


COMMISSION OF THE EUROPEAN COMMUNITIES

INTERNAL INFORMATION  
on **AGRICULTURE**

Vertical integration and the use  
of contracts in agriculture

II. Italy



**COMMISSION OF THE EUROPEAN COMMUNITIES**

DIRECTORATE-GENERAL FOR AGRICULTURE

Directorate Agricultural Economics – Division «Balance-sheets, Studies, Statistical Information»

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INTEGRATION VERTICALE ET  
CONTRATS EN AGRICULTURE

## II - Italie

Série : "Informations Internes sur l'Agriculture"

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Cette étude vient de paraître en langue italienne.  
Les versions française, allemande et anglaise sont  
en préparation.

Dans le cadre de son programme d'études, la Commission a chargé un groupe d'experts d'effectuer une étude sur les possibilités de l'intégration verticale dans l'agriculture.

L'étude concernant la R.F. d'Allemagne a été déjà publiée dans la série "Informations Internes sur l'Agriculture" sous le n° 106. Le présent volume contient le rapport pour l'Italie.

Le rapport analyse l'évolution et l'état de l'intégration verticale pour les produits agricoles les plus importants de l'agriculture italienne: froment, orge de brasserie, sucre, plants de pommes de terre, vin, tomates, pêches, porcs, veaux et jeunes bovins, oeufs et volaille, beurre et fromage, et indique les caractéristiques de chacune des formes de collaboration existantes.

Il est constaté qu'à l'état actuel le développement de l'intégration verticale est pratiquement limité à une certaine forme d'intégration, notamment la production sous contrat et ne concerne que quelques secteurs (orge de brasserie, sucre, vin, tomates, pêches pour la conserverie, oeufs et volaille). Les causes et les effets de cette situation sont analysés.

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L'auteur examine enfin les possibilités et conditions d'un développement futur des différentes formes d'intégration verticale en Italie et les effets d'un tel développement pour la situation des agriculteurs et notamment sur le plan structurel.

Les autorités publiques (l'Etat et régions) pourront jouer un rôle important dans le futur développement de l'intégration verticale par l'octroi de facilités fiscales spéciales et une meilleure réglementation juridique. D'autre part, les associations de producteurs pourront influencer ce processus, en aidant à surmonter les barrières psychologiques des agriculteurs traditionnels, et d'abord en entreprenant une action de regroupement de ces agriculteurs pour leur procurer une plus grande force de négociations vis-à-vis de l'industrie.

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## INTRODUCTION

The present study on vertical integration, participation and contracting in agriculture has been carried out by a group of experts within the frame-work of the study-programme of the Directorate-General for Agriculture.

The results are presented in different volumes, the first of which (1) concerns the F.R. Germany. The present document is related to Italy and has been prepared by

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The remaining volumes for the other countries concerned will be published as soon as they are available.

The divisions "Balance-sheets, Studies, Statistical Information" and "Condition of competition in agriculture and market structure" of the Directorate-General for Agriculture have participated in this project.

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The present study does not necessarily reflect the opinion of the Commission of the European Communities and does in no way commit its future standpoint on this matter.

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(1) "Internal Information on Agriculture" - N° 106.

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## 1. INTRODUCTION

The present essay concerns vertical integration, participation and contractual production in certain sectors of Italian agriculture. Particular attention has been paid to the following characteristic sectors in which there exist, from the angle mentioned above, problems of special importance both in a positive and in a negative sense :

- 1 - wheat
- 2 - brewer's barley
- 3 - sugar
- 4 - potatoes
- 5 - wine
- 6 - tomatoes
- 7 - peaches for the canning industry
- 8 - pigmeat, butter and cheese
- 9 - calves and young cattle
- 10 - eggs and poultry

The problems of vertical integration in the broad sense have always been much neglected in specialist Italian writings. If we leave aside the work of certain scholars like Galizzi and those of IRVAM, which all concern almost exclusively the fruit and vegetable sectors and poultry<sup>(1)</sup>, there does not exist any real reference bibliography.

This inquiry has therefore been carried out by collating, in addition to the bibliographical material mentioned above, original information from experts, producers' organizations, cooperatives, processing industries and distribution chains. We must not therefore be surprised if the information in question, although exploited carefully and critically, sometimes shows gaps and/or inexactitudes. This applies particularly to indications of quantity, which are very subjective since they are the result of estimates not based on official data.

