

RESTRICTED

Report No. E.A. 51-a

FILE COPY

RETURN TO
REPORTS DESK
WITHIN
ONE WEEK

This document was prepared for internal use in the Bank. In making it available to others, the Bank assumes no responsibility to them for the accuracy or completeness of the information contained herein.

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

CASSA PER IL MEZZOGIORNO AND THE ECONOMIC DEVELOPMENT OF SOUTHERN ITALY

May 20, 1955

Department of Operations
Europe, Africa and Australasia

Conversion Rates for Italian Currency

U.S. \$1 = Lit. 625

Lit. 1 = U.S. \$.0016

Lit. 1,000,000 = U.S. \$1,600

TABLE OF CONTENTS

	<u>Page</u>
Summary and Conclusions	1
Introduction	1
Background	1
The Cassa Program	2
Progress of the Program	5
Economic Effects of the Program	8
Productivity of the Program.....	10
Financial Aspects	14

Summary and Conclusions

1. Italy is a country of sharp contrasts. The North is on the whole economically well developed with prosperous industries and agriculture and its population of about 30 million enjoys a relatively comfortable Western European standard of living. On the other hand, Southern Italy is badly underdeveloped, its agriculture on which most of the population depends suffers from low productivity, unemployment and especially underemployment are widespread and the income per head of its 18 million inhabitants is less than half that of the North.
2. With the view of improving the living conditions in the South, the Italian Government launched an extraordinary ten-year public works program in 1950 for the economic development of Southern Italy and established the Cassa per il Mezzogiorno to carry it out. As originally conceived, the program would increase the productivity of southern agriculture, improve and enlarge transportation facilities and raise the health and sanitary standards in the area. To achieve these ends, the Cassa was allotted a total of Lit. 1,000 billion over a ten-year period, on an average of Lit. 100 billion annually. The program has since been extended to a twelve-year period and its financial resources increased to Lit. 1,280 billion. Even more important, however, has been the entry of the Cassa into the sphere of extending financial aid to industry and power in recognition of the fact that balanced economic growth requires industrial as well as agricultural development.
3. During the first two years of its operations, the Cassa encountered a number of successive difficulties which greatly retarded the progress of the program. Although under great pressure to spend all the appropriated funds, the Cassa refused to approve projects before it was fully satisfied with their economic and technical merits. By now, most of the major difficulties have been overcome and as of June 30, 1954 contracts were awarded for almost one-third of all the funds to be appropriated to the Cassa. While the physical progress under the Cassa program has been considerable, the works completed thus far cover only a small fraction of the established goals.
4. The stimulation which the Cassa has provided to the economy of the South far transcends its own physical achievements and certainly represents up to now by far the most important contribution it has made to the changing economic climate of the South. During 1953/54 investments under the Cassa program reached Lit. 150 billion and accounted for more than one-third of the over-all investment activity in the South and for nearly half of public investments in the area. It is estimated that some 200,000 additional jobs were created as a result of the Cassa program.
5. The execution of the Cassa's public works, and especially the previously mentioned encouragements to private industry, have already had a favorable effect on the industrialization of the South. It is estimated that during the past four years a minimum of Lit. 200 billion have been invested by some 1,750 firms in either expanding existing industrial plants or launching new ones in the South. The estimated annual normal operating manpower requirements of these firms are in excess of 90,000 workers. The range of industries covered by this expansion is very broad, with primary emphasis, however, being placed either on

investment materials required to carry out the development program in the South, such as cement, or on the processing of the increased output of raw materials in the area, for example paper, oil pressing and sugar refineries.

6. Among the most readily discernible effects of Cassa operations on the economy of the South during the past four years has been the widespread rise in living standards within the area and the accumulation of increased stocks of capital goods by individual producing units, especially in agriculture. Consumption of many goods and services in the South has increased perceptibly between 1950 and 1953 and its increase has generally been greater percentage-wise than in the rest of the country. Although the South has been the chief beneficiary of the Cassa program, as was originally intended, the rest of the country has also felt its beneficial effects in the form of increased demand for investment and consumption goods. As a result of this, many of the leading northern industrialists and financiers who were somewhat skeptical about the Cassa prior to its inception are now enthusiastic about the outcome and are actively cooperating in the economic development of the South by establishing branch plants there.

7. The Cassa program is primarily one of public works whose aim is to improve the productivity of southern agriculture, help create an economic climate favorable to the general development and industrialization of the South, and lead to the improvement of the living standards of its population. As a consequence, the character of the Cassa's investments has been dictated by their long-run contributions to the output, employment, and living standards of the region. In the case of agriculture, which is the mainstay of the Cassa program, it is estimated that annual net output will rise by roughly Lit. 135 billion and permanent employment by about 280,000 full-time farm jobs. In the final analysis, the productivity of the entire Cassa program, just as its economic effects during the first four years of operation, must be measured not only by its productivity within the several sectors but mainly also in terms of its contribution to the over-all economic development of the South and of the rest of the country. During the past four years only a small fraction of the Cassa physical goals were attained; nevertheless, the contribution of the Cassa to the changing economic climate of the South and to the growth in the national income of Italy has been very considerable. In the same manner, the increased employment and output in agriculture resulting directly from the completion of Cassa works is likely to be only a small part of its over-all permanent achievements. Its contribution to expansion of the market through rising incomes, to increased transportation facilities and to sizeable private investments in industrial enterprises may yet turn out to be its greatest permanent accomplishment.

