of the budget of payments was assured by the credit balance for services which settled the trade debt.

Although it is difficult to determine the "agricultural" trade balance (6), it is reckoned that it amounted in that year to 1,487 million lire for imports (7) and 923 million lire for exports (8), closing with a debit of 564 million lire.

(6) A. BIZZI: *Bilancio dei pagamenti e bilancio mercantile con particolare riguardo al prevedibile contributo della produzione agricola*, Report of the Committee for Reconversion, of the Ministry of Industry, 1946, p. 91 et seq.

The "Agricultural trade balance" includes four groups:

Group I - *Unprocessed agricultural foodstuffs and livestock* (wheat, maize, rice, other cereals, fresh vegetables, fruit, legumes, cattle, sheep, etc.).

Group II - *Agricultural foodstuffs processed entirely or mainly by "agricultural industries"* (fresh and frozen meat, butter, cheese, wine, oil, etc.).

Group III - *Agricultural foodstuffs processed wholly or mainly by industry in general* (sugar, flour, semolina, canned and preserved fruit, vegetables, legumes, etc.).

Group IV - *Agricultural raw materials for industry exclusive of foods* (raw tobacco, hemp, flax, cotton, wool, lumber of various kind, hides and skins, flowers, various plants, molasses, etc.).

(7) Wheat 399.5 million lire; maize 54.5 million; meat, lard, and fat 23.2 million; wool 73.9 million.

(8) Citrus fruit 85 million lire; fresh & dried fruit 99.4 million; vegetables 20.8 million; cheese 72 million; wines 75 million.

It thus accounted for 41% of total imports, 40% of total exports, and for 42.5 of global deficit of the Italian balance of trade.

In the case of food and non-food agricultural products imports were valued at 1,428 million lire, exports at 599 million, showing a debit balance of 829 million, covered to a large extent by the credit balance (265 million lire) goods from agricultural and other industries using farm products.

b) In 1920 the agricultural trade balance amounted to 12.6 milliard lire for imports (9) and 5.9 milliard for exports (10), leaving a debit balance of 6.7 milliard lire, and it accounted for 49% of total imports, 33% of total exports, and 92% of the global deficit of the Italian balance of trade.

In the case of food and non-food agricultural products, imports were valued at 12.1 milliard lire and exports at 4.3 milliard lire partly covered by the credit balance of goods from agricultural and other industries using farm products.

c) The grave situation arising from the disequilibrium of the "agricultural" trade balance has been one of the causes of systematic government intervention. By these means a balanced situation was secured in 1938, when imports stood at 3.2 milliard lire (11), exports at 3.3 milliard (12) with a credit balance of 100 million lire.

It thus accounted for 29% of total imports, 40% of total exports, and covered 3.3 per cent of the global deficit of the Italian balance of trade.

But this adjustment was obtained at the cost of dislocating the development of our agriculture in a direction which had serious consequences, more especially for animal husbandry (13). The average daily per capita con-

(9) Wheat 3.5 milliards; maize 503 million; meat, fats, lard 321 million; wool 1 milliard.

(10) Citrus fruit 688 million lire; fresh fruit 348.8 million; vegetables 132 million; cheese 452 million; wines 280 million.

(11) Wheat 216.5 million; maize 34.4 million; meat, lard, fat 37 million; wool 417 million.

(12) Citrus fruit 533 million; fresh fruit and dried 836 million; vegetables 123 million; cheese 202 million; wines 148 million.

(13) Self-sufficiency wheat plants led to the spread of cereal farming in hill and mountain lands, better suited for forage crops and stock farming.

sumption of calories remained nearly the same in volume and composition as in 1911-15; in 1936-40 this consumption fell below the figures attained in 1921-25; and barely touched the minimum considered necessary for healthy living by the physiologists. The figures stood in fact at 2579 calories in 1911-15, at 2783 in 1921-25, and at 2650 in 1936-40.

d) World War II has reacted very seriously on Italian agricultural production. The scarcity of fertilisers, indispensable when farming poor and exhausted lands, and the losses in land investments and live-stock are three of the principal causes. Of the global loss caused our country by war destruction, estimated at 2,000 milliards of 1945 lire, agriculture accounts for 385 milliards, i.e. 18.4%.

It is however comforting to note that in spite of the severe blows received, agricultural production has almost everywhere revived, and though the prewar levels have not yet been reached, the very low yields obtained in the first post-war years have been exceeded. A considerable improvement can also be noted in the case of consumption.

