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# INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

# AN APPRAISAL OF THE DEVELOPMENT PROGRAM FOR SOUTH ITALY

July 31, 1951

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# AN APPRAISAL OF THE DEVELOPMENT PROGRAM FOR SCUTH ITALY

## I. Purpose and Scope of this Report

This report contains an appraisal of the public works program, including land transformation and settlement, which the Cassa per il Mezzogiorno is authorized to finance and expedite in southern Italy and the islands during a ten-year period which started July 1, 1950. Participation by the Bank has been requested to the extent of loans covering the annual dollar impact of this program on Italian import requirements.

The basis for estimating the dollar impact of the program and the over-all economic justification have been covered in reports of the Loan Department and the Economic Department, so these points are not included in this report which is confined to an analysis of the public works categories involved in the program with particular reference to the suitability of the program as a basis for Bank participation. The specific projects tentatively selected for financing with the lira proceeds of a proposed first loan, are still under study by the Cassa and will be covered in a later report. Most of these projects fall outside the public works categories in which the Cassa is presently authorized by law to operate.

This report is based on numerous discussions with various representatives of the Cassa and other Government agencies, documents submitted by them, and field observations by a Bank mission which was in Italy during March and April, 1951. The information which is available is not complete for the purpose of a comprehensive technical and financial appraisal, but it is considered adequate to allow the Bank to reach a decision regarding the suitability of the public works program as a basis for Bank participation to the extent which is contemplated.

#### II. General Features of the Development Program

Prior to the elections of 1946, the people of southern Italy and the islands were strong monarchists and politically showed a majority in the Christian Democrat Party. The voting in the election of 1946 on the issue of creating a republic showed a large majority in favor of maintaining the monarchy. The left-wing parties at this time were able to show only a small minority vote. Following the defeat on the issue of the republic in 1946, however, and as a result of an intensive campaign by the Communist Party (based largely on promises of a distribution of land to small farmers by breaking up large estates), a significant shift in large areas of the South and on the islands to sympathy with the Communist Party occured during the interval between 1946 and 1948 elections. An aggressive campaign for land reform and other means of obtaining increased employment was started which the Government could not ignore and on which, in fact, it was required to

<sup>1/</sup> Report of the Italian Working Party on the Program for the Development of Southern Italy and Possible Method of Bank Financing, dated July 27, 1950.

The Creditworthiness of Italy, prepared by A. Stevenson, dated Aug. 15, 1950. Italy's Economic Policy and Prospects, prepared by A. Stevenson, dated June 21, 1951.

Report on the Development Program of Southern Italy, prepared by P. N. Rosenstein-Rodan, dated May 21, 1951.

take some action. The need for action was, in fact, forced upon the Government as a result of forceful confiscation of some lands in the South of Italy by members of the Communist Party following the 1948 elections. While the development of the south is an old issue in Italy, it is against this background that the current development program for South Italy was authorized in an effort to counter the plans proposed by the Communists and to increase, if possible, the political prestige of the Government in these areas.

The categories of public works which the Cassa is presently authorized by law to execute are as follows:

- 1. Roads
- 2. Aqueducts and sewers
- 3. Land reclamation and irrigation
- 4. Flood and erosion control as relating to land reclamation
- 5. Land transformation and settlement
- 6. Projects relating to the promotion of tourism
- 7. Industries as limited to the processing of agricultural products in land reclamation and land reform areas.

Some funds are included in the program for the construction of buildings for plants to be used for the processing of agricultural products. The availability of such funds, however, is definitely limited, and such work cannot be started until the fiscal year 1952-53.

With the exception of those concerned with land transformation and settlement in land reform districts, the majority of the projects in the Cassa program are not new. Many of the reclamation projects were in progress before the war, and additional progress has been made on these projects since the end of the war. Studies on practically all reclamation and irritation projects in the program had been completed before the formation of the Cassa. The same situation existed to a lesser extent with respect to new roads, aqueducts, touristic developments, and other categories in the program. Selection and coordination of these projects has been actively studied by SVIMEZ-, an independent organization supported largely by the contributions of private enterprise, since 1947, and the Cassa program is based largely on these studies with some minor changes and additions resulting generally from political considerations.

Prior to the formation of the Cassa, all of the projects in the various ublic works categories were executed as the responsibility of the appropriate ministries. Funds for the execution of the projects were provided from government revenues in the ordinary budget. Under this system

<sup>1/</sup> Associazione per lo sviluppo dell'industria nel Mezzogiorno

work on the various projects was relatively slow and, in fact, was discontinued at intervals due to failure of the government to provide the necessary funds in budget appropriations. The Cassa was created as an autonomous agency in order to guarantee the availability of funds on a fixed schedule and to expedite the program to the maximum extent possible within the means available to it. In the Cassa law an attempt is made to eliminate bureaucratic and other delays in the execution of the works. Funds for the Cassa operations are derived from the counterpart of U.S. aid programs and from the ordinary budget.

While most of the projects are not new, the operations of the Cassa should make possible substantially greater investment during the next ten years than would be possible under the old system.

Geographically most of the projects included in the Cassa program are confined to the regions of southern Italy including Abruzzi and Molise and the islands of Sicily and Sardinia. Some projects have been included, however, in central Italy. These are located in the provinces of Latina and Frosinone, on the isle of Elba, in the communes of Rieti province and in the Tronto reclamation district. Complete information as to the basis for selecting this distribution of works is not available, but it is evident to the mission that the areas included in the program either contain important works which are already planned or underway at present or present serious political problems for the government.

The specific categories in the Cassa program are discussed separately and in some detail below.

# III. The Road Program

The road program of the Cassa as designated by law and as set up in the overall program is confined to those road projects which fall outside of the programs of reclamation, land settlement and tourism. In the latter categories, the roads necessary for completion of the various developments are included as a part of the specific projects. State roads also fall outside of the program except in some cases where a provincial road, rehabilitated or built with Cassa funds, may be subsequently taken over as a part of the state network. The road program, therefore, includes only the rehabilitation of provincial and communal roads and the construction of some new provincial roads.

In the areas of southern Italy and the islands in which the Cassa is involved, there are approximately 21,000 km of provincial and communal roads of which only about 10% are bituminized. This represents only about .35 km of road per square km of area and compares with .57 km of road in central Italy and .76 km of road in the north. The Cassa program involves the rehabilitation of 10,700 km of these roads. The actual work required varies considerably from complete rebuilding of long sections to ordinary patching and resurfacing. In general, the rehabilitation projects do not involve the use of bitumen surfacing. Some existing roads will be widened,

straightened, and provided with adequate drainage.

Construction of new roads will be limited to 2,200 km. The projects are concerned largely with the completion of roads, which have already been started, to outlying communities, and with connections between existing roads to complete provincial networks. Most of the new road construction is in mountainous country and, therefore, involves a large amount of cutting and filling, as well as the construction of bridges, culverts and curbs.

Materials for road construction, with the exception of bitumen, are plentiful in the areas in which the road projects are located. In general, stone and gravel will be obtained on the site by crushing and sizing material blasted from cuts, or from nearby quarries. It is not contemplated that any substantial amount of mechanical equipment will be utilized in this program other than crushers and light rollers.