8. The financial resources of the Cassa are provided by the budget. However, the carrying out of the Cassa investments in a non-inflationary manner is, of course, directly related to the state of Italian public finances and to the capacity of the capital market to absorb government loans. While tax revenues have been rising and the capital market has been supplying the Treasury with increasing sums, resort to new money creation has become necessary. Although this monetary expansion does not appear to have exerted any significant inflationary pressures on the domestic price level, it has served to emphasize the need to import capital into Italy if the increased level of public investment is to be sustained.

9. While in the present Italian situation the Cassa is a definite burden on public finances, it is not without potential rewards. If adequate cognizance is taken of the stimulus the Cassa provides to various parts of the economy and of its contribution to the recent increases in national income, the immediate as well as the long-run costs of the Cassa program should not be too burdensome on the public finances of the country. Provided that the Treasury can borrow the necessary capital at home and abroad for financing the Cassa programs from non-inflationary sources, it should be in a position to service the loans from increased tax revenues, at the same time financing a development program which increases considerably the national income and national wealth of the country.

10. There is little doubt now that the Cassa program is an appropriate vehicle for the economic development of Southern Italy and a healthy influence on the rest of the country. This view is now fully shared not only by Italian public authorities, but also by some of the most prominent Italian industrialists, financiers and economists.

Introduction

1. This report is an economic appraisal of the over-all Cassa per il Mezzogiorno program, its suitability as an instrument of economic development for Southern Italy, and the total effect of the program on the Italian economy. The report evaluates the over-all Cassa development program both in terms of the elapsed four years of its activities as well as on the basis of the projected over-all twelve year goals.

Background

2. Italy is a country of sharp contrasts. The North, where 30 million persons live, is relatively well developed economically with flourishing industries and a generally prosperous agriculture. On the other hand, the territory lying south of Rome (including the islands of Sardinia, Sicily and Elba), with a population of 18 million, has remained badly underdeveloped. Many reasons account for this basic difference including those of geography, climate and history. Northern Italy, and especially the north-west part, lies adjacent to some of the most prosperous countries of Western Europe, while the South has found itself geographically isolated from the main centers of economic development. Similarly, the North enjoys a central European type of climate, while the very dry climate of the South has resulted in low per capita agricultural output in an area where the population is mainly dependent on agriculture. An equally important factor in the differential rates of growth of the two parts has been the difference in their political and social heritages. The growth of a commercial and industrial civilization in the North, with its emphasis on enterprise and innovations, contrasted sharply with the feudal structure which evolved in the South under the kingdom of Naples and Sicily and which existed from the time of the Middle Ages until Italian unification less than a century ago.

3. The great disparities between the North and the South may be readily seen from a comparison of some major economic indicators for the two areas. In the industrialized North, 39% of the labor force is employed in industry and transport, while 37% is in agriculture; in the underdeveloped South the respective percentages are 27 and 54, with much of the farm labor falling in the category of a surplus agrarian population. Furthermore, the average yield per hectare of such a staple commodity as wheat is 20 quintals in the North and only 10 quintals in the South, largely because of the persistence of primitive farm techniques. This situation has resulted in the average real income per head in the South being less than half of that of the North, and while only 3% of the population in the North is estimated to live below the "poverty line," fully 27% is in this category in the South. The low level of income in the South has naturally limited demand for the products of Italian industries, thereby aggravating the problem of industrial unemployment throughout Italy.

4. Once postwar reconstruction was completed, the major social and economic problem facing Italian authorities was that of persistent serious unemployment throughout the country and the continuing underdevelopment of the South with its concomitants of underemployment and poverty. Moreover, as a result of past population trends, the outlook was disquieting. This was particularly so for Southern Italy, where the labor force was increasing

by 140,000 a year, more than twice as fast as in the rest of the country. With emigration prospects being limited at best to 125,000 annually for the country as a whole, a further growth in unemployment appeared unavoidable unless appropriate measures were taken.

5. Confronted with this situation, the Italian Government resolved to increase the level of public investment in the form of a ten-year development program for the South. The major objective of this program was to raise the productivity of land and labor and to eliminate the economic waste of unemployment and underemployment. It was felt that an increase in the productivity of land and labor in the South would not only raise living standards within the region, and subsequently lead to its industrialization, but would also immediately help reduce unemployment in the North by stimulating demand for its industrial products. The Italian authorities placed primary emphasis on the development of a healthy and prosperous agriculture as a prerequisite for the development of the entire region, an emphasis similar to that contained in various general survey mission reports sponsored by the Bank for underdeveloped countries. With a view to providing a degree of coordination and continuity which could not be achieved by the regular ministries, the Government entrusted the execution of the program to a new agency, the Cassa per il Mezzogiorno.