Anyhow, in 1947 the "agricultural" balance (lire 202.5 milliards for imports (14) against 43.3 milliards for exports) closed with a deficit of 159.2 milliard lire.

It accounted for 40% of total imports, 21 per cent of total exports, and 76% of the global trade deficit.

7. - As these figures show, the second world war has thoroughly disorganised the structure of the Italian balance of payments. Not only has it cancelled or reduced the formerly important invisible items (shipping, tourist expenditures, emigrant remittances), but above all it has greatly increased the deficit on the agricultural balance sheet. In 1947 the deficit on our agricultural trade balance was the most critical feature of our balance of payments. Evidently, therefore, its readjustment is a matter of the utmost importance for the permanent

(14) 1947 imports were heavy for wheat (1.04 million m. t. for a value of 56.2 milliards); maize, 0.48 million m. t. for 5.1 milliard lire; flour and semolina, 0.52 million m. t. for 21.3 milliard lire; live animals, meat, sugar, etc. The most important of the non-food agricultural imports were cotton (40 milliard lire) and wool (31 milliard lire).

righting of our balance of payments and is essential for placing Italian economy on a firm and stable basis.

This readjustment must be made on lines other than those followed in the past, if we are not to retread the dangerous path of autarky; it must be based on the intensification of international trade, especially with those countries that can offer good and steady markets for our products. Production must therefore be directed above all to secure an increase in the volume of our exports.

## II

### E. R. P. help and the development of Italian Agriculture.

8. - Our agrarian policy is directed towards securing a general increase of production.

To obtain this increase we must (a) make changes in the crops raised; (b) introduce a more up-to-date technical and economic organisation of the farming industry; (c) secure a larger supply of instrumental goods and raw materials; (d) make long-term investments in land reclamation and improvement works and in irrigation; (e) develop the lands now under extensive agriculture (latifundia) by increasing the number of small holdings operated by their owners and by co-operative enterprises; (f) give steady and adequate help in the mountain areas.

The action planned calls for far-sighted government action and large long-term investments affecting the land itself and the systems of land tenure, and comparatively small investments which however could yield rapid and important economic results in the agricultural field. Agricultural recovery is therefore dependent on steady action by the Government, above all in the shape of financial help.

The agricultural classes are firmly convinced that the major part of the ECA counterpart fund in Lire should be assigned to agriculture, because:

1) the increase of agricultural production would reduce food imports and would make it possible to increase exports, thus making a great contribution to straightening out the balance of international payments;

2) land-reclamation and irrigation works are the public works most productive of wealth and which absorb large quantities of unskilled labour;

3) the execution of land-reclamation and irrigation works in the South where much of the effort would be centralised, is the *sine qua non* for a general improvement of Italian economic conditions;

4) the agrarian reform which has been promised, and from which noteworthy masses of country people expect more opportunities for work while many believe it will assure the longed-for social peace, cannot be carried out without large financial help from the Government;

5) the rational development of certain crops (fresh fruit and vegetables) and of animal husbandry will supply the basis for a similar development in important branches of industry using the products of the farm, such as the cheese, canning, and packing industries (15);

6) the distribution of the Lira Fund cannot be considered separately from the ordinary budget in which the appropriations made for agriculture are incredibly small.

Before expressing in figures the amount of the help the Government should allocate for agriculture in the form of budget appropriations or by drawing on the Lira Fund of the ERP, I will outline the action to be followed.

#### Fresh Fruit and Vegetable Crops and Animal Husbandry.

9. - Italian agricultural policy should aim above all at increasing the production of fruit and vegetables and at securing a marked increase in all the products of animal husbandry which allow of reducing imports and increasing exports in conformity with the needs of possible consumer markets.

If these objectives are to be attained the present use of farm lands will have to be mod-

(15) The products of the cheese industry and of the canneries for canning and preserving vegetables have always had good opportunities for export. In the years from 1906 to 1914 the annual average exports of cheese and butter stood around 293 million lire, only a little less than the 320 million which was then the average annual cost of importing 1.46 million tons of wheat our country then needed.

ified. Some areas now planted to cereals — wheat and rice—will have to be used for grass in rotation, to allow of keeping more cattle; the marginal beet-crops raised in Northern and Southern Italy will have to be gradually reduced and the land thus made available will have to be planted to legumes and market-garden crops, etc.

*The production of fruit and vegetables may become in time one of the pivotal points of our economy.* There is a tendency the world over to consume more fruit and vegetables rather than cereals, but the consumption is still low in many countries on account of high prices. If incomes rise, it will lead to a marked increase in the consumption of fruit and vegetables even among the poorer classes, and in Italy, and above all in Southern Italy, conditions are ideal for making such exports to European countries.