However, these aspects are of differing importance according to the sector considered. In this connection, wide differences will be noted both as regards the space accorded to each of these sectors and

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(1) Reference is made to these studies in particular in the chapters concerning Tomatoes, Eggs and Poultry.



the detail of the analyses concerning them. This is due to the reasons already mentioned and particularly to the unequal amount of data and available information, which very often are more or less directly connected either with the combined importance of the productions of the sector in question in absolute terms or the percentage of this production which has already been the subject of vertical integration in the wide sense.

The penury or complete absence of detailed information in certain sectors could not be made up for by the efforts of a single researcher disposing of the means supplied by the EEC and, above all, obliged to submit results within very short time limits. Only by team work, making it possible to carry out long and detailed direct enquiries, would it have been possible to fill the abovementioned gaps. This remark may be of interest in the event of any plan to base a more detailed study of the question on the elements contained in this work with a view to taking decision with better knowledge of the state of affairs.

## 2. WHEAT

### 2.1.

In Italy the production of wheat under contract has always been on a small scale. Moreover, the contracts concluded between the various farmers and the industrialist or dealer have never been in written form but always based on a verbal agreement. In other words, they have always been de facto agreements linked with local customs generally providing for an advance cash payment by the industrialist or dealer to the farmer who undertook to deliver the harvest at a fixed price, in principle at a level calculated so that the two parties should have a certain interest in concluding the contract.

Formerly this system was fairly widespread in Southern Italy. The Mill supplied fodder and flour in the course of the year. The dealer was often a wholesaler supplying the village with products for agriculture and foodstuffs and who sold these products to the farmer throughout the year, the account being settled at the time of the harvest. At present the importance of this practice is considerably less (10 to 15 % in the Southern regions of Italy) and it is destined to disappear.

It is obvious that only small farms are concerned by the practice in question and this relationship, which in any case is more informal than otherwise, does not involve farmers' associations or groupings.

### 2.2.

In the wheat sector participation concerns only certain forms of cooperative in which the producers invest capital (although on a very limited scale) and have an influence on the management of business through their vote in the general meeting. In fact the said influence is almost exclusively potential in the sense that the president of the cooperative - generally a politician or a local worthy - can do what he pleases and carry along with his decisions all the other members who, in view of the average level of their educational and technical background, rarely manage to cross his will.

In fact, the cooperatives in question were generally not created spontaneously but set on foot by the public authorities, particularly in those regions where reform and development corporations operate. They exist particularly in the Maremma of Tuscany and Latium, where they represent between 30 and 35 % approximately of the production of durum and common wheat, and in Apulia and Lucania, where they account for about 15 % of local production. Cooperatives of the same type - whose importance is, however, very marginal - also exist in certain areas in the North. Their members are young and more elderly farmers, heads of small and medium-sized farms who are generally not specialized in the production which is the specific subject of the enquiry.

These farmers are grouped in cooperatives which stock wheat, pay an advance to the producer members, sell the product and settle the payment of the final price at the end of the marketing year. They thus handle the marketing of the wheat, carrying out a number of related operations, such as stocking and financing.

In particular when they form second degree agricultural unions the cooperatives also often look after the production and marketing of wheat seed, the supply of certain technical media and the execution of work using the machinery they own.

It is rare - in fact there are only a few marginal and isolated cases - that they enter into direct contact with industry for the processing of wheat into flour, meal, bread and pasta. We therefore repeat that they concentrate almost exclusively on marketing, financing and also technical assistance.

### 2.3.

In the wheat sector there is practically no genuine vertical integration. It should, however, be pointed out that on the face of it this statement does not correspond to reality. It is possible to recall the existence of the agricultural unions and their powerful Federation, noting that their form is cooperative or quasi-cooperative and that therefore they could be classed among the examples of participation and integration in question. It must, however, be considered - and this

applies not only to the wheat sector but also to all the other branches of production which will be dealt with later - that in general farmers have not the least possibility of influencing the decisions of the unions and of their Federation. These bodies must therefore be treated in the same way as the industrialist or merchant who enter into contract with the farmers. This does not mean that the unions and the Federation pursue the same objectives as industry and commerce and, in particular, that they are opposed to the farmers. The principles of action of the bodies in question are probably different but the results are almost the same. For these reasons this study will take the unions and their Federation into consideration only when, like the private trade and industry already mentioned, they are specifically the subject of integration in the wide sense, for example because they conclude production contracts with farmers, etc.

#### 2.4.

In view of the small importance vertical integration in the wide sense has had in the wheat sector, it is very difficult to seek out the specific causes which determined it in the three particular cases of production by contract, participation and vertical integration in the strict sense. We must therefore limit ourselves to a remark of a general nature which is practically applicable to the three sectors.