The Cassa Program

6. The Cassa per il Mezzogiorno was established by Law No. 646 in August 1950 as an agency of the Italian Government to carry out the "Ten Year Plan for the Economic and Social Development of Southern Italy." The legislation which established the Cassa, also provided in effect for an average annual appropriation in the budget of Lit. 100 billion (\$160 million) during the ten-year period to cover the financial costs of the development plan, and roughly delimited the area of Cassa activities to the territory on the mainland lying south of Rome as well as to the islands of Sardinia, Sicily and Elba. The main scope of Cassa operations is in the field of agriculture, including the construction of reclamation, irrigation, flood and erosion control public works, and the granting of subsidies for the stimulation of private land improvements within the reclamation districts. In addition, the Cassa is charged with improving existing roads and building new ones, improving railroads, and with building aqueducts and sewers. Lastly, it is empowered to improve and expand tourist facilities and attractions, and to promote to a very limited extent industries handling and processing agricultural products.

7. The Cassa operates under the direction of a Committee of Ministers for the South, under the chairmanship of Minister Campilli, who has occupied this position continuously since 1950. This Committee laid down the broad outlines of the Cassa ten-year program and allocated funds among the several economic sectors. By and large the allocation of funds was made on the basis of studies prepared by SVIMEZ,^{1/} an independent and competent research organization, on the degrees of economic and social depression in the several

^{1/} SVIMEZ is the abbreviation for Associazione per lo Sviluppo dell'Industria nel Mezzogiorno (Association for the Industrial Development of Southern Italy) largely supported by contributions of Italian industrialists.

southern regions and the best means of alleviating these conditions. These allocations were intended to indicate the general magnitudes of the works which would be carried out by the Cassa in the different sectors of the economy and were not in any sense firm commitments. Even the size of the total program may be changed subject to the state of public finances and other considerations. One such change has already taken place in an amendment to the Cassa law of July 1952, which extended the extraordinary public works program from ten to twelve years and increased its funds from Lit. 1,000 billion to Lit. 1,280 billion. In allocating the additional funds the Committee of Ministers increased allocations to most of the sectors, particularly to reforestation and soil erosion control and included railroad construction works as a new sector in the program.

8. Allocation of funds by sectors in the two plans is given below. While this official classification provides a useful tool for analysis, considerable overlapping exists among the sectors. Thus some road construction is included under "Land reclamation" and under "Tourism." Similarly, aqueducts for Ischia and Capri are included under "Tourism."

The Ten-Year and the Twelve-Year
Cassa Plans

(allocation of funds by sectors in billions Lit.)

	Original Ten-Year Plan		Revised Twelve-Year Plan		Increase	
	Amount	%	Amount	%	Amount	%
Land reclamation, irrigation and improvement (incl. reforestation and soil erosion control within reclamation areas)	440.0	44.0	466.5	36.4	26.5	6.0
Reforestation and soil erosion control (outside of reclamation areas)	50.0	5.0	163.5	12.8	113.5	127.0
Land improvement on farms assigned under the Agrarian Reform	280.0	28.0	280.0	21.9	0	0
Roads	90.0	9.0	115.0	9.0	25.0	27.8
Aqueducts and sewers	110.0	11.0	150.0	11.7	40.0	36.4
Tourism	30.0	3.0	30.0	2.3	0	0
Railways	-	-	75.0	5.9	75.0	-
Total	1,000.0	100.0	1,280.0	100.0	280.0	28.0

Over 70% of the funds provided by the Twelve-Year Plan are allotted to agriculture (the first three items in the table). The agricultural works include land reclamation, irrigation, land transformation from extensive to intensive cultivation by means of various types of improvements, reforestation and erosion control. It also covers the land improvement expenditures on farms newly established by the Ministry of Agriculture in accordance with the land reform law, and some plants for handling and processing farm produce.

9. The investment envisaged in the agricultural sector is expected to benefit in varying degrees about 40% of all the agricultural and forestry area of the South or some 4.4 million hectares of land, of which about 10% would be eventually irrigated. The actual works include the construction of some 5,000 km. of access roads in reclamation areas, a variety of drainage and irrigation works and thousands of farm houses and such other farm structures as barns, silos and warehouses. The expanded reforestation and soil erosion control program calls for the planting of some 230,000 hectares or nearly 20% of all woodlands in the South, some of which must also be terraced. The road program includes the improvement of some 8,000 km. of provincial roads and the construction of 3,300 km. of new roads which will increase the highway network of the South by about 8%. The aqueducts once completed would supply about 15 million persons, or most of the people in the South, with adequate drinking water. The railroad program will increase capacity by building longer sidings and electrifying a number of main southern railways. Lastly, the investments in tourism foresee improved facilities in the form of better roads and improved water supplies, as well as a variety of archeological excavations and other attractions.

10. While the primary emphasis in the Cassa program is on public works, especially those public works which contribute directly to the improvement of the physical environment of southern agriculture, a separate law of March 22, 1952 greatly extended the Cassa's sphere of activity in the over-all economic development of the South. This law recognized that an adequate and satisfactory change in the structure of the economy of the South, would require more than just an accelerated extraordinary public works program and it empowered the Cassa to enter the field of financing industrial enterprises for the economic development of the South. For this purpose the Cassa was empowered to lend Lit. 50 billion of its own funds plus any amounts it managed to borrow in the domestic market as well as from abroad. It was in line with this new approach that the Cassa contracted the two IBRD loans of \$10 million each and reloaned the proceeds of the first loan to expand private industry and of the second loan to increase the hydro power generating capacity in the South. The importance of this law far transcends its specific authorization and lies in the basic recognition that the solution of the problem of the South requires the creation of a favorable climate for industrial growth. Consequent upon this realization, not only were credit facilities for industry and power augmented, but a variety of inducements were offered to Italian and foreign businesses to make investments in the South. Foremost among these inducements are tax and tariff concessions. In Sicily, for example, the regional authorities passed a petroleum law which has encouraged a number of foreign oil companies to undertake explorations which have already met with some success and hold out considerable promise for the future.