The individual projects in the program will be executed by the provincial departments of civil works either directly or by contract with private construction firms. The Cassa may also contract with private firms directly if no adequate organization exists in the province. In any case, however, before funds are made available by the Cassa, the provincial government must enter into an agreement under which it agrees to maintain all roads rehabilitated or constructed with funds provided by the Cassa and to spend on the maintenance of roads outside the program amounts equal to those provided by the Cassa. It is planned that a part of the roads built or rehabilitated will be taken over by the state as a part of the national network. In this case the provinces must agree to assume responsibility for the maintenance of a proportionate length of communal roads in those cases where the communities are unable to provide the necessary funds for this purpose.

The total allocation by the Cassa of funds for the road program amounts to L 90 billions, of which L 50 billions will be spent for the rehabilitation of existing roads and L 40 billions for new construction. This amounts to an average of L 4.68 million (\$7,500) and L 18.3 million (\$29,300) per km respectively. Actually, the cost of rehabilitation varies by regions from L 3.9 million (\$6,250) in Lezio and Lucania to L 5.8 million (\$9,300) in Abruzzi and Calabria. The cost of new construction varies from L 7.3 million (\$11,700) in Apulia to L 26.0 million (\$41,600) in Lazio. A breakdown of the program into regions, showing the lengths of roads to be constructed and rehabilitated, and estimated costs, is given in Table I.

The cost of both rehabilitation and new construction appears to be high, considering the types of roads which will be built and the labor rates which will be paid. With high labor usage it is expected that costs will be somewhat higher than could be obtained with mechanical equipment. Furthermore, at least 80% of this work will be carried out in mountainous

areas and this type of construction is expensive even when full utilization of mechanical equipment can be realized. An accurate appraisal of the estimates will not be possible until a number of representative contracts have been actually let, but it is believed that the contract prices will not be substantially out of line with the cost of similar work in other countries.

The rehabilitation program is scheduled to be carried out over a period of three years, starting July 1, 1950 with expenditures evenly distributed at the rate of L 16.7 billion per year. The program of new construction is scheduled to be carried out over a period of four years starting July 1, 1950, with estimated expenditures to run at the rate of L 10 billion per year. However, due to the fact that the Cassa did not start operations until October 1950, allocation of funds is running far behind schedule, and as of April 19, 1951 the Cassa had approved road projects amounting to L 2.1 billion but no funds had been committed. Practically all of these funds were for road projects in the province of Bari.

The important objective of the road program is to provide substantial employment in critical areas during the early years of Cassa operations until projects in other categories can be started, or completed, in order to provide further employment for the workers. The projects included in the road program, in general, are not new and involve either deferred maintenance or completion of new roads, construction of which has been periodically underway for a number of years. Contracts for such work can be let in a relatively short time. Hence it has been estimated that about 27% of the total funds available to the Cassa will be spent on roads in each of the first three years of operations, whereas the road program represents only 9% of the total 10 year program of the Cassa.

Of the total of L 90 billion, the Cassa estimated that only L 12 billion will be invested in roads which are of economic importance in relation to the overall development program for the South. These projects are, in general, required to connect existing roads for shorter hauls from agricultural and industrial developments. The remaining projects have been selected more or less on the basis of the condition of existing roads and the traffic density which is expected on completion and some may have increased economic value in the later stages of the development program.

An Office of Foads has been established in the Cassa which is under the direction of Ing Piero Grassini who is perhaps the outstanding road engineer in the country and has had many years of experience in the Ministry of Public Works. The mission feels that under his direction this program will be handled efficiently and with a minimum of political influence.

# IV. Aqueducts and Sewers

The law under which the Cassa is operating specifies that acueducts, including reservoirs, intake works and main collection systems, may be financed and executed by the Cassa as a part of the 10 year development program. Distribution networks are excluded from the program, such work being the responsibility of the municipalities which will be served by the adueducts. The actual investment for this purpose may be relatively small, involving several connections on a main conduit. The investment can be gradually increased as funds become available.

The program provides for the completion of 44 aqueducts distributed throughout all of the areas in which the Cassa is authorized to operate, including the isle of Elba. The largest project is in Campania and will provide supplementary water to the Naples area. Extensive works are located in the region of Abruzzi-Molise and in Sicily. The program will provide new or additional water supplies to about 1,000 communities, having a combined population of about 8.9 million people.

The total length of conduit involved in the program is about 3,000 km. The type of conduit varies from large pressure tunnels to relatively small concrete, steel or cast iron pipes. About 25% of the projects involve the construction of dams for storage and 30% connect into existing collection systems. Upon completion it is estimated that the program will provide about 14,600 liters per second (23,000 gallons per minute) of potable water to the communities which will be served.

The engineering work on practically all of these projects has been completed, this work having been done generally by the consortia which will own and operate the project on completion, or by the Ministry of Public Works. Since waterworks engineers in Italy, as in other countries, have hesitated to depart from established practices and have, in general, utilized water sources high in the mountains without regard for the length of acueducts required to reach the points of consumption, some of these projects require revision. In order to assure purity of water and continuity of supply, Cassa engineers are carefully reviewing each project received and returning them for revision if water availability has not been adequately studied, the design of the project is not in line with good engineering practices, or the most economical layouts have not been used. Cassa engineers are also requiring that the possibility of using Wells drilled near the points of consumption be considered as Well as the use of mountain waters, the former being a new departure in waterworks practice in Italy.

The sewer projects contemplated in this program have not yet been formulated. These projects, however, will probably be confined largely to disposal systems and vill not include collection works.

Of the L 1,000 billion available to the Cassa for the total program, L 110 billion or 11% has been allocated for financing aqueduct and sever projects. The estimated amount required for aqueducts is about L 102 billion leaving L 8 billion for severs. Campania will receive about L 38.5 billion for the construction of aqueducts, of which about L 23

billion will be spent on the supplementary supply system for Naples. About L 11 billion will be spent in Abruzzi and L 13.4 billion in Molise. A breakdown of expenditures by region is given in Table II.

It is expected that the completion of all aqueduct and sewer projects will require the full 10 years of Cassa operations. However, as much work as possible will be concentrated in the early years of the program and it is estimated that L 15.6 billion will be spent in 1950-51, and L 31.8 billion in 1951-52, or a total of L 47.4 billion in the first two years of operations. Actually, as of April 19, 1951 projects amounting to only L 5.4 billion have been approved by the Cassa, of which L 2.6 billion have been committed. It is, therefore, doubtful whether as much as L 25 billion can be actually spent before July 1952.

The estimated cost of the aqueduct program seems to be reasonable on an overall basis. If it is assumed that all of the projects would carry full financial and operating charges, a situation which, however, is not contemplated, annual expenses would amount to about 10% of the investment. With a delivery of 23,000 gallons per minute, the average cost of water would be equivalent to about 1.2¢ US per 100 gallons delivered to the distribution systems. This cost is considered reasonable.

The aqueduct and sewer program is not required for the satisfactory operation of the agricultural and industrial programs of the Cassa but should be regarded, along with the road program, rather as a means for providing employment during the early years of Cassa operations until further employment in construction or industrial projects, or settlement on land can be provided for the workers. The program obviously has political aspects but there is little indication that political situations have resulted in the selection of projects which are not otherwise justified.

The aqueduct and sewer program is a responsibility of a separate division of the Cassa under the direction of Ing Pietro Celentani who is on leave from his permanent position as Managing Director, Apulia Aqueduct System, the largest and most efficiently managed system in Italy. Ing Celentani is generally accepted as the most outstanding waterworks engineer in the country and it is the opinion of the mission that this program Will be executed in an efficient manner along sound technical lines under his direction.