It can therefore be said that the factors which have mainly encouraged farmers to turn to the abovementioned forms of integration are, by order of importance, the following :

- The possibility of enjoying technical and commercial assistance directly linked with the possibility of thus achieving a more stable market price and reducing production expenditure (particularly those related to the use of mechanical vehicles, whose cost exceeds the financial strength and economic profitability of the small and medium-sized farms.

- Greater facility of access to credit for the farmers grouped in a cooperative. In other words it has been possible for credit to the cooperative to replace in part the credit to the different farmer

members, who, in their turn, have been able to obtain substantial advances from the cooperative with which they are affiliated.

- The possibility of obtaining goods and services with very long payment terms, particularly in the case of a production contract concluded with wholesale traders.

As regards the factors which, on the contrary, have led the partners of the farmers to adopt vertical integration the following comments should be made.

In the case of the cooperatives the same reasons as apply to the different farmers are valid.

For industry and trade, on the contrary, security of supply and reduction of collection costs are the predominant factors.

On the other hand a few lines may now be devoted to the reasons for such a limited development of vertical integration of the sector in question.

In this connection the particular structure of the wheat market in Italy since the days of the Facist régime must be borne in mind. The campaigns in favour of self-supply in foodstuffs obligatory and voluntary stocking, with a very powerful private processing industry - more and more concentrated today - created the worst conditions for the expansion of integration.

In those regions where integration developed to a certain extent, this was generally under the external impulsion of the public authorities, who saw in it a means of emancipating and protecting farmers whose educational and technical training and even occupational experience itself - it should not be forgotten that we are dealing with land reform areas - were extremely inadequate. The economic factors considered so far therefore played a very modest part in the development of vertical integration as they were dominated by the social factors mentioned above, which are mainly attributable to the collective need for better balanced socio-economic development in the more backward agricultural areas.

This is why, even if the market factors mentioned above are left out of account, vertical integration does not seem to have any great prospects of development in the wheat sector.

Contrary to what happens in other sectors, the acceleration of the socio-economic development of agriculture in the areas considered eliminates, at least partially, the motives which have so far been behind integration and thus provides the conditions for its gradual elimination.

It may be asked whether, once this stage has got over, the factors militating for vertical integration, precisely in the most advanced agricultural areas and the most specialized productions, will not emerge here too. At present, a development of this sort may not be ruled out in theory. However, it is certain that, if it does appear, it will not be in the short term, and that it is therefore not possible to make even approximate conjectures on this matter.

Nevertheless, considerable doubts can exist in this matter, and we see no reason why we should try to elaborate on the phenomenon.

In other words, we do not see why the State or the public authorities in general should have to put forth efforts in this direction when they could turn their attention to using their resources in other sectors where the need for integration is greater, or could strengthen agriculture in the wheat sector by other means than integration.

As regards the producers' associations, it may be seen that so far they have fulfilled practically no function in the sector and there is no apparent reason why they should begin to do so today. It may even be doubted that they would have the necessary strength and resources to do so since they have their sights fixed on other objectives and are concerned to ensure by other methods greater protection and a better future for their members.

### 3. BREWER'S BARLEY

#### 3.1.

Before tackling the subject of vertical integration in the sector of brewer's barley, a few points need to be mentioned concerning the production of this cereal, which presents widely differing aspects from one region of the country to another.

In the North the growing of brewer's barley has been almost entirely supplanted by other crops which pay better and are much less demanding as regards the nature of the land and techniques of growing, such as American maize for animal feed.

In the South and in the central regions (particularly Latium and Apulia) brewery barley has never been considered as a traditional crop but was introduced fairly recently and has developed relatively well, thanks precisely to certain cropping operations under contract promoted by a big industrial group.

In the aggregate, however, the production of brewer's barley does not run to more than 300 000 quintals, or only a very small part of the requirements of the national industry.

#### 3.2.

All the abovementioned production is subject to the system of farming under contract. This is tantamount to saying that there is no free market for brewer's barley, so that no reference prices are quoted for it. The only possible reference is the price of foreign barley and of malt in terms of yield. It is therefore very unlikely that individual farmers will take the initiative of growing brewer's barley if they have not made sure of outlets of their production beforehand. Moreover, such assurances are provided by industry only if it is certain that the farmers are using particular selected seeds and undertake to follow the technical and cropping operations which will ensure a certain qualitative and quantitative yield. In practice, the seeds and the abovementioned technical assistance are provided solely by the processing industry.