Progress of the Program

11. Cassa operations got off to a very slow start. As so often happens with extensive investment undertakings, they encounter a number of successive difficulties which cannot be fully foreseen in the preparation of blueprints. The problem of organizing and staffing a new para-statal organization of such size took longer than anticipated. Once this was achieved, the Cassa personnel soon discovered that in many of the projects it was expected to finance, especially in the vital agricultural sector, much detailed technical preparation remained to be done. In many instances the regional associations of landowners or other bodies with which the Cassa was supposed to work were either poorly staffed or practically non-existent. A good deal of time was thus spent in the administrative and technical review of various projects before contracts could be awarded. Even at this stage, however, difficulties were encountered, primarily because bidding was originally limited to southern contractors, whose prices were on the whole high. Finally, the contracting firms which won the contracts experienced difficulties in obtaining the necessary equipment and machinery, a serious cement and steel tube shortage developed in the summer of 1952, and an unexpected dearth of skilled and semi-skilled workers has confronted the implementation of the works. The Cassa tackled each problem as it arose and, in general, has done a satisfactory job of over-coming these difficulties. Surprisingly enough, however, in a country with unemployment like Italy, the shortage of skilled workers has persisted.

12. Needless to say, the pressures on the Cassa were very great to limit its review of the projects, in order that it could spend the funds at its disposal and thereby create direct employment opportunities in the South and indirect ones in the rest of the country. Not wishing to proceed without being fully satisfied with the economic and technical merits of its works, however, the Cassa appears to have adopted the general policy of approving and launching the relatively simple works in the field of drainage, reforestation, aqueducts and road improvement and construction, at the same time delaying the approval of the more complex works, especially in irrigation. During its first four years of operations ending June 30, 1954, the Cassa processed investment applications in the total amount of Lit. 605 billion. In the course of screening, some applications were rejected, others were revised and a total of Lit. 464.5 billion was approved. As a result, the Cassa entered into formal commitments for projects amounting to Lit. 411 billion, of which contracts were let for Lit. 403 billion. The number of works for which contracts were awarded by the end of the fourth fiscal year and the amounts involved in each sector are given in detail in the table below. The magnitude of work involved is indicated by the nearly 33,000 separate contracts which had to be awarded.

Contracts Awarded^{1/}
(June 30, 1954)

	<u>Number</u>	<u>Amounts</u> <u>Millions of Lire</u>	<u>% of allocations in</u>	
			<u>Original</u> <u>Plan</u>	<u>Revised</u> <u>Plan</u>
1. Land reclamation	1,449	140,756 ^{2/}	36.4 ^{3/}	34.3 ^{3/}
2. Reforestation	850	28,462	57.1 ^{4/}	17.5 ^{4/}
3. Aqueducts and sewers	473	57,121	51.9	38.1
4. Roads	1,175	82,172	91.3	71.5
5. Tourism	120	8,020	26.7	26.7
6. Railroads	82	21,516	-	28.7
Total (1-6)	4,149	338,047		
7. Private land improvements	28,637	64,935 ^{2/}		
8. Mountain pastures	68	228 ^{2/}		
Total (1-8)	<u>32,854</u>	<u>403,210</u>		

- ^{1/} Exclusive of land improvements on farms under the Agrarian reform program.
^{2/} Includes private share of projects.
^{3/} Includes 30% of item 7 as Cassa liability.
^{4/} Includes 40% of item 8 as Cassa liability.

13. Thus by the end of the fourth fiscal year contracts were awarded for almost one-third of all the funds which are to be appropriated to the Cassa during the twelve-year period. The lags between project approvals and contract awards, which developed during the first two years of Cassa operations, have now been considerably narrowed. On the other hand, as the character of the projects has become more complex - a shift from drainage works to large-scale irrigation works and from road improvements to new road construction -- the screening and approval of projects has been taking longer. Nonetheless, the Cassa appears to have greatly simplified the previous bureaucratic procedures for approval of public works by reducing the number of steps from thirty to twelve, without impairing the fundamentals of screening. The Cassa now permits bidding by qualified Italian contractors even though they are not located in Southern Italy and appears to have succeeded in overcoming the reluctance on the part of many established construction firms to bid on its works. In this manner it has not only achieved substantial economies but has also assured itself of high grade performance.

14. The difficulties encountered by the Cassa in the course of its operations and the policies it adopted to cope with them have greatly affected both the rate at which physical progress could take place as well as the nature of the works which could be completed. Because the construction period averaged over two years, the works actually completed by the Cassa as of the end of the fourth fiscal year amounted to only Lit. 108 billion, or slightly in excess of one-quarter of those contracted for during the period.