# V. Land Reclamation and Irrigation

The land reclamation and irrigation program is the most important undertaking of the Cassa in terms of both expenditures and effect on regional income and employment. The program consists of a selected group of projects chosen from those reclamation and irrigation developments which have been prepared which are most susceptible to relatively rapid execution.

There are 171 land reclamation and irrigation districts in southern Italy and the islands most of which have been in the process of

development for many years. The Cassa's 10 year program affects 96 of these districts which, together, contain a total area of about 3.3 million hectares. It is planned that about 363,000 hectares will be irrigated, this amounting to about ten times the total area now irrigated in the South.

The geographic distribution of the areas involved in this program is given by regions in Table III. The largest regional program is scheduled in Sicily involving an area of about 821,000 hectares of which about 102,000 hectares will be irrigated. An area of 762,000 hectares will be affected in Abulia of which about 48,000 hectares will be irrigated. The program for Sardinia affects 357,000 hectares with an irrigation program of 69,000 hectares. In Campania, there most reclamation work has been completed in the various districts, only 107,000 hectares are affected but of this amount 62,000 hectares will be irrigated.

The size of the individual projects in the program varies over a Wide range. The largest single project is the Tavoliere district in Apulia involving 460,000 hectares of which 28,000 hectares will be irrigated. A composite project in the Sila district of Calabria affects 393,000 hectares of which 15,000 hectares will be irrigated. On the other hand, the Venafro and Biferno districts in Abruzzi involve total areas of only 4,000 and 1,700 hectares respectively.

The proportion of irrigation works to the total area involved in a given project varies considerably depending upon climatic conditions, water availability and the extent to which reclamation work has already been completed. In some of the districts no irrigation works are involved, while in the lower Volturno Valley in Campania the Cassa project involves a total area of \$\mu 1,000\$ hectares of which 37,000 will be irrigated. Five projects involve \$42\% of the total irrigated area in the program.

The character of the works to be executed in the various reclamation districts varies considerably between projects. In most cases, drainage of marsh land is required which involves the construction of drainage canals and pumping stations. Movement of earth is generally required for leveling and for the removal of sand and gravel from above subsoil. Clearing of scrub and wild grasses is almost always required as part of the land reclamation operation. Civil works, such as roads, bridges, acceducts, electrical supply and rural community centers are an essential part of all projects.

Similarly, in the case of irrigation works, the character of the items involved varies greatly between projects. If large storage reservoirs are required, the cost of the dam and other civil works is generally divided between the Cassa and a private utility company, the latter, in turn, financing the hydroelectric installation project made possible by the development. If only diversion dams are involved, these are to be built under the responsibility of the Cassa. In all cases, the construction of main irrigation canals is the responsibility of the government.

Provision of secondary tanals, ditches, farm buildings, implements and similar items are primarily the responsibility of individual farmers who are settled in the districts, although these items are eligible for a substantial government subsidy.

It is planned that the reclamation and irrigation projects will be executed under the direction of the established consortia (cooperatives of farmers and land owners settled in each of the districts). These consortia have, in general, been in existence for many years and have been in charge of the planning and execution of all improvements in the districts, as well as acting as advisors on agricultural matters. They are generally staffed with competent engineers and agricultural experts who have fully studied the various technical and business aspects of the projects involved. The result is that most of the projects in this program are in the course of execution and the work can be easily accelerated.

Financing of reclamation and irrigation projects by the Cassa will be in accordance with the general law passed in 1933 which covers the extent of government participation in such works. This law, originally designed to accelerate the completion of such projects in the interest of national self-sufficiency and for the creation of additional employment, authorized the government to contribute 87% of the cost of all items benefiting a reclamation district as a whole, such as dams, main canals, roads, bridges, rural settlements and utilities. It further authorized a contribution to be paid to individual land owners of 38% of the cost of items benefiting the individual owner such as secondary canals, ditches, farm buildings and machinery. Funds allocated by the Cassa for the execution of the reclamation and irrigation program will be used to cover these subsidies.

The land reclamation and irrigation program is estimated to cost L 440 billion (\$740 million) over the ten year period covered by the program. Of this amount about L 320 billion (\$512 million) represents the government contribution of 87% of the cost of public works benefiting the entire districts. About L 110 billion (\$176 million) will be spent as the government's contribution of 38% to farm improvements which benefit the individual landowner. The remaining L 10 billion is allocated to the construction of plants in the reclamation districts for the conservation and processing of agricultural products.

The regional allocation of funds is given in Table III. The largest allocation, L 100 billion, has been made to Sicily, L 86 billion has been allocated to Apulia and L 80 billion to Sardinia. The regional allocations are not in proportion to the total areas involved, but depend largely on the extent and nature of the irrigation works included in the various districts.

A detailed program of works and expenditures has been prepared by the Cassa for the fiscal year 1950-51. Expenditures were estimated at L 83.7 billion (\$134 million) of which L 20.8 billion was to be spent for hydraulic works, L 31.6 billion for irrigation systems, L 22.7 billion for roads, and L 8.6 billion as the government contribution to farm improve-

ments. Actually, expenditures for this period were greatly over-estimated and the program envisaged for the past year will probably require all of the year 1951-52 for its execution. As of April 19, 1951, the Cassa had actually approved projects totaling L 19.5 billion of which only L 9 billion had been committed. Disbursements were slightly less than L 1 billion.

The ECA programs of agricultural assistance in Italy which were initiated in 1948 and will be concluded in 1952 are closely related to the Casse program. The ECA programs involve about 64 projects which affect about 75% of the area of the reclamation districts in the Cassa program. The ECA projects were selected within the programs of the districts on the basis of the rapidity with which they could be executed and their ability to bring a part of the district under cultivation prior to completion of the entire program. As of December 31, 1950, ECA had approved allocations of counterpart lire totaling L 23.4 billion for such projects.

During its work in Italy the mission attempted to develop information to permit a rational analysis of the investment and earnings aspects of the Cassa reclamation and irrigation program. However, this proved to be impossible since information regarding past investment in the various districts was not available and the exact status of the program in each district could not be accurately determined. Also, the increased value of production resulting from past and future investment could not be obtained. The Cassa staff realizes the importance of obtaining this information and has promised to develop some reliable date. It is likely, however, that such information will be available only on those portions of individual projects in which Cassa financing is involved. It is not the policy of the Cassa, however, to establish priorities among projects on the basis of profitability. Gross production and other factors may be considered important.

In a study completed in 1950 of seven selected irrigation districts located in southern Italy and the islands, SVIMEZ produced what is perhaps the most comprehensive analysis of the costs and benefits of such projects which is available at the present time. The results of this study are summarized in Table V. This analysis indicates a cost of irrigation and settlement of from L 603,000 per hectare (\$390 per acre) in the lower Volturno district in Campania to L 1,089,000 per hectare (\$700 per acre) in the Neto district of Calabria, the latter being in very rugged country. The private investment required in these districts for irrigation and settlement works varies from L 172,000 per hectare (\$110 per acre) in the Metaponto district to L 396,000 per hectare (\$250 per acre) in the Neto district.

The estimated increase in value of gross production per hectare varies considerably between the various districts. A threefold increase is estimated in the Volturno, Catania and Ofanto districts, this increasing to fivefold in the Tara, Neto and Metaponto districts. The increase in net profit to the farmer resulting from irrigation varies from about 80% to 300% among the seven districts studied.

The estimated direct return on the total investment varies from 1.8% to 3.0%, while the return on the private investment varies from 6.8% to 8.9%, both figures being based on the increased net profit to the farmer. The government, through increased taxes, is estimated to earn from 1.6% to 4.5% on its contribution to these projects.