With the increase of *per capita income*, the Italian-home market will also offer large possibilities for increasing the consumption of such products as the present average Italian *per capita* annual consumption of fresh fruit is very low when compared to that of other countries. Before the war it stood at 30 kg. per annum as against 80 in the United States, 65 in Switzerland, and 39 in the United Kingdom.

*The central problem of Italian agriculture is that of animal husbandry.*

It calls for resolute action both on the part of the Government and of the farmers, for apart from the Valley of the Po and a few limited areas in Central Italy, the livestock on the farms is quite insufficient. The herds and flocks of Italy are scanty, and little progress has been made in the last forty years. If we compare the number of livestock to the productive area, the situation does not look so bad, but if the comparison be made with the population it is very serious indeed.

We have already referred to the responsibility of the wheat self-sufficiency plans for the stationary conditions prevailing in dairy farming, which are due to the limited area assigned to forage crops.

Of course, in order to secure an increase in the number of livestock, steps must be taken

to improve the whole agricultural situation. Apart from the special conditions brought about by the war, it will be necessary to carry out improvements on the farms (stables, water-supplies, haysheds silos, etc.) and make changes in the crop system (permanent meadows, grasslands, etc.) placing a limit on wheat-farming, especially in hill and mountain areas.

Another side of the problem is the mechanisation of the farm, for this means saving forage to be used in raising stock, where it is now lacking, for the production of meat and milk. At bottom, it is a question of investing large amount of capital.

The opportunities for marketing animal products in Italy are excellent, as the present annual *per capita* consumption of meat is very small and in the Southern provinces consists of only a few kilos; and even to meet this small demand large quantities of meat have to be imported.

In this field the Government should help all forms of enterprise, and specially animal genetics and prophylactics. Special help should be given to stock-breeding in Southern Italy, where the need of new forms of farming is most felt.

Permanent results could be attained with less difficulty than is generally thought, provided sufficient energy were displayed. At the beginning of the XIXth century the non-irrigated sections of the Valley of the Po were farmed on much the same lines as the great estates of the South. There too wheat farming was accompanied by a great scarcity of forage, there were few permanent meadows and the quality of the livestock was poor. The introduction of alfalfa led to a renewal of the whole economic system, because it allowed of a great increase in animal husbandry.

#### *Land-reclamation and irrigation.*

10. - Land-reclamation and irrigation may be carried out as public works and paid for in full or mostly by the Government, or they may be carried out by private owners and paid for in full or in part by them. The guiding principles in selecting the works to be executed

should be to concentrate sufficient means on a few large highly profitable reclamation works located in areas where unemployment is rife; and to allocate most of the available funds for completing reclamation works which are already well advanced. It is particularly important to help those land improvement works in which private enterprise is already to some extent engaged (improvement of mountain pasture lands, small irrigation works, the erection of silos for ensilage especially in Southern Italy and the Islands). It would be a very serious mistake if, in order to undertake another public work, private enterprise were discouraged by refusing financial help to those improvement works, which would soon be able to show returns on the capital invested in them, and whose completion requires the assiduous care of the owner who meets approximately two thirds of the cost. Above all it will be possible by a sparing distribution of grants and prudent loans at low rates of interest to help those small and average-sized peasant holdings that are the soundest part of our agricultural structure.

In the lower Valley of the Po, in Central Italy and in the South, there are land-reclamation works that can be completed within four years. The case of the Piana del Sele, in the vicinity of Salerno, shows how productive the southern lands can be when the local resource are fully utilised and when private enterprise puts forth its full efforts. Southern Italy would benefit greatly if a large number of farm buildings were erected, small irrigation plants installed, and the lands levelled and drained.

Of course, before land-reclamation and irrigation works can be undertaken, an impartial estimate of the probable results to be obtained from them must be made, so as to avoid making bad use of precious capital (16).

The data in Table VII give an idea of how vast the problem of Italian land-reclamation is. An area of 9.7 million hectares of land (some 24 million acres) i.e. nearly one third of the whole Italian productive area, is involved, of

(16) On the vicissitudes and results of land-reclamation in Italy see: Report of the Economic Committee of the Ministry in the Constituent Assembly - op. cit. - I. Agriculture, p. 327 and seq.

which 3.6 million ha. in Northern Italy, 1.5 in Central Italy, and 4.6 million in the South and Islands.

