



# THE ARKLETON TRUST

RURAL PRODUCTION COOPERATIVES IN SOUTHERN ITALY by Giuliano Cesarini

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## FOREWORD

Rural Production Cooperatives in Southern Italy is the first title in a series to be published by the Arkleton Trust recording field experience in rural development. It is also the first full account in English of a particularly interesting approach to the development problems of an especially difficult rural environment.

Among the main constraints to the improvement of life for small farm communities, three may be listed as of major importance. Firstly, the high cost of programmes which have any effective impact; secondly, the limited availability of skilled and motivated change agents; and thirdly, the under-rating of the traditional values and potential of people in the rural areas. The experience illustrated in this book is of importance on account of both the approach and the results. A further point of interest is that southern Italy manifests a large number of the problems of the Third World - a world with which it also has many cultural ties.

Giuliano Cesarini writes from first-hand knowledge and experience of underdeveloped southern Italy. By giving major emphasis to community action, by increasing the ability of existing change agents through group work and by making new investments very much smaller than those that would be required to create jobs in other sectors, the constraints have been overcome and hope has been given to people whom classical economic theory had written off. In ten years the movement has taken firm root and promises to grow.

The author is Professor of Agricultural Extension at the University of Bologna and Director of the Division for Inland Development at the Cassa per il Mezzogiorno. For the last ten years he has had particular responsibility for extension and production cooperatives, in which fields he and his team have developed new approaches. He has also worked widely as a consultant for United Nations Agencies in Egypt, Guatemala, Haiti, Iran and Sudan. Giuliano Cesarini has made a large number of contributions to the literature of rural development, which have been published in various countries.

The present English edition has been prepared by Keith Abercrombie. The Italian edition was published in 1978 under the title "Le Gestioni Associate in Agricoltura – Esperienze e Proposte", Quaderni Formez, No 15, Naples.

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# CONTENTS

1

	Page		
FOREWORD	i		
INTRODUCTION	1		
Part 1. BACKGROUND AND GENERAL APPROACH			
Chapter 1. GEOGRAPHICAL AND HISTORICAL BACKGROUND			
North and South	3		
Beginnings of farm cooperation in Italy	4		
Joint tenancies	5		
New forms of farm production cooperative	8		
Chapter 2. PROBLEMS AND APPROACH IN THE SOUTH			
Special problems	10		
The human factor	12		
State intervention	13		
Technical assistance	14		
Operational approach	17		
Joint managements	19		
Part II. FIVE-YEAR SURVEY OF TWELVE JOINT MANAGEMENTS			
Chapter 3. THE STARTING-POINT			
Basis of survey	25		
Initial situation	26		
Chapter 4. THE PROCESS OF CHANGE			
General approach	30		
Structural changes	32		
Capital resources	35		
Land improvement	37		
Changes in production patterns	44		
Management and the human factor			
Results in the first five years	55		
Part III. PRESENT ACTION AND FUTURE PROSPECTS			
Chapter 5. PRESENT ACTION AND PROBLEMS			
Dynamics of joint managements	63		
Analysis of 61 joint managements	64		
Operational problems	71		
Chapter 6. FUTURE LINES OF ACTION			
Short and medium-term possibilities and prospects	77		
Conclusions	78		
LIST OF FIGURES	80		

The traditional, small-scale agriculture of southern Italy, once selfsufficient, has been wasting away for many years. Young men have left the land in such numbers that the rural population consists predominantly of old people, with a very high proportion of women. The status of rural work has been debased. In these circumstances the logical next step, in the light of what has happened in other European countries, would be the emergence of a new type of agriculture, characterized by larger farms, modern technology, and high capital investment. The rural exodus, formerly the product of necessity, is already aided by law. Old people are encouraged by various measures to leave their farms and retire, and the "surplus" young people to retrain for industrial employment.

The rural areas are increasingly subject to urban pressures. These pressures not only require higher agricultural productivity, but also access by urban people to the countryside, and (closely related to this) a continued human presence in the areas that are being abandoned. Thus urban society is reshaping vast areas of the countryside for its own use, in the form of parks for the conservation of nature, and large modern farming and forestry enterprises. These activities provide only limited employment opportunities for the remaining rural inhabitants.

The others, following the advice of the experts, have emigrated, often outside Italy, in the hope of a better future. Once a year, at holiday time, they have the psychological satisfaction of returning to their native villages. and showing their superiority over those who have stayed behind.

It is wrong to accept that agriculture is only capable of modification and of integration with the rest of the economy if the changes come from outside. It is also doubtful if it is right to advise farmers to retire early, thus denying the role of old people in society, which is particularly important in rural areas.

New relations are needed between rural and urban societies that will give them equal possibilities for development. People and communities should be able to develop without having to leave their areas of geographical and cultural origin. A society that encourages the emigrant is only superficially humanitarian. It is unbalanced, and involves heavy costs in human terms. What is needed is to help communities, in their own areas, to work out for themselves how to strengthen and develop, and to adopt new concepts and structures in place of obsolete ones.

To attempt to develop rural areas from the standpoint of purely urban values is doomed from the start, especially when the rural areas are steeped in their own traditions. It implies using the wrong criteria, making decisions for others, and taking advantage of the fact that isolated and scattered small farmers are unaware of the means and resources that are available. The whole system has to be changed from inside, not only in form but in substance, in approach, and in the way problems are perceived and resolved. These are the factors behind the pragmatic approach developed since 1970 by the Cassa per il Mezzogiorno (1) in poor, traditional farming communities with high rates of underemployment and emigration. The aim has been to develop the existing physical and human resources, adding the vigour of new technology to the knowledge and values accumulated in the past.

Some 2,000 farm families, with fragmented and scattered small holdings, have voluntarily brought together their land and their labour to form about 100 production cooperatives. The cooperatives cover a wide range of activities, including livestock production, greenhouses, pastures, viticulture, horticulture, and handicrafts. Single family management has been turned into multifamily management, retaining the original spirit of mutual aid but spreading it over wider groups and on a larger scale.

The stimulus for this development has come from an elite group of technicians who, for a decade, have worked "with dirty boots" at the grassroots level in the rural communities. About 50 technicians have gradually been selected from a much larger group of about 500.

The first results of this new approach in southern Italy are the subject of this book. Part I deals with the background and general approach, Part II with a five-year survey of 12 of the production cooperatives, and Part III with a more general analysis of the present action and future prospects.

(1) The full title of this organization is "Cassa per Opere Straordinarie di Pubblico Interesse nell'Italia Meridionale", which may be translated as the "Fund for Special Works of Public Interest in Southern Italy". For convenience, it will henceforth be referred to simply as "the Cassa".

### Part I

# BACKGROUND AND GENERAL APPROACH

## Chaper I. GEOGRAPHICAL AND HISTORICAL BACKGROUND

#### NORTH AND SOUTH

The south or "Mezzogiorno" covers 131,250 km<sup>2</sup>, or 44% of the total area of Italy. Significantly, its population of 19.6 million in 1975 was only 37% of the national total. The Administrative Regions involved are shown in Figure 1 at the end of the book.

The disparities between the industrialized north and the backward, agricultural south are so great that they have sometimes been described as "the two Italies". Yet the south, so underdeveloped today, was once, in the 5th century B.C., at the centre of Mediterranean civilization, the site of the prosperous Greek colonies of "Magna Graecia".

However, the gradual impoverishment of the south began very early, with the expansion of Rome, its occupation of Magna Graecia, and its transformation of the Mediterranean into "Mare Nostrum". The forests were destroyed, pastoral farming and latifundia developed, and malaria spread in the plains. The remaining inhabitants fled to the mountainous interior.

In contrast to the physical and economic decline of the south, there was rapid expansion in the north. Defence against the barbarians required, instead of extensive cereal and pastoral production, the settlement of exsoldiers as the proprietors of small farms. After the Roman Empire was split into east and west, the area still maintained its vitality, with Rome the centre of power and adminstration, whereas the south was governed from distant Constantinople. The feudal period was short in the north.

Vulnerable to attack from the sea, and plagued by malaria in the small area of lowlands, the south was continually under the domination of a succession of foreign powers, including (after the departure of the Byzantines) Goths, Arabs, Normans, French and Spaniards. It kept its essentially feudal structure until only a few decades ago. Extensive latifundia, side by side with tiny farms, numerous hired labourers, and the absence of secondary and tertiary activities were among the consequences.

Topography has also helped to maintain the isolation of the south from the rest of Italy. The north is linked by the great Po Valley. The south is mountainous and fragmented, with a long coastline and the two large islands of Sardinia and Sicily.

Today income per head in the south is only 61% of that in the rest of the country (1). The rate of illiteracy is 10% in Campania, Molise and Sicily, 13% in Basilicata, and 15% in Calabria. In the south 21% of the labour force is in agriculture, as against 15% in the centre-north. In many moun-tainous areas of the interior, agricultural production is still almost the only economic activity. Whereas the south has only 37% of the total population of Italy, it accounts for 49% of the total number of unemployed.

 In 1975 net income per head was 1.43 million lire in the south and 2.35 million in the centre-north (SVIMEZ, Rapporto sul Mezzogiorno 1975, Rome, 1976).

# BEGINNINGS OF FARM COOPERATION IN ITALY

In addition to the disparities between north and south, another important part of the background to the present efforts of the Cassa to promote farm production cooperatives in the south is the past experience of farm cooperation in Italy. This will therefore be briefly examined.

Such cooperation in fact has a long history. In the late middle ages there were in the south of Italy a number of "societas omnium bonorum", in which property was held in common. The first of these were the "fraternitas", in which brothers continued to work together after the death of the father. Another example of joint management is provided by the common lands, owned by the village, on which every villager has the right to graze livestock, collect wood, and in some cases cultivate. The monastic communities are a further example. Closer forms of cooperation between families, groups or communities have also been common for work and defence.

One of the first statutes of joint management was signed in 1789 by Ferdinand IV, King of the Two Sicilies, establishing the silk-producing colony of San Leucio on land donated by him near Caserta. It laid down rules for the community, which was to operate as a single family.

Agricultural cooperation in Italy began to take on a more definite legal and modern form towards the end of the last century. It was promoted by two groups, the socialist party and the catholic movement, which at that time were gaining popular support. Both saw cooperation as a means for improving the welfare of the masses, especially in the deprived rural areas.

This was shortly after the political unification of the country in 1870. The new State concentrated on the most urgent and obvious tasks, such as defence, and the strengthening of industry (mainly in the north) and of railways and other communications. Agriculture was neglected, and a period of crisis set in.

The agricultural sector was already in considerable difficulties, as a result of increasing population pressure and the inequitable distribution of land. In 1861 8.3 million people, or 57% of the labour force, were working in agriculture. More than half of them were landless, and worked as labourers or share-croppers on large capitalist enterprises. Some 93% of the farms has an average area of 0.75 ha and covered 25% of the land, while 0.3% had an average area of 380 ha and accounted for 39% of the land (2).

In the north (and especially in Emilia and Romagna), which was already geared to wider markets, the large landed properties were developed by enterprising tenants and owners. Many large estates abandoned the traditional share-cropping system in favour of using hired labour. Livestock and fodder crops replaced cereal production. Many of the former sharecroppers were added to the ranks of the landless labourers. Some of them (together with immigrants from other poor regions like Veneto) found employment in land reclamation works in the Po Valley and around Ravenna, and in the rice production that this made possible, but rice was soon replaced by other crops requiring less labour. In the provinces of Bologna,

(2) SVIMEZ, Statistiche sul Mezzogiorno d'Italia, 1861-1953, Rome, 1954.

Ferrara, Forli and Ravenna alone there were 114,000 landless labourers at the end of the 19th century, representing almost 10% of their total population.

The south, cut off from the rest of Europe by poor communications, without industries, with its few lowlands malarial and marshy, felt the full effects of the agricultural depression. The difficulties were accentuated by an agricultural structure characterized by extensive production on feudal latifundia, stagnating and isolated small farms, and large numbers of labourers and farmers without or almost without land, concentrated in the mountainous interior. First the landless labourers, then the share-croppers, the tenants, and finally the small proprietors found themselves in steadily worsening conditions.

In these circumstances the pressure to emigrate became immense. From the north the emigration was mainly to other parts of Europe, and (except for those from Veneto) temporary. From the south it was overseas and permanent. Around 1900 more than 200,000 people a year (285,000 in 1907) left the land. This was only the beginning of a long history of hope and suffering, and of separation from families, communities and land.

Some of the agricultural labourers, instead of emigrating, sought to survive by obtaining better conditions for continuing their present livelihood. The labourers in the north, who were landless, concentrated their action mainly on improved wage agreements and assured employment. Those in the south, generally small farmers with 1000 or 2000 square metres of land and sometimes a mule and a plough, sought to organize themselves to increase the land available to them for cultivation.

### JOINT TENANCIES

One solution available to the organized groups lay in the acquisition of joint tenancies. In more or less formally defined groups, they sought to rent land for either joint or individual cultivation. The first experiments in the joint management of land were, however, only a small fraction of the total cooperative effort. Moreover, they did not always meet with success.

An important event in the history of agricultural cooperatives in Italy was the foundation in 1883 of an association of labourers (3) in Ravenna by Nullo Baldini. Its main aim was the direct execution of public works by its members, but (like a number of other labour cooperatives) it also emphasized the basic importance of an attachment to the land, especially after the amount of public works was reduced. Often the first experiments in joint tenancies were started by highly motivated leaders who understood the importance of the link with the land, but even in these cases there were many difficulties. For people such as the members of the Ravenna association, without land or capital, to say nothing of managerial capacity, landholding was an almost impossible aspiration.

In many cases the number of joint tenants was out of proportion to the amount of land available, even reaching 1,000 members on 100 ha. Thus the cooperatives were forced to divide up the work between their members

(3) Associazione Generale degli Operai Braccianti del Comune di Ravenna.

on a shift basis. At best, only a few weeks of work were available each year for each member.

But, in spite of many setbacks, different types of joint tenancy spread quite rapidly in both north and south Italy. By 1960 there were 108 such tenancies on nearly 45,000 ha with more than 27,000 members. In the north the movement developed mainly in Emilia and Romagna, and in the south mainly in Sicily.

In the absence of Government interest, the only organizations'in contact with the masses were the socialist, popular (catholic) and republican parties, and their related trade unions. Subsequently the National League of Cooperatives and Mutual Societies (4) (socialist and republican) and the Confederation of Italian Cooperatives (5) (catholic) were established. It was mainly such organizations that promoted joint tenancies. The first State intervention came in 1906, when two laws were passed, exempting landholding cooperatives from the payment of taxes, and authorizing the Bank of Sicily to grant them loans. By 1911, 37 associations on 40,000 ha were assisted by the bank.

The associations were of three main types. Under joint tenancies with individual farming, the cooperative acted as a contractual agent, standing surety for the members and for the landowner. The rented land was divided among the members, who cultivated it individually. In the north, each member cultivated a farm together with his family. In the south, where feudal estates predominated, each member cultivated a share, which might vary from year to year according to the rotation. The cooperative could also provide common services, such as insurance, machinery, purchasing and marketing, and be linked with a rural credit bank.

Under joint tenancies with joint farming, the cooperative completely took the place of the tenant. The members, who could be permanent wage labourers or casual labourers, worked collectively on the farm. There were also mixed forms of joint tenancies, with part of the land divided between the members, and part farmed collectively on the basis of wage payment.

The formula of individual farming was the most prevalent, especially in Lombardy and in Sicily. The joint farming system was founded mainly in Emilia and Romagna, and in certain parts of Mantua. Of the 108 joint tenancies in 1906, only 25 (all in the north) were jointly farmed, and 83 (of which 53 in the south) were farmed individually.

In 1919 and 1920 two laws promoted the ceding of uncultivated or badly cultivated land to cooperatives. As a result, the number of joint tenancies had risen to 314 by 1928, with almost 48,000 members and an area of 243,000 ha. In general, however, the period between the two world wars was a difficult one for joint farming. The two cooperative organizations mentioned earlier were dissolved, and an official National Cooperation Organization (6) established. Joint farming was regarded with

- (4) Lega Nazionale delle Cooperative e Mutue.
- (5) Confederazione delle Cooperative Italiani.
- (6) Ente Nazionale della Cooperazione.

suspicion. The Ravenna labourers' association and similar organizations were placed under the control of Government officials. Some of the cooperative tenancies were liquidated and the land returned to the former tenants, while others were placed under the strict control of the State. Only about 10 joint tenancies with joint farming survived with difficulty in Emilia and Romagna.

Immediately after the second world war there was a new impetus for the acquisition of land by cooperatives. Strong social pressures were reinforced by two new laws passed in 1944 and 1946 for the allocation of uncultivated or insufficiently cultivated land to cooperatives. There was also a major shift towards the south. Of the 24,000 requests by cooperatives for the allocation of about 2 million ha at the end of 1952, 21,000 (involving 1.8 million ha) came from the south. At the same time 84% of the allocations that had already been granted concerned the south.

Italy's Agrarian Reform was passed into law in 1950. It provided for the expropriation of large estates, and the allocation of plots or small farms to labouring families or to small farmers. Some 616,000 ha were expropriated and improved, and assigned to 109,000 families. Once again, this mainly concerned the south. Together with a general lowering of social pressures, it reduced the stimulus to establish joint tenancies.

Almost all the joint tenancies in the agrarian reform areas, that is to say mainly in the south, petered out. Others in the north continued and strengthened, becoming owners of the land they cultivated. Thus new forms of cooperative emerged which actually owned the land. All of these cooperatives (48 in 1953) were in the north, and 34 of them were under joint farming.

It is necessary yet again to emphasize the differences between the north and the south. The 53 joint tenancies on feudal holdings in Sicily in 1906 were very different from the 55 in the north, which were in developed environments, charged with idealistic fervour, and fundamentally democratic. In the north, the labourers saw in joint tenacies a useful complement to their work as wage labourers, and counted particularly on additional days of work. In the south the labourers, who were also small farmers, mainly saw the possibility of adding to the small area of land to which they had access.

In general it has to be admitted that the achievement of the joint tenancies was small. To take only one example, the cooperative "La Moderna" was founded in 1938 in the province of Enna in Sicily. There were 180 members. cultivating cereals and broad beans on 2 or 3 ha each. In 1953, after 15 years, the opportunity arose to buy their rented 205 ha on a mortgage. Only 92 members accepted this responsibility, and the holding was divided into plots of about 2 ha that were assigned by lot. By 1975 only 50 families still Many had emigrated, and the plots had more than 200 lived on the holding. The farm building was divided into about 200 parts. proprietors. The cooperative still grows only cereals and broad beans, and the only indentifiable positive element has been the reduction in the real value of the mortgage repayments as a result of inflation. The only thing modern about the cooperative is its name.

#### NEW FORMS OF FARM PRODUCTION COOPERATIVE

New forms of agricultural cooperative began to develop in Italy around 1960. Among the first of these were cooperative livestock units. Small farmers (tenants as well as proprietors, and sometimes share-croppers) joined together to establish cooperative units on an economically viable scale for the production of meat and milk. The objectives were threefold. By freeing themselves from the heavy and continuous work in individual units, the members would be able to undertake other agricultural or nonagricultural activities. The cost of converting forage into meat and milk would be reduced, and the members would have organic fertilizer for use on their own farms.

The members continued to run their own farms, and delivered fresh or dried forage in agreed quantities. The forage was valued on the basis of its nutrient content. Using purchased livestock, the cooperative converted the forage into meat and milk. It sold these products and, after the deduction of costs, divided the proceeds among the members on the basis of their share of the forage. The manure was divided on the same basis.

After an initial phase of rapid development, the spread of cooperative livestock units slowed down as a result of a number of difficulties. Their main benefits accrued to the larger producers. The management remained of traditional type, based on the use of hired labour, so that there was little cooperative spirit. Homogeneous and sufficiently large farm units were necessary to achieve a harmony of interests and adequate reductions in production costs.

This last condition is one of the principal reasons why this type of cooperative made little headway in the south, with its small, fragmented holdings. Out of a total of 119 in 1972, 115 were in the centre-north, and only four in the south (7).

As regards joint tenancies, the continuation of some of the earlier enterprises made new initiatives possible, especially in Emilia and Romagna, with better man-land relations as a result of the changed socio-economic conditions of the country. Share-croppers or tenants on the large estates of hospitals and similar institutions joined in cooperatives to rent the land on which they had worked individually, and to manage it cooperatively. They were paid monthly advances at trade union rates, and at the end of the year the balance was divided among the members.

In the last few years there has been a resurgence of this type of cooperative, mainly involving tenancies, but also mixed types where the land is purchased and divided among the members. Full statistics are not available, except for the south. However, it may be roughly estimated that at the end of 1975 about 200 such enterprises were functioning in the whole of Italy. Almost half of them were in the south, mostly of very recent establishment.

At the end of the 1960s there began in southern Italy, sponsored by the extension service of the Cassa, a movement towards a new type of integrated

(7) S. Nacamuli, G. Cesarini and E. Pedrini, Nuove Forme di Collaborazione nel Campo della Produzione Agricola, Informazioni Interne sull'Agricoltura, No 93, EEC, Brussells, November 1972. joint management (8). Small farmers bring their land together into units of economic size, with the aim of improving production on a common basis, and ultimately the full utilization of the labour of the family members.

Membership is entirely voluntary. The members assign their land for the use of the cooperative for 30 years. The net proceeds are divided between the members on the basis of the work performed and the amount of land made over. The management is fully cooperative, since hired labour (whether or not that of a member) is completely excluded.

The development of this type of joint management, the difficulties encountered, and the progress achieved are the subject of the following chapters.

(8) The Italian name of "gestioni associate" is abbreviated to "Gea", after the Greek earth goddess of that name ("Ge" in English).

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## Chapter 2. PROBLEMS AND APPROACH IN THE SOUTH

## SPECIAL PROBLEMS

Some of the main characteristics of southern Italy have already been briefly discussed at the beginning of Chapter 1. They will now be examined in more detail in the light of the problems they pose for rural development.

A very large proportion (84%) of the area is mountainous. It is geographically scattered along an axis of over 700 km and in the two main islands of Sardinia and Sicily. The climate is characterized by autumn and winter rainfall and summer drought. Population density averages as high as 147 per km<sup>2</sup>, and 21% of the active population works in agriculture. There are very many small farms, with 80% of the total of 1.8 million farms smaller than 5 ha. The rural structure is traditional. There is a wide range of agricultural production patterns, in line with the climatic and soil conditions, which vary with latitude and altitude. The communities are ethnically heterogeneous.

These conditions cause serious obstacles to development. It is impossible to make contact with so many farmers and their families in any effecttive or lasting way. Thus there are no channels for innovations to reach the production units and the millions of people who depend on them. When innovations do reach them, they are either adopted irrationally, or rejected because of the impossibility of absorbing them. Other problems are the low level of education, and limited managerial capacity.