Increased employment resulting from irrigation and settlement in these districts varies from about 200% to 500%, this increase being estimated in terms of the number of man-days per year required to obtain the estimated increase in production.

The program which was expected to result from the general law of 1933 was estimated to increase the national production of agricultural products by 20% and increase employment by about 250,000 workers. These are approximately the same objectives of the Cassa program. However, the objectives of the 1933 law were never realized for a number of reasons, and many of the conditions which caused this program to fail still exist, in addition to the lack of public funds for investment in a program of this type.

The most serious problem remaining to be solved in connection with this part of the Cassa program is the availability of private capital to cover the landowners share of the investment required in the various projects in order to place the districts on an operating basis. This problem is discussed in some detail in a separate section of the report below.

Another difficulty involved in this program lies in the general reluctance on the part of small Italian farmers to shift from a simple system of cropping to the highly organized and complicated systems required to show a profit on irrigated lands. Many farmers who have settled in the reclamation districts have refused to complete the irrigation systems and other improvements on their property for this reason and, while the law allows confiscation under such conditions, political considerations make such procedures impractical.

Reclaimed and irrigated lands must be cultivated in crops of relatively high value if the farmer is to show a profit in his cultivations. In the past, fancy fruits and vegetables for the export market were stressed as the most desirable crops, but due to lack of adequate market analyses, over-production of these items resulted with serious financial losses to the farmers. In spite of past experience, the possible export market for such items is still considered a primary justification for a large part of the reclamation and irrigation program. The value, at 1950 prices, of Italian exports of fresh vegetables in the period 1936-38 was about L 13.3 billion per year. This compares with L 13.5 billion per year in the period 1948-50. Corresponding figures for citrus fruits are L 23.8 billion and L 23.7 billion respectively, and for other fruits L 14 billion and L 20.6 billion respectively. It is significant that, in spite of a substantial reduction in exports to Germany and Austria, major customers before the war, exports of these items have actually increased in the past three years due to improved markets in the U.K., Switzerland and other

European countries. Also, the domestic market for fresh fruits and vegetables has almost doubled since the end of the war. It is estimated that in 1950 about 200,000 producers in South Italy shipped about 400,000 tons of fruits and vegetables to processing centers. The completion of the Cassa reclamation and irrigation program is estimated to increase this amount by about 200,000 tons per year if the proposed scheme of cultivation of the new land is followed. It is believed by Cassa experts and others that not only can this increase in production be sold on the domestic and export markets, but also that it can be sold at higher prices if the program of establishing processing and storage centers can be realized. It is the opinion of the mission that the disposal of this increase in production is possible but will require aggressive promotion and selling on the part of exporters and domestic brokers.

A portion of the reclaimed and irrigated land to be placed under cultivation will not be suitable for raising fresh fruits and vegetables. It is proposed that such land will be operated on a system of cereal and fodder production with the fodder being used to increase the production of meat and dairy products. This system can also be used interchangeably with vegetable farming and probably has more attractive possibilities than the latter.

The consumption of meat and dairy products in Italy has always been low, amounting to less than 20% of the per capita consumption in the U.S. Since the war, per capita milk consumption has increased from 37 kg per year to 50 kg per year, an increase of about 33% over pre-war levels. Butter and cheese have regained pre-war levels. The consumption of meat, however, which was about 15 kg per year per capita prior to the war, had only reached 11.4 kg in 1949.

Italy is not self-sufficient in meat and dairy products. Imports of fresh and frozen meat in 1950 amounted to about 22,000 tons and imports of milk and casein products have averaged about 20,000 tons per year in the past three years. Import statistics on butter are not available. It is evident from the above figures that an established market exists for meat and dairy products on the basis of current imports. If it is assumed that the pre-war level of meat consumption will again be reached, imports of about 30,000 tons per year can be replaced by domestic production along with about 25,000 tons of milk and milk products. It is estimated that this would require the addition of about 120,000 head of cattle in the country which in turn would require about 120,000 hectares of additional irrigated land to carry them. This represents about one—third of the irrigated land scheduled for development in the Cassa ten year program.

An incresse in the domestic production of mest and dairy products sufficient to replace future imports would save the equivalent of about \$25 million per year in foreign exchange at current prices. Also, lesser savings would result from reduced imports of hides and skins. There is also the possibility of a substantial increase in production of domestic wool with a corresponding reduction in imports.

It is not contemplated that crops will be controlled either with respect to type or acreage in the reclamation districts. Therefore, the production of fruits, vegetables, meat and dairy products are only a few of many possible cropping plans which can be adopted. Cereals have an assured market due to heavy import requirements. Peas, beans and hemo have been profitable crops since the end of the war. It is to be expected, therefore, that the farmers will operate on the same basis as others throughout the world and plant those crops consistent with the character of the land from which they estimate a maximum profit can be obtained.

The reclamation and irrigation program, along with the flood and erosion control and land settlement programs are the responsibility of a division which is the largest in the Cassa organization. It has been under the direction of Ing Aldo Ramadoro, a man of long experience in these fields. However, Ing Ramadoro has recently resigned and no information is yet available as to his successor. He has been assisted in this work, however, by Prof. Paulo Vicinelli, an agricultural expert of outstanding reputation, who is acting director at the present time.

Summing up, it is believed that the reclamation and irrigation program of the Cassa will be well engineered and executed in a relatively efficient manner due to the extensive experience of the Cassa personnel and of the staff of the consortia in the districts who will be responsible for this program. The problems involved are largely those of the availability of private capital necessary to augment government contributions and the availability of markets for the high priced crops which must be raised on the irrigated lands in order to provide an adequate profit for the farmer.

## VI. Flood and Erosion Control

The flood and erosion control program is limited to the reclamation and irrigation districts and to a lesser extent, the land reform areas in which Cassa financing will be involved. In general, such works are a desirable supplement to those reclamation and irrigation projects which involve transformation of the lower valleys of rivers since they are designed to prevent flooding of low lands while under cultivation and to avoid the redeposition of sand and gravel on reclaimed land.

The works involved in this program are generally recuired on mountainsides and on high streams feeding into the main rivers. The most important item is the extensive reforestation of mountain areas lying in the watersheds of small tributaries and the addition of civil works, such as retaining walls, conduits, canals, buildings and roads. In some cases small dams for flood control reservoirs will be constructed.

The 10 year program consists of about 181 projects, all of Which have been approved by the Cassa. Their completion will result in the referestation of about 9,000 hectares of new land and the rehabilitation of about 3,000 hectares of existing forests. The construction of about 1,400 km of roads is required, along with bridges, buildings and other types of

civil Works.

With regard to geographical distribution of these works, 53 projects will be executed in the region of Calabria, 29 in Sicily, 25 in Campania, and 14 in Sardinia. The remainder are distributed in smaller numbers in other regions in which the Cassa will operate.

The projects will be executed by the Forestry Corps of the Ministry of Agriculture and the provincial public works departments, the former agency handling all the work involving soil preparation and planting, the latter all of the civil works involved.

The total cost of this program is estimated at L 50 billion over the 10 year period of Cassa operations. Table IV gives the breakdown of estimated expenditures by regions for 1950-51 and for the total programs. Of the total of L 50 billion, about 70% will be spent for reforestation and will be allocated to the Forestry Corps. The remainder will be spent for civil works.