Works Completed ^{1/}
(June 30, 1954)

<u>Sectors of intervention</u>	<u>Millions of Lire</u>	<u>% of allocations in</u>	
		<u>Original</u> plan	<u>Revised</u> plan
1. Land reclamation	32,308	8.9 ^{3/}	8.3 ^{3/}
2. Reforestation	5,514	11.0	3.4
3. Aqueducts	9,990	9.1	6.7
4. Roads	37,437	41.6	32.6
5. Tourism	1,812	6.0	6.0
Total (1-5)	87,061		
6. Private land improvements	20,834 ^{2/}		
Grand Total (1-6)	<u>107,895</u>		

1/ Exclusive of land improvements on farms,
under the agrarian reform program.

2/ Apparently inclusive of the private share.

3/ Includes 30% of item 6 as Cassa liability.

15. In the agricultural sector, which is most important both from the standpoint of money allocated to it and from its contribution to the over-all goals of the Cassa, the works completed thus far include 290 km. of diversion channels with necessary embankments and regulators, 482 km. of drainage canals and five drainage pumping plants with a power capacity of 1,412 kw. A land area of 17,945 hectares has already been drained by these works. In the field of irrigation, seven branch canals with a capacity of 21,700 liters/second were completed and 152 wells were drilled to tap subterranean waters. An irrigation network of 871 km. was built as a result of which nearly 30,000 hectares were irrigated in the summer of 1954. A total of 1,498 km. of new rural roads was built and 168 km. of rural roads were improved with the view of making the land more accessible. At the farm level, an estimated 8,600 houses and 19,000 other farm structures, including silos, warehouses and barns were built. In the mountains, some 21,365 hectares were reforested of which 5,164 hectares had also been terraced, and an additional 943 hectares were converted into grazing lands. In the littoral zones, 3,148 hectares were planted with trees to stabilize the dunes and act as wind breaks.

16. The sector of greatest physical progress is that of road improvement and construction. Some 7,670 km. of provincial roads have been improved and this part of the program is virtually complete. New roads have also been built to the extent of 1,700 km. On the other hand, the aqueduct works completed are only a fraction of the total and supply drinking water to less than 1 million persons. In the field of tourism, a number of archeological excavations have been carried out at Pompeii and elsewhere, several historic structures have been restored and 38 km. of sightseeing roads were built. While the physical progress under the Cassa program has been considerable, the works completed thus far cover only a small fraction of the established goals.

Economic Effects of the Program

17. The stimulation which the Cassa has provided to the economy of the South far transcends its own physical achievements and certainly represents up to now by far the most important contribution it has made to the changing economic climate of the South.

18. The intended investments of the Cassa of roughly Lit. 100 billion a year had a double objective - an immediate increase in the level of employment on the various works and a subsequent rise in the output of southern agriculture which would establish a firm basis for a permanent increase in job opportunities. The Cassa investments loomed large indeed in relation to the over-all level of investment in the South and they were expected to provide the necessary push to send the economy of the South on the road to development. However, for reasons already mentioned, Cassa operations got off to a slow start and less than Lit. 50 billion were invested during 1950/51 and 1951/52. It was only in the third and fourth years of Cassa activities that investments under its program reached Lit. 110 billion and Lit. 150 billion,^{1/} respectively, (see table below) and became a very important factor in the over-all economic situation. It is estimated that Cassa investments now account for more than a third of the over-all investment activity in the South and for nearly half of public investments in the area.

Estimate of Real Investment During
the First Four Fiscal Years in Connection with the Cassa Program^{1/}
(millions of Lit.)

Sectors	Investments			
	1950/51	1951/52	1952/53	1953/54
1. Agriculture:				
Land reclamation	1,465	12,085	30,270	36,736
Reforestation	614	1,968	6,345	7,204
Private land improvements	5	4,690	16,657	22,686
Land improvement on farms assigned under the Agrarian Reform	700	6,500	19,300	33,700
2. Roads	104	14,199	23,580	20,434
3. Aqueducts and sewers	122	2,874	8,619	12,234
4. Tourism	7	567	1,465	1,993
5. Railways	-	-	76	3,334
Total	3,017	42,883	106,312	138,321
6. Industrial initiatives	-	800	4,000	12,150
Grand Total	3,017	43,683	110,312	150,275

^{1/} This includes the privately financed share under the Cassa program of roughly 10%.

19. The economic effects of Cassa operations have already proved very significant to the Italian economy and especially to the South. The carrying out of the Cassa works has recently directly provided about 140,000 full-time jobs. In addition, the need to produce and transport various construction materials, machinery and equipment for the Cassa works and to satisfy the increased demand of the newly employed workers for a variety of consumers goods, has been responsible for the employment of an additional 50,000 persons throughout the country. If consideration is also given to lands already transformed from extensive to intensive agriculture or from dry to irrigated farming with the resultant increase in manpower requirements, the total rise in employment opportunities is in the neighborhood of 200,000 or roughly 15% of the unemployed in Italy. In reality, of course, a good deal of this additional employment was distributed among large numbers of underemployed and therefore the actual reduction in the unemployed was much smaller. The income created as a result of this additional employment is in the order of magnitude of approximately 2% of the Italian national income.