TABLE VII  
Estimate of the Situation of Land Reclamation Works in Italy (1947)

Land Reclamation Circumscriptions	Thousands of hectares
(1) Circumscriptions in which land-reclamation works have been carried on	5,977
of which:	
(a) with principal works in course of execution	ha. 3,355
(b) with principal works completed	1,312
(c) " " and works of agricultural development all completed	1,300
(2) Circumscriptions in which no land-reclamation works have been carried out	3,718
Grand total	9,695

Source: PASQUALE SARACENO, *Elementi per un piano economico 1949-52*, op. cit., p. 30.

In the case of irrigation, which is fundamental for the progress of our agriculture, a start was made with a five-year plan in 1947 (17). The total estimated cost amounts to some 120 milliard lire, of which 56 for public works of irrigation, 46 for land improvements, 18 for land-reclamation works connected with the irrigation. The plan applies to half a million ha. of land, being 2% of the whole productive area (Table VIII).

TABLE VIII  
Total Irrigable Area in hectares - Plan for 1947-1951

	Irrigable Areas (new and supplementary to existing irrigated areas)
Northern Italy	337,300
Central Italy	43,380
Southern Italy	86,100
Islands	86,850
Total	552,630

Source: *Annuario dell'economia agraria italiana* - Vol. I - 1947.

#### *Mountain lands.*

11. - The problems connected with mountain lands, which, as we have seen, account

(17) The plan was drafted by the Ministry of Agriculture & Forests and completed by the Special Committee on Land Reclamation.

for one third of the whole productive area, vary from zone to zone, from the Alps to the Appenines, and taken as a whole, they may well arouse dismay. In some parts of the Appenines the situation is extremely grave, as the growing pressure of population on the land makes the hydro-geological conditions progressively worse. Lands continue to be used for arable crops which should be reserved for grazing and for woods, while the population is engaged in a heroic struggle to obtain a bare living from an ungrateful clay soil.

What is required is generously financed action to check the causes that are leading to the physical destruction and consequent depopulation of the mountain areas. This should be done even if, viewed from the strictly economic point of view, such work cannot be considered immediately profitable; the cost of such an undertaking is so great that the contributions made by government will always be small as compared to the urgent needs.

There can be no doubt, however, that the revival of the poorest of these zones depends on securing a better balance between available land and population; only emigration can lead to a return to normal economic conditions. In 1936 on a productive mountain area of 10.7 million hectares more than 9 million people were living, the density exceeding 75 per sq. kilometer!

Of these 10.7 million ha., only 3.7 million were under arable crops, specialised tree and bush plantations, permanent grass; the remaining 7 million hectares were productive only of poor crops.

#### Mechanisation.

12. - Given the lay of the lands—largely hill and mountain—and the prevalence of small peasant holdings, the use of farm machinery is much less advantageous than in other countries and therefore many difficulties stand in the way of the mechanisation of agriculture in Italy. Moreover, we do not find in Southern Italy those small engineering shops which would make it possible for motor-ploughing, for instance, to find the help it needs for successful operation. Nevertheless, it is necessary

that the hard toil of the peasants, especially in the South, be lightened by the use of machinery for the heavier jobs, thus freeing the farmers for more important work.

The mechanisation of agriculture, above all in the South, would be encouraged if a large number of strong, simple, farm machines were put on sale at advantageous prices and if their purchase were facilitated by granting the peasants the usual five year loans, perhaps with some help from the government toward the cost of interest payments.

As a matter of fact the number of tractors available has steadily increased in these post-war years, and it is to be hoped that this increase will continue (Table IX). This need should be remembered when planning measures to favour the industrialisation of Southern Italy by assisting enterprises for setting up industries connected with agriculture.

Number of Tractors in Italy (Thousands) TABLE IX

	1938	1946	1947
Northern Italy . . .	26.6	30.4	41.2
Central Italy . . .	5.9	7.3	7.8
Southern Italy . . .	3.1	4.1	1.6
Islands . . .	1.4	2.0	1.9
Total . . .	37.0	52.8	54.4

Source: *Annuario dell'economia agraria italiana* - Vol. I - 1947.

#### Vocational training of the peasants, experiment-stations, organisation of agricultural producers.

13. - The vocational training of the peasants must be undertaken not only because almost half of the Italian population is agricultural, but also because, when we reflect on the possibilities offered by the application of modern scientific methods to farming, we realise the great value to the country of a more general and up-to-date organisation of agricultural education and propaganda. If the serious decline in the training of the Italian rural classes is to be checked, the requisite organisations must be set up and financed.