The expenditures are expected to be evenly distributed at the rate of 5 billion per year. However, in spite of the fact that this program is the most advanced of all those being financed by Cassa from the standpoint of planning, only L 3.4 billion have been committed as of April 19, 1951 with disbursements of only about L 1,2 billion.

Based on the reforestation of about 12,000 hectares (30,000 acres), the cost per hectare is about L 4.2 million (\$2,700 per acre) which is extremely high for work of this type. However, reforestation in most mountainous areas in Italy has always been a very expensive operation and cannot generally be justified on the basis of timber production alone. The number of seedlings that can be planted per man per day is only about 5% of that obtained in ordinary U.S. practice. This is due to the fact that the time required to search out or move sufficient soil in which to plant individual seedlings is extremely high. Also the volume of civil works, such as wells, ditches, conduits and similar items required to prevent extensive erosion while the forest is young, is much greater than normally encountered in other countries.

The referestation and stream regulation projects involved in this program are a desirable but, in general, an expensive and not necessartily the best supplement to the land reclamation and irrigation program. The flood and erosion control program has been included in the overall Cassa program at this time primarily to create additional employment. The net results of increasing the timber stand in Italy by about 12,000 hectares and the protection which will be given to reclamation areas from floods and deposition of sand and gravel probably justify the expenditures.

Execution of the flood and erosion control program is the responsibility of a special office in the division of the Cassa which is also responsible for the reclamation and irrigation program. It is the impression of the mission that the program as presently formulated is well conceived and will be ably supervised. This is an important consideration since the actual work will be done by two government agencies which are not

particularly noted for efficient operation.

#### VII. Land Transformation and Settlement

The Cassa agricultural program involves two types of land transformation and settlement operations. Those concerned with land reclamation and irrigation districts have been discussed above. The second type of operation consists of the transformation and settlement of lands acquired under the general land reform procedures which are now being formulated.

The general land reform law proposed for Italy is still before Parliament but two special laws affecting land tenure in selected areas were passed during the course of 1950. Political necessity requires that these laws be implemented as rapidly as possible and that the results obtained be successful. The Cassa, therefore, has been provided with a large appropriation to assist in the implementation of the special laws which are now in effect and the general law which is contemplated.

The first land reform law to be passed by Parliament is known as "Sila Law". This law provides for the expropriation of approximately 76,000 hectares now held as large estates in the Sila district in central Calabria. The law limits individual holdings in the district to 300 hectares and all land held by individual owners above this limit was to be proposed for expropriation with compensation during the second half of 1950. A small part of the compensation for expropriated land is payable in cash, the bulk in long-term government bonds.

It is estimated that the distribution of expropriated land in the Sila district will require about three years. Only 1,500 hectares were allocated permanently to farmers at the end of 1950, the remaining area being assigned to local peasants or left with the original owners on a temporary basis. The land to be transferred is to be provided with housing and other facilities, including roads and rural settlements, necessary for the permanent settlement of small farmers through the use of Cassa funds before a final distribution is made.

The total cost of the distribution and settlement of land in the Sila district is estimated at L 30 billion or about L 400,000 per hectare of expropriated area. One half of this amount represents expenses to be incurred by the Cassa for public works, such as flood and erosion control, irrigation, road construction, and similar items, while the other half represents the expenses which will be incurred for improvements of the properties, such as farm buildings, wells, and agricultural implements. Funds for both categories will be provided by the Cassa from its appropriation of L 280 billion for the total program concerning land reform. However, the individual farmer must repay part of the money invested by the Cassa. This part will amount to about L 90,000 per hectare, in addition to L 45,000 per hectare which he must repay as compensation to the original landowner. Repayments to the Cassa will, in future years, represent income falling within the annual allocation of L 100 billion of the Cassa and will be used in future operations. Cassa financing is

limited to settlement and improvements and does not include any compensation payments, these being borne by the government from other funds.

The second land reform bill passed by Parliament in 1950 was the Legge Stralcio (sample law) which involved several limited areas, the total of which amounts to about 650,000 hectares. In the South, these areas are confined to the regions of Apulia, Lucania, and Sicily. This law may function effectively in Apulia and Lucania but difficulties are involved in Sicily due to the co-existence of a Sicilian land reform law and the desire of the autonomous administration in Sicily to carry out land reform on a local basis.

Little progress has been made to date in the implementation of the sample law. Some disbursements have been made by the Cassa to the local organizations responsible for carrying out the redistribution of land in the continental south but to date work on improvements has not progressed to any great extent.

The general land reform law before Parliament has been subject to much discussion and has encountered very substantial opposition. A number of amendments are before Parliament now, designed to correct the errors and eliminate the obvious inequities in the proposed legislation. These amendments provide for increasing the maximum holdings of any one individual and making the maximum dependent upon the number of descendants of the owner. Maximum holdings by a single owner may be increased if such holdings are under intensive cultivation and are efficiently operated. Particular opposition has developed to the amount of land to be expropriated in central and northern Italy and it is likely that the areas involved will be considerably decreased.

It is too early to appraise the results which can be expected from the program of land reform. Much will depend on the final legislation which is passed but, in general, it can be anticipated that the expropriated lands will be brought into substantially greater production than at present. This will be accomplished both as a result of smaller holdings by the original owners and through the settlement of new farmers with proper facilities for carrying out intensive cultivation.

#### VIII. Tourism

The program designed to stimulate tourism in southern Italy and the islands has not yet been formulated in terms of individual projects. It is understood from discussions with interested parties, however, that the program will be designed to attract both international and national tourist trade to the South and will probably include the development of existing thermal spas at Castellammare and on the isle of Ischia. Improvements are contemplated at Pompei, Paestum and other points of archeological interest. Access roads, hotels and other facilities will be provided in areas of natural interest.

The allocation of funds for this program has been established at L 30 billion, to be spent over the 10 year period of operations. No

schedule of expenditures is yet available.

Responsibility for the tourism program has been tentatively allocated to the Industrial Division of the Cassa. No organization has yet been formed for the formulation and execution of the program.

If the projects forming this program are properly selected, they can become important income producing enterprises and, at the same time, provide for substantially increased employment in the South. Judgment as to whether these results will be accomplished must wait until a program has been established.

#### IX. The Industrial Program

The present law under which the Casse is operating places the following definite limitations on the scope of its activities in the industrial field:

- (1) Projects are limited to buildings for use in the transformation and conservation of agricultural products.
- (?) The industrial projects must be related to the reclamation or land reform projects in which the Cassa is participating.
- (3) Funds for financing such projects are to be derived from payments of interest and principal on loans which have been made by the Instituto Mobiliare Italiano (IMI) from ERP funds to industrial firms; such payments start on July 1, 1952.

Notwithstanding the third limitation the Cassa had tentatively established a program for the year 1950-51 involving the construction of about 30 grain siles having an aggregate capacity of 160,000 MT. Also it was tentatively planned that, during the two year period 1950-52, about 16 fruit and vegetable collection and storage centers would be constructed. 10 of which will be located on the continent and 6 on the island of Sicily.

The allocation of funds for such projects amounts to L 20 billion over the 10 year period, to be spent evenly in the land reclamation districts and land reform areas. No schedule of expenditures is available.