20. The execution of the Cassa's public works, and especially the previously mentioned encouragements to private industry, have already had a favorable effect on the industrialization of the South. It is estimated that during the past four years a minimum of Lit. 200 billion have been invested by some 1,750 firms in either expanding existing industrial plants or launching new ones in the South. The estimated annual normal operating manpower requirements of these firms are in excess of 90,000 workers. The range of industries covered by this expansion is very broad, with primary emphasis, however, being placed either on investment materials required to carry out the development program in the South, such as cement, or on the processing of the increased output of raw materials in the area, for example paper, oil pressing and sugar refineries. Many other industries, including plastics, bricks and tiles, prefabricated building materials, woolen mills and chemicals, have been launched in the South. The case of the new fertilizer plants locating in the South is of particular interest since it both reflects the already increased demand for the product in the South as well as the anticipations of a further expansion in the market as a result of the modernization of agricultural techniques stimulated by the Cassa. The application of larger quantities of fertilizer should contribute to the realization of the goals of increasing output in southern agriculture.

21. Among the most readily discernible effects of Cassa operations on the economy of the South during the past four years has been the widespread rise in living standards within the area and the accumulation of increased stocks of capital goods by individual producing units, especially in agriculture. Consumption of many goods and services in the South has increased perceptibly between 1950 and 1953 and its increase has generally been greater percentage-wise than in the rest of the country, as the following table indicates.

Percentage Increase
1950 - 1953

<u>Item</u>	<u>North</u>	<u>South</u>
Electricity (subject to tax)	34.7	42.5
Subscription to telephones	52.0	59.9
Licences for radios	49.2	68.4
Animals slaughtered	15.4	22.6
Attendance at movies	45.8	61.3
Motor vehicle registration	52.6	68.3
Motor scooter registration	206.4	378.0
Tobacco	9.8	5.6

22. Another factor in the rising living standards of the South, but one that is much more important in its significance for the future of southern agriculture, has been the increased use of nitrogenous fertilizers by 65% and of ownership of tractors by 98%. All told the Cassa program and the related development activities in Southern Italy have already had a very salutary effect on the living standards of large numbers of persons within the area.

23. Although the South has been the chief beneficiary of the Cassa program, as was originally intended, the rest of the country has also felt its beneficial effects. It is estimated that more than a third of the expenditures in the South have found their way North in the demand for either investment or consumption goods. The demand for 1,300,000 tons of cement, for 250,000 tons of cement pipes and for 60,000 tons of iron and steel tubes was satisfied to a good extent by northern industries, especially prior to the expansion of cement production in the South. Practically all the earth moving machinery and other construction equipment as well as many of the industrial and power installations were manufactured in the North. Lastly, the increases previously cited of tractors, motor vehicles, motor scooters, and of a variety of consumers goods, served as a stimulus to industrial production and employment in the rest of the country as well as in the South. Thus, as anticipated, development of the southern economy, has not only benefited the South, but also the North. As a result of this, many of the leading northern industrialists and financiers who were somewhat skeptical about the Cassa prior to its inception are now enthusiastic about the outcome and are actively cooperating in the economic development of the South by establishing branch plants there.

Productivity of the Program

24. The Cassa program is primarily one of public works whose aim is to improve the productivity of southern agriculture, help create an economic climate favorable to the general development and industrialization of the South, and lead to the improvement of the living standards of its population. As a consequence, the character of the Cassa's investments has been dictated by their long-run contributions to the output, employment, and living standards of the region. The Cassa program represents the use of public funds for the

purpose of "opening-up" a region and making it possible for the people to make better use of its resources as well as of their own labor. In order that the individual farmer can shift from extensive to intensive agriculture with the resultant increases in employment and output, the large drainage and irrigation works must first be built. Similarly, an adequate highway and railway network is essential if economic activities are to expand and flourish. Improvements in tourist attractions and facilities are required if more travellers are to be accommodated. Better standards of health and sanitation require a good water supply and sewerage system, and lastly, protection of life and property from the ravages of floods requires extensive reforestation and erosion control works.

25. The road and railway programs are designed to improve and enlarge the transportation facilities of the South in line with the anticipated over-all development of the area. The road program increases the road network of the South by about 8% and appears on the whole to be justified by the recent increases in motor vehicle registrations and traffic volume. Some of the new roads will reduce distances, as in the case of the Rome to Naples coastal highway, while others will help open up the hinterland and increase marketing prospects. As for the road improvements, consisting largely of surfacing and the widening and reduction of curves and grades, it is roughly estimated that a net economy in motor vehicle operating costs will range from about Lit. 8 billion in 1955 to about Lit. 15 billion in 1962. Thus from the standpoint of the economy as a whole, the road program should prove very beneficial. The railway program seeks to increase the capacity of several main lines in the South by general improvements and by electrification. The bulk of the funds are earmarked for increasing the capacity of the railway from Naples to the Strait of Messina and for the completion of the electrification of the Foggia to Naples line, whose traffic densities are expected to double by 1962 and attain the present national average. The combined expansion in the road and railway networks should enable them to cope with the traffic requirements of the South during its early stages of industrialization. The aqueducts will supply a population of about 15 million with adequate supplies of clean drinking water and thereby improve health and sanitation conditions. The expenditures on tourist facilities and attractions should benefit not only the region, but also the foreign exchange position of the country as a whole.