Table 1 illustrates some of the characteristics of the farm structure in parts of the south. The data refer to the area served by 168 Extension Centres of the Cassa in 1973. The 886,000 ha involved contained 296,000 farms with an average area of about 3 ha. Some 89% of the farms were smaller than 5 ha, and covered 34% of the total area. It is noteworthy that these characteristics are more or less the same whether in the dry mountainous areas or in the irrigated lowlands.

Farm	Dry mou	ntainous ar	eas Irrigat	ed lowlands	Total <sup>a</sup>	
size	Farms	Area	Farms	Area	Farms	Area
	No	Ha	No	Ha	Nó	Ha
• .	82, 132	253, 506	46, 279	124,673	296, 416	885, 590
ha			% of 1	total		
Less than 5	87.5	36.3	89,9	32.1	88.8	30.6
5 and above	12.5	63.7	10.1	67.9	11.2	69.4

Table 1. Farm structures in area served by 168 Extension Centres of Cassa per il Mezzogiorno, 1973.

a. Including those in other areas served by the extension centres.

The importance must be stressed of this structural uniformity in different environments, in view of the extreme variety of climatic and soil conditions in southern Italy. It indicates an attachment to the land that is not governed by economic laws alone. This attachment also depends on the sense of security that land gives to those who cultivate and possess it. Sales are therefore rare, the land market is static, and prices are high in relation to production potential. Farm structures are influenced mainly by marriage and inheritance, and are becoming more and more fragmented. Sometimes the farm structure is worsened by infrastructural developments that reduce and subdivide the already irrational pattern still further. Irrigation pipes and channels, drainage systems and roads must follow topography, instead of farm structures dictated by marriage and inheritance.

The overall results of this situation are well known. A few specific examples, partial but certainly not isolated, will nevertheless help to explain the problems which hold back development, of which irrational structures are among the most important.

The first example is an area of 74 ha in the province of Agrigento, Sicily, with 98 properties of an average size of 0.76 ha. It is served by two irrigation districts, which provide water for 4,880 m of irrigation canals, or 66 m per ha. While this may seem excessive, it is in fact insufficient, in that not all of the properties are served by the irrigation network.

Except in the few areas of recent settlement or of pastoral tradition, where the size of holdings is better balanced; this type of phenomenon is repeated. On a sample of 49,000 ha of the 80,000 ha of the Campidano in Sardinia, 82% of the farms are smaller than 5 ha. Fragmentation reaches particularly high proportions, with the plots scattered all round the village.

The same conditions as in Sardinia and Sicily are found on the mainland of the south. Examples are the plains of Venafro and Cassino, the Conca di Sora, the whole area around Naples, and the valleys of Abruzzo. Even some industrialized areas are not exempt. This is the case; for example, with the reclaimed land around the River Pescara. On 2, 220 ha of irrigated land under 31 districts of the Vestina Land Reclamation Society, there were in 1970 1,976 users of irrigation water, with holdings of an average size of 1.2 ha. Water was distributed to 4,152 plots, with an average size of 0.5 ha (1).

A particularly striking example of the effects of farm structure is provided by a service cooperative in the irrigated area of Cepagatti in the province of Pescara. The cooperative not only markets its members' produce but also undertakes certain production operations, including crop spraying. Table 2 brings out the remarkable fact that in 1973 the 52 farms received a total of 1, 106 crop spraying treatments on 106 separate plots.

(1) Secondo Flamini, Relazione sulla Stagione Irrigua dell'Estate 1970, Consorzio della Bonifica Vestina, Pescara, November 1970.

Crop	Area	Farms	Plots ,	Treatments per plot	Total treatments
	ha	• • • • • • • •		no	
Tomatoes	31	22	37	18	666
Sugarbeet	7	- 6	8	7	56
Fruit	· 2	. 3	- 3	12	36
Olives	116	. 21	58	6	348
TOTAL	156	52	106	10	1,106

Table 2. Crop spraying treatments by service cooperative of Cepagatti, 1973.

### Source: Lionello D'Orazio, Relazione Semestrale, Centro di Assistenza Tecnica di Cepagatti, Pescara, 1973.

All of the farm operations are affected in a similar way. It is therefore hardly surprising that unit costs of production on the small farms are generally more than double those on farms of more than 10 ha.

#### THE HUMAN FACTOR

For farm families these conditions imply much wasted effort, and irrational use of the human potential, male and female, old and young. There are both external and internal conditions which reduce the efficiency of the rural family, and bring many negative effects.

Externally, there is no proper structure to assist rural families, in a timely and efficient way, to meet their real needs. Small public infrastructures are either lacking or of limited efficiency, because of the difficulty and high cost of construction and maintenance. Families and communities have little capacity to communicate with the outside world, because of the diversity of language, motivation, and interests.

Internally, there is an unbalanced and wasteful use of energies and resources. Incomes are low and uncertain, and even in the best of circumstances arduous efforts are required to gain a livelihood. There is a tendency to under-rate and even reject the values acquired through traditional experience.

A particularly serious aspect is the problems of rural women. They either play no role at all, or are exploited to an extreme degree. A study of 100 farm families in different parts of the south has clearly indicated the many factors that prevent rural women from having their full potential influence on society The attachment to the land and the emigration of the male population ob-(2). lige the women to remain where they are. Their mobility is also reduced by the difficulty of finding alternative employment opportunities. Their educational level is lower than that of the males, and this further limits their capacity to have contact with the outside world. The inefficient production structures do not permit them to divide their time rationally between the farm and the family and household. Irrational and sometimes unhealthy dwellings add to the

(2) G. Cesarini, G. Minuti and M. Satta, Economia domestica rurale: considerazioni su di una indagine campionaria, Cassa per il Mezzogiorno, Rome, February 1974. burdens of the domestic work which falls entirely to them. Their decisionmaking is greatly restricted. All this is made worse by the inability of Government Services to give concrete assistance to rural families.

The young people look for any kind of job, without even thinking of working in their own villages. Those with middle-school diplomas always look for an office job, and in the meantime live in the village off the pensions of the older members of their families. The others look for work as doormen, ushers, drivers, messengers. If (as in most cases) they do not find the jobs they want, they emigrate to the north of Italy or overseas. Old people try to get a pension for work-incurred illness, or wait for their old-age pensions, continuing to work their small plots. The women marry. If they marry emigrants, they either live in the village on their husbands' remittances, or continue to work on their land. It is rare for the emigrants' families to follow them abroad.

A hidden resistance to development, and a lack of confidence in it, rule out even the discussion of possible changes. There is an adverse attitude which impedes any constructive process, even by serious and well-qualified organizations. When a constructive dialogue is finally achieved after much difficulty, it is confined to a few people and has limited effects.

The economic losses from this waste of human resources, in a country that is obliged to import increasing quantities of agricultural and other products, are incalculable. To these must be added the losses from emigration. During the 1960s, for example, about 2.3 million people emigrated, 1.5 million of them abroad. The remittances sent home from other countries are far smaller than the State's investment in the education and development of the emigrants, and an even smaller proportion of the loss of production they represent. One must also add the loss of the intellectual capital and skills acquired in the original environment.

# STATE INTERVENTION

It is against this background, together with the very serious socio-economic conditions at the time, that Law No 646 of 10 August 1950 established the Cassa per il Mezzogiorno. For the first time in Italy, public action was undertaken on the basis of concrete intervention programmes to be carried out within the framework of a concerted development strategy.

The new organization, with the objective of the socio-economic development of the south, had several novel features. It was to ensure the coordination of action programmes, and to concentrate in one organization the responsibility for the planning and execution of interventions in different administrative sectors, including land reclamation, irrigation, roads, water supplies, vocational training, industrialization, and tourism. It was to provide financial assistance on a guaranteed, long-term basis, and to work in a speedy and flexible manner, without imposing additional burdens on the normal organs of State intervention.

During its history of more than a quarter of a century, the work of the Cassa has gone through several phases. The initial emphasis on infrastructure and agriculture was subsequently supplemented by new inititatives in the industrial sector, in the development of human resources by training programmes, and in all aspects of production. The strategic interventions accomplished since 1950, with a total investment of more than 30 billion liré (3), include large

(3) 30,000,000 million lire.

dams, water supply systems, major roads, irrigation networks, and new industrial and tourist areas. These interventions have been fully articulated with sectoral and regional objectives under long-term coordinated development plans, and subsequently under the directives of the Interministerial Committee for Economic Programming (4). Today they are carried out as special intersectoral and interregional projects within the framework of the National Plan.

This action has brought a considerable development of irrigation, of industries and of tertiary activities in a large part of the south. However, some areas of the interior, far from the major centres of development, have remained isolated and depressed. In these areas the phenomena described earlier of impoverishment, abandonment of the land, emigration of the young people, and the ageing and "feminization" of the population have continued and been accentuated.

In 1968 the Cassa therefore began a series of rapid interventions in the social and productive sectors of the areas characterized as "particularly depressed", with simplified procedures and maximum flexibility. The objectives were to meet the most urgent problems by the strengthening and modernization of public services, and to develop initiatives for the promotion of cooperative production.

To accomplish the second objective, suitable criteria were established to ensure the rapid execution of projects. Since interventions of this kind depend on the presence on the spot of an efficient supporting structure, arrangements were made to work through the existing extension organizations. The Extension Centres were therefore reorganized, improved and strengthened, in order to have on the spot institutions capable of understanding, facing and resolving human as well as technical problems. At the same time, the first initiatives of a collective type were taken, which could serve as examples and practical applications of the criteria developed by the Cassa.

In discussing the basic prerequisites for the development of modern agriculture, the structures for support and technical assistance are usually ignored, as it tends to be taken for granted that they not only exist but are also effective, which in reality is seldom the case. If they are fully effective, they make it possible to channel investments rationally, objectively and speedily, to detect all the various aspirations and attitudes of the families and communities concerned, and to identify and promote the most appropriate type of adjustment.

Thus it is important to consider the organizational and operational aspects of the external structures concerned with development, with programming, with the application and working of the law, with support and guidance, and above all the organizational structures for technical assistance or extension, the training of their personnel and the system of supporting and coordinating them.

## TECHNICAL ASSISTANCE

The effectiveness of the structures supporting development depends on the way in which they are organized, and on the type of action they undertake.

(4) Comitato Interministeriale per la Programmazione Economica.

Both depend in turn on the qualifications and training of the personnel.

Basic organizational criteria are the continuous presence of the technicians on the spot, the concentration of interventions in limited areas, gradual but complete action, and operational autonomy. These considerations imply a decentralized structure, with long-term aims, capable of adapting itself closely to the social structures concerned, as a prerequisite for establishing a two-way system of communication (5).

With a hierarchically rigid, contralized and authoritarian structure, with few qualified personnel, it is possible to make rapid overall material progress, especially in infrastructure and large-scale interventions. It is not possible, however, to make progress in the human aspects of participation and active collaboration that are the subject of this book.

The ideal system would have a horizontal structure, with uniform levels of qualifications, differentiated only by area of specialization. Work at the community level in a small village of 100 or 1,000 families requires the same degree of qualifications as work at the intermediate level in specialist support and coordination, or at the provincial or regional level in overall programming and coordination.

It is difficult to understand that it is possible to work by collaborating instead of giving orders, and to coordinate without delaying decisions or introducing too many formalities. The technician working in the field must be assured complete and unconditional support. Full responsibility for decision-making must be left to him, so that he can in turn pass it on to the farmers concerned. All this implies the need for support in terms of adequate equipment. It also requires maximum mobility, and continuous contact with colleagues and institutions, in order that the negative effects of psychological and cultural isolation are not added to the inevitable physical isolation. Finally, secure conditions of work and adequate remuneration are essential.

It is only when these obstacles to organizational efficiency have been overcome that it is possible to move into action, and to put into effect an approach that is global, gradual and in harmony with the rural communities, and has a uniform methodology, and autonomy of action. It is for these reasons that the Cassa chose the decentralized organizational solution. It is more difficult to achieve, but it offers greater assurance of influencing the rural communities on a continuing basis.

In difficult environments, with a high population density, the presence on the spot of qualified and competent personnel, objectively motivated for the tasks assigned to them, is an essential prerequisite for starting any action in the agricultural field. In place of the usual administrative link with the "formal" community, there must be an operational link with the "real" community. This seldom results from official contacts. It requires people who are able to work in isolated communities, capable of gaining the confidence of these communities as a result of their competence and way of life, without becoming personally involved in the situation. This problem is easily solved by ignoring it, which is the typical approach of the technicians who spend a single day in the area, make their own evaluations and decisions, and then

(5) Giulio L'eone and Giuliano Cesarini, Assistenza Tecnica Agricola: Metodologia Operative della "Cassa", Cassa per il Mezzogiorno, Rome, November 1974. return to the town.

The training of the extension agents has therefore been given the highest priority by the Cassa. It has covered both the methodology of the human and cultural approach, and production techniques. Groups of 20 to 25 technicians from different regions have attended methodological courses or refresher meetings.

The methodological courses last three to six months. They study, within the institutional framework of the country, the basic elements of economics, psychology and sociology, techniques of communication and extension, the analysis of situations, the preparation of work programmes, and the evaluation of results. The courses are residential, and are carried out by an organization specialized in intermediate-level training, the Training and Studies Centre for the South (FORMEZ) (6).

The refresher meetings last two weeks. They cover basic subjects (soil science, fertilizers, farm lay-out, irrigation, mechanization, rural construction), as well as the various agricultural products and systems, rural hand-icrafts, home economics, cooperation, and accounting. They take place in suitable rural areas, and are organized by the technicians themselves in collaboration with appropriate experts and research workers.

Each operational group or Extension Centre has three main tools of work. The first is a basic survey (7). This includes a detailed socio-economic investigation of the area of intervention (3,000 to 5,000 ha), and a critical analysis of the operational situation and of the objectives, phasing, methods and priorities of the work of extension, assistance and promotion (8). The second is an annual work programme, with indications of objectives, organizational, technical and methodological requirements, a calendar of operations, and estimated expenditures. These programmes and their results are discussed in regional meetings by all the technicians. The third tool is a sixmonthly report, to check on the action under way, evaluate the results, and adapt the operational programme accordingly.

The execution of these training and organizational activities has been developed side by side with the work of extension and promotion. In the space of a few years, 10 methodological courses and 80 refresher meetings have been held. Basic surveys have been prepared for 168 intervention areas, and a data base of 10 years of six-monthly reports has been built up. This has made possible the gradual training of the technicians in close relation to the conditions in which they operate, has united them in a uniform method and approach, and made them feel a sense of prestige and of belonging to a unique group with the common objective of the development of rural communities. Agronomists have been trained to interpret local technical and economic problems in a framework of people, families and communities.

(6) Centro di Formazione e Studi per il Mezzogiorno.

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- (7) Piano degli orientamenti.
- (8) G. Lisciani and G. Argenti, Schema Guida per la Compilazione del Piano degli Orientamenti per i Centri di Assistenza Tecnica Agricola, Serie Divulgazione No 7, Cassa per il Mezzogiorno, Rome, 1969.

#### OPERATIONAL APPROACH

On this basis it became possible to think in concrete terms of the radical transformation of structures and production patterns, the realignment of motivations and ideas in the communities, and the better use of the strengths and intellectual potential within the families. In this type of social change, the mass media have no effect, except to reinforce the tendency to give up. This is also true of the classical technique of communication by direct contact, because of the waste of effort it involves. What is needed is to work through formally and legally constituted groups.

Change must take place harmoniously and naturally, not warped or accelerated by promises or pressures but promoted indirectly. It cannot be mapped out in advance in terms of timetables and quantities, but only on the basis of general guiding principles, the actual manifestations of which may be of the most varied nature. In one area nothing may appear to change for many years, and in another cooperative organizations may develop rapidly, but this does not necessarily imply that the work was bad in the first case or good in the second.

The operational structures must be open and flexible. Continuous and timely contact at all levels, however great the distances involved, must become the rule rather than the exception. The same apparent results can be achieved either by imposing decisions through the stimulus of grants, or by encouraging people to make decisions themselves on the basis of information about the ways to overcome their own problems. The second approach makes use of the spirit of mutual aid and collaboration. The action taken must help those concerned, in the light of their own perceptions and aspirations, to discover for themselves the steps and decisions that have to be taken.

In the conditions of southern Italy, with its small and fragmented farms, an essential aim is to arrive at farm units of economic size that permit the development and efficient management of resources. This has to be done in a way that is fully articulated with evolving human realities. A whole process of technical and human change must be started through a composite intervention that gradually develops the existing structures into a stable form of productive enterprise.

This requires a capacity to interpret local phenomena, direct knowledge and experience of local production possibilities, and constant contact with the communities concerned. If these conditions are met, it is possible to bring together individuals (or, better, families) in close collaboration, to bring together for joint operation farms that are owned and cultivated according to age-old rights, and to achieve reasonable incomes on a basis of collaboration and trust. The joining of individuals, families and different interests, in varied conditions, is perhaps the most difficult aspect. It cannot be achieved quickly, except in purely formal terms. The main stimulus has been the conviction that, even in the most depressed areas, large increases in incomes could be obtained in a reasonable period of time.

Initiative has been fully encouraged, but has not been allowed to enforce changes in the basic guiding principles. Special importance has been given to the presence of people on the land, not as hired labourers or casual workers, but as productive and decision-making entities. Hence the greater priority that has been given to the human aspects than to purely technical and economic considerations. The positive results to be expected from a cooperative approach were analysed at the first refresher meeting on the methodology of organizing joint managements, held by the Extension Service of the Cassa in May 1970. Divided into the technical and economic and social effects in the private and public fields, they may be summarized as follows:

### PRIVATE BENEFITS

Technical and economic

- it is possible to establish enterprises of technically and economically viable size;
- in a static and high-priced land market, a better utilization of the land can be achieved without expropriation or purchase;
- natural resources can be rationally and fully utilized;
- in the new physical and economic dimensions, technical inputs can be used economically;
- the utilization of the labour force is in line with the capacities and inclinations of each person, resulting in greater efficiency;
- the absorption of new techniques and knowledge is accelerated;
- concentration of effort reduces waste and leads to the intensification of production;
- uniform production specialization improves the quality of the product.

Social

- the sense of collaboration, of working as a group, and of mutual respect is reinforced;
- technical and general training and education are facilitated;
- the fuller use of the human potential, male and female, young and old, is favoured;
- by giving directly to those concerned the possibility and ability to resolve their problems, the sense of mutual aid and of self-determination is fortified;
- the better organization of the work makes possible the reduction of costs and of physical effort;
- holidays and leisure time become realities even for small farmers.

#### PUBLIC BENEFITS

Technical and economic

- assistance to farmers, no longer directed to innumerable small units, is strengthened and facilitated;
- common lands may be used more rationally by responsible bodies with a direct interest in improving and conserving their productivity;
- public intervention, mainly concerning infrastructure, is carried out more economically and efficiently, with greater assurance that it will be rationally used;

- proper water control on larger farm units is favourably reflected over entire hydrographic basins;
- water distribution in irrigated areas is simplified if there is a more rational and economically controlled use of water;
- marketing is facilitated by specialized production units of adequate size.

Social

- the traditional values of individual communities are retained and strengthened;
- traditional values are helped to adapt to the assimilation of innovations;
- conditions are created which make possible a decent existence on the spot and permit people, especially the new generations, to make a free choice of their way of life;
- improved productive organizations are established which, shielded from the effects of what happens to individuals, make possible effective operational programmes in a wide range of activities;
- the democratic spirit supports an effective and sustained social growth;
- in difficult, socially anomalous and even criminally inclined environments (including banditry, family feuds and the influence of the Mafia), bodies are created which are capable of accelerating the process of civic development.

It is on the basis of these hypotheses, formulated in 1970, that the work of the Cassa per il Mezzogiorno on cooperative managements has taken shape.

## JOINT MANAGEMENTS

The common management of any resource must be based from the start on complete freedom and democracy, and on the assurance that the common effort cannot be distorted or broken up. The first of these two conditions is satisfied when there is a communion of interests and aims, towards which progress is clearly made on the basis of self-respect and respect for others on the part of all the members. The second condition is realized if the common will of the members cannot be set aside by the divergent interests of individuals or minority groups within the community, or outside it. Mechanisms are therefore necessary which make it possible for the group to sustain its own democracy, and to resist effectively any internal or external disruptive forces that may appear.

There was no previous experience in Italy in this field which could be drawn on. The joint tenancies, discussed in Chapter 1, mainly reflected the needs of the agricultural labourers at a particular period. Similarly, the cooperative cowsheds could not solve the problems of the small, fragmented and scattered farms of the south. The new type of management that was envisaged in the south involved bringing together the land of the members for production in common in varied and complex conditions. Thus, while holding firmly to the key principles of cooperation (equal voting rights and mutuality), the legal solutions adopted were not preconceived but based only on general guiding principles.

Groups of farmers were called on to undertake commitments that affected their families and economic situation, and took them into a new legal, fiscal, technical and economic framework. It was no longer a question of everyone for himself, but all for one and one for all. It was a venture into the unknown, where it was not possible to have recourse to formulas developed in other countries or periods.

The basic principles were voluntary participation, full freedom and responsibility in collective decision-making, the complete availability of the land for rational management, and the division of income in accordance with the work and land contributed. After this the choice of the legal formula was left to those concerned, guided by their local advisors and their own direct experience. They could join either in a common law partnership, a simple partnership, a limited liability partnership, or a limited liability cooperative.

Sound farmers and motivated and qualified technicians are the two starting points from which it was possible to move in this new direction without any sure ideas of the best legal basis. Financial and other commitments were undertaken with the sole security of the will of the families concerned. From the very beginning, no extension agent ever took part in the decision-making bodies of the joint managements.

Meetings were held every year where the technicians and farmers discussed common problems in the light of the situation at the time. The first meetings concentrated on the legal aspects. It was only later that administrative, engineering, technical and organizational aspects were successively taken up. As experience spread and was consolidated, it became possible to move on to further phases of development.

Gradually what was known was strengthened into a solid operational base, and the unknown area was reduced, especially psychologically. The simplest formulas (common law and simple partnerships) soon showed their limitations. Some of their weak points were the lack of legal status and of autonomy over capital, and the impossibility of expanding managerial activities into such areas as marketing and processing.

Of the limited liability societies, the cooperative formula proved the most suitable, being based on capital, legally autonomous, and assuring mutuality as regards the members. The mutuality is characterized by the service rendered by the society to its members. It is recognized legally (9) if the following three points are observed: the indivisibility of reserve funds until the society is dissolved; the transfer of property to mutualistic purposes on the dissolution of the society; and no dividend on the paid up capital (the shares of the members) (10) to exceed the legal rate of interest (5%). Furthermore, cooperative societies are exempt from company taxation (11).

This legal status and autonomy over capital enable the societies to obtain credit and associated benefits, as well as giving them a well-defined contractual power. They can undertake managerial activities of various types either on their own account or together with other similar bodies.