Anyone who has thought about the question of agricultural experimental work and who

has visited the experimental-stations of many countries, cannot but be convinced that Italian agriculture has great need of being provided with adequate means for taking up this work again and that it should be eminently practical in its character. Its purpose should be to facilitate the work of the farmers in applying new agricultural methods.

The organisation of agricultural producers was a matter that claimed attention towards the end of last century, when some serious pests imported from abroad attacked our cultivated plants. There then arose the first associations of producers and the first co-operative societies, voluntary organisations formed to control the ravages caused by insect pests and plant diseases, to encourage the improvement of seeds and livestock, to select the varieties best suited to each condition of climate and soil, to organise marketing more especially of products for export, etc. All these are tasks that experience has taught the agriculturists to deal with themselves through their own organisations, rather than leave it to the government. After a parenthesis during which these services were forcibly bureaucratized, there is a revival of the desire to deal with them through new means which will rely on the voluntary efforts of the parties concerned.

But the formation of this new organisation cannot be left exclusively to private enterprise; it must be assisted and guided by the Government. Therefore measures should be taken to establish, and foster a close collaboration between: 1) itinerant advisory experts; 2) agrarian associations; and 3) producers' associations. To the first should be assigned the specific tasks of training and giving advice on farm practice and economics; to the second, commercial tasks such as purchasing fertilisers, seed, machinery, etc.; and to the third, the technical and marketing operations relating to production.

#### The problem of agricultural credit.

14. - The references made to the financial means required for the solution of the principal problems dealt with (intensifying the cul-

tivation of the more valuable crops, the increase of farm equipment, the formation of small holdings operated by their owners, land improvements, etc.), have already called attention to the serious nature of the present situation of agricultural credit in Italy.

Many farmers now find it quite impossible to finance their ordinary cycle of operations, to provide themselves with the necessary live and dead stock, and to carry out useful works even on a small scale, because the agricultural credit institutions are unable to provide them with the necessary credit on reasonable terms. The problem is not a new one (18), and undoubtedly many difficulties stand in the way of its solution on a national scale; but the present situation is the consequence of Government policies which, to meet emergency needs which can be readily understood, absorb too large a share of national savings directed towards uses of doubtful economic value, leaving whole sectors of vital importance uncovered and unprovided for.

#### Extent of the help required by agriculture.

15. - The purpose of the figures I give for the amount of the financial help needed by Italian agriculture is that of affording a guiding idea which will allow of appreciating the comparative position of agriculture in relation to the Italian economy as a whole with a view to assuring a fair distribution of Government help.

First of all, it would be necessary in the course of the next four years to raise the estimates of the Ministry of Agriculture and Forests which—taking as basis the pre-war figures amounting as a general rule to a sum considerably above one milliard lire per annum—should now stand at a yearly sum of 50 milliards to be allocated in favour of a systematic action of the Ministry's services which should be brought up to a high level of efficiency (19).

(18) Report of the Economic Committee, op. cit. - IV - Credit - I, p. 254 et seq.

(19) Thus the services of Agricultural Inspection (decentralised bodies) should be provided with the necessary means for performing their duties without being hampered by distress.

When the national budget has thus provided for placing on a normal basis the ordinary services for agriculture, the special program for agricultural reconstruction to meet present emergency needs will have to be financed.

To carry out this program it should be possible during the next four years to draw on the *ECA counterpart Fund in Lire for amounts of not less than 160 milliard lire per annum*. We have made this estimate in consideration of the great number of problems that have to be settled, especially in Southern Italy, and of the need of planning an efficient agrarian policy, bearing in mind that the American help is given to assure full economic development. At home this development is to be promoted by the reconstruction of instrumental goods and by reorganisation to allow of lower costs by con-

ing limitations. An efficient plan of vocational training would require at least 3 milliard lire per annum; the experiment stations services should be provided with at least 5 milliards; and from 7 to 10 milliard lire would be required for encouraging animal husbandry and the mechanisation of the farm; etc.

cerns specialising in those lines of production suited to the conditions prevailing in the country; in external relations development will be assured by coordinating our national economy with those of other countries, so as to assure through more active international trade relations, a marked and lasting increase of national income.

And here it is well to remember that the recovery of agriculture will require the recovery of the balance between agricultural and industrial activities in the allocation of the E.R.P. help and in other fields. As Italian agriculture must once more follow the traditional policies which lead it to endeavour to intensify international trade exchanges so as to free itself from the yoke of autarky, so also industry must give up those high protection policies based on the desire to safeguard special interests, which have often induced it to absorb all the financial assistance the Government can give, using it for its own-exclusive advantage.