26. The Cassa works in the agricultural sector are the mainstay of the current development program. While they are also largely in the category of public works, they are designed to induce private land improvements and therefore raise a number of issues not present elsewhere in the program. To begin with, the Cassa generally requires that private landowners, whether of a commercial or owner-cultivator type, contribute on the average 10% of the cost of the public works benefiting their lands. Thus the reclamation roads, the drainage works and the large irrigation dams become in part a charge on the private farmer. Moreover, the Cassa requires that private land improvements, in the form of barns, silos, wells and farmsteads, be carried out side by side with the public works for the purpose of shifting from extensive to intensive farming, and subsidizes such improvements to the extent of about 30% on the average as well as extends the necessary credit facilities. Consequently, the private farmer, both the absentee owner and the owner-cultivator, must make a substantial investment before he can benefit from the increased output on his land. The amount of this investment and the return the farmer

can expect depend in large measure on the location of his land and whether it is to be irrigated or merely to be transformed from extensive to intensive dry farming.

27. The Cassa agricultural program affects some 4.4 million hectares, of which only about 10% is expected to be eventually irrigated.^{1/} Detailed estimates have been made of output before and after irrigation. These are based on extensive sample data available and realistic levels of forward prices for products have been assumed. The estimates are considered to be as reliable as can be expected for calculations of this nature although they are naturally subject to a fair margin of error. They show that, in general, irrigation is a profitable investment for the farmer, and is especially profitable if the farmer is located in an area where citrus can be grown. Taking into consideration all monetary fixed and working capital costs incurred by the farmer, (including imputed wages of unpaid family labor in the production stage) the return on his investment on ordinary irrigated farms may be very roughly estimated at 16% and on irrigated lands under citrus, which cover only about 10% of irrigated areas and 1% of the total area to be transformed, at roughly 53%. On the other hand, the changeover from extensive to intensive dry farming which covers about 90% of all areas to be transformed is much less attractive because of the generally poor land. For the absentee owner whose wage bill goes up in proportion to increased output, the estimated return is roughly 7% on his investment. Nearly half of this acreage is estimated to be in the hands of owner-cultivators, however, and to them the low return does not appear to be a serious matter. If unpaid family labor is not counted as a financial cost, the return on investment rises to about 18%. The owner-cultivator is not concerned about what the labor would cost him if he had to hire it; his primary interest is the increased net output which results from a more intensive utilization of his own and his family's labor.

28. On the remaining half of the dry farming areas where a simple cost calculation is likely to prevail, the 7% return may not be sufficiently attractive. It is still, however, highly conjectural what will happen in individual cases. Some of the lands, of course, carry a return above the average and the absentee owners may find it adequate to proceed with land transformation. Other absentee owners have mixed holdings, partly irrigable and partly dry, and treating them as a package, may also transform their entire farms. Strong family traditions of land ownership as well as the belief that in the long-run land is the best hedge against inflation may induce many others to transform in spite of the immediately unattractive rate of return. How large a proportion this will cover is difficult even to estimate, but it is likely to be substantial. The remainder of the land will probably be sold to owner-cultivators, who as it was pointed out before, do not regard unpaid family labor as a cost and therefore find it profitable. There is little doubt, however, that the lands will be transformed because in its desire to raise the national output of agricultural products, the Italian Government has empowered the Cassa by law to see to it that either the lands are transformed by their present owners or they become subject to

^{1/} The calculations below are all based on 352,000 hectares which are expected to be under irrigation shortly after the completion of the Cassa program.

the land reform law.

29. In addition to cooperating with private landowners, the Cassa also has the responsibility of financing public works and improvements on lands acquired by the Ministry of Agriculture under the agrarian reform laws. The problems relating to determining returns on these lands are quite different from those involved in the private land transformation sector. Payments to former owners are made by the Ministry of Agriculture, while the Cassa expenditures cover not only the costs of public works but also all the normal costs of private land transformation, including farm implements, cattle and the necessary working capital. The law provides that the assignees must repay the Government for the cost of the land over a 30-year period with an interest of 3.5%, and they may also be required to pay for up to 40% of the costs of transforming their lands. In reality, it is expected that no more than one-third of the transformation costs will be assessed and on this basis the new owners should find it possible to become generally self-sustaining. Their average holding will be about 8 hectares, much less, of course, if it is irrigated and especially if it is under citrus, and the average family net income should be in the neighborhood of \$1,000 a year, which is very good by Southern Italian standards. However, because of the small size of farms, the improvements are very costly and constitute a relatively greater financial burden on the Government than the rest of the agricultural program of the Cassa. The justification for this portion of the program is social rather than economic.

30. Since the dominant objective of the Cassa intervention in agriculture is to increase employment and national output, its productivity must be assessed on the basis of these criteria. It is very roughly estimated that a total of public and private investments (excepting unpaid labor) in agriculture during the life of the Cassa of about Lit. 1,175 billion will increase net agricultural output (net of all costs except labor) annually by approximately Lit. 135 billion. This would represent a net return to the economy on capital invested of about 12%. This is a favorable return on capital in agriculture and it reflects the real economic benefits of the Cassa program which lie in the utilization of unemployed and underemployed labor for increased agricultural production. It is estimated that some 280,000 additional permanent jobs for farm workers will be created by means of a shift to intensive farming. Most of these jobs will be spread over a very much larger number of underemployed farm workers and the actual absorption of unemployed will be much less. Since Italy suffers from overpopulation and a deficit in foodstuffs, increased output of farm products and more employment opportunities will help strengthen the Italian economy.