- (9) Decree Law No 1577 of 14 December 1947, Article 26.
- (10) The shares of the individual members can reach 2 million lire, or 4 million lire in the case of production and labour cooperatives, and those concerned with the consumption, processing, preservation and marketing of agricultural products (Law No 127 of 17 February 1971).
- (11) Law No 127 of 17 February 1971, Article 8.

The formal organs of the society are the assembly, the board of directors, the chairman, the auditing committee (12), and the arbitration committee (13) The assembly, composed of all the members, can take any decision (14). concerning the cooperative and its members, discusses production patterns and general rules, and elects the subsidiary bodies. ... With a four-fifths majority it can decide on the dissolution of the cooperative and a return to individual management. The board of directors is usually composed of five members, from among whom the chairman and vice-chairman are elected. It executes the decisions of the assembly, programmes and organizes the work, helps the chairman in his duties, and (if this is allowed for in the statutes) enrols new members. The chairman is the legal representative of the society, and is responsible for its external relations, and for the execution of the decisions of the board of directors.

The auditing committee, composed of four people (who are not necessarily members), checks on the administration of the cooperative, watches over the observance of the law and of the act constituting the cooperative, and ensures that there is regular accounting. The arbitration committee resolves disputes concerning the statutes or regulations.

The tasks involved in holding these various offices are considered as a normal part of the work of a cooperative member. The participation of the members in the work is voluntary until the available labour force has gradually been absorbed as a result of the intensification of activities. If necessary, the board of directors is then empowered to call for full-time work by the members. These concepts have been fundamental, because they have made it possible to build up the legal provisions required to regulate and defend the system.

There was a danger that independent farmers would be turned into hired labourers. This would not only have threatened organizational efficiency, but also the cooperative spirit itself, by abandoning the participation of every individual in management, and falling back on the work of subordinates. In some cases, right from the start of the first joint managements, there were some who favoured the inclusion of wage-earning members. Anumber of points were made in support of this approach. With the establishment of farm units allowing economies of scale, it would permit more efficient work organization and the reduction of the labour force. Specialization and more intensive production, requiring high investment, lead to mechanization and the need for a small, specialised labour force. The use of hired labour suits the owners of large holdings, who, by joining the cooperative, compensate for the small size of the other holdings. On a specialized and mechanized farm unit, the division of the proceeds on the basis of the work performed would bring very high returns for the wage-earning members at the expense of the proprietors who did not work.

- (12) Collegio Sindacale.
- (13) Collegio dei probiviri.
- (14) For further details of the legal and related aspects, see G. Cesarini and A. Franco, L'Azione Promozionale della Cassa per il Mezzogiorno e le Gestioni Cooperative, Cassa per il Mezzogiorno, Serie Divulgazione No 10, Rome, September 1972.

Many other arguments could also be advanced in favour of wage-earning members. The fact is, however, that this is not orthodox in the cooperative sense. Nor is it orthodox in the mutualistic and psychological sense, because it tends to concentrate decision-making in the hands of the nonworking members. The work is of a subordinate nature. Interest in sound management is reduced for those who work as hired labourers, and remains only for the larger proprietors.

Moreover, three fundamental aspects are neglected. The land improvement is made possible by uniting all the members. The aim of the cooperative is to arrive at the rational use of the labour of the members and their families, rather than an efficient mechanized enterprise. The new balance created by cooperative land use considerably reduces the importance of land as a factor of production in relation to capital and labour.

Any solution involving fixed wages and unequal sharing in decisionmaking would have been dangerous, leading towards subordination. The time would quickly have come when a member decided to emigrate or change his work, thus bringing claims for such things as unpaid wages or holidays not taken. Discord would easily have taken root, and opposing forces would have prevented the structure from moving forward in harmony.

The search for a solution that would be psychologically suitable and stable was therefore the subject of intensive study. This was essential in order to give the collective enterprise a sound and solid basis, without sacrificing the freedom of the members. The solution for the distribution of the proceeds was found through the cooperative spirit, starting from the consideration that a cooperative is a mutual, non-profit-making enterprise, which performs a service for its members. This service is the use of a good made over by the members, which is transformed and marketed.

The cooperative transforms the good and sells the product. After the deduction of costs, the net proceeds (15) are divided among the members on the basis of the quantity and quality of their contribution. These proceeds are not subject to any separate taxation.

If the aim of the cooperative is to improve the living conditions of its members' families by the common management of their own land, the resources to be considered as the basis of the associative process are labour and land. Thus in a joint management which is the only means of making economic use of these resources, the net proceeds can be divided among the members on the basis of the work performed and the land conferred.

The members retain their legal status as independent farmers. They make their own social security payments and pay their own taxes. They receive an advance from the cooperative, and the balance when the accounts are closed. Their receipts are based on the number of days they have worked, usually without distinction by type of work, age or sex. It is in fact considered that work in the cowshed must be undertaken with the same care as any other work with the hoe, on the tractor, or in the office. Part of the net proceeds is divided on the basis of the area and quality of the land made over to the cooperative. Generally the share that is defined in the statutes is 80% for work and 20% for land.

(15) Called the "prezzo di riparto".

This solution has shown itself all the more suitable in that it gives full value to work, and at the same time allows for the diverse situations found in a traditional world in a phase of rapid change. A cooperative of this kind can be joined by the most varied types of member: farmers who own land (the majority), farmers who do not own land (like some family members or labourers), landowners who are not farmers (like some old people), and emigrants and landowners working in other sectors.

This has made it possible to be flexible, without any formal discrimination. It is of course desirable that as far as possible the groups should be socially and managerially homogeneous. However, in actual fact the rural world is very heterogeneous, and there are many differences in land tenure and social situations, and in traditional customs. The diversity of these situations can therefore be overcome only if there is sufficient flexibility to allow for local realities. It is precisely this approach that has made it possible to mobilize lands that no law had hitherto succeeded in affecting.

The merging of land has to be done in such a way that the joint management has the assurance that it has the land at its disposal for a long enough period to make possible its full development in line with social aims, without either legally or psychologically prejudicing the rights and sense of ownership of the members. Here, too, there are situations of many different kinds.

There are owners in whose name the whole property is registered, others whose property is registered in the names of other people as well (sometimes as many as 20 or 30 scattered all over the world). There are owners whose land is not yet registered in their name (sometimes the transfer of ownership has not been made for one or two generations), and there are cases which are a mixture of all these situations. Other forms of landholding include "enfiteuti" (16), various "precarious" tenures, beneficiaries with various rights, usufructuary tenants, share croppers, and leaseholders.

There are also many who have various rights of possession: by word of mouth, on the land of relatives or emigrants, by usurpation, by long custom, in a range that mixes naturally with the cases already mentioned. To these must be added the whole range of situations concerning the common lands, and the lands allotted and transferred as a result of the agrarian reform laws. Some of the rights in land are based on legal formulas and agreements that have been unchanged for centuries. If tampered with by inexperienced hands, they can easily be changed in a way that is contrary to what is intended.

Here too, the fundamental guiding element is the will of the members and their mutual respect and trust. It is on this basis, in fact, that as the joint managements have gradually demonstrated their strength, each member has directly committed the land that is his own or is available to him. In this way situations have been resolved that would otherwise have been legally insoluble.

It is against this background of pragmatic situations that, after much varied experience, a legal instrument has been developed which has been able to complete the design and give concrete form to what was intended. This is a contract which places the land at the disposal of the cooperative for 30 years for use in accordance with the aims of its members. The contract is a bilateral one between the member and the society. It includes commitments and obliga-

(16) Tenants on long leases paying only ground rent.

tions, and provides for full powers of intervention for the purpose of improvement. It is bilateral in the sense that, while defending the interests of the society, it must also be sufficiently flexible to allow for special cases; for example if a member wishes to withdraw and the assembly is in agreement. In the case of the legal alienation of land, the possibility is included of the society enjoying the right of preemption under the same conditions. However, if such a sale takes place without the authorization of the assembly, the member or ex-member has to reimburse the improvements made by the cooperative and the damages caused to it.

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## Part II

# FIVE-YEAR SURVEY OF TWELVE JOINT MANAGEMENTS

## Chapter 3. THE STARTING POINT

#### BASIS OF SURVEY

The first group of joint managements to be establised voluntarily in the years 1970-71, with the approach and criteria described above, consists of 12 cooperative units. They were established in Abruzzo, Molise, Campania, Sicily and Sardinia, in areas characterized by heavy emigration and the rapid ageing and "feminization" of the population. The 12 units were formed by the joining of 244 small family units of an average size of 8.5 ha, with 955 family members and a total of 2,071 ha at the time of their establishment.

What structural, social, technical and economic changes have there been in this first phase? In what way have agronomic, managerial and cultural changes taken place? Has the cooperative approach been confirmed as a possible solution to the problems of the rural areas of southern Italy? What production results have been obtained or are obtainable? Have emigration and the ageing of the population been slowed down? Is it possible to arrive at a real transformation of an apparently hopeless situation, or has the intensive action undertaken resulted only in a temporary alleviation of economic and social pressures?

Since this survey deals only with the first group of cooperative units (12 out of the 100 or so now in operation), it inevitably highlights the initial difficulties and uncertainties, stemming from the lack not only of knowledge but also of a firm legal and formal framework. It has only been possible to overcome these difficulties step by step, on the basis of direct experience, and the adjustments that have been made have not always had positive effects. There have been cases of enforcement and of excessive stimulation and zeal as a result of a mistaken spirit of emulation among the technicians.

The joint managements covered in this survey have been designated by the numbers I to XII. Groups I to III are in Abruzzo, IV to VIII in Molise, 1X in Campania, X and XI in Sicily, and XII in Sardinia. For each of the 242 families involved at the time of their establishment, a form was completed covering demographic data for the cooperative member and his family, their educational level, the type of management and structural characteristics of their holding, the available services, and the employment of the family members (on and off the farm, agricultural and nonagricultural). The form also records the production pattern, the livestock inventory, farm machinery, gross saleable product, nonagricultural income, and the amount of land made over to the cooperative. Work done by women is included on the same basis as that done by men.

A similar survey was carried out in early 1976, covering the 332 families (including new members) then involved in the same cooperatives, and including their land still under individual management. Economic data have been adjusted on the basis of the increase of 65% in the official index of the cost of living between August-September 1971 and August-September 1975 (1).

(1) Istituto Centrale di Statistica, Bolletino mensile di statistica, No 12, Rome, 1975.

#### INITIAL SITUATION

The cases surveyed refer to interventions at the microlevel in areas of traditional agriculture in hilly and mountainous regions characterized by the breakdown of the physical environment, poverty, a backward agriculture, and overseas emigration during the last century. At the time the programme was begun there was heavy emigration towards northern Italy and northern Europe. Other common elements were the absence of cooperative experience and motivation, and of practical and legal solutions that could be used as examples.

The cooperatives in Abruzzo, Molise and Campania (Groups I to IX) are in the Apennine Hills from 300 to 800 m above sea level, with the exception of Group III, which is in a broad plain at a height of 200 m. In all cases the winter is cold, with frosts and snow. Rainfall averages 800 mm, although Groups X to XII is Sicily and Sardinia, at 200 to 500 m above sea level, have only 500 mm.

The groups in the mainland Apennines have loamy, clay-loam and calcareous soils, except for Group III, which is in a plain with clay-loam and sandy soils. Of the remaining groups, X is in the interior hills, rich in clay, XI is in the coastal hills with calcareous loams, and XII in the area of low-lying hills with clay, loam and calcareous soils. The soils are fairly uniform, and sufficiently balanced in their content of lime, clay and sand. Sometimes there is a higher proportion of clay (Groups IX and X), or of sand (Groups I, III and XII). The pH is usually subalkaline, and sometimes neutral. The content of nitrogen and organic matter is low in all the samples analyzed.

In 10 of the 12 groups the predominant crop was cereals, produced in traditional ways as the pivot of a subsistence economy. In the mainland Apennines, cereal production is strongly influenced by the rainfall regime, which determines husbandry practices, and the time of seeding and harvesting.

The 242 families surveyed had 955 members, 487 male and 468 female. Each family had an average of 3.9 members. The average number of families in each group was 20, ranging from seven in Group IX (Campania) to 50 in Group II (Abruzzo) and 60 in Group VIII (Molise). The average size of the original farm units ranged from 4.8 ha in the latter group to 24 ha in Group XII (Sardinia). Of the 955 individuals, 680 were from 14 to 65 years old (338 males), 200 under 14, and 75 over 65.

Of the 242 families, 185 resided in the village and 57 on their farms. The average age of the dwellings was 44 years (39 years in the villages and 50 on In one case (XI) the average age of the farm dwellings was 104 the farms). In some groups (IX and XI), some of the farmers had modest dwellings years. in the village which they used in the winter, in addition to their farmhouses. In these cases, only the farmhouses have been included in the survey. Some 43 of the dwellings were classified as "uninhabitable", 101 in mediocre condition, and only 96 in good condition. Of the 185 dwellings in the villages, one was without running water, 16 without a toilet, and 169 without heating (except for the customary fireplace). 28 had no radio, 58 no television, 73 no refrigerator, and 128 no electrical household appliances. Only two of them possessed a bathroom.

Of the 955 people concerned, excluding the 200 of school age (up to 13

years), 55 were illiterate, 195 barely literate (having completed three years of elementary school), 344 had completed four or five years of elementary school, 127 had finished lower middle school, 33 had diplomas, and one a degree. The 250 people (112 men and 138 women) classified as illiterate or barely literate had an average age of 56. The average age of the 344 (178 men and 166 women) who had completed the fourth and fifth years of elementary school was 34. Thus the most disadvantaged groups were the aged and the women.

A total of 19 young males emigrated temporarily, keeping their residence in their original villages, and returning at the peak period of work. There were about 20 permanent emigrants, who were not included in the survey.

Almost all of the original farm units were smallholdings using family labour. Only three units in Group XI (Sicily) and 20 in XII (Sardinia) resorted occasionally to hired labour, either at periods of peak requirements, or because the farmer was old and childless, or because of traditional agreements with shepherds and others. Of the future cooperative members, one was a capitalist-type farmer, and 11 were landless. Almost all of the latter were children or brothers and sisters of those holding land, and only one of them (with a veterinary degree) had a profession.

Of the 2,071 ha in the 244 farm units (2), 1,421 were legally owned (3), 271 held on the basis of informal agreements, and 379 rented. On average, each unit was fragmented into 15.6 plots. Three quarters of the total area were subdivided into 2,557 separate plots, with an average size of 0.44 ha, ranging from 1 or 2 ha in Campania, Sicily and Sardinia to 0.2 to 0.5 ha in Abruzzo and Molise (4). The average distance between the fields and the family's usual dwelling was a little more than 2 km, but there were substantial differences depending on the type of settlement, either centralized in the village or scattered in the countryside as a result of the excessive dispersion of the plots. In some cases the distance was more than 4 km, as in Groups 11 (Abruzzo) and VIII (Molise).

Production patterns were extensive, and based mainly on cereals (Table 3). Cereal production was combined with grazing on 972 ha in Groups II (Abruzzo), V (Molise) and XII (Sardinia), with livestock raising on 480 ha in Groups I and III (Abruzzo), IV (Molise), VII (Campania) and X (inland Sicily), and with tree crops on 619 ha in Groups VI, VII and VIII (Molise) and XI (coastal Sicily).

- (2) The number of farm units (244) does not correspond with the number of families (242), since three families operated two units and one was landless.
- (3) Including 86 ha in Group X (Sicily) assigned under the Agrarian Reform Law.
- (4) In these circumstances, it is hardly surprising that the collection of land taxes cost more than their yield.

	Dryland	Irrigable land	Total land	Share of total
·		На		%
Cereals <sup>a</sup> .	911	50	961	46
Industrial crops <sup>E</sup>	° 10	15	25	1
Grain legumes <sup>C</sup>	13.1	· 5	136	6
Horticultural cro	ops <sup>q</sup> 10	10	20	1
Forage crops	397	10	407	20
Vines	119	1	120	່6
Olives	16	1 .	17	1.
Grazing	186	-	186	9
Woods and			•	
wasteland	199	· _	199	10
Total	1,979	92 <sup>e</sup>	2,071	
%	96	4	100	100

Table 3. Production patterns on 244 family units.

a. mainly durum wheat. b. mainly sugarbeet. c. mainly broad beans. d. tomatoes and artichokes. e. only 44 ha actually irrigated.

The modest livestock inventory amounted to only 320 EEC livestock units, or 0.18 units per hectare (5). There were 120 equines (mostly mules), 193 cattle (105 cows), 680 sheep, seven goats and 146 pigs. The equines and sheep were concentrated in Groups II(Abruzzo) and XII (Sardinia), which combined cereals and grazing.

There were 69 tractors, averaging 46 HP, and 98 other units of farm machinery, averaging in total 1.6 HP per ha.

Some areas were subject to erosion, mainly because cereals were grown on steep slopes and because of the fragmentation of the land. The small, scattered plots, in addition to preventing an efficient system of water control, made contour ploughing impossible.

Cultivation techniques were elementary even on the farms with tractors. The tractors were of low power, and used only for certain limited operations. Fertilizer use amounted only to 150 kg of superphosphate per hectare, and in some cases 30 kg of ammonium nitrate per hectare. Yields were consequently low: 2.0 tons per ha for durum wheat, 1.6 for oats, 1.5 for broad beans, and 2.7 for maize. The most common forage crops, lucerne and sweet vetch, yielded 5.2 and 3.7 tons per ha respectively in dryland conditions. The vines, grown in bush form and all past their peak yields, produced 4.5 tons per ha of grapes, and the few olives 2.1 tons per ha. Annual bovine production was 31.7 tons of meat and 128 tons of milk.

The gross saleable product of the 244 farm units was made up of 138.6 million lire from cereals, 67.5 million from livestock products, 44.3 million from wine and olive oil, and 62.6 million from other products, for a total of 313 million lire. The product per hect are of 151,000 lire was only half the average for southern Italy as a whole in 1971.

The labour force consisted of 730 labour units (6) (381 male and 349 female),

- (5) Excluding vineyards, woods and wasteland.
- (6) Labour units value the work of men and women equally, but make allowance for reduced work by those under 18 and over 65.

or three per farm unit. Theoretically, however, there was full-time employment (on the basis of 300 days a year) for only 375 labour units, or 1.5 per farm unit. The 730 labour units in fact worked only an average of 154 days a year, and underemployment was general. The average employment per farm unit was 461 days, or 54 days per hectare. There were 2.8 ha for each available labour unit, in comparison with 5.5 ha on the basis of full employment. Thus only 51% of the theoretical labour potential was actually utilized (46% of the female labour and 55% of the male). Gross saleable product amounted to 429,000 lire per actual labour unit, in comparison with 835,000 lire on the basis of 300 working days a year.

Nonagricultural incomes were quite large, amounting to 133 million lire, or 42% of gross saleable product and 57% of net profit. More than 18% (25 million lire) consisted of the pensions of 109 old people and invalids. Net product could only be roughly estimated on a percentage basis (70% of gross saleable product for Groups II, IV, V, VI and VII, 75% for I, VIII, IX, X, XI and XII, and 80% for III). Estimated on this basis, the net product of the 244 farm units totalled 231 million lire.

Total family income, however, was 364 million line. Of the average income of 1.5 million line per family, 548,000 line came from off-farm employment. Per caput income was 381,000 line, in comparison with the national average of 1.1 million.

This picture of the starting-point may be completed by underlining the disjointed nature of the farm units, the lack of any form of collaboration, and the division of families.

## Chapter 4. THE PROCESS OF CHANGE

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## GENERAL APPROACH

There are two principal weak points in the development of the decisionmaking capacity of a traditional community. An excessive attachment to and unquestioning respect for tradition tend to immobilize group action. At the same time, exaggerated independence and individualism disrupt the group and subject it to external forces, making any form of group action impossible.

The first of these two tendencies is typical of old people, whose experience tells them that they cannot put their trust in external structures or innovative ideas, which almost always bring failure or the waste of energies and motivation. The second, on the other hand, is typical of young people. In search of novelty and without experience, they set greater store by their first impressions and by external structures and events, to which they unconsciously find themselves drawn in their negation of the past.

The whole process of human change depends on the reconciliation of these dualistic tendencies. Such change must begin in the minds of the people concerned before it is possible for a group decision to take legal and concrete form. It is precisely for this reason that the promotional approach developed by the Cassa has been an indirect one, working towards the creation of a receptive atmosphere in a relationship of reciprocal trust. In such an atmosphere, in which innovation is not imposed but is independently screened by the community concerned, it is possible to bring the two tendencies together.

Among the first to support the idea of joint managements, once they were convinced of their concrete possibilities, were in fact the old people, who quickly saw in them a way of keeping their children near by through the provision of an economic future for them on the spot. This reaction of the old people, men and women alike, was probably the most basic determinant of group action. It is therefore clear that innovations are not ruled out in principle when they are seen to be useful, expecially from the human angle. The young people, finding themselves in this favourable family environment, with possibilities for progress, were open to the new models that brought the prospect of better living conditions.

In order to make a tentative analysis of the main factors involved, some of the external and internal impediments, first those deriving from the physical environment and second those of psychological and social origin, are listed below. The first group is divided between off-farm and on-farm influences, and the second between the outside world and institutions in general and those within the immediate community.

## STRUCTURAL CONDITIONS

#### Off-farm

- difficult physical environment;
- absence of infrastructure;
- absence of external technical and economic support;
- absence of marketing institutions;

PSYCHOLOGICAL ATTITUDE

To the external world

- absence of trust in the State, in technical and administrative structures, and in public institutions;
- absence of trust in the future;
- inferiority complex towards other social classes;

- absence of a cooperative tradition.

#### On-farm

- waste of land and people
- irrational use of productive resources;
- irrational agricultural techniques;
- limited mechanization;
- absence of irrigation;
- shortage of capital;
- difficult access to credit;
- low yields per hectare;
- high costs of production;

 adverse attitude of young people, especially young women, to the rural world.

Within the community

- attachment to the village and its environment;
- attachment to traditional food habits;
- traditionalism in production techniques and patterns;
- distrust of others;
- emotional attachment to the land;
- opposition in principle to indebtedness
- undervaluation of one's own work;
- absence of technical qualifications;
- overvaluation of fixed capital as a means of saving;
- conviction that things can be obtained only as a favour and not as a right, through the recommendation of people believed to be influential.

This close net of situations and attitudes, of which only some of the most obvious have been listed above, is tied to the complex of interests of those involved, not least those concerned with inheritance. According to Roman Law, the inheritance must be divided equally among all the heirs.

The factors discussed above justify even the sceptical and adverse attitude of old people to any opening towards what is normally understood by progress, which is based mainly on technological change induced from outside. However, if a deeper analysis is made, it is not only such negative aspects that emerge.