A few years ago this industry endeavoured to initiate the growing of the product in the North as well, specifically in the Provinces of Cremona and Brescia and in Venetia and Friuli-Venezia Giulia. In the Brescia and Cremona areas growing under contract was quickly abandoned because it paid off neither for the farms nor for the industrialists. The latter found themselves paying about 7/8% more for the barley than the foreign product, while the price to the farmer was always below what he could have obtained from other cereals.

In Venetia and Venezia Giulia growing has continued with the brewing or malt industries as partners.

In this connection, mention should be made of the tendency of Italian breweries to abandon the production of malt from barley and to produce direct from malt as raw material.

In the South and in Central Italy (and also in Venetia as already pointed out) on the contrary a very large malt industry (Malteria Tirrena), which is practically the only large complex operating in the sector, has developed. It transforms the barley into malt and then sells it to the beer-processing industries.

The abovementioned concern makes contracts direct with the individual farmers and never deals with their organizations or associations. The farmers in question operate holdings of varying dimensions. While small farms predominate in Apulia and Venetia, the large ones are situated in Latium, the area of greatest production in absolute terms.

The contracts provide for a certain sharing of risks between the industrialist and the farmer. The former supplies seeds to the farmer, who undertakes to pay for them when the crop is harvested and also to deliver the whole crop to his partner. A basic price is fixed and may vary upwards or downwards in the light of the quality of the product delivered. In general, however, such variations are not very considerable.

It has already been pointed out that the sector concerns about 300 000 quintals of barley each year; but it should be noted that it is expanding strongly. In 1964 the figure was only 3 000 quintals per



annum. This expansion is due almost exclusively to the initiative of the abovementioned malting concern, which has a productive capacity of about 700 000 quintals per year and has therefore launched a whole campaign of propaganda and promotion to convince even those farmers whose cultural and technical level is low by success in imposing on a vast scale an intensive crop which is not a traditional one. This campaign is still going on and it is supposed that the next few years it will succeed in making it possible for the concern to exploit the total productive capacity of its own plants. It is even foreseen, taking into account the methods used, that the expansion of the production of brewer's barley in this area will be such as to make it possible to enlarge the processing plants with profit.

In view of the above, it is clear that the brewer's barley sector has never undergone any form of participation or genuine integration.

### 3.3.

After what has just been set out, the reasons for the development and orientation of the cultivation of brewer's barley appear equally clearly.

The industry required raw materials which it could only procure abroad. It endeavoured to launch national production and this experiment was successful in a single macroscopic case. The reasons for this success are to be sought both in the organization of the industry and in the fairly backward agricultural milieu on which it was grafted. In other words, it was easy for the industry, even though it had to overcome not insignificant psychological obstacles, to persuade the farmers to drop traditional but poor crops, and to go over to an intensive product which was sufficiently rich, at least in relation to their situation.

The prospect of obtaining higher operating incomes without any worry of a commercial and technical nature and, consequently, the assistance supplied in several fields by the industrial partner, were the chief factors inciting the farmers to accept, with a good will, the initiative launched by industry.

All this had important consequences. A system of specialized agriculture was obtained where previously a mixture of rather irrational production had prevailed. Farmers' incomes have actually increased and become more stable over the years. Several financial problems have been resolved, whether it be because the supply of seed and fertilizers and of special technical services is practically financed by the industrialist up to the time that the crop is certain to be brought in, or because the farms producing under contract have easier access to operational and betterment credits through the traditional banking channels.

On the other hand, there have been no important repercussions on the distribution systems, the stability of the markets, the prices paid by the consumer, or for those farmers who do not conclude production contracts. This is because :

- a) domestic production of barley accounts for only a very small part of the national consumption of the product;
- b) the consumer price is determined by the price of foreign malt or barley;
- c) there is no real free market nor are there any farmers who are not tied by production contracts.

As regards economics of scale, these have mainly been achieved by industry, whose problems - we stress this once again - have conditioned the whole evolution of the sector.

### 3.4.

It follows from the above that there are no special difficulties in the expansion of the process of concluding contracts in the brewer's barley sector. The only difficulties concern production, rather than integration, in the sense that the second will only be able to develop if the first does so. But this development is determined by the relative profitability for producers of planting barley rather than other cereals or farm products. It must therefore be considered that, in those areas - relatively backward from the economic and social angle - in which

it has spread most widely, the specialized growing of barley already represents one of the highest levels to which the agriculture of these areas can at present aspire. Only profound structural changes could therefore set limits to the development of this activity in the areas in question, and it may be presumed that these changes will not occur in the short term.