The law as presently interpreted, obviously does not permit the Cassa to participate in any substantial industrial development of the South. It was thought, at the time the law was formulated, that such participation would not be required since it was expected that after the public Works program had progressed sufficiently, private capital for industrial investment would be attracted in sufficient amounts without government assistance. Within recent months, however, it has been decided to accelerate industrial development in the South through investments by or credits available

through the Gassa. An amendment to the Gassa iam has been presented to Parliament which will bermit borrowing from domestic and foreign sources by the Cassa for such financing. It is in this field that the IBRD proposes to participate, along with private capital, by means of loans to firms desiring to establish industrial enterprises in the South and on the islands. The details of such participation will be covered in a later report on the projects which are selected.

An Industrial Division has been established in the Cassa with the responsibility of forming an industrial program as well as the program covering touristic developments. This Division is now under the direction of Tito Fraschetti, a former official of Snia Viscosa. At the time of the visit of the mission, the Division had no staff.

## X. Financial Requirements and Sources of Funds

The estimated financial requirements for the Cassa program of public works have been given and discussed by separate categories above. These requirements within the 10 year program and the total of L 1,000 billion (\$1.6 billion) authorized by law can be summarized as follows:

# Allocation

Category	In billion Lire	As Millions of US\$
Roads	90	144
Aqueducts and Sewers	110	176
Land Reclamation & Irrigation 1	440	704
Flood and Erosion Control .	50	80
Land Transformation & Settlement2	280	448
Promotion of Tourism	30	48
		4-4
TOTALS	1,000	1,600

<sup>1/</sup> of which 110 billion lire are for agricultural improvement and 10 billion lire for establishment of agricultural products processing industries in areas reclaimed and irrigated under the program.

<sup>2/</sup> of which 10 billion lire are for the establishment of agricultural products processing industries and 10 billion lire for land reclamation and irrigation projects in land reform areas.

The allocation of funds between categories is based on the best estimates available at the present time, but these should not be considered as firm. The amounts may be altered within the total of L 1,000 billion as the program progresses and the need for adjustment is established by the Committee of Ministers for the South.

In addition to the above amounts, it is contemplated that foreign borrowing will be authorized by an amendment modifying the present law and intended to implement an expended industrial program, such borrowing to be entirely or largely from IBRD and in an amount of about \$100 million (L 62.5 billion) over the 10 year period.

The Cassa law requires that a sum of at least L 100 billion per year be made available to the Cassa by the Ministry of the Treasury in cuarterly installments. The sources of funds vary by years through the period of ERP operations and have been definitely established in the law as follows:

In the fiscal year 1950-51

- (a) 42.6 billion lire from the ERP counterpart lire fund
- (b) 23.8 billion lire from the U.S. Interim Aid counterpart lire account on the books of the Bank of Italy
- (c) 33.6 billion lire from the budget of the Ministry of the Treasury

In the fiscal year 1951-52

- (a) 18 billion lire from the U.S. Interim Aid counterpart lire account on the books of the Bank of Italy
- (b) 82 billion lire from the budget of the Ministry of the Treasury, of which 50 billion lire from amounts accruing in that fiscal year to the ERP counterpart lire fund

In the fiscal years 1952-53 through 1959-60

- (a) 80 billion lire from the budget of the Ministry of the Treasury
- (b) Principal of and interest on loans, made by Instituto
  Mobiliare Italiano (IMI) for industrial re-equipment from
  funds allocated for this purpose by ECA and repayable to
  the Italian Government.
- (c) One helf of moneys accruing to the ERP counterpart lire fund after June 30, 1952 and until the end of ECA operations in Italy.

If expenditures by the Cassa in any year fall short of the appropriation, the unexpended balance may be carried over to lower years. If the availability of funds from the above sources exceeds the amount of L 1,000 billion, the excess can be spent on additional projects after necessary approvals are obtained. If, however, the amount falls short of L 1,000

billion, the appropriation from the budget of the Ministry of the Treasury must be increased to cover the deficit. This last provision of the Law is of importance particularly in view of the uncertain prospect of the repayment of some of the IMI loans.

ECA allocations for the re-equipment of some major Italian industries amount to \$78 million and 44.2 billion lire (\$70 million). These funds are being advanced to industrial enterprises on a loan basis. The greater part of the dollar loans, while made in lire, are designated by the Government as a part of the overall ECA loan to Italy and the repayments will be used to service this loan. The lire loans are repayable in lire to the Italian Government, and it is expected that service payments will be credited by the Government to the Cassa although ECA has not yet agreed formally to this plan.

More than 75% of IMI loans have been made to the IRI group, and about 75% of this amount has been made to FINSIDER, the government—controlled iron and steel group in Italy. It is the mission's opinion that these loans have not been taken seriously with respect to repayment and this was borne out again during the visit of the mission through the failure of the Cassa and IMI to provide information concerning the amounts, terms and conditions of these loans, even after repeated requests for this information.

The Cassa has not prepared a budget for fiscal 1950-51, but is operating on an annual L 100 billion Treasury appropriation. The first annual budget listing receipts and expenditures will be prepared as of the end of the current fiscal year for submission to the Treasury and to Parliament before October 31, 1951. According to its financial statement of April 19, 1951, the Cassa has received L 49.5 billion from the Treasury in quarterly installments. The first installment of L 25 billion represented the Treasury's own funds, but the bulk of the second installment of L 24.5 billion consisted of the lire counterpart of U.S. interim aid. The third installment, due from the Treasury on April 1, 1951, had not been paid up to April 19, 1951. This situation resulted from the refusal of ECA to release a corresponding amount of counterpart lire without agreement with the Cassa to submit desired information on land reclamation and irrigation projects, including those not financed with ECA funds.

As of April 19, 1951, the Cassa had invested L 44.5 billion of its funds in Treasury bills, maturing between May 2 and November 2, 1951, and held about L 1.3 billion in account with the Bank of Italy, other banks, and the Treasury. Only L 4.9 billion was spent for the execution of projects and L 0.1 billion for administrative expenses over the six months! period of the Cassa's activity. It is not expected that more than L 20 billion will be disbursed before June 30, 1951, the end of the first year of operations. The following is the breakdown of Cassa expenditures as of April 19, 1951:

Payments Made	In Million Lire
To local land reform administrations	2,650
For land reclamation and irrigation works For waterworks and afforestation in	953
mountain areas	1,208
For construction of aqueducts	60
	**************************************
TOTAL	4,871

It should be noted that the Board of Directors of the Cassa has already allocated about L 37 billion for specific works and that about three quarters of this amount has been committed. A further L 20-25 billion should be specifically allocated by the Board of the Cassa before the end of the fiscal year 1950-51.

The present law permits the transfer of public works projects from the responsibility of individual Ministries, such as the Ministries of Public Works and Agriculture, to the Cassa providing the funds appropriated to the Ministries for such projects are transferred to the Cassa account. This provision of the law may become important in the later years of its operations, provided the Cassa can demonstrate its ability to function effectively.

#### XI. Bidding and Contracting Practices

The responsibility for the execution of the projects in the Cassa program Vill, in most cases, be delegated to existing consortia and national, provincial, and municipal agencies which are considered to be competent in their particular fields. These agencies may, in turn, either carry out the project with their own personnel and equipment, as in the case of road construction by the provincial public works departments, or, contract the work to private firms. In the latter case a "contract of concession" is made by the Cassa with the designated agency and disbursements are made only on the basis of documentary proof of the completion of definite stages of the project. Field checks by representatives of the Cassa will be made to determine the accuracy of the reports on which dispursements are based.

If there are no public agencies qualified to supervise or execute specific projects, the Cassa may place contracts for such work directly with private construction firms.