The difficult living conditions in the rural areas of southern Italy could not be accepted or overcome without the deep-seated presence of certain ethical and human values. These values, if properly directed, can be the mainspring of the process of renovation, and a principal support for the modification of the physical and social structures that are crystallized in tradition.

The possession of land for decades on the basis of goodwill, or the renting of land by a handshake, despite the legal alternatives available, indicate that friends or relations have agreed, with or without compensation, to the use of their possessions in the confident belief of finding them intact and at their disposal whenever they should require them. Other positive factors are family cohesion, the prestige of old people, and the attachment to work. A further important aspect is the active presence of women, not only as housewives and mothers, in almost all cases.

The 12 groups therefore decided, with the collaboration of the extension

services, on a solution that involved joining all the land of the possible members in one physical entity, eliminating all boundaries. The legal solutions varied widely. While Groups V, X and XII establised simple partnerships, the others aimed from the beginning at limited liability cooperatives.

This has brought complex psychological, legal and economic problems and consequences. The investments made by simple partnerships become the direct property of the members in proportion to their contributions. In a cooperative, however, they are and remain the property of the cooperative, and on its dissolution are devoted to other cooperatives or to works of public utility. The customary high value given to investment, not as a means of production but above all as a means of saving and capitalization, brings many different problems, especially in an environment where land already has a high value as a hedge against inflation.

The average composition of the 12 joint managements formed in 1970-71 was 80 people, of whom 20 were actual members. Some groups (1, 111, IV, IX, X) involved eight or nine farm units, usually corresponding to the same number of families. One of these (Group IX), with 11 members, involved only seven families. Group II (1) had 50 members and Group VIII 66, but VI had only 15, VII 26, XI 13, and XII 21. This heterogeneous composition had both positive and negative effects on the delicate evolution of the cooperative structure.

#### STRUCTURAL CHANGES

Substantial structural changes were among the first results of the establishment of joint managements (Table 4). The number of plots on the land made over to joint mangement was reduced from 1,929 in 1970 (before the merging to only 208 by 1972). The average size of the plots on this land rose from 0,49 to 4,53 ha.

Table 4. Structural changes in the 12 joint managements

	1970	1972	1975
Total farm units	244	244	332
Cooperatives		12	11
Cooperative members		262	395
LAND UNDER INDIVIDUAL MANAG	EMENT		
Area (ha)	2,071	1,290	1,762
Plots	3, 758	1,722	2, 133
Average size of plot (ha)	0.55	0.75	0.83
LAND UNDER JOINT MANAGEMEN	T.		
Area (ha)	_	942	1,406
Plots	<u> </u>	208	234
Average size of plot (ha)	-	4.53	6.00
TOTAL LAND			
Area (ha)	2,071	2, 232	3, 168
Plots	3, 758	1,930	2, 367
Average size of plot (ha)	0.55	1.16	1.34

(1) Group II was based on an existing labour and service cooperative, with a change in its aims and a drastic reduction in its membership from 101 to 50. Between the time of the initial survey, carried out in 1970, and the actual establishment of the cooperatives (usually only the few weeks required for legal and administrative action), there were some small changes resulting from the acquisition of additional land. The total thus rose from 2,071 to 2,232 ha. Only 42% of the 2,232 ha individually managed (942 ha) was made over to the cooperatives, and 1,290 ha were retained by some of the cooperative members.

There were two different reasons for this. On the one hand, the farm units were so fragmented and scattered that making over the whole of the land to the cooperatives would not have greatly reduced the degree of fragmentation and dispersion. The approach that was taken (which also influenced production patterns in the early stages) was therefore to make over contiguous land, in order to arrive at an initial unit of economic size. Groups 11, VII, VIII, XI and XII thus made over only 20% of the land formerly under individual management.

The second factor was the gradual nature of the changes in farm structures and in production patterns. Because of their attachment to their own production patterns and technical traditions, and because of the need to get through the critical period of reorganization and change in production patterns, the members made over their land only gradually, although the aim was to contribute almost all of it as quickly as possible. Groups 1, 111, 1V, V, VI, IX and X made over 95% of their land.

In both cases, however, other influences were the production pattern (vines in the first, livestock raising in the second), and especially the psychological attitude of the groups. Various factors, more or less evident, included lack of trust, fear of the decision that had been taken, the uncertainty of the stages of investment and transition, and the ties of the individual members with their small vegetable gardens, their vineyards (especially the old people), their farmyard animals, trees and plants. The basis of this attitude was the need to keep intact the links with the past, so as to maintain an alternative solution.

These psychological attitudes of fear or of drastic decision sometimes affected structural conditions. In Group XII, for example, even though the original situation was favourable (528 ha in 378 plots, with an average size of 1.39 ha), only 28 ha (5.3%) were made over to the cooperative. On the other hand in Group III, with a high degree of fragmentation and dispersion (115 ha in 229 plots of an average size of 0.5 ha), all of the land was made over.

By 1975 the number of farm units in the cooperatives had risen from 244 to 332, and the area under joint management from 942 to 1,406 ha. In December 1975 more than 44% of the total area was under cooperative management. But if we exclude Groups II in Abruzzo (which developed atypically) and XII in Sardinia (based on cereal production and extensive grazing) because of their extreme fragmentation, as well as Group IX in Campania, which was dissolved, in the remaining nine groups of joint managements only 39% of the total area remained in individual use. These were mostly lands that were refused by the cooperatives (distant and isolated plots, unproductive lands, or small gardens and vineyards). With these were connected certain minor activities of small livestock and sheep raising, which were continued by the members on an individual basis and helped in getting through the critical initial phase.

In Groups I, III, IV, VI, X and XI, for example, the area retained individually was only 11% of the total, whereas in Groups VII and VIII (vineyards) it was as much as 63%. In the case of the latter two groups organizational problems and the slow pace of investment made the assignment of further land inadvisable. The number of farm units in Group VIII, for example, rose from 66 to 140, the members from 66 to 166 and the area collectively managed from 60 to 372 ha, at which point the Board of Directors had temporarily to suspend the assignment of new land.

On the 3, 168 ha either directly or indirectly involved in the cooperative process, the number of plots fell from 4, 255, with an average size of 0.74 ha, to 2, 367, averaging 1.34 ha. On the 1,406 ha jointly managed, the number of plots was very sharply reduced from 2, 122 to 234, and their average size raised from 0.66 to 6 ha. The remaining 1,762 ha under individual management, however, retained a high degree of fragmentation and dispersion, with 2, 133 plots of an average size of 0.83 ha.

In this way 12 cooperative units with an average area of 78 ha were set up in the first phase. With the failure of one unit (Group IX), there were 11 units in the second phase of consolidation, with an average size of 128 ha.

These new structures, on lands that were in a bad state, difficult, and poorly served by infrastructures, made possible the gradual introduction of a complex process of land improvement and the development of physical resources, of change in production patterns and agronomic rationalization, and of human change and improvement. These three different lines of development were in turn either supported and integrated, or impeded and slowed down at different times.

In a period when land has a high value, because of inflation, recession and the innate attachment to the land, especially of the older owners, it was only through their agreement and will that it was possible to change the agrarian structure, which is the mirror image of human aspirations and attitudes.

The qualitative valuation of the lands was carried out on the basis of their condition at the time they were made over, and it was therefore necessary to check the areas. In many cases the cadastral data did not correspond with reality, and sometimes the differences were substantial. These differences made it difficult to calculate a fair return for the land, thus leaving doubts and fears in the minds of the members. They also complicated the calculation of the data required for the planning of land improvement.

The boards of directors therefore set up committees, composed of advisors and of the members concerned, with the task of checking the areas and carrying out the valuation. They often asked for the collaboration of the extension agent, but this invitation was always declined, with the suggestion that they should, if necessary, seek the assistance of other experts.

Two different solutions were found for the valuation of the land. The first was based only on the area, without taking account of quality. This solution

was adopted when, as in Groups I, II, IV, VII, X and XII, the plots were so small and dispersed as to make it difficult to carry out a valuation that would be both objective and in line with the expectations of the members. In these cases, therefore, the distribution of the part of the net proceeds (20%) assigned to the land was based only on area.

The second solution was based on both area and quality. It was adopted when, as in Groups III, V, VI, IX and XI, a sufficiently large size of plot was accompanied by significant differences in slope and soils, or in fixed investments. In such cases the distribution of the 20% of the net proceeds assigned to land was based on the market value as assessed by the committee.

In one case (Group VIII), because of the novelty of the situation, the lack of relevant previous experience, and especially the difficulties imposed by a notary in accepting the unusual proposal to make over land for common management, it was impossible to give a legal basis to the decisions taken by the cooperative. Thus, in order to overcome this obstacle, which was blocking the whole progress of the cooperative, the members decided to rent their land to the cooperative for 30 years at a rate per hectare that was equal for all.

The land made over to the cooperatives for 30 years represents a value of at least 1 million line per ha, or 1,406 million line in total. Even if it is not always apparent in the figures to be presented later, this very large sum should constantly be kept in mind in order to assess correctly the economic contribution that supported the process of change. In addition, the sentimental value of the property made over by the members was even greater than its monetary value.

In synthesis, there has been, with the aim of increasing productivity, a mobilization of land, involving voluntary consolidation of plots and joining individual enterprises in units of economic size, without any direct expenses.

# CAPITAL RESOURCES

In this not very clearly defined situation, one of the problems has concerned the acquisition by the cooperative society of the live and dead stock belonging to the individual members, their possible sale, and the necessary compensation. From the beginning the idea was rejected of making over these resources as something to be added to the value of the land, and thus as an element in the distribution of the net proceeds. The principle emerged that capital resources must be the property of the cooperative society.

The diverse situtations that appeared in the first phase may be summarized by two main tendencies. The first was the acquisition of the capital resources by the cooperative society, and the elimination of such resources on an individual basis. The cooperatives took over partially or totally the capital resources of the members, who sold on their own account the part not made over in this way. The second tendency was the retention of individual capital resources and the aquisition of new resources by the cooperative. The solutions adopted naturally varied, in line with the different situations and the existing and future production patterns. In this case too, the planned production pattern and the farm structure were the main influences. Where large areas of land were kept in individual use, and where the cooperative mainly produced wine and thus did not interfere with other individual activities, the capital resources were retained by the individual members, as in Groups II, XI and XII. On the other hand, in cases where the production pattern was livestock raising, and where most of the land was made over to the cooperative, the complete cession of the capital resources was the general rule, as in Groups III, V, VI, IX and X. In a few cases the existing machinery and livestock were insignificant, as in Groups I, IV and VII for machinery, and VII and VIII for livestock. The situation in the different cooperatives is shown in Table 5.

Table 5. Machinery and livestock in the 12 joint managements

	Tractors	Cattle .
Kept for individual use In large numbers <sup>a</sup> In small numbers	II, XI, XII I, IV, VII	11, XII VII, VIII
Sold by individuals	-	I, IV
Made over to the cooperatives	111, V, VI, IX, X	III, V, VI, IX, X 🚊
No resources	VIII	×I

a. More than three tractors or cattle per group. b. Up to two tractors of cattle per group.

Other influences are to be found in the heterogeneity of the capital resources, especially machinery, and of the economic levels of the families. Some farmers, in fact, even used their machinery to do contract work for third parties, others had recently acquired mahcinery that was already obsolete, and others had livestock of the lowest quality. Some cooperatives prefered to acquire such obsolete machinery and poor quality livestock from their members, subsequently eliminating them by exchange or sale, in the spirit of mutual aid.

Of the 69 tractors, 49 were retained by individuals (42 of them in the three Groups II, XI and XII), six sold, and 14 made over to the cooperatives (Table 6). Of the 105 adult cattle, 54 were made over, 33 sold, and 18 retained individually. Some of the machinery and livestock retained was in poor condition, and it is probable that the owners, instead of selling them, preferred to keep them for the remainder of their useful life.

MACHINERY	Initially in Individual ownership	Retained by individuals	Sold by individuals	Made over to cooperatives
Tractors	69	49	6	, • •
Motor cultivators <sup>a</sup>	23	13	6 3	14
Combine harvesters and	t /		J .	7
reaper binders <sup>D</sup>	6	3	_	3
Motor mowers	<b>20</b> °	15		5
Balers	2	-	_	2
Motor pumps	1	1	-	
Ploughs	- 25	18	-	7
Seed drills	11	8	· – ,	3
Trailers	10	5	-	5
Various <sup>d</sup>	16	2	-	14
LIVESTOCK				· .
Cattle				
Adult	105	18	33	54
Young	88	-	49	39
Sheep and Goats	687	672	• 6	9
Pigs	146	108 /	30	8
Equines	120	111	7	2

Table 6. Machinery and livestock resources on the 12 joint managements

a. Including rotary cultivators and motor hoes b. Three combine harvesters, one thresher, two reaper binders c. Steel ploughs for mechanical traction d. In the survey of the intitial situation 10 trailers and six various pieces of equipment were included under tractors.

The new organizations had to bring in from outside capital resources that were radically different in type and size, and for this it was always necessary to improve or establish an efficient machinery centre, and to acquire new livestock. The cooperatives normally purchased the goods acquired from the members, over a period of three years, and without interest. Thus these goods became the full property of the cooperative. In total, capital resources worth 46.9 million lire were made over to the cooperatives. These consisted of 29.3 million lire of farm machinery and 17.6 million lire of livestock.

# LAND IMPROVEMENT

The phase in which agrarian structures are modernized and the land is improved is the most demanding one in the whole process of change. The changes have to justify the economic and psychological sacrifices involved in making over land, in joint management, and in accepting the crises incurred. They also have to be in line with expectations.

The unified development of land almost always makes it possible to solve

the problem of water, which is one of the most crucial in southern Italy. Without the obstacles imposed by boundaries and ownership, it is easier to find a small riverbed or fold in the land, which can be blocked with a simple earth dam to conserve rainwater. Similarly, other types of infrastructure can be designed in the context of the whole area under joint management, instead of individual plots. Another important aspect is the possibility of putting the land to its best agronomic use. The concentration of crop production on the best land makes it possible to restore the worst to pastoral use, while irrigated forage production complements the forage produced in the drylands.

The technological innovations and high investments that are required are generally beyond the scope of the small farmers involved, not only economically but also sometimes culturally. A fundamental scheme for modernization has to be evolved, and given the necessary technical and economic support. This stimulates the professional pride and imagination of the technicians called on to contribute. There is the danger that they may anticipate the decisions of the group, and make decisions for them. It can thus happen that the project may develop in a direction that is not in conformity with the motivation of the group.

Faced with novelty, and with external supporting action that, as if by a miracle, turns so many aspirations into concrete possibilities and opens the ways to a better future, the group easily accepts ready-made solutions. It accepts them all the less critically the more costly and global they are, and thus distant from what can immediately be perceived. The dominant idea be-comes that of high investment in favour of the group.

This uncritical acceptance allows those involved to evaluate the changes on the basis of their own frame of reference and low managerial horizons. Because the action that is taken is not felt or understood by them, it is alien. Physical structures are not seen as the means for common production, but rather as the accumulation of wealth. Traditional motivation concentrates on immediate benefits.

The best approach to a process of social change that must be both physical and human is a gradual one, which follows the development of the perceptive capacity of the group, of the agronomic potential of the land, and of organizational and social maturity. This does not eliminate the negative factors outlined above. But it does make it possible to confront problems one at a time, with the minimum of interference from outside interests, and in circumstances that are controllable and defined. The groups thus have time to clear up their own doubts. Only a gradual and direct understanding of the problems involved can make possible the successive steps required for radical change.

A number of factors, however, militated against a gradual approach. Improvements had to be carried out rapidly and completely, in order to overcome the obstacles imposed by the instability of markets for construction and other materials, and the continuous and sometimes unexpected rise in prices (2). A small delay could imperil the whole initiative, and defer production

(2) During 1973 the price of iron rose from 125 to 350 lire per kg, that of cement from 12,000 to 19,000 lire per ton, and of fuel oil from 25 to 98 lire per litre.

by a year or more. It was difficult to have available on the spot at the right moment the necessary equipment and firms that were capable of carrying out works that, although small, were technologically advanced. Once a suitable firm was found and the equipment in place, it was necessary to make maximum use of them, in order to avoid higher costs in the future. Moreover, certain improvements could not be made on a partial basis. The planting of permanent crops, especially vines with their high investment costs, had to be in units of standard size, and the various phases completed at the right time. Livestock housing has to be of economic size, even if it could not yet be used to full capacity.

Thus two contrasting approaches were necessary. On the one hand, timeliness and speed in planning, financing and execution were necessary to reduce costs in a period of rapid inflation, and because of the need to complete the successive phases of certain improvements without delay. On the other hand, a cautious and gradual approach was necessary to evaluate the action and check the suitability of the support structures and of the development of the groups in the human and operational context.

The land improvements that were undertaken were decided and programmed by the cooperatives, in collaboration with the extension agents. The greatest possible use was made of local technicians, who were furnished (where necessary) with plans, and charged with the supervision of the work. This made it possible to train local people capable of extending the area of collaboration with the cooperatives, with the financing agency, and with firms.

Another basic aspect was the shortage of expert and well-organized firms, able to undertake small but sophisticated and delicate works in isolated areas to which access was difficult. When it is a question of large-scale and costly works, it is always possible to find efficient firms who are ready to compete. But this is not the case with a small artificial lake, with an earth dam and a modest irrigation system, in isolated and dangerous areas where an unexpected snag or the breakdown of machinery become difficult problems.

In these circumstances, in their enthusiasm and in order to improve their incomes, the groups sometimes proposed to carry out part of the work them-This provided the possibility of earning something during the conselves. version period, when incomes were low. To pass the winter constructing a cowshed or preparing a vineyard seemed a good solution. Another factor was the competence of the members, some of them former emigrants, as brick-layers or mechanics. But experience showed that this course was almost always mistaken. The work has to be done by specialists and done well, with full guarantees and responsibility. The farmers have to be farmers. This was a useful lesson. Livestock housing and other new installations had to be completed as quickly as technically possible, in order to enter into production. With a few exceptions, the members could collaborate with the specialized firms and provide unskilled labour.

The improvements were begun on the basis of the production patterns already selected by the cooperatives: livestock for Groups I, II, III, IV, V, VI, IX and X, and viticulture for VII, VIII, XI and XII. The investments involved are shown in Table 7. The total direct and indirect investment in the five years up to December 1975 was 3,472 million lire, or 2.3 million lire per ha of the area under joint management.

	Production	Area of						
	pattern	cooperative (ha)	Members	Total	Per hectare	Per member		
I	Livestock	130	11	175.4	1.3	15.7		
11 <sup>.</sup>	Livestock and							
	cereals	150	50	213.9	1.4	4.3		
111	Livestock	102	16	306.1	3.0	19.1		
IV	Livestock	144	13	154.0	1.1	8.1		
V	Livestock	81	19	258.3	3.2	13.6		
VI	Livestock	138	24	250.0	1.8	10.4		
VII	Vines	25	36	307.1	12.3	8.5		
VIII	Vines and							
	livestock	372	166	1,155.7	3.0	7.0		
ıx <sup>a</sup>	Livestock	90	15	140.1	1.6	9.3		
X <sup>b</sup>	Livestock	199	10	137.8	0.7	13.8		
XI <sup>°</sup>	Vines	37	28	169,8	4.6	6.1		
XII	Vines	28	22	204.2	7.4	9.3		
	Total	1,496	410	3,472.4	2.3	8.5		

Table 7. Investments in the 12 joint managements, December 1975

a. Afterwards restored to the members for individual management. b. Of which 101 ha are not owned by cooperative members but used for the production of annual crops under contractual arrangements with other landowners.

Chronologically, the investments were concentrated particularly in 1973 and 1974. The livestock units were gradually endowed with fixed investments. Water for irrigation was collected mainly by small lakes in the hills. The construction or improvement of housing came only after the productive improvements. The acquisition of farm machinery followed the first development of the new organizations. The establishment of vineyards took four years for inevitable technical reasons.

Gradual evolution, combined with timeliness in the individual phases, made it possible to acquire greater experience of planning and execution, and to correct various technical and other defects. In the case of Group IX, in Campania, the work was concentrated in a very short period, because of the need to use the equipment available on the spot in an isolated area with difficult access, and to create an example for demonstration purposes. It was this which, on top of other factors, brought the failure of the group.

Groups I and III, in Abruzzo, chose to construct the livestock housing directly themselves, leaving only the erection of the prefabricated supporting structures to outside firms. In the first case, imperfections and delays absorbed the small financial gain that the group had thought it could make. The second group was more efficient and specialized, and the work was completed by the rational use of the dead season for farm work. Both groups, however, found that their labour could have been more profitably employed in agriculture.

Considering the completeness of the change, the investment of 2.3 million line per ha on the 1,496 ha cooperatively managed was not particularly large, especially in view of the difficult mountainous environment. Of the total investment of 3,472 million line, direct assistance provided 80%, or 2,771 million line, while the remaining 20%, or 701 million

lire, was found by the cooperatives themselves. To this total should be added a further 10% which the cooperatives had to contribute from 1973 because of the new system of value-added tax (3).

To meet their own contributions the cooperatives provided labour, jointly advanced money, or had recourse to short-term loans of one to five years. The direct assistance consisted of a grant. For basic interventions, like new installations, irrigation and drainage, and infrastructure, a grant of up to 90% was possible, and for machinery and housing up to 60%. For the purchase of livestock the cooperatives usually resorted to shortterm loans.

This raises the classical question of whether agriculture should be assisted by loans or by grants. With the present pace of inflation, a 20-year mortgage at a subsidized rate of interest in practice includes a large element of grant. However, for a small farmer or for a joint management in its initial stages, it is practically impossible to provide a credit institution with sufficient guarantees for the high investments required. It should be added that in Italy all assistance for private land improvement is based on grants.

In the joint managements, the improvements are collective, concern a number of farm units, and are undertaken on land that has been made over for 30 years. They are also in line with certain public purposes concerning land improvement and water management. The collective works of water control, irrigation and road building, which concern land originally belonging to 332 units, have the character of public interventions. Some of their objectives go beyond the orbit of the associated families and interest the wider community.

In addition, the key investments, like livestock units and irrigation dams, are carried out on land that is the property of the cooperative, and not on the land put at its disposal by the members (4). This permits firmer guarantees for the financing agency, and leads to greater cohesion among the members themselves. It is sufficient to recall that the law on cooperatives provides that, on the dissolution of a cooperative, the capital may not be divided among the members but must be used for mutualistic purposes.