#### 4. SUGAR

##### 4.1.

The sugarbeet industry is different in many ways from the other sectors which are being dealt with.

Both production and processing of sugarbeet are subject to EEC regulations, primarily to EEC Council Regulation 1009/67/CEE of 18 December 1967.

This particular regulation partly confirmed what already existed de facto and coordinated rationally, at Community level, the production of the particular sector in Italy as elsewhere.

One must first recall that this regulation came into effect from 1968, and will be applicable until 1974. During these seven years, a chain of measures will be taken to help agricultural producers in the economic and technical fields, with the aim of restructuring the agricultural and industrial sectors. This, in particular, in order to help the countries which, without such action, would have had difficulty in reaching a competitive level of production in comparison to the other States.

One must remember, however, that from 1975 onwards, a free market will be established at Community level, and no discrimination of any kind will be possible between EEC producers.

Coming back to Regulation No. 1009/67, we see that Articles 2-3-4 establish a uniform prices policy. It is laid down in particular that every year the following prices will be fixed, and within the specified time limits (difficult to observe in practice) :

- a) a target price for sugar for the Community area with the greatest surplus;
- b) an intervention price for sugar for the Community area with the greatest surplus.

On the basis of the intervention price of sugar, a minimum guaranteed price for sugarbeet is derived, again for the area with the greatest surplus.

Article 23 of the abovementioned Regulation moreover lays down the basic quota which has to be produced by each country belonging to the Community; for Italy this quota is 1 230 000 tons of white sugar.

In addition, Italy has been authorized to help agricultural and industrial producers.

This basic quota must be allotted to every factory or plant producing sugar in the country, on the basis of their average output during the reference period 1961-65.

The different production quotas are covered by price and market guarantee.

As regards Italy, this distribution was ratified by the ministerial order of 26 February 1968 (stabilization of basic quotas for sugar covered by EEC Regulation No. 1009/67 of 18 December 1967).

This order decides upon the sharing out of 90 % of the basic quota between firms, on the basis of criteria fixed by Regulation 1009/67, and, for the remaining 10 %, of criteria reflecting any variations which may have been noted in the sector after 1965.

After their production quotas have been attributed to them the firms have to share it among their own factories. In order to protect the interests of sugarbeet producers this redistribution should be subject to approval by the Ministry for Agriculture and Forests, as well as the Ministry for Industry, Trade and Handicrafts. This being so, the output of each factory must be allocated to the different farmers whose production comes within the province of the factory in question.

The price previously fixed is applicable to the basic quota established for all firms. However, these may exceed this production quota by 35 % with a total guarantee of sale. But the guaranteed price would then be lower and calculated on the basis of special criteria.

The quantity of sugar produced above the maximum limit of 135 % cannot be sold on the home market and has to be exported at the expense of whoever produced it.

To this must be added the fact that compensation operations between the different firms are not allowed. In other words, if one firm produces a quantity inferior to that allotted to it, and another more than its quota, the second firm may not take the place of the first in order to obtain the guaranteed price.

This, in short, the situation of the sector after the coming into effect of Regulation No. 1009/67, more or less directly supplemented subsequently.

Particularly as regards the contracts governing the relations between the farmers and the processing industry, we must take into account EEC Council Regulation No. 206/68, dated 20 February 1968. This lays down outline conditions for inter-branch contracts and agreements concerning the purchase of sugarbeet.

This regulation is also founded on the assumption that, before 1968, very detailed written contracts existed in the various regions of the Community concerning the supply of beetroot, the purchase price, the staggering of deliveries, collection centres, the possible return of the pulp, etc., and is confined to fixing the minimum guarantees necessary to sugarbeet planters and to the industrialists for the proper functioning of the sugar economy.

After having noted that the sugarbeet planters and sugar manufacturers are grouped in trade organizations, and that there are inter-branch agreements concerning the conditions for the purchase of sugarbeet, Regulation No. 206/68 again takes up the concept of "inter-branch agreements" between the most representative organizations of the sector and provides that these agreements may derogate from the rules in force.

All this having been laid down, the Regulation spells out several features of the contracts.

Under the terms of Article 2, the contract must be concluded in writing and for a specific quantity of sugarbeet. It specifies whether a supplementary quantity may be supplied, and on what terms.

Furthermore, Article 3 provides that the beet shall have a specific sugar content and that there shall be a conversion schedule, indicating

the different sugar contents and the coefficients with which the quantities supplied are converted into quantities corresponding to the sugar content indicated in the contract.