31. In the final analysis, the productivity of the entire Cassa program, just as its economic effects during the first four years of operation, must be measured not only by its productivity within the several sectors but mainly also in terms of its contribution to the over-all economic development of the South and of the rest of the country. During the past four years only a small fraction of the Cassa physical goals were attained; nevertheless, the contribution of the Cassa to the changing economic climate of the South and to the growth in the national income of Italy has been very considerable. In the

same manner, the increased employment and output in agriculture resulting directly from the completion of Cassa works is likely to be only a small part of its over-all permanent achievements. Its contribution to expansion of the market through rising incomes, to increased transportation facilities and to sizeable private investments in industrial enterprises may yet turn out to be its greatest permanent accomplishment. There is little doubt now that the Cassa program is an appropriate vehicle for the economic development of Southern Italy and a healthy influence on the rest of the country. This view is now fully shared not only by Italian public authorities, but also by some of the most prominent Italian industrialists, financiers and economists.

Financial Aspects

32. The financial resources of the Cassa are provided by the budget. According to the original legislation, the Cassa was supposed to receive on the average an appropriation of Lit. 100 billion annually for a period of ten years. The amendment of the law which extended its life to 12 years also raised the total appropriations to Lit. 1,280, or to approximately Lit. 107 billion annually on the average. The Cassa is permitted to carry over unspent appropriations from year to year. It is also empowered to make forward commitments up to the full amount of its program and in advance of the actual appropriations. During the first two years when its program moved slowly, the Cassa accumulated substantial balances and kept them on deposit with the Bank of Italy as well as in other banks. In the more recent past, it has not only managed to use fully its current appropriations but has also had recourse to its previously accumulated balances, which declined from Lit. 179 billion on June 30, 1953 to Lit. 159 billion on June 30, 1954.

33. The carrying out of the Cassa investments in a non-inflationary manner is, of course, directly related to the state of Italian public finances and to the capacity of the capital market to absorb government loans. Although Treasury receipts increased from Lit. 1,152 billion in 1950 to Lit. 1,963 billion in 1953, actual expenditures rose in the interim from Lit. 1,664 billion to Lit. 2,511 billion, leaving a cash deficit of about Lit. 548 billion. The Treasury cash deficit reached Lit. 576 billion in 1954. With the gradual decline in counterpart lire accumulated through American aid, increasing recourse by the Treasury to the Italian capital market has become necessary. While the capital market supplied as much as Lit. 405 billion in 1953, and Lit. 427 billion in 1954, it was necessary for the Treasury to rely on new money creation, chiefly by the Bank of Italy, to the extent of Lit. 68 billion in 1953 and Lit. 93 billion in 1954. Although this monetary expansion does not appear to have exerted any significant inflationary pressures on the domestic price level, it has served to emphasize the need to import capital into Italy if the increased level of public investment is to be sustained.

34. Because of the heavy public investment program undertaken by the Italian authorities, public expenditures may be expected to exceed public revenues for some time to come. While the financial resources necessary for the carrying out of the Cassa program are provided for in law, the ability of the Treasury to finance these added investments in an essentially non-inflationary manner

depends in large measure on the course of Treasury receipts and on its ability to float loans in the domestic and foreign markets. On the whole, the outlook appears reasonably favorable. Tax revenues have been rising both as a result of the continued growth in national income and of better enforcement procedures. Domestic savings are continuing to increase and while the demands on them are numerous, the Treasury may be expected to secure its share. Lastly, Italy has been able to secure some capital from abroad and the increasing strength of the Italian economy should serve to bolster this tendency. The inflow of foreign private capital into Italy may also be expected to increase substantially if a more favorable foreign investment law is adopted in the near future. On balance, the likelihood of Italy's ability to carry out the expanded public works program in a non-inflationary manner appears good. Should these favorable factors fail to materialize, however, the pace of Cassa investments may have to be slowed down and the attainment of its objectives stretched out over a longer period.

35. While in the present Italian situation the Cassa is a definite burden on public finances, it is not without potential rewards. Detailed calculations indicate that the additional revenues which should accrue annually just from the increased gross output of the agricultural program of the Cassa would be sufficient to pay an interest of about 6% on the public investment in agriculture by the Cassa.^{1/} Because of the prevalence of very high gasoline taxes, government revenues from increased motor vehicle traffic will probably yield at least as high a return on the Cassa investments in roads. Moreover, if adequate cognizance is taken of the stimulus the Cassa provides to other parts of the economy and of its contribution to the recent increases in national income, the immediate as well as the long-run costs of the Cassa program should not be too burdensome on the public finances of the country. Provided that the Treasury can borrow the necessary capital at home and abroad for financing the Cassa program from non-inflationary sources, it should be in a position to service the loans from increased tax revenues, at the same time financing a development program which increases considerably the national income and national wealth of the country.

^{1/} This includes the investment under land reclamation (Lit. 466.5 billion) and land improvements under the agrarian reform (Lit. 280 billion).