There are also other technical considerations. The improvements undertaken by the groups are conspicuously productive, they are fundamental and rational, and involve investments that, in total, per hectare and per head, are usually lower than those required per single farm unit. Even if, isolated and alone, the members would have been able to overcome all of the problems involved and make the necessary investments, the cost would have been greater

- (3) This raises the total to 3,672 million lire, and the contribution of the cooperatives to 901 million lire, or almost 25%.
- (4) It is not easy to find suitable land for this purpose. It has to be level, at the centre of gravity of the area to be served, of sufficient size (1 to 2 ha), and capable of being provided with roads, water and electricity. It is not always that such land belongs to members, that the price asked is reasonable, or that the cooperative has the necessary financial means or the capacity to quickly agree the most favourable conditions of purchase. Nor is it possible in practice to have recourse to expropriation. All these circumstances have to be defined before the stages of planning and execution. It was particularly difficult, for example, to find the land for the livestock units of Groups I (Abruzzo) and VI (Molise).

and the productive efficiency lower. Some improvements, such as small dams to collect water for irrigation, would have been impossible because of the lack of suitable areas on the single units.

Table 8 shows the investments in some of the major improvements on the cooperative farms. The investment in livestock units was 547,000 lire per head of the 1,225 livestock. The cost per irrigated hectare, including the finding and collection of water, was 1.7 million lire. The installation of specialized vineyards covering 282 ha, almost all on the "pergola" system, cost 2.9 million lire per ha. The roads, all on steep gradients, and covering 18,4 km, cost 8.9 million lire per km.

Normally no more than eight to ten months elapsed between the presentation of the plans and their execution. Of the 3,400 million lire of plans approved up to 31 December 1975, the finance for about 90% was already allocated. This compared with a normal delay of two to four years, even for collective interventions (5), with bureaucratic costs and other effects which greatly raise the final burden on the state (6).

The small farmer, often without financial means of his own, and using the savings of an emigrant son, must advance the money required for the improvements. With limited guarantees, he can discount his expected grant at a bank, and obtain an advance at an interest rate of 15 to 20%. At the same time, the prices envisaged in the plans presented a year before have risen by 20 or 30%. In these circumstances, the work often comes to be executed with economies that prejudice its efficiency.

In the case of a cooperative, such difficulties would have even wider effects and completely block useful initiative. It is mainly for this reason that the aim has been for action to follow as quickly as possible after a decision has been made. However, this has not always succeeded.

Finally, it should be added that the making over of land for 30 years represents, in ethical as well as money terms, a real economic contribution to social change. The voluntary consolidation of holdings that has been achieved has obvious public benefits. This alone, if carried out in the traditional way without changing the size of the farm units, would have cost at least 500,000 lire per ha. The new collective units have, in addition, made possible fundamental improvements and the introduction of advanced technologies. Their speedy execution and low unit costs have provided the conditions for new investments to come rapidly to the stage of actual production.

(5) F. Falini, Le stalle sociali, Edagricole, Bologna, 1970, p.5.
(6) In Group VI, a modest water supply system, which would have served all the scattered dwellings in the valley, was approved in 1969 as a public work. By the end of 1975 it was still not in operation. The whole idea was only made possible by a small well dug by the members of the cooperative in 1969.

	Liv	estock units <sup>e</sup> /estock		Irrig		Vine	yards	Farm	roads	Dwellir	ngs	
	Housing		Cost per head	Area served	Cost per ha	Area	Cost per ha	Length	Cost per km		Cost per dwelling	a
	Num	iber	Million lire	Ha	Million lire	Ha	Million Tire	Km	Million lire	Number		
I	1	96	0.7	-			-	-	-	_	_	
11	1	96	0.8	70	1.1	· • ·	· _ ·	2.0	6.7	· · _		
Ш	2	196	0.7	-	_ ·	-	_	· _	_			
IV	2	164	0.6	30	0.5	_	; _	2.4	5.8	1	- 7.7	
V	· 2	164	0.7	25	0.8	_	<u> </u>	2, 9	7.7	_	2 1	43
VI	2	164	0.3	14	1.8	-	_		_	10	- 2. 4 <sup>b</sup>	~
VII	´-	-	-	20 <sup>C</sup>	1.8	25	3.2	2.5	2.6	÷	<b>2.</b> 4 <sup>-</sup>	
VIII	· — · .	· _	-	150	2.1	128	3.2	8.6	12.5	_	- -	
IX	. 1	96	0.9	· _	_	-	-	-	-	• -	-	
X	2	249	0.2	-	-	_	_	_		· _ ·	-	
XI	-	_	<b>-</b> `	35	2.6	27	1.4	· _ ··	•	9	- 4.5	
хн	-	-		27	2.8	27	2.3	_	· · · ·	-	4.J -	
Total	13	1,225	0.5	371	1.6	207	2.9	18,4	8.9	20	_	able
a. Inc	luding ha	vlofts, silos	and equip	ment, as	well as ho	ousina.	b. Impre	vements.	c Eon c	 Uprilement		8.

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Investments by major category on the 12 joint managements

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a. Including haylofts, silos and equipment, as well as housing. b. Improvements. irrigation on 45 ha. c. For supplementary .

#### CHANGES IN PRODUCTION PATTERNS

Changes in production patterns have taken place gradually, and are still going on. They began in the year following the constitution of the cooperatives, and thus in almost all cases in the three years 1972 to 1974, several more years will be required for their completion.

Besides technical considerations (such as the time taken to establish a vineyard and bring it into production), a number of other factors impeded rapid change. One was the need for the members to adapt themselves to technical and organizational change, especially as regards irrigation. Another was the risk involved in a complete and sudden change during the critical phase of higher investments, and lower incomes. In addition, there was a strong attachment to the prevalent cereal production, and (where they existed) to the scattered olive and fruit trees.

The gradual changes in production patterns took place in two different ways. In the joint managements based on viticulture, with the continued individual and traditional management of part of the land (Groups VII, XI and XII), it was possible of offset part of the reduction in income that is inevitable for at least four years from the establishment of a new vineyard. In addition, by working themselves on the establishment of the vineyards, the members had a further source of income.

In the case of the joint managements based on livestock production, the changes were even more gradual. It was impossible to produce immediately the necessary quantity of the right kinds and mixtures of forage, or to reach immediately the levels of stocking permitted by the installations that had been constructed.

Nonetheless, by the end of 1975 the changes in production patterns were already at an advanced stage. The production patterns in 1975 are compared with those at the starting-point of 1970-72 in Table 9. The table also compares the changes in the land under joint management with those on that remaining under individual management.

Whereas the production pattern was almost unchanged on the land that stayed under individual management, there were substantial changes on that placed under collective management. The cereal area was reduced from 46 to 17%of the total. The area under forage crops rose from 20 to 31%. If grazing land (some of which was turned into sown grassland) is included, the total increase in forage crops was from 29 to 57%. A number of new species of forage crop were introduced, including fodder beet, maize and sorghum and sanfoin. Large areas were also devoted to autumn and spring grasses and to lucerne.

There was a large expansion of specialized vineyards from 6 to 15% of the area. The irrigated area rose from 4 to 23%. However, only 39% of the irrigable area was actually under irrigation. This is an innovation which, especially in hilly areas, requires time for its full adoption.

Changes in livestock production have also been substantial. Table 10 indicates that the number of EEC livestock units increased more than three-fold after the establishment of the joint managements. In this sector, too, the situation of the land remaining under individual management has hardly changed, and is still characterized by large numbers of mules and goats. On the joint managements there has been both a quantitative and a qualitative improvement, in particular through a large increase in the number of dairy cows.

	1970-72			1975								
		ividua ageme			Individual Joint management management		nt	t Total				
	Dry land	Irri- gatec	Total		Irri- gated		Dry	Irri-	Total	Dry Iand	Irri-	Total
Cereals	911	50	961	720	22	742	195	40	235	916	62	978
Industrial crops	10	15	25	5	8	13	· <b>_</b>	-	-	5	8	13
Grain legumes	131	5	136	113	7	119	5	-	5	118	6	124
Honticultural crops	10	10	20	5	3	8	2		2	6	4	10
Forage crops	397	10	407	276	3	279	316	120	436	592	123	715
Vines	119	1	120	84	1	85	54	168	222	138	169	307
Other crops	16	1	17	12	-	13	6	-	6	18		18
Grazing	186	-	186	146	-	146	. 358	_	358	504	-	504
Woods and wasteland	1,99	-	199	267	-	267	142	-	142	409	-	409
Total	1,979	92	2,071	1,628	44	1,672	1,078	328	1,406	2,706	372	3,078
	••••				%	of tot	al					
Cereals	44	2	46	43	1	44	14	3	17	30	2	32
Industrial crops	-	1	1	-	1	1	-	-	-	-	-	-
Grain legumes	6	-	6	7	-	7	-	-	-	4	-	4
Horticultural crops	-	1	1	_	_		_	-	-	-	-	-
Forage crops	20	-	20	16	-	17	23	8	31	19	4	23
Vines	6	-	6	5	-	5	4	12	15	5	6	11
Other crops	1	-	1	1	-	1	-	-	-	1	-	· 1
Grazing	9	-	9	9	-	9	26	-	26	17	-	17
Woods and wasteland	10	-	10	İ6	-	16	10	-	10	12	-	12
Total	96 ·	4	100	97	3	100	77	23	100	88	12	100

Table 9. Changes in production patterns on the 12 joint managements

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		• -							
	1970–72 Individual management	Joint , management	December 1975 Individual management	Total					
Cattle	•								
Adult	105	419	67	486					
Young	. 88	210	11	221					
Equines	120	-	75	75					
Sheep	680	470	772	1,242					
Goats	7		61	61					
Pigs	146	71	331	402					
Poultry	a	-	5,146	5,146					
Total <sup>b</sup>	320	698	403	1, 101					

Table 10. Livestock numbers on the 12 joint managements

a. In the first survey the very small number of poultry were not enumerated. b. In EEC livestock units.

The number of livestock units in relation to the land area (7) rose from 0.18 to 0.68 per ha on the joint managements. On the area remaining under individual management there was a small increase to 0.23, mainly because of a large rise in sheep numbers. In total, the number of EEC livestock units rose from 320 to 1, 101.

Table 11 shows the changes in yields for the principal crop and livestock products. Here too, the areas under joint management jumped ahead of those under individual management. The effect of their new production systems is particularly evident in the yields of forage crops, vines and cattle, even though they are still far from optimal. Yields increased for all the main production categories, with the exception of durum wheat (largely because of the low yield in Group II), and the small production of broad beans.

Chemical fertilizer use was formerly very small and sporadic, and organic fertilizers were hardly used at all. By 1975 the use of both chemical and organic fertilizers had become part of normal cultivation practices. In spite of the increased price of chemical fertilizer in that year, 221 tons were used. The manure produced (4, 500 tons) was also particularly important.

As regards mechanization, the situation on the land remaining under individual management had hardly changed by the end of 1975, with a large number of machines of low power (Table 12). On the joint managements, however, the situation was very different. There was a relatively small number of machines of high power, amounting to a total of 2,804 hp, or 1.99 hp per ha.

(7) Including all sown areas and pastures, but excluding woods, wastelands and specialized permanent crops.

1970-72 1975 Individual Individual Joint management management management CROP PRODUCTION ..... tons per ha ...... Cereals Durum wheat 2.0 2.0 1.5 Oats 1.6 1.7 2.3 Barlev 2.0 1.9 Maize (grain) 2.7 1.9 8.5 Forage crops Sorghuma 20.0 Maize (forage)<sup>a</sup> 43.3 Fodder beet 32.0 Sown grassland<sup>D</sup> 4.9 6.5 Lucerne<sup>b</sup> 5.2 5.1 Sweet vetch b 3.7 5.3 4.0 Other vetch b 5.1 Sanfoin<sup>b</sup> 4.0 5.1 Clover<sup>b</sup> 3.4 Tree crops Vines <sup>C</sup> 4.5 5.8 10.8 Olives 2.1 5.6 <u>---</u> Other crops Potatoes 7.0 8.6 Broad beans 1.5 1.6 1.0 LIVESTOCK PRODUCTION ...... Kg per head of cattle ..... Meat 302 222 587 Milk

Table 11. Changes in yields on the 12 joint managements

a. Green basis. b. Dried basis. c. Grapes.

All these changes did not come about without errors and difficulties. Tradition, the desire for immediate results, errors of judgement and partial successes all played a part. The desire to make progress and obtain tangible results, both for themselves and for the watching outside world, was continually slowed or compromised by reality. Often at the planning stage everything seemed simple, and the technical problems were underestimated. The errors that resulted were magnified in the small neighbourhoods involved.

97

1.514

122

	Tractors		Other po m	Other	
	No	Hp	No	Нр	No
Individual management	75	3, 570	47	883	77
Joint management	33	1,922	24	882	206
Total	108	5, 492	71	1,765	283

Table 12. Machinery, December 1975.

One aim common to all was to stock the livestock units as quickly as possible, in order to see the first results. No attention was paid either to advice to proceed slowly and cautiously, or to the possibility of consulting experts. To suggest different breeds, sometimes in conflict with traditional ideas, was not possible. Similarly, to suggest where to purchase them was so delicate a matter that, especially in the early years, it was at best regarded as undue interference by the extension agents.

As a result, fodder production was insufficent for the livestock that had been purchased. Some joint managements thus had to purchase hay in the early years, and there was a shortage of green fodder for long periods. The livestock that were purchased were seldom of the expected quality, and sometimes the purchase was so unwise as to cause considerable problems.

In the cooperatives based on viticulture, the changes were more concentrated, and were defined by the different phases of establishing the new vineyards. In Group VIII, for example, with 166 members, 6,000 young vines had to be planted per day.

It is often asked whether it would not be preferable in these conditions to speed up agronomic improvements to the maximum, by an authoritarian type of action, eliminating the dead seasons, and squeezing the timing imposed by technical considerations, in order to obtain rapid economic results and fully utilize the costly investments. This is a thesis which often crops up at difficult moments, in the face of technical failures, and which the most capable and impatient technicians put forward whenever there is some "human" obstacle. It leads automatically to the insertion into the cooperative mechanism of a "technical director", whose orders the members are obliged to follow.

It is easy to see the likely negative consequences of such an approach, especially in the early stages of training and organization, and in the absence of an effective extension service. Even the supporters of this approach have become aware of these consquences whenever, as in the case of large wineproducing cooperatives, it has been necessary, in order to make changes completely and quickly enough, to substitute temporarily for the decision-making of the cooperative itself.

With the larger size of cooperative units, deficiencies and errors immediately come to light, either internally or in the relations of the cooperatives with the outside. In isolated areas, services are normally inadequate and communications limited. Administrative and other actions which elsewhere can be taken in a few hours require one or more days. To obtain a spare part for a tractor that breaks down can take an unpredictable amount of time. Similarly, the collective purchase of cattle of inferior quality has much worse effects than in the case of a few head destined for single units. In addition, 100 selected animals housed together are more exposed to disease when traditional techniques and structures persist in the neighbourhood and are uncontrolled. Group III in Abruzzo, which by enormous sacrifices had reached a high level of stocking, suffered an outbreak of brucellosis in 1975. This entailed the slaughter of animals, disinfection, and the rebuilding of the herd, with very large economic losses.

When there is a single owner and management is centralized, every new event is met by a timely readjustment of decisions. When the enterprise is collective, if the difficulties and errors are not the direct result of the relations of those responsible with the outside world and of their decisions, they often come to be considered as insurmountable and irreparable. The causes are thus attributed to the technicians or to external factors, and discontent, insecurity and distrust spread among the members. Even eventual successes are superficially accepted, and not valued on the basis of the real efforts they require.

With the exception of Group IX in Campania, all of the joint managements resisted these dangers, and followed the approach that is based on their own decisions. Hardships and difficulties can be overcome if they are shared by all those in the group. At the same time, a small interference or a psychological factor can destroy a complex structure. It is paradoxical that a rational and efficient cooperative, with the power of decision-making outside the group, is more vulnerable than one that is inefficient and badly organized but where decisions are made within the group.

# MANAGEMENT AND THE HUMAN FACTOR

The development of the cooperative spirit and the process of managerial improvement and adjustment are implicit in all the phases discussed above, and are in fact the connecting link between them.

A wide range of decisions has to be taken by the assembly of the cooperative. Since it is generally a question of groups of 15 to 20 families, the assembly may be said to be continuously in session. The group meets each week to take decisions for the next week, but in many cases the fact of living in a small community means that in practice there is a meeting almost every evening. In a formal sense, it is the board of directors that programmes the work, and the chairman who then makes the necessary arrangements.

The member must integrate himself, for operational ends in which individual, family and community requirements are joined, in an enterprise in which relations are profoundly different from those to which he is accustomed. He must begin to act in relation to the other members, and find his place in a collective entity. He must therefore train himself to exercise a degree of self-discipline that was not required on his own farm. To make decisions and think in a mutualistic way, and to recognize common responsibilities represent still further levels of human development. Work is allotted on the basis of the inclinations, qualifications and motivation of the members, thus facilitating an informal process of self-eduction. The human development on which the success of the cooperative depends is in turn dependent on its being open both externally and internally, and on its correct and democratic management.

As the cooperative develops, it is almost always possible to create new jobs and increase the area of land under its management. Once outside observers have been reassured by the first results, they want to join. If the cooperative is open towards the exterior, requests for membership are screened and accepted in the light of technical and economic possibilities. If it is not open in this way, the original group closes itself in, recalls the sacrifices it has made and the risks it has borne, and refuses to enrol new members.

The open character of the 12 units surveyed is indicated by the expansion of 50% (from 942 to 1,406 ha) in the land under joint management during the five-year period, which was mostly due to the enrolment of new members. The number of individual managements that were joined in fact rose from 244 when the cooperatives were established to 332 in 1975, an increase of 36%.

As regards internal aspects, there were cases where family members were occasionally employed without being cooperative members, where the collaboration of older members was not viewed in a true cooperative spirit, and where women were excluded. However, internal democracy gradually improved, with the greater participation of young family members, women and old people. The number of cooperative members, originally 262, and mainly heads of families, rose by 53% to 395 (Table 13). The difference of 63 between the number of members (395) and farm units (332) indicates the increased participation in decision-making, as actual members, of wives, sons and daughters, and their active participation in the growing amount of work. The number of women members rose by 130%, from 21 to 32% of the total membership.

	(12	1970–72 (12 joint managements)			31 December 1975 (11 joint managements)			
	Male	Female	Total	Male	Female	Total		
Number of members	207	55	262	268	127	395		
% of total	79	21	100	68	32	100		

Table 13. Changes in membership, 1970-72 to 1975

The other indicator of the process of human change is the development of correct and responsible management, with a clear definition of tasks and in line with democratic and mutualistic principles. Accounting systems were gradually improved, and in this case too the choice was left to the members. It was the extension agents who, after brief refresher courses, began the keeping of accounts. In some cases the cooperatives made use of local accountants and in others they found someone among their members who, The aim was always with some assistance, could make the first accounts. In the last few years, with increasing to find and train a young member. experience, the need was felt to unify criteria and guarantee efficient admin-An accounting centre was therefore established, to which, volistration. untarily and at different times, all the joint managements except Groups II The responsible member of each cooperative, either alone and XII adhered. or with the help of the extension agent, sends monthly accounts for analysis by the centre.

The three conditions of being externally and internally open and managed democratically were satisfied in nine of the 12 joint managements (Groups I, III, IV, V, VI, VII, VIII, XI, XII). Group II is still deficient on all three counts. Group X, after a favourable beginning and the development of an efficient management, completely neglected the principles of being externally and internally open. Group IX, after a promising beginning, went into a decline from which it was impossible to recover. Of the nine groups that at the time of the survey appeared to have satisfied the three essential conditions, four (Groups I, III, IV, VI), had in fact found themselves at different times in critical situations that made failure seem imminent, and only five (Groups V, VII, VIII, XI, XII) developed in a balanced way from the start.

Group I is one of those which successfully overcame a critical situation. The cooperative was established from a small community of mountain people, modest, persevering and firm in their decisions, and not without obstinacy. In the difficult first year of joint management, once the livestock housing had been constructed, the Assembly decided to accept a new member who had a middle-school diploma and was a technician. This should have guaranteed competent leadership, and he was therefore unanimously elected Chairman. Once elected, however, he acted in an authoritarian manner, arranged for the execution of costly and useless works, and undertook unwise purchases of livestock and a search for large areas of land to rent. The livestock unit had to be fully stocked, in order to be able to organize a spectacular inauguration with many prominent people, and the land area had to be conspiculously large.

The cooperative was burdened with heavy debts, some members who were former emigrants returned to Germany, and the management of the livestock unit was entrusted to a paid employee. Brucellosis began to cause abortions and greatly reduced milk yields. Dialogue with the extension agent became useless, and disagreement and distrust spread rapidly. The seven or eight remaining members finally realized the danger. The Chairman was asked to resign and leave the cooperative, and the former Chairman took over again. Since then (1973) the cooperative has been laboriously returning to normal working.

The critical point in the management of Group III came in the phase of technical and economic expansion. After two years of personal sacrifice by all the families, the livestock unit was fully stocked and the first productive results were being obtained, when brucellosis required the slaughter of the entire herd, worth more than 40 million lire. In spite of this disaster, the group stayed together and overcame their difficulties.

The critical phase for Group IV concerned the human factor, and began the moment the cooperative was established. Originally consisting of nine units and nine members, it began in competion with a similar cooperative in The group was hurriedly set up by the extension agent, a nearby village. without sufficient knowledge of the people and families involved. Attention was riveted by the flatness of the land (unusual for the mountainous south of Italy), in which the technicians saw the possibility of realizing a model that was technically and economically sound, The improvements (livestock housing, a small lake for irrigation, a road, a machinery centre) were undertaken rapidly. In 1971 the first livestock were purchased (20 Brown Swiss cattle). Everything was going normally, even though the livestock reflected the hurried nature of their purchase. No problems were in sight.

There were however, no contacts with the nearby cooperative, which brought a certain parochialism. In 1971 the group had to buy hay, and the following spring, during an inspection, it was noticed that the land had not yet been prepared for the sowing of summer grasses. Since the situation had not changed by June, it was decided to make a direct investigation. This decision involved the risk of accelerating the possible failure of the cooperative, with consequences which, in that initial period, could have affected other joint The investigation revealed that the land was not worked collecmanagements. tively, but each family had retained its own plots. The livestock had not been bought by the cooperative but in the name of individual members. It was kept in the common livestock unit, but each member tended and milked his own an-The members kept other livestock, on their own account, in the small imals. and unhealthy old housing. The machinery financed by the cooperative was divided among the members. Few were interested in cooperating effectively. The extension agent did not report objectively.

He was replaced by the one responsible for the other cooperative. At a meeting of the Assembly, four of the members voted to carry on, but the other five did not. Since those wishing to carry on were in the minority, they invited the others to resign after regularizing all pending matters and paying with bills of exchange what had to be restored to the cooperative. The resignations were to take effect after new members had been found to take their place, which took several months. As the news got round, it created a difficult situation in the community and even in the provincial capital. Finding new members proved difficult. The Chairman and the new extension agent succeeded in overcoming the prevailing diffidence only through the personal esteem in which they were held by the community. From 1972 a slow process of cautious recovery and development began. Today the group includes 12 families, with 13 cooperative members, and new families will be enrolled as soon as economic conditions permit.