In addition, the Regulation lays down that the contract shall include provisions concerning the normal duration of deliveries and how these are to be spread out in time (Article 4). The contract must also specify collecting centres for the beet (Article 5), transport costs from these centres being borne by the manufacturer, save special conventions.

Rules are also laid down to define the places where the sugarbeet is to be accepted and the different methods of ascertaining the sugar content and returning the pulp.

In addition, Article 13 recognizes the validity of the inter-branch agreements, but establishes that the rules in these agreements concerning the subjects dealt with the Regulation may not run contrary to the provisions of the latter.

Under point 3, the subjects which may be covered by inter-branch agreements are enumerated.

In the sugarbeet-growing sector, these agreements are concluded annually and at national level. From one year to the next they lay down rules which improve the contractual links between the parties with a view to placing them both on a genuinely even footing.

An analysis of the most recent inter-branch agreements easily shows that these are aimed at improving the terms of cession of the beet. These improvements concern more particularly :

- 1) transport compensation
- 2) reimbursement of expenditure on the mechanical unloading of the beet
- 3) restitution of the pulp
- 4) delivery prices.

It may be affirmed that these contracts are of primordial importance in Italy in view of the fact that all production is subject to the above-mentioned rules.

In this way, all production is governed by the contractual links defined by the EEC regulations, completed by the inter-branch agreements.

The contracts are concluded by the farmers and processing industries (sugar refineries) which, in their turn, sell to traders and middlemen.

We can safely state that the sugarbeet sector is integrated one hundred percent.

We can even say that vertical integration is traditional where sugarbeet is concerned. The integration is downstream in that the integrating enterprise is the sugar mill which is, however, generally integrated upstream with the producers of fertilizers, seeds, pesticides and machines, if it does not manage to produce and distribute these on its own.

In view of the fact that all production is subject to these contractual links, it is easy to deduce that these relations exist throughout Italy but that, logically, they have greater importance in the areas where production is on a wider scale and, in particular, in the Po valley.

#### 4.2.

As regards the forms of participation, it must be noted that these are few in number and confined to cooperatives set up solely by the development bodies.

Two are to be found in Emilia and are backed by the organism "Delta Padano". A third, which is of some importance, has been promoted by the Ente Fuccino (Società anonima distillerie agricole Tresigallo, Zuccherificio di CELAMO).

What has already been said concerning the wheat sector also applies to these cooperatives.

#### 4.3.

Genuine integration is on a small scale in the sugar sector.

The few cases which may be met with here and there are processing enterprises which have their own land on which the sugarbeet is grown. However, their output is completely marginal in relation to total production.



4.4.

In view of the fact that the sector is almost completely integrated, the question of which farmers are interested in integration does not arise. All beet producers are involved, and they are grouped into two trade organizations which differ as to their political line but, in substance, pursue the same objectives.

Their aim is to act as professional unions of the farmers vis-à-vis the representatives of the processing industry, but they are not empowered to sign contracts on behalf of their members. Relations between these and industry continue to be on an individual basis. Consequently, the associations have only a moral power as regards their members.

Once this is said, it must be remembered that, as regards the different forms of integration, and until a little while ago, the initiative was always taken by the processing industries, and this because of the strong concentration of the industrial sector. Thus, these industries were able to impose on the beet producers contractual conditions which were certainly not the most favourable for them.

In this way, in order to avoid the imbalance which thus arose between the two contracting parties, the farmers felt the need to organize and take the initiative. They thought that, in this way, they would be able to increase their negotiating power vis-à-vis the industry. They therefore willingly accepted contractual integration on new bases ensuring a remunerative price and markets for their whole output. Moreover, once they were organized, the farmers were able to have the advantage of specialist assistance supplied by the different trade organizations, and this has meant undoubted advantages at every stage of production.

Security of supply was the main reason for integration as regards the industrial side.

In view of the extreme complexity and the considerable average dimensions of the plant needed to process sugarbeet, it is indispensable that the refineries should have sufficient raw materials available to ensure utilization of their maximum production capacity.

4.5.

The most modern forms of contractual integration in the sugar sector have not had any fundamental effects because, as pointed out above, the sector had already been more or less integrated for some time. The structure of farms therefore did not change much, whereas the income of farmers increased as a result of the better contractual conditions they managed to obtain from the processing industry by joining the trade organizations and giving these powers to negotiate with the industrial partners. These negotiations, which lead to inter-branch agreements covering the contracts of the year in question, also permit fairly elastic amendments to the contractual rules themselves, which can be adapted to the situation obtaining at any given time. Even stability of incomes is improved in this way, since these now depend mainly on technical production factors (diseases, infections, weather factors, etc.) rather than on market phenomena.