The bidding practice adopted by the Cassa involves the submission to bidders of detailed plans and specifications along with an estimated cost, broken down into quantities and prices. Engineering design and estimating may be done by government agencies, consortia or consultants. The bidders simply alter their prices contained in the estimate to conform with their expected cost. This system leaves much to be desired because, by providing an estimated cost to the bidders, the agency indicates what

it considers to be a fair price for the job. In general, bids have deviated only slightly from the original estimates. However, the contractor is held to his bid with no provision for escalation.

A serious problem which has, in fact, already developed in the placing of contracts is that of collusion among contractors. With a program of this size and with a desire to execute it as rapidly as possible, there is actually more work available for private contractors than they are able to handle without substantial additions to their staff and equipment. Under such conditions, agreements may be reached between contractors as to the distribution of work and the amounts of their bids. The Cassa is aware of this situation and is attempting to hold prices at the level of the estimates. The element of competitive bidding is lacking and the situation will probably get worse as the program progresses.

## XII. The Problem of Private Investment Funds for Agriculture

While the Cassa will provide more than L 770 billion for the completion of agricultural projects in the ten year program, there is a substantial requirement for private investment funds necessary to bring the projects into operation. The funds to be spent by the Cassa on land reclamation works, irrigation, land transformation and agricultural improvements, represent only the contribution of the government to the financing of these programs.

The extent to which financial participation of the individual farmer is required varies considerably with the character of the works involved. In land reclamation and irrigation projects, major works such as dams, main irrigation and drainage canals, roads and bridges, and municipal facilities obtain a relatively large subsidy through the Cassa. Improvements affecting a single farm or a small group of holdings, such as secondary irrigation canals, buildings, barns, agricultural machinery, etc., receive a much smaller subsidy and are largely the financial responsibility of the individual farmer.

The availability of private capital for the settlement of farmers on reclamation and irrigation projects has always been a problem in Italy and has been one of the greatest retarding factors to the proper development of agriculture in these areas. Now, as in the rest, those familiar with agriculture in southern Italy and the islands feel that the availability of private capital will again limit the speed and the extent to which reclaimed land and land acquired under the reform procedures can be permanently settled. If it is impossible to properly settle the areas in which the Cassa will make substantial investments, the effort of the Cassa will be wasted to a large extent, and, at the present time, there is no definite program to prevent this situation from developing. The only solution appears to be that of reallocating funds within the framework of the Cassa operations to provide the necessary credits to cover a part of the cost of secondary works, this at the expense, however, of reducing the total public works program unless additional funds are made available over and above L 1,000 billion which has been allocated, Under the present law, the government contribution to major works amounts to 87.5%, the remaining 12.5% being carried on a prorated basis by the individual farmers settled in the district. The government contribution to secondary works and farm improvements averages 38%, requiring the landowner to provide 62% of the capital required for such items. For land reclamation and irrigation projects alone, the Cassa proposes to spend L 440 billion (3704 million) of which about L 320 billion will be spent on items requiring a government subsidy of 87.5%. The remaining amount of about L 120 billion will be used as government subsidies for secondary works and farm improvements amounting to 38% of the total cost. This will require a corresponding expenditure of about L 225 billion (\$360 million) by the landowners which brings the total investment in the agricultural program to about L 995 billion (\$1.6 billion) of which L 770 billion or 77% will be financed by the Cassa.

An additional problem develops in the case of reclamation and irrigation projects where the farmer is required to finance the total cost of improvements during the course of construction and is reimbursed by the government to the extent of 38% on completion of the project. He is therefore forced to use short-term credit from the regional agricultural credit institutions to cover the 38% government contribution during the construction period and this in itself has presented serious difficulties in the past. It is in this field of short-term credit that the Cassa may operate using funds derived from short-term borrowing, if possible, or using accumulated surpluses from its appropriation.

In the case of lands acquired by farmers through redistribution under the reform procedures, the Cassa will provide a total of L 280 billion toward the items required to settle this land on an operating basis. This will be used largely for the construction of buildings, the provision of agricultural implements, roads and municipal works. In most cases the government subsidy amounts to approximately 45% of the total cost of such items, the remaining 55% requiring repayment by the settlers to the Cassa over a period of 30 years in addition to an interest charge of about 3½%. There is considerable question as to whether a large part of the settlers on land obtained through the reform procedures will be able, or see fit, to honor their obligations. The situation is particularly difficult in view of the political problems involved in confiscating these holdings in those cases in which a farmer fails to meet his obligations.

It appears that the expansion of agricultural credit operations in the South is indispensable to the successful execution of the Cassa program. Short-term advances are required to meet the 38% government contribution to farm improvements and long-term loans must be available to provide all or a part of the 62% contribution of individual landowners. The mission raised this question on a number of occasions but obtained no satisfactory answer as to the availability of funds for these purposes.

For the years 1950-51 and 1951-52, the agricultural programs of the Cassa are relatively firm except their timing has been altered by the delays which have been encountered in the first year of operation. The following table shows the total investment contemplated, the government contribution, and the contribution required by individual farmers.

	1950-51	1951-52
	(Inlbia)	ion:lire)
Total investment	139	96
Government contribution through the Cassa Contribution of individual farmers	116	72
	23	24
Percentage of private contribution to total investment	n 17%	<b>2</b> 5%

The delays encountered in the current year will reduce the amount of private investment which will subsequently be required, but experience during the fiscal year 1951-52 should indicate the extent to which private funds will become available for investment in newly settled areas.

# XIII. The Organization of the Cassa

The Cassa Law (No. 646) of August 10, 1950 established a Committee of Ministers to formulate a general program for the improvement of economic and social conditions in southern Italy to run over a period of 10 years, starting July 1, 1950. This Committee is composed of the Ministers of Agriculture and Forests, Treasury, Industry and Trade, Public Works, and Labor and Social Security, under the chairmanship of Pietro Campilli, who is now Minister of Transport. The Committee is designated as "The Committee of Ministers for the South." The Law establishes the chairman of the Ministerial Committee as the supervisor of the administration of the Cassa.

Minister Campilli has formed a technical secretariat for the Committee, consisting of seven men selected by him. This secretariat, while not definitely authorized by the Law, is typical of the organizations used by Minister Campilli during the early stages of any new position which he has acquired in the past. The members act as advisors to him and as a channel through which the Committee now transmits its directives to the Cassa. On the basis of past experience with Campilli organizations of this type, it is to be expected that this secretariat will be disbanded as soon as the Cassa is operating effectively.

The management of the Cassa is the responsibility of a Board of Directors selected for a term of four years. It is composed of a chairman appointed by the President of the Republic on the recommendation of the Prime Minister, two vice-chairmen, and ten members appointed by the Prime Minister after consultation with the Cabinet.

Actual operations of the Cassa are in the hands of a Director General and a small staff of technical experts. At the present time, three divisions are in operation, namely, (1) land reclamation, irrigation, and land improvement; (2) aqueducts and sewers; and (3) accounting and dibursements. An Office of Roads to formulate and supervise the Road Program has also been

<sup>1/</sup> In July 1951, Mr. Campilli assumed the duties of Minister of Industry and Commerce.

established. A fourth division to deal with credit, industrial development, and the promotion of tourism is being formed, but as of April 19, 1951 this division had no staff other than the head.

The Cassa is staffed largely with civil servants detailed from government departments and agencies, as provided by the Law, and salaries are in line with government rates. A few of the employees, particularly at the higher levels, have been recruited from outside the government, but such employees have only a temporary status. At the present time, the total personnel of the Cassa consists of about 200 employees, which is not excessive for the work involved in this operation.