The 16 families in Group VI were situated in one of the most difficult and worst-off areas, as regards the steepness of the land, fragmentation and living conditions. The environment was such that the classical solution would have been the abandonment of the land; the transfer of the families to other activities, and public works for reafforestation and water control. The only thing that stimulated collective action, in the face of conflicting opinions among the technicians, was the fact that the families were there on the spot. If they had managed to live there divided for generations, they could surely live better united.

This was the first of the joint managements to be established on the basis of land and work, and the one that has been most often cited in order to stimulate farmers elsewhere. In the early years the external atmosphere was not favourable to the initiative, and it was considered a failure from the start. It was the first of all the groups to have to face difficulties with regard to In the first period of difficulty it was subjected to an acrimonious livestock. campaign of denigration, with grave insinuations about the honesty of the administration, the members, and the extension agent himself. One of the members (who had a small shop in the village) lent a million lire to the cooperative It was immediately rumoured that his aim was to get for the purchase of hay. the cooperative into debt in order to take over the livestock housing. In February 1970, following these rumours, the Board of Directors called a special meeting of the Assembly to verify the wish of the members to remain in the society, and the confidence of the Assembly in its officers. These were unan-

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imously confirmed and the membership of the group has increased from 16 at the time to 24 today.

Turning to the cooperatives that have so far failed to develop satisfactorily, Group II was based on a service cooperative already in existence, with many inactive members, including clerks, tradesmen, small farmers and permanent emigrants. There was no administrative control, and the cooperative supported itself by selling grain through local traders, one of whom was the Vice-Chairman. It was therefore necessary to revise the statute, adding the conditions required for joint management, and consequently reduce the membership to those most interested in this approach.

From 1970 to 1972 the gradual resignation of those who did not wish or were unable (because of their lack of essential requirements) to be members reduced the membership from 130 to 50. This was not without moments of tension, and it was made possible only by calling on the remaining members for a larger economic commitment and participation in the work. From the human angle, the situation has not yet stabilized. An indication of the group's unsatisfactory development is that the three members who did most of the work were paid wages. There was only very limited participation by the other members, who were more interested in the land they had kept under individual management.

However, a new Board of Directors has recently been elected, and a substantial reorganization is under way. Ten inactive members have been invited to resign, the wage-earning members have assumed the same status as the others, and together with them have formed a group of ten who are committed on a full-time basis. The other members participate in the periods of peak labour requirements, while waiting to participate fully, with their land as well, once this is permitted by the further development of the cooperative. The theft of eight cattle helped to stimulate these adjustments.

Group X operated for more than a year as a simple partnership, with the shares divided in equal parts among the nine heads of families who were members. With an active and efficient leadership, there was strong economic expansion for the first year. This immediate success crystallized the tendancy for the income to be divided on the basis of the shares. Even when a member died and his two sons succeeded him as members, the original share was divided between them, and thus the income deriving from the management. In addition, it was accepted that a member could replace this own work by directly paying wages to someone else.

In these circumstances, there were many problems when it became necessary to change the partnership into a cooperative. Vested interests were by then already established, and reinforced by the capacity and experience of the individuals concerned, all of whom were very active. Rather than for reasons of cooperative cohesion, the change occurred when the group became aware of the fiscal and managerial limitations of a simple partnership. With the change to a cooperative, the capital accumulated in the simple partnership was added to the share represented by the land. In this way the principle was confirmed of the division of the net proceeds in accordance with the goods made over and the work performed by the members. However, the group closed itself in, refusing new members and any expansion, and employed a hired labourer when the work increased.

The presence of small, traditional enterprises in an isolated and backward area gave the group the possibility of assuming leadership in the community and developing a whole series of secondary activities. These activities, which could have provided the basis for a wider range of cooperative action, were instead done as services for third parties (threshing, transport, marketing) through a larger service cooperative that was set up for the purpose. Instead of consolidating its own base, the group was therefore oriented towards external service activities for medium and large-scale enterprises that were short of labour, and for small enterprises for which it provided services that they could not otherwise obtain. This had some positive results in the community. For example, during a period of drought the cooperative loaned forage to individual farmers, to be paid back the following year. But in the long run the tendency to dominate and condition the decisions of the others prevailed.

Inside the group this deviation was reflected in the attitude to women as members. On several occasions the opportunity was pointed out for the active participation of wives and daughters, and not just heads of families, in production and decision-making. After vacillations and half-promises, the answer was "here men work for four, and the women stay at home". All this led to reduced mutuality in which were the seeds of the decline of the cooperative.

During the same period, two other joint managments were established in the neighbourhood, and the service cooperative has become increasingly independent. Thus the external structure is being strengthened, and it is probable that the community itself will make the necessary adjustments. It should be mentioned that the area in question is isolated (without roads until a few years ago), with a very hard and difficult life. It has for decades been the scene of various attempts at development and colonization. Even though unsatisfactory, the present cooperative initiative has its own original mould, and has demonstrated its conformity with the environment.

Group IX, which failed, had all the requirements for successful development. It involved seven families with 27 members, of whom 15 were cooperative members (seven men and eight women). The initiative began with the full participation of the group, and the changes were rapid and concentrated. In order to participate actively, two families without a dwelling in the countryside installed themselves in two store-rooms in the livestock unit. The fear of increasing debts caused the Chairman to reduce the dividends. In 1972 only 1,000 lire per work day were paid, and in 1973 only 1.1 tons of grain perfamily instead of money. In these conditions various small irregularites were tacitly agreed. The families distributed a litre of milk a day to themselves, without recording it in the accounts, and some did extra work for third parties. Thus small matters caused guarrels, especially amongst the Everyone thought he worked better than the others, and every wowomen. man that she was the best milker. Some families began to leave. The women in particular felt themselves at a disadvantage compared with the emigrants! wives who lived comfortably in the village, without working and with time to look after their children and house. Eventually only three or four people worked in the cooperative.

A meeting of the Assembly was held to decide whether or not to continue. The group decided to dissolve itself, even though it had more than 10 million lire in the bank. Evidently the process of disintegration had gone too far to be cured. At the root of all this was the low educational level of the group, the cunning attitude of some of the members, and the absence of organizing ability. But the really basic causes were the inefficiency of the Chairman who was incapable of coordination and leadership, and the lack of the constant presence on the spot of a capable extension agent. The latter thus had only limited knowlege of the people concerned, was cut off from the group, was slow to notice what was going on, and failed to take action in time to correct it (8).

Some preliminary conclusions can be drawn from the seven case histories outlined above. It is difficult and costly to correct defects originating from pre-existing cooperatives, adjusting legal and human arrangements that were wrong from the start. The groups should be socially and educationally homogeneous. Very small groups (of only seven to ten families with ten to 15 cooperative members) should be avoided, since a split into two groups is sufficient to prejudice the whole cooperative enterprise. The presence on the spot of well-trained extension agents, specialized in both the approach and the action required, is indispensible. Correct arrangements are essential from the outset, in order to avoid distortions in the later stages. Deviations and failures almost always derive from initial errors of judgement, limited knowledge of the groups and their situations, and inefficiency on the part of the extension agents.

It is noteworthy however, that in no case was there dishonesty among the cooperative members, even when the situation was breaking down. The cooperative structure favoured open relations and difficult decisions, without covering-up or adopting unclear solutions.

#### RESULTS IN THE FIRST FIVE YEARS

During the first five years, the number of families in the joint managements surveyed has risen from 242 to 324, and the family members from 955 to 1,209 (614 males and 595 females). Cooperative members increased from 27 to 33% of the total. The average size of family fell from 3.95 to 3.73 persons. The average number of families per group rose from 20 to 29, with a minimum of seven in Group V and a maximum of 140 in Group VIII. The land area increased from 8.5 to 9.7 ha per family (of which 4.3 ha under joint management).

Of the 324 families, 265 lived in the villages and 59 in the countryside. Data for the 320 dwellings surveyed (9) are shown in Table 14, in comparison with the initial situation. The average age of the dwellings went down from 44 to 33 years, and the proportion of those in the worst condition from 18 to 7% of the total, and there was a substantial improvement in services. Some 26 houses in the countryside and 105 in the villages had a bathroom and

- (8) In 1977 a group of young people from a nearby village, together with one of the former members, established a new joint management, which is now in operation and expanding.
- (9) Four dwellings were not surveyed, because the families concerned occupied them temporarily on a rental basis.

shower, as compared with only two a few years before. The tendency of every family to make household improvements as a first investment was reinforced by the greater confidence generated by the cooperative initiatives. In the scattered settlements (Groups V, VI, X, XI) where conditions were the most depressed, the situation was radically changed by selective technical and economic assistance.

1970-	-72	19	75
No .:	90	No	%
240	100	320 <sup>a</sup>	100
44	· <del>-</del>	33	
• • • • • •	-	· · ·	•
96	40	188	59
101	42	108	34
43	18	. 24	7
41	17	3 <u>1</u>	10
61 <sup>b</sup>	25	25 <sup>C</sup>	8
21	9	. 4	1
25	10	61	19
44	18	69	22
44	18	51	16
	No 240 44 96 101 43 41 61 <sup>b</sup> 21 25 44	$\begin{array}{cccc} 240 & 100 \\ 44 & - \\ & \\ & \\ 96 & 40 \\ 101 & 42 \\ 43 & 18 \\ 41 & 17 \\ 61^{b} & 25 \\ 21 & 9 \\ 25 & 10 \\ 44 & 18 \\ \end{array}$	No $\frac{\%}{100}$ No240100 $320^a$ 44- $33$ 96401881014210843182441173161^b25 $25^c$ 2194251061441869

Table 14. Housing conditions, 1970-72 and 1975

a. 26 dwellings in the countryside and 135 in the villages had a bathroom and shower. b. 9% of the dwellings in the villages and 82% of those in the country-side. c. Six dwellings in the villages and 19 in the countryside.

The proportion of illiterates rose from 6 to 18% (Table 15), but this was due to the enrolment of 88 new members with land, who were of advanced age. Otherwise, there was some improvement in educational levels. The illiterate and barely literate combined fell slightly from 38 to 37% of the total. Likewise, those who had only completed four or five years of elementary school fell from 58 to 55%. There was a steep increase (from 10 to 29, or from 4 to 7% of the total) in the small numbers with a middle school diploma or a degree.

This educational improvement is confirmed by an examination of the age structure of the cooperative members (Table 16). It was not accompanied by an increase in the younger age groups. Those from 18 to 50 in fact fell from 60 to 52%, while those from 51 to 75 rose from 39 to 46%. The proportion of those from 18 to 30 hardly changed in a total that was 51% larger. The average age of the members rose from 47.8 to 50.1 (10). The average age of those who actually worked on the joint managements in 1975 was 46; the 68% of them under 50 did 74\% of the work.

(10) It should be noted that the age of majority was only reduced from 21 to 18 in 1975, so that there were few cooperative members under 21. Table 15. Educational level of cooperative members

llliterate	Male 13	1972 Female 4	17	6	Male 44	. 1975 Female, 27	Total 71	% 18
Barely literate <sup>a</sup>	64	. 19	83	32	. 52	25 ·	77	19
4 to 5 years elementary school	121	31	152	58	147	71	218	55
Lower middle school diploma	5	· 1	. 6	2	14	1	15	4
Higher middle school diploma	3	· _	3	1	9	3	12	3
Degree	1	· 🕳	1	. 1 1	2	-	2	1
Total	207	55	262	100	268	127	395	100
			•	•				

a. 3 years elementary school.

	•	· -	•					
Table 16.	Ages of cooperative	member	s					
Age		1972	• •	_		1975		~
-, · · ·	Male	Female	Tota	al %	Male	Female	Total	%
18-30	15	.2	.17	6	. 20	7	27	7
31-50	112	28	140	54	125	55	180	46
51-65	61	24	85	32	84	48	132	33
66-75	16	· 1	17	7	29	17	46	12
Over 75	3	-	. 3	1	10	-	10	2
Total	207	55	262	100	268	127	395	100
<i>¶</i> o	79	21	100		68	32	100	
		•						

Emigration came to a halt. Some who were temporarily abroad returned permanently, while others who intended to emigrate no longer did so. Some emigrants wrote to their relations from Argentina or Australia, asking why initiatives of this kind had not been taken earlier. In synthesis, it may be noted that, in this critical stage of initial organization and expansion, in contrast to the general trend in the rural areas of the south of Italy, better-educated people were attracted, and the ageing of the population was checked. The gross saleable product of the 11 joint managements remaining in 1975 increased during the five-year period from 302 to 996 million line at current prices. The increase of 82% at constant prices compares with an expansion of 55% in the area involved. Thus at constant prices the gross saleable product per hectare rose by 25% (20% on the land under individual management, and 31% under joint management). Table 17 indicates that there was a substantial shift from cereals to livestock products in the composition of the gross saleable pro-

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Table 17. Gross saleable product

÷	Tc Individual management	otal 1975 Joint management	Total	Comp 1971	osition 1975
• •	-	million lire .			%
Cereals	206.0	22.5	228.5	44	23
<b>Eivestock</b> products	5 147.5	312.0 🐪	459.5	22	46
Wine and olive oil	75.2	81.9	157.1	14	16
Other	90.6	60.6	151.2	20	15
Total	519.3	477.0	996.3	100	100

These increases in the total gross saleable product and its altered composition are only a first indication of changes that are still going on. Almost all of the new investments were made in 1973-75, and have yet to show their full results. The degree of utilization of the production capacity is still low (Table 18). For example, some irrigation systems (in Groups IV, VI, VII, VIII) entered into operation only in 1977 for various technical reasons. Some livestock housing (Groups IV, VI, VIII) was only completed in December 1975. Some vineyards (Groups VII, VIII) established in 1973-74 had still to reach the production stage.

Table 18. Degree of utilization of production capacity, 31 December 1975

•	Advanced	l group	s <sup>a</sup>	Groups a	t early s	stag	е <sup>b</sup> То	tal	
	Capacity	Actual	%	Capacity	Actual	%	Capacity	Actual	70
Cattle (no)	720	465	65	444	158	36	1,164	623	54
Pigs (no)	800	226	28	800	• –	-	1,600	226	14
Sheep (no)	300	342	114	1,400	128	9	1,700	470	28
Vineyards (ha) <sup>C</sup>	62	32	52	150	10	7	212	42	20
Irrigation (ha)	122	116	95	200	. 10	5	322	126	39

a. Groups I, III, V, X, XI, XII, which had exceeded 50% of production capacity. b. Groups II, IV, VI, VII, VIII, which were below 50% of production capacity. c. Area in production estimated on the basis of a yield of 2 tons of grapes per ha.

The table indicates, however, that there was a marked difference between the groups at an advanced stage of development and those still at the stage of initial change. The former (Groups I, III, V, X, XI, XII) had only 41% of the total area, but were responsible for 75% of the gross saleable product. On the 576 ha under joint management in these advanced groups, the gross saleable product per hectare increased from 169,000 to 622,000 lire at current prices, or by 124\% (25\% a year) at constant prices. The increase during the five-year period was equivalent to 28\% of the total investment from public funds. When the production capacity is fully utilized, these increases could even be doubled.

Table 19 shows that, of the 108,504 days worked in 1975, 77% were on the land under individual management and produced 52% of the total gross saleable product, while the 23% on the land under joint management produced 48% of the total. Productivity per day increased between 1971 and 1975 by 35% (at constant prices) on the land under individual management, and by 322% under joint management.

				Gross saleable produc per day 1971 <sup>a</sup> 1975		
	Malé.	Female Days	Total	1971 <sup>a</sup> i	1975 ire	
Advanced groups <sup>b</sup>	20,011	5, 805	25, 816	9, 293	20, 907	
Individuat manage- ment	7,366	4, 595	11,966	9, 239	15, 175	
Joint management	12,645	1,210	13,855	· -	25, 855	
Groups at early stage <sup>C</sup>	49,011	33, 677	82, 688	2, 824	5, 477	
Individuat manage- ment	40, 474	31, 538	72,012	2, 824	4,690	
Joint management	8, 537	2, 139	10,676	-	10, 788	
All groups	69,022	39, 482	108, 504	4, 571	9,148	
Individual manage- ment	47,839	36,133	84, 972	4, 571	6,184	
Joint management	21, 183	3, 349	24, 532	-	19, 297	
a. at 1975 prices. b. VI, VII, VIII.	Groups	I, <u>III,</u> ∨,	х, хі, хіі	. c. Gro	ups II, i∨,	

Table 19. Days worked in 1975

Once again there are striking differences between the groups still at an early stage in 1975, and those at an advanced stage. In the former, the gross saleable product per work day rose by 66% (at constant prices) on the land under individual management, and 282% under joint management. Such increases are very large, especially considering that these groups had not yet reached even half of their productive capacity (11). Progress was even more marked in the more advanced cooperatives, which had got through the critical stage of low income, even though still far from their optimum development. The gross saleable product per work day increased by 63% (at constant prices) under individual and 178% under collective management (12).

(11) Group VIII, for example, only began production in 1977.

(12) The average compensation per work day was 9,431 lire in the more advanced and 5,154 lire in the less advanced groups.

There is evidently a positive correlation between the increases in productivity on the collectively and individually managed land. The greater efficiency of cooperative management made it possible to concentrate the family labour on the most profitable activities, such as farmyard animals, sheep, pigs and small orchards, improving the use of the traditional resources.

The number of days per hectare (54 in 1971) remained almost unchanged on In total, however, there was a reduction from 54 the jointly managed land. The traditional individual structure thus benefitted into 34 days per ha. directly without undergoing changes itself. The large numbers employed in these traditional structures can gradually be released to the collective structures or to the secondary and tertiary sectors, as new work opportunities are The cooperative work first absorbs the men and then the women, generated. in a gradual process that makes it possible to get through the period of low incomes without too much difficulty. It is noteworthy in this regard that the number of work days performed by women remained high (43% of the total work days) on the individual managements, and was still low (14%) on the collective ones.

The total number of labour units (13) employed in 1975 was 762, of which 564 on the individual and 198 on the joint managements, with an average of 148 work days per labour unit on the former and 123 on the latter. Theoretically, however, there was full-time employment (on the basis of 300 days a year) for only 362 labour units (280 on the individual and 82 on the joint managements). Thus, as compared with 51% in 1972, only 47% of the theoretical labour potential was actually utilized (49% on the individual and 41% on the joint managements).

At the same time, productivity per labour unit increased from .043 million lire in 1971 (0.71 million lire at 1975 prices) to 0.92 million on the individual and 2.41 million lire on the joint managements in 1975. Thus on the joint managements the degree of utilization of the theoretical labour potential fell by 20%, while labour productivity rose by 241%.

The gross saleable product per theoretical labour unit increased from 1. 37 million lire in 1971 (at 1975 prices) to 1.85 million lire on the individual and 5.82 million lire on the joint managements. The latter figure again includes cooperatives that were at an early stage of development, where the labour was still mainly employed in land improvement. For the groups at an advanced stage, the gross saleable product per theoretical labour unit was 4. 55 million lire on the land under individual management, and 7.76 million lire under collective management. Similarly, the more advanced groups accounted for as much as 89% of the total net product.

On 31 December 1975 the capital assets of the 11 cooperatives stood at 3,136 million lire. The cash flow in 1975 was 637 million lire. The total income of 1,177 million lire was made up of 650 million lire net agricultural product and 527 million lire nonagricultural income (of which half consisted of state pensions).

(13) Labour units value the work of men and women equally, but make allowance for reduced work by those under 18 and over 65. The total includes even those who worked only one day during the year. The income per family of 3.63 million lire was 45% greater at constant prices than in 1971, while the income per head of 0.97 million lire represented an increase of 55%. The income per head rose from 56% of the average for southern Italy in 1971 to 68% in 1975, and from 30 to 41% of the average for the centre-north. It should again be borne in mind that the increases in net agricultural product of 28% per family and 35% per head were still far from the potential. For example, in the more advanced groups the increases were 237% per family and 204% per head.

Nonagricultural incomes were 32% of the total in 1971 and 31% in 1975. Excluding agricultural pensions, which were sharply raised during the period, the share of nonagricultural activities in total income fell from 30% in 1972 to 24% in 1975. This confirms the checking of the process of rural decline, the vitality of the cooperative structure, and the tendency to retain the labour force in its own environment.

In summary, there have been profound changes in structures and in production during a comparatively short period. Of particular importance is the contraction of cereal production in favour of more intensive production patterns, especially in livestock production. Agronomic and cultivation techniques are still not optimal, and there is ample scope for further improvement. Similarly, the proper use of human resources, male and female, still requires time to arrive at the right balance.

An expanding system is being set up which is capable of channelling and bringing together physical and human resources in socially and economically depressed areas, with productive results that offer concrete new hopes to the communities concerned. Structures have been rationalized in a way that has raised productivity without a drastic reduction in labour requirements, and has indirectly favoured a general change in motivation. There has thus been a convergence of interests towards agriculture, with a check to the abandonment of land, and the first signs of the return of emigrants. The same has occurred in the other joint managements in the south of Italy, which will be discussed in more general terms in the next chapter.

The developments discussed above are confirmed by a further survey carried out in December 1977. Table 20 compares gross saleable product in 1971, 1975 and 1977 in the 11 cooperatives surveyed, as well as in the six that were at an advanced stage of development by 1975. Particularly noteworthy is the increase of 233% (at constant prices) between 1971 and 1977 in the 11 groups as a whole. Gross saleable product per hectare rose by 156%, and per work day by 492%. It is also significant that a comparison between the figures for all 11 groups and those for the more advanced six, suggests that the other five have begun to catch up.

	Total		Per hecta	Per work day		
· · ·	Million lire	%	Million lire	%	Lire	70
11 joint managements	•*		· · ·		. *	
1971	322.86	100	, 0.34	100	6 <b>,</b> 298	100
1975	659.22	204	0.47	137	26,668	423
· 1977	752.68	233	0,53	156	31,002	492
6 at advanced stage	•	۰.			• .	
1971	220.35	-100	0,38	100	12,818	100
1975	<b>494.90</b>	225	0.86	225	35, 731	279
1977	486,48	221	0.84	221	32, 697	255

Gross saleable product. December 1977 and earlier years<sup>a</sup> Table 20.

a. At 1977 prices, land under joint management only. .

It should be noted that, for the cooperatives in Abruzzo and Molise, 1977 was a very dry and particularly critical year, especially for livestock production. Similarly the wet summer of 1976 adversely affected wine production.

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Finally, it should be added that one of the cooperatives at an advanced stage of development (Group I) is going through a period of crisis because of organizational deficiencies. Among the less advanced cooperatives, Group II has fully overcome its difficulties and is expanding strongly. As already noted, Group IX, which was in liquidation, has recently started up again as a new cooperative formed by a group of young people, and is in the stage of development, and consolidation. .