As regards the financing of agricultural investments, integration has not caused any great upheaval either, except for indirect reasons. The fact is that credit establishments are more inclined to lend to farms which, like the integrated ones under study, have no marketing problems, because they consider the contracts which these farms have concluded with industry as a special motive of indirect guarantee on which they can base their inquiry concerning ability to repay any debt contracted.

In recent times these markets have proved more stable, but this must be attributed more to Community policy than to the expansion and standardization of the contractual forms.

There have been no repercussions on consumer prices, since, in Italy, these are fixed under the aegis of the Inter-ministerial Committee on Prices.

The farmers have not had the possibility of increasing their production and, consequently, of making economies of scale or external economies of different types, which the processing industries have, on the other hand, enjoyed, thus being put in a position to meet a part of the increased supply costs resulting from the higher remunerations granted by contract to the farmers.

4.6.

In order to speak of the weakness and difficulties which have inhibited vertical integration in the sugar sector, we must confine ourselves exclusively to vertical integration in the strict sense.

This integration has not spread because the minimum physical and financial dimensions of the beet processing establishments exceed the average possibilities of the groupings of farmers - even the largest ones - concerned in this matter. Practically no cooperative mills have therefore been built; this is, however, also attributable to the special Italian legislation on cooperatives in general.

Despite the changes recently made in the status of cooperatives, their possibilities of finding among their members the necessary funds to contribute a registered capital are very limited, either because of the very low maximum amount which each member is in a position to contribute or because - in order to overcome this obstacle - an extremely large number of farmers would have to be recruited. This is a thing which has been achieved without any special difficulty in other countries, but has so far proved impossible in Italy.

This point as regards the law appertaining to cooperatives does not apply to the sugar sector only, but also concerns all the other branches of production considered and, in particular, those in which cooperatives are most common and play the most important role.

Similar technical and financial reasons connected with the size of the plants and agricultural areas necessary to keep them properly supplied have, moreover, impeded vertical integration in the field of the processing of the sugarbeet produced on land belonging to the industries themselves.

The industries have in fact preferred not to produce beet on own account and have concluded contracts with a great number of individual producers, thus achieving practically the same results with very small financial outlay.

## 5. POTATOES

### 5.1.

With regard to vertical integration in the broadest sense within the potato sector, we shall limit ourselves to that fraction of production intended for seed. It is only within this fraction that there exist types of very limited integration, even though their overall importance is small and that importance is decreasing in both the absolute and relative senses.

Seed potatoes represent some 5 per cent of Italy's total potato crop; these seed potatoes can be divided into three groups :

- (a) basis potatoes, which are used to produce a large quantity of certified seed potatoes;
- (b) certified seed potatoes, grown from the basic potatoes;
- (c) ordinary potatoes, used for sowing.

These three categories are valid for all Member Countries of EEC (Law No. 1096 of 25-11-1971 published in the O.G. 322 of 22-12-1971) and they are of interest to us because only sub-category (b) is subject to vertical integration in a form, which it is difficult to classify, within the three parts laid down in the joint working plan (contracts, participation, integration).

For Italy as a whole, seed potatoes reach a figure of 15,000 tons per year. Areas of production are the Trentino-Alto Adige, the province of L'Aquila, the Sila, and other areas of lesser importance. On the other hand the national consumption of seed potatoes is between 90 and 100,000 tons. It therefore appears that only 15 to 20 per cent of the seed potatoes used are of national origin, the remaining 80 to 85 per cent being imported mainly from the Netherlands, France, Germany, Denmark, Canada, the U.S.A., Switzerland and Poland. The percentage of nationally produced potatoes is continually decreasing, for reasons connected with the general production crisis for potatoes in Italy; we shall return to this subject when we come to consider the crisis among the production cooperatives for seed potatoes.

These cooperatives exist on a limited scale in the Trentino-Alto Adige area only and represent the sole example of vertical integration in the broader sense existing in Italy.

The cooperatives grew up at a time when potatoes provided one of the main sources of income for farmers in this areas. They were an important step forward for improving the value of local produce.

Unfortunately, however, this crop has been through and is still going through hard times, on account of low production and consequently low earnings. Costs are high in proportion to the prices received and this has a disproportionate effect on the overall incomes of the cooperatives. The latter aim at improving the economic condition of their members by higher found incomes, by organising supplies on a cooperative basis, by improving plant health and in particular by perfecting seed potatoes with higher yield.