The management of the Cassa has stated that due to the limitations imposed by law on the use of civil servents, they have been inable to obtain sufficient numbers of experienced men having civil service status and they propose to have the law changed to permit the permanent appointment of men obtained outside of the government service.

There are a number of checks on the Cassa operations to prevent any serious misuse of funds or incorporation of unnecessary or uneconomic projects in its program. These checks are as follows:

- 1. All programs and program changes require approval of the Committee of Ministers for the South and must be reported to Parliament.
- 2. Before authorizing the preparation of any suggested project, or approving the execution of projects already prepared and costing over L 100 million, the Cassa must consult with a sub-committee of the High Council of Public Works.
- 3. A Board of Auditors is established by the Cassa Law, under the chairmanship of a councillor of the Court of Accounts. This Board has the responsibility of determining the regularity of the Cassa accounts; auditing of its expenditures; reviewing documentary proof of such expenditures; and ensuring proper implementation of the law by the Board of Directors.
- 4. A new advisory committee has been formed which will be responsible for the study and the preparatory work necessary for the comprehensive overall program. This Committee at present consists of six men under the chairmanship of Professor Pasquale Saraceno, Director General of IRI, an outstanding economist who has been very close to the formulation of the development program for the South in his past position as Director General of SVIMEZ.

# Conclusions

1. The development program for southern Italy, as presently conceived, involves a large group of public works and agricultural development projects, most of which have been planned for many years, and a large number of which are in the course of execution. These projects are, in general, well studied

and engineered and construction can be rapidly undertaken.

- 2. While this program has the obvious political objective of increasing the prestige of the present government in southern Italy and the islands, there is little evidence that political considerations have resulted in the inclusion of many unnecessary or uneconomic projects in the program.
- Assuming no serious deterioration of the international situation, it is probable that the program as presently conceived can be executed within the 10 year period established by law and within the amount of L 1,000 billion which has been allocated to it over this period.
- 4. The administrative and technical personnel of the Cassa are believed to be competent and fully qualified for the direction of the program with the exception of those concerned with the industrial and touristic programs where some restaffing is believed to be required.
- The greatest deterrent to the realization of the final results of the program will probably be the lack of credit for private investment in agriculture. It is likely that the Cassa will find it necessary to provide such credit in substantial amounts from its own resources in order to facilitate final settlement of reclaimed areas and lands distributed to small farmers under the system of land reform.
- 6. Earnings resulting from the investments to be made by the Cassa and private landowners in the agricultural program cannot be determined at the present time. The types of crops and the availability of markets will be established when the lands are placed under cultivation and these may be substantially different from those contemplated at present.
- 7. There is no evidence that additional funds derived from domestic or foreign borrowing will be required by the Cassa for completion of the public works and agricultural development program. Such funds, however, can be effectively used in an expanded industrial program in combination with funds derived from private sources.
- 8. The development program has no aspects at the present time which should prevent the Bank from participating along the lines that are contemplated, that is, the granting of a series of loans to cover the dollar impact of the program on the Italian economy. The operations of the Cassa will, however, require careful review each year before additional commitments are made.

TABLE I

Breakdown of the Cassa Road Program

Region	on Rehabilitatio		New Con	Total	
	millions of lire	cost per lm in millions of lire	millions of lire	cost per km in millions of lire	
Isle of Elba	190	5.0	<del>gr</del>	-	190
Southern Latium	2240	5,0	1600	26,0	3840
Tronto dis <b>t</b> rict	200	3,9	aparana.	<del></del>	.200
Abruzzi	5290	5.8	3200	15.5	8490
Molise	3220	4.9	2000	15.5	5220
Campania	8340	4.3	3800	16.5	12140
Apulia	8010	4.5	1100	7.3	9110
Lucania	3670	3.9	2270	20.0	5940
Calabria	5870	5.8	11730	24.5	17600
Sicily	7620	5.0	10300	17.8	17920
Sardinia	5350	4.8	4000	16.0	9350
TOTAL	50000	52 <b>.</b> 9′	40000	159.1	90000

TABLE II

Breakdown of the Aqueduct and Sewers Program.

Region		Estimated Cost in million lire
Isle of Elba		376
Southern Latiu	on and	2.420
Abruzzi		11.020
Molise		13.350
Campania		38.456
Apulia		8.000
Lucania		5.000
Calabria		4.606
Sicily		11.015
Sardinia		7.550
Total Aqueduct	s	101.793
Sewers		8.207
	Total	110.000

Breakdown of Land Reclamation and
Irrigation Program

Regions	Superficial Area (in thousand ha.)	Area to be <a href="Irrigated">Irrigated</a> (in thousand ha.)	Total Expenditures (in billion lire)
Southern L atium	187	18.7	9
Abruzzi and Molise	205	23	16
Campania	107	62,1	32
Apulia	<b>7</b> 62	47.5	86
Lucania	382	22.3	56
Calabria	471	19.0	61
Sicily	821	101.7	ıòo
Sardinia	357	68.7	08
	olycos-mary mail-and little		<del>4</del>
Total	3,292	363,1	140

TABLE IV

Breakdown of Flood and Erosion Control Program

Estimated Cost (in millions of lire)

		Marina di Angalago (1988) di pinangang anday di Marina pinangan anday anda anday angang angan angan angan anga	
Region	Civil Works	Reforestation	Total
Isle of Elba	a 75	145	220
Southern Latium	2.254	4.186	6.440
Tronto district	138	260	398
Abruzzi and Molise	1.882	3.760	5.642
Campania	1.650	3.150	4,800
Apulia	940	1.400	2.340
Lucania	2.600	3.260	5.860
Calabria	3.400	6.300	9.700
Sardinia	1.960	3.640	5.600
Sicily	en 100	9,100	9.100
	14.899	35.201	50.100
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Estimated Results of Irrigation and Transformation in Selected Districts
Based on 1950 Costs and Prices

Unit per hectare	Volturno	<u>Ofanto</u>	<u>Tara</u>	<u>Metaponto</u>	Netc	Catania	Campidano
Cost of irrigation and transformation (lire)	603,371	743,009	684,667	658 <b>,943</b>	1,089,000	761,857	847,975
Cust to farmer (lire)	201,911	224,704	236,500	171,552	395,800	177,797	239,325
Gross production for sale (lire) a	120,000 360,000	71,000 254,000	44,000 203,000	43,300 211,300	34,800 153,800	76,400 204,400	47,000 282,000
Net return (lire) a b	103,000 260,000	53,700 168,000	34,000 120,000	28,500 134,400	27,700 134,500	55,400 162,000	33,900 193,300
Farmers' profits (lire) a b	36,000 51,000	20,500 40,500	8,600 24,800	6,300 18,200	11,000	24,400 39,200	12,300 30,100
Return on total invest- ment (per cent)	2,5	2.7	2.4	1.8	3.0	1.9	2,1
Return on private in- vestment (per cent)	7.4	8,9	6,8	6,9	8.1	8.3	7.4
Return on government investment (per cent)	4.5	3.8	3.2	3.4	1.6	2.8	3.7
Employment (man-days per year) a b	57 162	29 93	24 94	24 114	22 85	33 130	21 120
Livestock (live weight in kg.) a	100 500	50 390	40 400	65 390	96 <b>3</b> 45	42 450	84 400

a = before transformation
b = after transformation

Source: SVIMEZ - Report on Irrigation and Transformation in Selected Districts.