#### Part III

# PRESENT ACTION AND FUTURE PROSPECTS

#### Chapter 5. PRESENT ACTION AND PROBLEMS

# DYNAMICS OF JOINT MANAGEMENTS

On 31 December 1975 there were 88 joint managements in southern Italy, with 2, 199 members (corresponding to about the same number of families), on an area of 8, 796 ha. Of the 88, 76 were at an advanced stage of development, eight at an early stage and four in the course of being organized (Table 21).

Table 21.	Joint managements	in southern I	taly, by	stage of	development on
31 Decen	nber 1975	·		_	

	Cooperatives	Members Io	Area Ha
At advanced stage	<b>76</b>	1,785	7,156
Agricultural	61	1,600	7, 145
Specialist	15	185	11
At initial stage	······································	290	600
Agricultural	ِ <b>ُ</b> 5	242	600
Specialist	3	48	-
Being organized	4	124	1,040
Agricultural	· 4	124	1,040
Total	88	2, 199	8,796
Agricultural	70	1,966	8,785
Specialist	18	233	11

During the five years 1971-75 the area of intervention was broadened. To the viticultural and livestock raising cooperatives, which were the majority, were added horticultural, pastoral, handicraft and mixed cooperatives. "Specialist" cooperatives (with little or no land) were set up for the greenhouse production of vegetables and flowers, and for handicrafts, made up of groups of 10 to 12 members, generally women. The handicraft cooperatives make traditional manufactures, mainly hand-woven cloth, but they have gradually added more sophisticated products like woollen or cotton carpets, blankets, curtains, tablecloths and linen and cotton sheets. Others make basketwork or leather goods. Some already have their own workshop.

The joint managements are distributed in all the eight Administrative Regions of southern Italy. Their number, and their diffusion in many different environments, permits the conclusion that it is not true that the farmer of southern Italy is an individualist by nature. Individualism is a defence mechanism, a reaction to external pressures and systems that are neither suitable nor welcome. One lesson that has been learned is the inadequacy of simple partnerships. This model is now a thing of the past, and only one is still in operation. The conversion and adjustment of existing cooperatives, with diverse social objectives, is no longer considered. The need for gradual action has been learned by all. Although considerable difficulties remain, the number of critical cases has been reduced to a minimum, as a result of sectoral and geographical coordination; the possibility of drawing on the experience of other joint managements, and the security gained by the technicians and farmers concerned. Of the 88 joint managements in operation, four are in a critical situation, eight use wage-labour from outside at peak periods, and two are in decline. All of these were established before 1971. Otherwise, there are at present no cases of deviation, regression or dissolution.

### ANALYSIS OF 61 JOINT MANAGEMENTS

The growth of the joint managements has been characterized by the consolidation of legal and operational arrangements, a tendency towards groups of more than 15 families, and the cautious promotion of new initiatives. The following analysis is limited to the 61 agricultural cooperatives shown in Table 21 as being at an advanced stage of development in 1975 (1). These represent 70% of the total membership and 81% of the land under joint management.

The present membership and area of the 61 agricultural cooperatives is shown in Table 22 according to the period in which they were established. The average membership and area are largest for those established in 1971– 72. Those set up subsequently have not yet had time to consolidate themselves and widen their social base, although their average membership is already fairly high. Five of the 61 cooperatives have up to nine members each (all of these were established before 1972), nine have from 10 to 12 members, 25 from 13 to 20, 10 from 21 to 30 and 12 more than 30 members. A few of the latter have more than 100 members, with the entire village involved either directly or indirectly.

Table 22. Average area and membership of 61 joint managements, by date of establishment

	1969–70	Established in 1971-72	1973–75	Total
Number of joint managements	5	9	47	61
Average area (ha)	121	205	112	117
Average number of members	18	29	26	26

The more than 7,000 ha cover ed by the 61 cooperatives were originally part of 1,197 small family farms, with an average size of 6 ha, and were

 The inclusion of "specialist" cooperatives, with their high labour intensity and little or no land, would have greatly reduced the homogeneity of the data. Investment in these cooperatives is comparatively low, amounting in ten of them to 30 million lire each, or 2.7 million lire for each of the 110 workers.

Stru	uctural cha	anges on	61 joint ma	nagements	, by Admin	nistrativ	e Région		• .
,	Abruzzo	Apulia	Basilicat <b>a</b>	Calabria	Campania	Molise	Sardinia	Sicil	/ Total
Members	189	14	109	- 26 ·	82	325	732	123	1,600
Before change Area (ha)	1,210	48	1,222	82	429	1,695	1,829	645	7,160
Farm units	173	14	109	18	72	163	553	95	1,197
Plots	3,467	20	591	38	154	2,652	1,336	155	
Average size of farm unit (ha)	7. Q	3, 5	11.2	4,6	6.0	10.4	3.3	6,8	8,413 6.0
Average size of plot (ha)	0.3	2.4	2.1	2.2	2.8	0.6	1.4	4.2	0.9
After change <sup>a</sup> Area (ha)	1,062	48	1,149	82	751	1,804	1,582	667	7,145
Joint manage- ments	9	1	8	2	5	9	20	7	61
Plots	968	1	159	23	65	86	41	39	1, 382
Average size of farm unit (ha)	118.0	48.4	143.7	41.1	150.1	200.4		95.3	-
Average size of plot (ha)	1.1	48.4	7.2	3.6	11.5	21.0	38.6	17 <b>.</b> 1	5.2

a. 31 December 1975, excluding land under individual management.

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Table 23.

subdivided into 8,413 separate plots of 0.9 ha each. Today, after the merging of the land, the plots have been reduced to 1, 382, with an average size of 5.2 ha, and the average area of the farm units is 117 ha (Table 23).

These structural changes have been accompanied by the radical transformation and intensification of production patterns. The original extensive pastoral and cereal production (37 groups in Sardinia, inland Sicily and the mountainous parts of Abruzzo) and mixed production (21 groups in Abruzzo, Molise and Basilicata) have been transformed into intensive production patterns, partly under irrigation. Livestock production is now the main activity in 26 groups in the Apennines and in Sicily. Specialized permanent crops. mainly vines, but also olives, citrus and other fruit, have been developed in 24 groups, mostly in Sardinia, but with examples also in western Sicily, Abruzzo and Molise. The development of these permanent crops has been mainly in the former pastoral and cereal producing areas, with very small farms, and with settlement concentrated in the villages. Livestock production has been developed in place of the former mixed production in areas of scattered settlement in the countryside.

The total investment was 15, 283 million lire, or 2.1 million lire per ha (Table 24). The State was responsible for 13, 126 million lire (85%), or 1.8 million line per ha. The new investments included 29 livestock centres for a total of 3,059 dairy cattle, five units for 4,354 sheep, nine units for 6,560 pigs, 1,435 ha of vines olives and fruit-trees, 42 irrigation systems (including 30 small lakes in the hills) for 1,986 ha, 96 km of roads, and 42 machinery centres (Table 25).

Region	Joint managements N		Area under jo management Ha	Total		nvestments e per member re
Abruzzo	9.	189	1,062	1,642	1.5	8.7
Apulia	1	14	48.	38	0.8	2.7
Basilicata	. 8	109	1,149	2,143	1.9	19.7
Calabria	2	26	82	79	1.0	3.0
Campania	5	82	751	772	1.0	9.4
Molise	9	325	1,804	3, 428	1.9	10.5
Sardinia	20	732	1,582	6, 326	4.0	8.6
Sicily	7	123	667	855	1.3	7.0
Total	61	1,600	7,145	15,283	2.1	9.6

Table 24. Investment in 61 joint managements, by Administrative Region 31 December 1975

	Investments			Improvements				
	Total	Sha	re Per ur	nit 👘	Units	Capacity	Actual	Degree of
	Millio		Million		•	· · ·		utilization
	lire	%	lire		••••	No .	• • • • • • •	%
Livestock centres						•		
Dairy cattle	3,009	20	0.98 pe	er head	29	3, 059	1,605	. 52
Pigs	611	4	0.09 "	<b>U</b> (	9	6, 560	4,030	61
Sheep	736	5	0.17 "	ti ti	5	4, 354	3,048	. 70
Small livestock	<sup>b</sup> 154	1	0.01 "	ŧ	5	11,000	1, 599	15
Permanent crops			• •	<b>بر د</b> در	· . •			
Vines	4,102	27	-3.97 pé	èr ha	25	1,032 ha	664 h	ia 64
Olives and fruit	481	3	1.19 "	U.	15	403."	248	" 62
Irrigation systems	c 3,245	21	1.63 "	п	42	1,986 "	1,056	II 53
Machinery centres	786	5	18,71		42	42	42	100
Windbreaks, fenc and various <sup>d</sup>	ing 834	.6	_	•	_	~	_	_
Storehouses and sheds	351	2			-	_	-	-
Roads	826	5	8.62 pe	er km	_	96 km	-	-
Housing	148	1	-	•	-	. –	-	-
Total	15, 283	100	-		-	-	-	-

Table 25. Investments and degree of utilization of production capacity, 61 joint managements, 31 December 1975

a. Including buildings, yards, hay-lofts, silos, mechanical equipment, milking machines and refrigeration for dairy cows and sheep. b. Two units for rabbits and three for turkeys. c. Including 30 small lakes in the hills and irrigation equipment for 1,246 ha. d. Electrification, water supply, small sales and service centres, etc.

Almost all of these improvements were approved and carried out in the course of three years, and more than 90% of the investments have already been made. The new structures were established rapidly, in spite of the economic crisis, and are already in production. As was brought out in the detailed survey of 12 joint managements in Chapter 4, the cost of the investments was low, both in total and per unit. The irrigation systems (including the collection and distribution of water) cost 1.6 million line per irrigated hectare, and the roads 8.6 million per km. The dairy units cost an average of 104 million line each, or 0.98 million per head of livestock, including cowsheds with milking machines and other mechanical equipment, haylofts, silos, yards, and minor infrastructure. The sheepfolds, with capacities ranging from 700 to 2,500 sheep, and including all the items just listed, cost 0.17 million line per head.

Since an average of 20 individual units was brought together in each joint management, it may be estimated that 29 dairy units were set up instead of 580 individual ones, 25 vineyards instead of 500, and 42 irrigation systems instead of 840 separate ones.

In this first phase of establishment, the average age of the new structures was about two years. The extent to which the capacity was utilized by the end of 1975 is shown in Table 25. Production should reach full capacity by 1979, or four to five years after the improvements were carried out. By that time, gross saleable product should be at least 4,500 million lire, or 34% of the public investment.

A number of the joint managements are already in the stage of spatial and functional integration. This integration takes two forms, of which the first is the enlargement of the original joint management to involve directly or indirectly most of the area and population of the municipality (2). An example is the joint management "La Nostra Terra" at San Felice del Molise (Figures 2 and 3), which is based on livestock and viticulture. In 1971 the municipality had 974 inhabitants in 350 families, the population having fallen by 42% since 1961 and 383 people having emigrated. The agricultural land of 2,085 ha was divided into 317 farm units, of which one of 350 ha was common woodland (Table 26). By 1975, about half of the population was directly involved in the joint management. The area of vines and other permanent crops was more than doubled, and about 10% of the land was irrigated.

Table 26.	Agrarian struc	ture in the m	unicipality of	f San Felice del Moli:	se,
1971 and	d 1975	•			

Farm units	•	1971		1975
· ·	No	Ha	No	· Ha
Up to 5 ha	193	522	201	286
5.01 to 20 ha	116	1,045	101	910
20,01 to 50 ha	.7	168	7	167
50.01 ha and above	1	350 <sup>a</sup>	2	722
Total	317	2,085	311	2,085

a. Common woodland

The second form is the integration of different joint managements for common services and marketing. A group of cooperatives in Campidano di Oristano, Sardinia, is an example of the spread of new joint managements in a concentrated area, and of their gradual integration. In the municipalities of Bauladu, Milis and Tramatza, seven joint managements were established in 1972-75, of which five are already in operation, grouping 130 families and 350 ha. Their gradual integration has made it necessary to overcome rivalries both between and within municipalities. The new situation is shown in Figure 4 and Table 27. The change in the agrarian structure at Bauladu, where the first of these cooperatives ("San Gregorio") was set up, is shown in Figures 5 and 6.

	Municipality	Members	Area (Ha)	Production pattern e	Date stablished
1. San Gregorio	Bauladu, Milis, Tramatza	66	187	Vines and olives	1972
2. Sa Cannuga	Milis	1°5	0.5	Flowers and handicrafts	1974
3. Ortofrutticola Milese	Milis	47	98	Horticulture and bees	1974
4. Perda Liana	Milis	24	18	Livestock and horticulture	1974
5. San Giorgio	Milis	24	380	Olives and livestock	1974
6. Murdegu	Tramatza	<b>. 21</b> .	40	Vines	1975
7. Su Eranu	Bauladu ,	12	3	Flowers, green house produc- tion	
8. Service Centre <sup>a</sup>	Bauladu	,480 1,	956	Services and marketing	1975
a. 23 joint manag	ements.		.`		

Table 27. Joint managements in the municipalities of Bauladu, Milis and Tramatza, Sardinia, 1975

a. 20 joint managements.

A second-level cooperative has recently been established, with a service and marketing centre for the joint managements. In addition to the seven, 17 other joint managements in the surrounding area of 1,000 km<sup>2</sup> have joined the service cooperative. The potential of the total of 24 joint managements represents an agricultural area of about 2,000 ha and about 500 families. When the group is in full production in the next four years, it will produce 11,000 tons of grapes from 490 ha; 4,500 tons of olives and fruit from 360 ha; 1,000 tons of horticultural crops from 30 ha; 1,000 cattle, 4,000 sheep and 1,000 tons of milk from 1,328 ha; 48 tons of cork from 2,496 ha; 50 tons of honey; and various specialist products, including basket work, cloth and cork handicrafts.

The objectives of the service centre are market research and marketing; the establishment of a cooperative winery; a machinery centre; centralized accounting; complementary activities for the full utilization of the members! labour; a rural museum of local equipment; and cultural and mutual assistance activities, including meetings for the examination of common problems.

Horizontal and vertical integration are going on to some degree in all of the regions. The basic criterion is to favour the full integration of existing structures, when this is permitted by the quality and level of organization. Especially with marketing, the aim is to avoid any form of centralization that would replace the single joint management. Every joint management must find its own way, seeking the solutions that are made possible by the cooperative and private marketing organizations present on the spot. The contractual capacity of the collective production organization should in itself ensure better conditions, with full responsibility and independence in decision-making.

Stage of Developmen	Members	Assistance service	Technicians and firms	Public bodies	Operational stage	Years ab
1. Orientati		Preliminary in- vestigation, technical courses for farmers, de- monstrations, in- formal meetings	-	Promotional collaboration	Pre-cooperative, agro-economic and socio-economic knowledge	1 ie 28.
2. Beginnin	g Examination of concrete possi- bilities, formal establishment Formulation of social project Presentation of project	Technical and administrative intervention, assistance in establishment Assistance in formulation	- Preliminary work on project	- Financing of project	Cooperative planning	1
3. Establis		Assistance in land improvement and change in production pattern	Work on con- struction and structural changes	Infrastructure, allocations of finance on basis of progress	Transformation	2-4
4. Developr	nent Administrative adjustment, pro- duction plans organization of work	Assistance in management, training courses	· <b>-</b>	-	Management	· 2
5, Consolic	lation Intensification of production, intro- duction of remain- ing labour force, widening of social base	Assistance in management, training courses		Collaboration in educational services	Management	2–3
6. Final adjus		Assistance in management, training courses, management advic	- e	Collaboration in educational services	Management	Future

Stages in the establishment and development of a joint management

Such developments indirectly contribute to stablizing and strengthening prices in the area, thus also benefiting the small farmers who are still isolated. The benefits are equally evident for processing cooperatives, both because of the greater control that a production cooperative wishes to have over the cooperative that processes its products and because of the guaranteed quantity and quality which benefits all of the production. A cooperative that delivers to a cooperative winery 3,000 tons of grapes that have been produced rationally and economically also indirectly increases the value of the other 3,000 tons delivered by 300 small producers. The same occurs with cheese production, where the daily delivery of 1 to 2 tons of milk by one or two cooperatives increases the value of the 4 tons delivered by 70 to 100 small individual enterprises scattered th rough the countryside.

Administrative and technical integration is also taking place. The special nature of the joint managements, the specific legal, technical and management problems that are not found elsewhere, the long time taken for construction in diverse physical and human environments, and the need for the continuous exchange of experience has caused them to join in a second-level interregional organization. The Board of Directors of this organization is elected from among the chairmen of the joint managements. The task of the organization, in which membership is voluntary, is direct technical assistance to the production cooperatives that are members. On the administrative side, this includes accounting assistance, with a centralized data processing service; farm management analysis; and economic assistance to get through the critical stages of structural change. The technical side includes keeping up-todate maps of the joint managements; assistance in drawing up plans, by means of standard schemes and solutions; expert assistance in such areas as livestock production, fruit production, and mechanization; and assistance in training the cooperative members.

The member cooperatives have to make an annual contribution to the organization equal to 0.1% of their gross saleable product. In addition, the joint managements can participate in various national cooperative organizations.

#### OPERATIONAL PROBLEMS

Table 28 schematically sets out the salient points in the evolution of a joint management, with the interventions of the various groups and bodies arranged in chronological order. The three essential elements that it indicates are, first, the pre-eminence of technical assistance in the work of promotion and support; second, the importance of such assistance in making it possible to adhere to the different stages of development (legal-administrative, technical-administrative, engineering, agronomic, managerial); and, third, the fundamental role of operational continuity. The maximum times indicated for the first four stages are based on direct experience, while for the next stage it is a rough estimate. These times cannot be shortened, and it is not possible to jump a stage, since each is integrated with the others. This confirms the complex interaction of the most disparate factors, which explains how, in the absence of certain basic conditions, production cooperatives can fail even when the general situation is favourable. Among the more obvious shortcomings are interventions of brief duration, discontinuity in promotion and support, limited knowledge of the initial situation, and the tendency to press for rapid action, thus compromising the freedom of decision and the maturing of the people concerned.

Five years are too short a period to pass judgement, but the small number of failures does demonstrate the capacity of the structure to resist the problems that arise during the course of development. When the action is correct and the rules are observed, the intensity of the social change is such as to render it irreversible. In the early stages (2 and 3), everyone is waiting, and attention is galvanized by novelty, and by the improvements that are made. It is only later that defects unexpectedly come up.

There are many possible deviations from the optimal criteria and conditions, both in the organization of the assistance and in that of the cooperative itself. Some of these deviations can be critical and dangerous, in that they carry within them the seeds of the decline of cooperative spirit and action.

On the basis of experience, some of the optimal conditions are shown schematically in Table 29. An examination of these conditions makes it possible to perceive deviations in time, and reduce their negative effects. Such defects originate either in the external promotional mechanism or inside the cooperative itself.

Among the critical deviations in the promotional and support structures, three may be singled out, without underestimating the others, as the most dangerous, precluding any possibility of dialogue and concrete action. These are when the action is not continuous (point A-11), when the extension agents are out of touch because they do not live in the area in question (A-13), and when they live on the spot but are also farmers or politically active (A-17). Discontinuous action makes it impossible to profit from past errors and experiences, so that each time a start has to be made from scratch. If the technicians do not live on the spot, they are unable to achieve the total involvement that is required by this type of work, especially in the early years, and they become cut off from the area and the community. If they have political and economic interests in the area, this makes close collaboration with all members of the community impossible, and predisposes the environment even further to internal struggles and disruptions. Thus the focal point of the whole mechanism is the technican, who normally has to work in very difficult and diverse conditions.

As regards the joint managements themselves, the most serious deviations are when the legal arrangements are inadequate (point B-3) when wagelabour is employed (B-6), and when the office-holders in the cooperatives become so well known that they accept or seek formal political office (B-12). In these cases too, the human and socio-economic objectives of the joint managements are not achieved.

Table 29. Critical issues in the development of joint management OPTIMAL CONDITIONS DEVIATIONS A. Promotional and support structures At regional level Existence of local public institution 1. Absence of local institution capable of undertaking an operational programme Existing institution operating effic-2. Institution existing but inefficient iently With operational means, for imple-3. Without operational means for implementation mentation 4. With social sensitiveness and under-Indifferent to human and promotional standing of the promotional proapproach gramme 5. Without politicized personnel With politicized personnel With efficient technical service 6. In capable of taking care of technical, planning and operational aspects With efficient administrative service 7. Administrative service too formalistic, indifferent to technical and external problems Open minded to small-scale problems Concerned only with large-scale and the rural community physical works, and with conspicuous 8. and profitable interventions Decentralized operational structure 9. Centralized organization Close coordination and control 10. Limited control and weak coordination 11. Operational continuity Irregular and spasmodic interventions Continued and timely support 1.2. Delay, interruptions, lack of timeliness At local level 13. Technicians living permanently Technicians living in towns in the area 14. Mobility of technicians, external Physical and psychological isolation contacts of technicians confined to their operational area 15. Methodologically and technically Not specialized in assistance, extentrained personnel sion and promotion, and without continuous refresher training Career possibilities in the area 16. Need to move to a town for promotion and higher salary 17. Technicians not formal political Holding political office or farmers in leaders or farmers in the area the area

73

- B. Joint management structures
- 1. Sound and homogenous innovating group
- 2. Fully motivated membership
- 3. Correct legal arrangements concerning land and work, consignment of all the land
- 4. Election of capable and active chairman
- 5. Clear rights and duties, consignment of live and dead stock, immediate start of joint management
- 6. Net proceeds shared on basis of work
- 7. Frequent decisions by assembly
- 8. Vertical rotation of offices and responsibilities
- 9. Conflicts and difficulties discussed by appropriate bodies
- 10. Open to new members from inside and outside the community
- 11. Collaboration with other joint managements and individual farms in the neighbourhood
- 12. Collaboration with local civic and political structures, incompatibility of political office with office in management.

Group seemingly innovating, but with mental reservations

Partial involvement and limited trust

Distorted or partial solution (simple partnership, transfer of only part of the land, faulty documentation and guarantees)

Chairman authoritarian, weak or inactive

Individual members who retain some livestock or machinery, work for third parties, or carry out individual farming activities outside the cooperative

Presence of wage-earning members or hired labour from outside

Decisions concentrated at level of chairman and board of directors, members ill-informed

Crystallization of offices, gradual development of subordinated work

Conflicts and difficulties dealt with informally, gossip, breaks between family groups

Closed to new membership by children who reach adulthood, by women and others as the enterprise develops, recourse to hired labour from outside

Tendency to dominate neighbouring farms, controlling service and marketing organizations

Mayor or other formal political leader as chairman of joint management.

When the critical deviations of the two systems, external and internal, are added together, very difficult situations can arise which may not be apparent from outside. In the technical and economic documentation, everything seems perfect, but the cooperative is lifeless and without mutuality. It can even be said that critical deviations in joint managements are a function of the effectiveness of the support structure, since it is from them that they derive inspiration and help in the early stages.

The conditions for successful promotional action are found when there are no deviations in either of the two systems. In practice this optimal situation rarely occurs, and there are many varied factors that contribute to disequilibrium and decline. Secondary relationships are therefore formed to overcome them. This happens, for example, when the technical assistance service takes on administrative functions, or when the efficiency of the chairman or the board of directors of a cooperative are able to make up for various legal or organizational deficiencies. It is possible for the two systems to substitute temporarily for one another, as with the extension agent and the chairman when one or other is weak. But these are all temporary expedients that should be designed to re-establish optimal conditions; and their persistence should be considered dangerous and negative.

There appear to be a number of minimum conditions for success which must exist simultaneously in the two systems. These are listed in the table as points A-4, 11, 13 and 17 for the promotional and support structures, and B-3, 6, 9 and 12 for the joint managements themselves. Table 30 summarizes the deviant factors in the two joint managements in a critical condition (Groups II and X) and the one failure (IX) analyzed in detail in Chapter 4.

Table 30. Critical deviations in Groups II, IX and X and in the related promotional and support structures<sup>a</sup>

Group	Promotional and support structures	Joint management
11	A-2, 4, 8, 10, 13, 17	B-3, 4, 5, 6, 8, 12
IX	A-2, 4, 5, 8, 10, 13	B-4, 8, 9, 12
×	A-15	B-3, 6, 8, 10, 11
a. See Tab	ole 29.	

When the technical assistance organization is functioning properly, the same is usually true of the cooperative. In the same way, if the cooperative structure has a solid base, without deviations, it automatically corrects deficiencies in the technical assistance.

It is for these reasons that particular attention was paid in Chapter 2 to the organizational and operational methodology of technical assistance. On the basis of experience, two other fundamental considerations have emerged concerning the office-holders of the cooperatives. It is necessary to rotate these offices, in order to avoid their crystallization and to prepare as many members as possible for management responsibilities. It is incompatible for the chairman to hold other offices, if his full-time commitment to the cooperative is to be ensured.

The cooperatives almost always have an ideal relationship with the surrounding environment and community, and are aware that their actions can influence wider features of community life. This aspect, resulting from the effects the decisions of the group can have on the environment, the heritage of history, and on civic life, is a sign of awareness of a cohesion with the outside world which should not be undervalued.

The past history of the Mezzogiorno has left its traces everywhere, and there is no village which has not witnessed an important event, or does not have monuments, legends or customs that are tied to the past. These links with the past are reflected in the names that have been spontaneously given to some of the joint managements. One of them, for example, was set up in the village of Corfinio, where even today the irrigation water comes from a Roman canal, and where in 90 B.C. the first Italic Federation was founded to combat the Romans. The cooperative is called "Italica". The cooperative "Nasa Zemljia" ("La Nostra Terra") was established at San Felice del Molise, where the community is of Slavonic origin.

There have been many cases in which one of the main preoccupations of the group, on the establishment of a joint management and at the first meetings of its assembly, has been to register immediate successes - "otherwise the cooperative movement in the whole valley will be stationary for generations". This is closely allied to the innate stimulus in the Latin world of the south to "make a good impression" (3).

In many cases, the "community effect" has helped the cooperatives to get through the critical periods that inevitably occur in the early stages. Usually any human depression is much less than the inevitable physical and economic depression. Such difficulties have in fact increased the capaicty and the cohesion of the groups.

Sometimes, however, this does not happen. This is the case in environments where extreme poverty and the physical degradation of the land accompany a human disintegration, without a culture, without a past. ln. such circumstances it is necessary to undertake a lengthy process of building a new human fabric, gradually injecting confidence, security and motivation into the attitudes of individuals and groups.

On the other hand, the "community effect" is sometimes such that every decision of individuals or of the group is taken in relation to the entire Social perception supersedes political and family factions, community. and is combined with inalienable values and rights. This is the case with certain ancient ethnic groups, where intelligence, physical strength and a difficult environment have for centuries formed communities that have resisted domination and remained intact.

In both cases, however, if the work is not carried out gradually, it is easy to arrive at difficult and dangerous situations of extreme tension. This is especially so if the radical innovatory action comes up against stablized situations and the vested interests of individuals or influential groups, and begins to produce effects outside the traditional systems. Uncontrollable and incalculable forces can then be released, which only time and appropriate action (together with some luck) can overcome.

(3) "Fare bella figura".

### Chapter 6. FUTURE LINES OF ACTION

### SHORT AND MEDIUM-TERM POSSIBILITIES AND PROSPECTS

The reorientation of agricultural development towards integrated forms of production can bring substantial economies of resources and effort for the national community. Joint managements are one possible solution to the problems of development, through the rational use of resources without a preconceived ideological framework. They represent a difficult solution, but it would be illusory to expect easy solutions for difficult problems.

Joint managements can be promoted where human conditions are appropriate for the force of example to be the best means for their diffusion. Programmes that are ends in themselves, and formal meetings or inaugural ceremonies are of no use. Joint managements must be begun cautiously, without dramatic or superficial interventions, without sudden changes, and without damaging structures that are already viable, but making use of the scope provided by the rationalization of anomalous structures.

A gradual approach to their development is essential for the observance of the timing imposed by technical considerations, for the adaptation of promotional and support structures, for the internal adjustment and maturity of the groups, and for the training of technicians and firms capable of carrying out small but specialized works in difficult and disadvantaged areas. Such an approach is also necessary in order not to upset exisiting microsystems, and to make good use of the available strengths and knowledge.

The technical and administrative experience that have been acquired are widening the range of action, and taking it beyond the stage of experiment and orientation. The number of joint managements is increasing, and they are becoming more widespread. They are already helping to strengthen the primary sector, and can also make a substantial contribution to the improvement of civic and economic conditions in the poorest areas. One of the most important possibilities presented by modern joint managements of economic size lies in the opportunities for specialized employment in directly productive activities that they offer for young people of both sexes, and for those with diplomas and degrees (1).

Errors and difficulties, insufficient commitment, and human disequilibria are brought rapidly to the surface by the joint managements. Their structure brings anomalies to light and rules out the possibility of bluff. Only continuous and detailed observation, the gradual acquisition of maturity, and the continued adjustment of structures and methods make it possible to get through the successive stages of development and expansion, and to avoid costly failures.

In the short term, the bases should be laid and methods stabilized, not through preconceived models but through general guidelines for meeting the following objectives. The experimental stage would be completed, by strengthening the existing cooperatives and eliminating the remaining deviations. They would be brought to full production, and to the balanced use of their

 In 20 years the number of young people in the rural areas of the whole of Italy fell from 2.1 million to 300 or 400,000. In 1975 the supply of people with middle-school diplomas exceeded demand by 237,000, while for people with degrees the excess supply was 195,000. human resources. Horizontal and vertical integration would be pursued further. The organizations for technical assistance and training would be strengthened, and promotional and operational methods improved. A further 200 joint managements would be developed by 1980. The establishment of new cooperatives and the expansion of the existing ones would favour combined forms that involve entire municipalities.

Medium-term action might have the following objectives. The quality of the promotional and support structures would be further strengthened. Horizontal and vertical integration by groups of municipalities would gradually be developed where the size, characteristics and number of joint managements make this a natural evolution. New initiatives, including nonagricultural activities, would be developed in connection with the existing cooperatives. The establishment of new joint managements would be encouraged. In the development of the programme, all the existing organizational and operational structures would be used in full autonomy but with a close coordination of their methods and action. Motivations and attitudes would not be subjected to pressure, and it would be left to example and trust to convince people, without time limits or conditions.

#### CONCLUSIONS

Some final remarks may help to clarify certain points and to bring together the conclusions already referred to in their separate contexts.

One of the most difficult requirements for action is the logical coordination of what is known with what has to be done, of the formal world with the real world, of the institutions with the work. This dichotomy is to be found everywhere, and permeates human aspirations, which are always divided between rational and mystical, and between reason and sentiment. This makes it necessary to look at everything more deeply, and to adopt different criteria from those which are current. It is necessary in fact to recognize that less may sometimes be better than more, that what is unseen may be more important than what is seen, that progress may signify underdevelopment, and that the groups that are in the worst conditions today may yet develop into the best of tomorrow. It is therefore essential to pay attention not only to results but also to the means of achieving them. Economic and political development must go at the same pace.

Hence the importance of grafting the process of renovation on to the best of the values embodied in tradition. Tradition does not only imply the possibility of drawing on a patrimony of knowledge of people, environments and events which is not possessed by the formal world. It also implies continuity. This continuity is the only element which makes it possible, in the complex rural microcosm, to transform the errors of the past into active guidelines for the future.

To rationalize and reorganize the migrations and improve the livestock of the nomadic Dinka in southern Sudan or Fulani in the Sahel is much better, at least in the early stages, than teaching them to plough, or to grow oranges or peppers. In the same way, it would be wrong to try to change Sardinian shepherds into industrial workers. It is preferable to look on the spot for the first indications of what will bring security, prestige and self-sufficiency to the rural communities, and to induce changes that retain all their best values. It is better to seek know-how on the spot than to import it.

The initial results of the joint managements suggest that investments in traditional areas have a higher productivity than those in other sectors,

including those outside agriculture. Can this model be repeated in different environments and cultures?

The joint managements are the closest and most integrated form of cooperation between small farmers who voluntarily make over their land. They are therefore the most difficult form to achieve. Their principal output is not wine or livestock products. They have come together for the primary purpose of human betterment.

While crop and livestock production provide the economic support for the joint managements, they are characterized above all by the development of people to take their place in democratic communities. They are essentially a means of self-education. In this respect the model of the joint managements evolved in southern Italy could, with suitable adaptations, prove useful in the rural development of other countries. Their further spread will depend on the structures that support them, on the thrust that is chosen for them, and on the continuity of action.

## LIST OF FIGURES

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### 1. Map of Italy showing Administrative Regions

- 2. San Felice del Molise, Campobasso, Molise. Agrarian structure, 1972
- 3. San Felice del Molise. Agrarian structure, 1975, after establishment of joint management "La Nostra Terra"
- 4. Campidano di Oristano, Sardinia. Group of neighbouring joint managements
- 5. Bauladu, Oristano, Sardinia. Agrarian structure, 1973
- 6. Bauladu. Agrarian structure, 1975, after establishment of joint management "San Gregorio"

# Figure 1. Map of Italy showing Administrative Regions



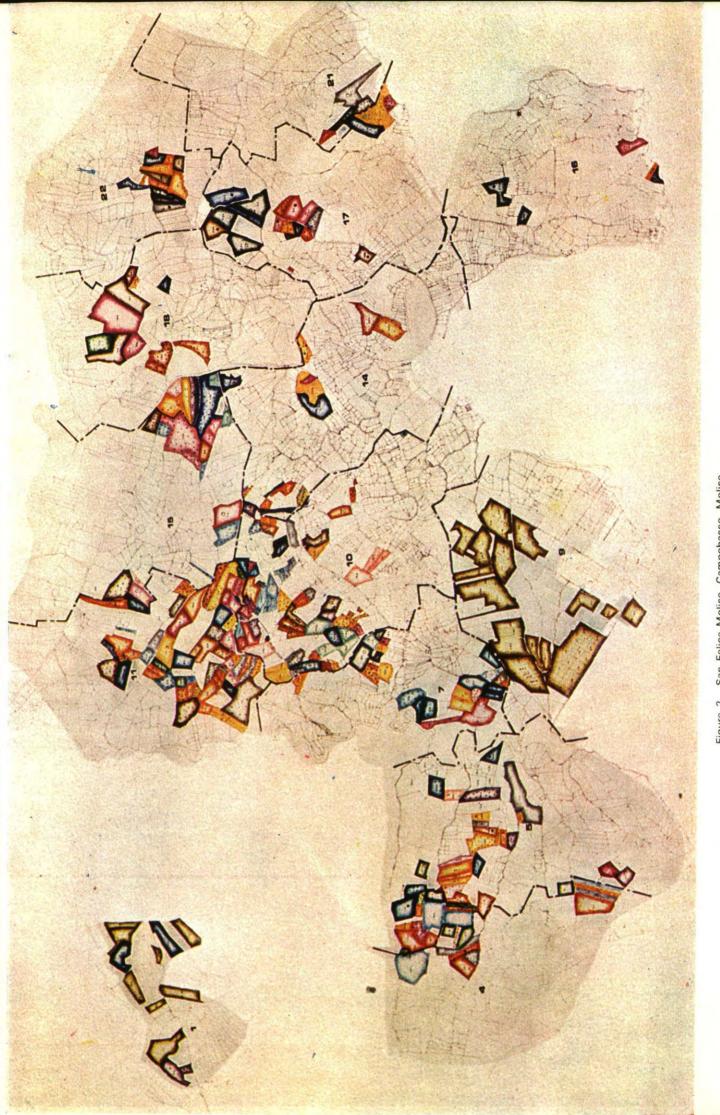


Figure 2. San Felice Molise, Campobasso, Molise. Agrarian structure 1972, 140 farm units, 327 ha, 522 plots.

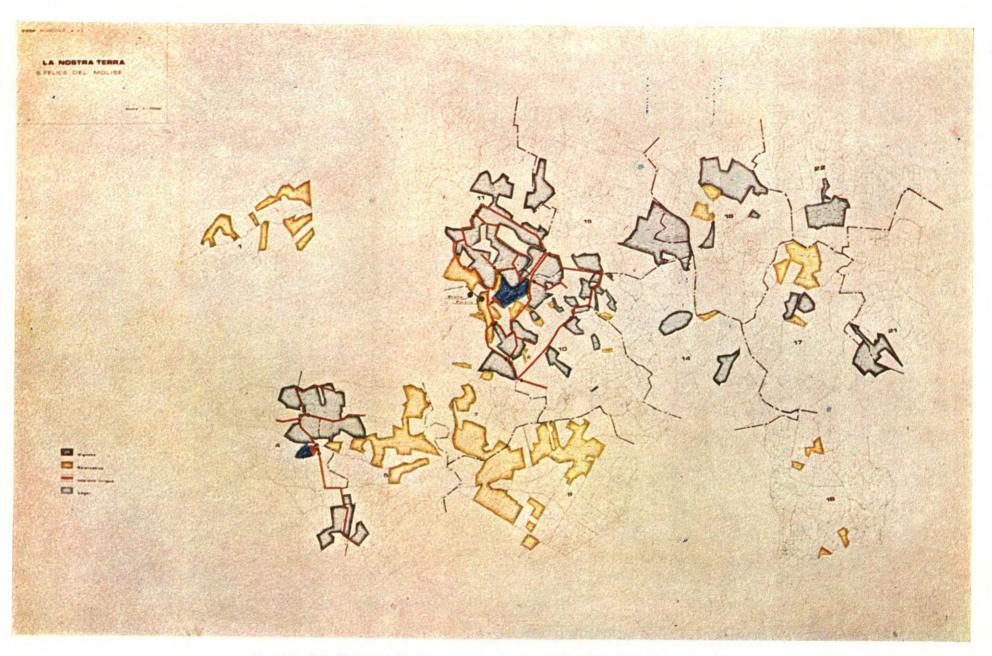


Figure 3. San Felice del Molise, Agrarian structure 1975, after establishment of joint management "La Nostra Terra", 372 ha, 10 plots, 170 members.

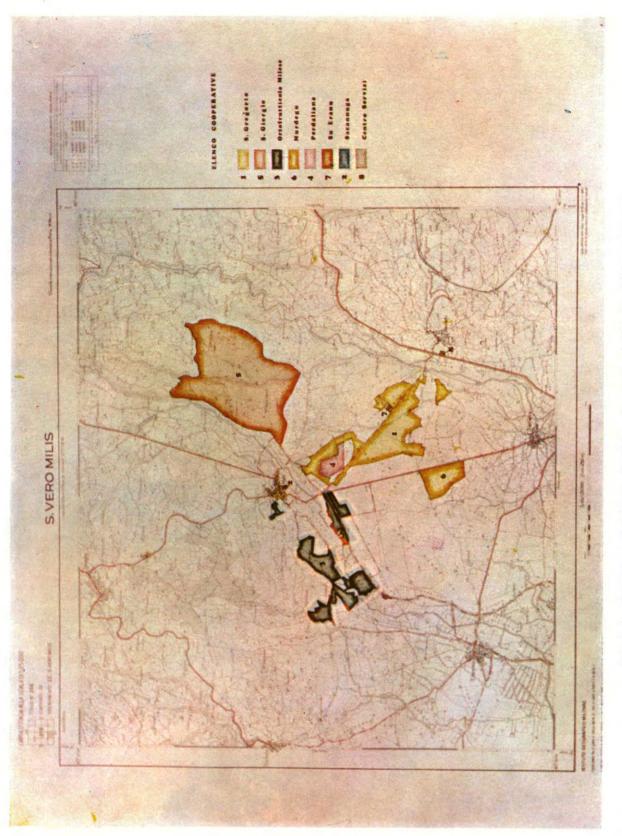


Figure 4. Campidano di Oristano, Sardinia. Group of neighbouring joint managements.

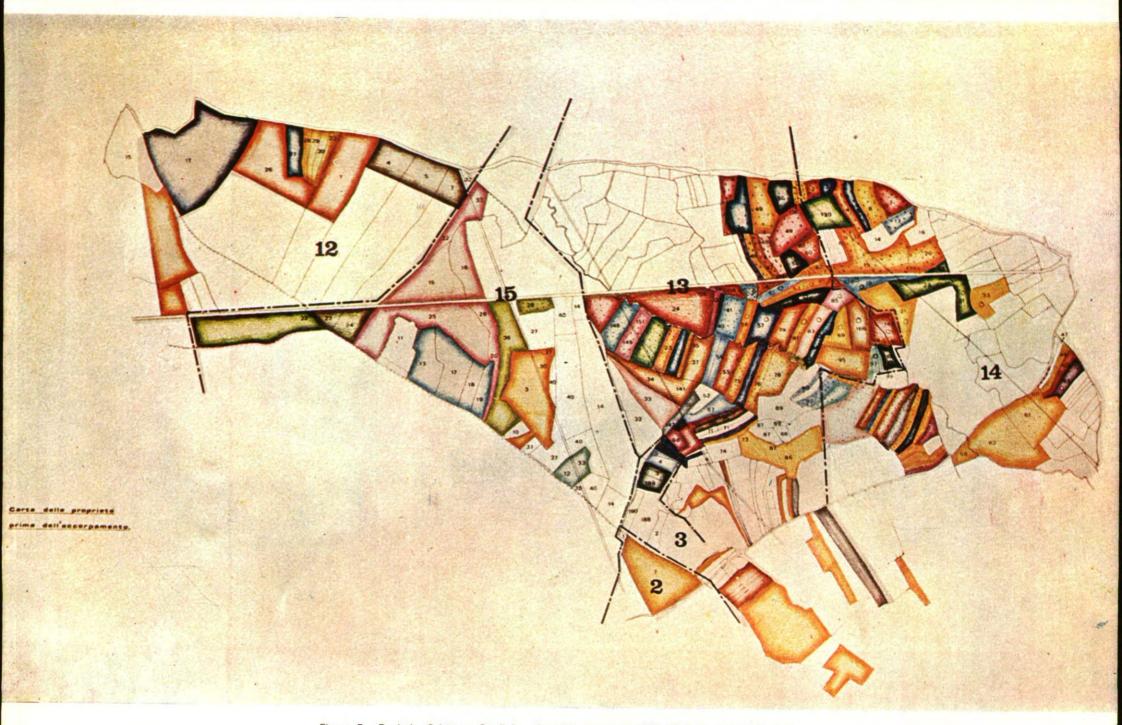


Figure 5. Bauladu, Oristano, Sardinia. Agrarian structure 1973, 59 farm units, 148 plots.

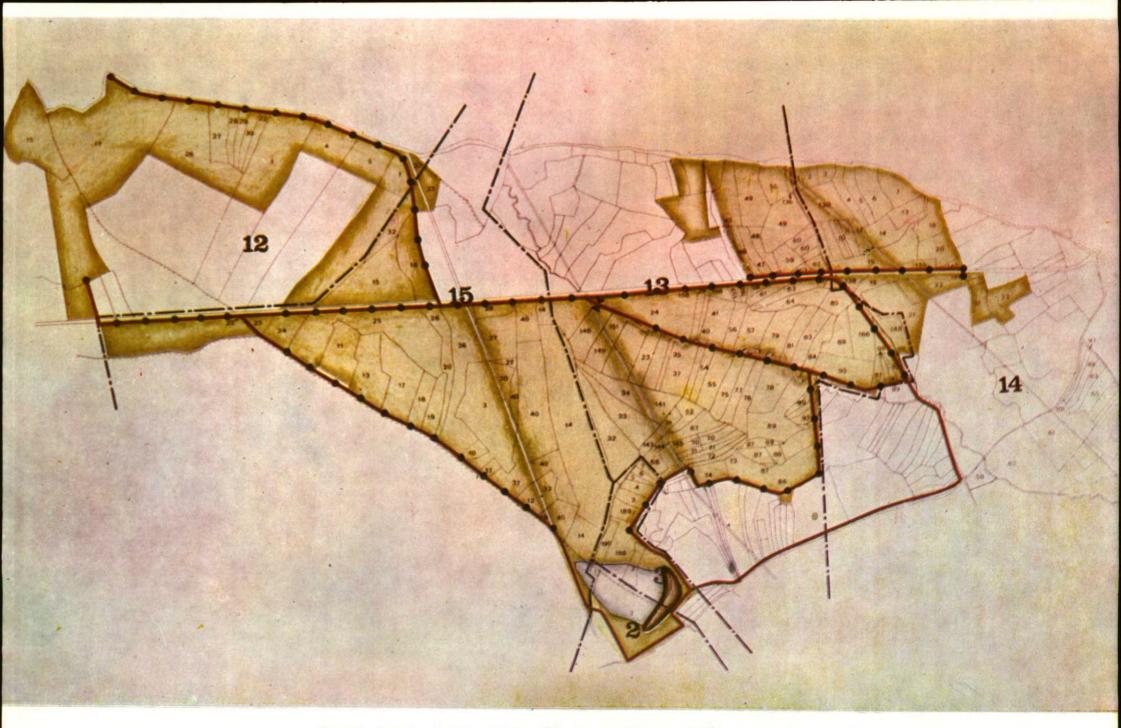


Figure 6. Bauladu. Agrarian structure 1975, after establishment of joint management "San Gregorio", 187 ha, 70 members. THE ARKLETON TRUST uses its resources for the study of new approaches to rural development with emphasis on education and training. It aims to promote dialogue between politicians, administrators and practitioners at all levels on the problems of Europe and the Third World.

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