They work in cooperation with the Provincial Inspectorate of Agriculture and they use funds forthcoming from the Green Plan and other legal provisions either of a central or regional nature. These have played an important part in the setting up and development of the cooperatives in question. Consequently equipment has been obtained practically free of charge by the cooperatives, which have thus come into being without any particular economic or financial commitment on the part of their members. This had led to a lack of cohesion among the members although these cooperatives are situated in an area traditionally known as one in which the cooperative spirit is strong and in which cooperatives are in general highly developed.

In any event they are attempting to organise, on a cooperative basis, the growing of seed potatoes in accordance with the most modern agricultural techniques in order to obtain a product whose freedom from viruses is in accordance with EEC regulations.

The cooperatives purchase, pre-germinate, and distribute the potatoes to their members. The potatoes are later controlled and treated with various sprayings free of charge. All these operations take place under the supervision of the agricultural inspectorate.

Despite the efforts of the latter and of the autonomous Region, it has not yet been possible to instil in the members that economic and

social maturity which would enable them fully to understand the benefits which cooperation can bring in this sector; consequently the future of these organisations is far from bright.

In order to be effective, the spraying must be extended to an entire area and must be undertaken on large fields close to one another. In fact, however, the arable land is very much fragmented, belonging as it does to many small and generally part-time farmers, for whom the growing of seed potatoes merely represents a supplementary income. These producers are thus not very interested in their crops and it is consequently difficult to organise them into efficient cooperatives.

These, in addition, were formed at a time when potato growing was going through a period of high yields and great commercial possibilities.

The characteristics of the area, which was suitable for high quality production, and the granting of a quality label, which made it easier to sell the potatoes on the market at very rewarding prices, made it apparent to the public authorities and to farmers associations that it was necessary to organise production in this sector. Today, however, conditions have changed.

Much has happened in the meantime.

Today the unit yield of the product has been reduced and the quality label is no longer granted. Consequently the potatoes have lost their reputation for quality and the profit from them is smaller.

Only if trade in certified seed potatoes were to revive would it be worth attempting to explain to the members of the cooperatives that it is necessary to organise themselves properly.

Thus the cooperatives have clearly been affected by the general conditions obtaining in the production of potatoes in general and certified seed potatoes in particular; these can be summed up as low prices for producers who are particularly affected by foreign competition as imported seed potatoes come on to the Italian market at lower prices than those produced at home.

5.2.

Special mention must therefore be made of the marketing of imported certified seed potatoes, especially with regard to the action of the Federconsorzi which provides a typical example of the intervention of this organisation on the Italian agricultural market.

Importers are numerous, about 100, and their importance varies. The Federconsorzi is, however, in the first place among them and imports between 30 and 35 per cent of the total. Beside it we find other large importers whose activities are usually confined to one or two parts of the country. The Federconsozi, however, works at national level and imports every quality of certified seed potatoes without confining itself to two or three particularly good qualities for sowing in any given region.

The ultimate purchasers are, of course, farmers the users of the product. The middle men between them and the importers are the Consorzi Agrari Provinciali (provincial farming boards) or other wholesale undertakings all of which are free to seek supply wherever they think fit; in other words the Consorzi Provinciali may buy from the Federconsorzi, from wholesale suppliers or in certain cases may import directly from abroad. The same is true of the wholesalers. This system has its effects on the final stage of marketing, that is to say on purchases made by farmers. These purchase from wholesalers instead of from the provincial boards, even though they may be members of the latter who, in their turn, are free to sell to whoever applies to them whether he be a member or not.

Under this system there is no previous agreement between the farmers and the provincial boards or between these and the Federconsorzi. The same is even more true of relations between farmers, wholesalers and importers. The resulting mechanism therefore is as follows with regard to that part of the market covered by the Federconsozi :

- (a) The Federconsorzi forecasts probable sales on the basis of the needs notified to it by the provincial boards. These, however, do not commit themselves to purchasing a given quantity of certified seed potatoes;

- (b) The Federconsorzi draws its supplies from abroad and, to a smaller extent from Italy;
- (c) The Federconsorzi sells to the provincial boards (and to a smaller extent to private wholesalers) at fixed market prices based on those charged by other suppliers in competition with them.

Thus the Federconsorzi controls the market and also such credit facilities as it and the provincial boards are able to offer to their farmers members.

This gives rise to a second form of vertical integration in the seed potato sector with particular reference to what has previously been defined as "basic" (as in the case of the cooperatives in the Trentino-Alto Adige region).

These potatoes are almost exclusively imported by the Federconsorzi which distributes them to individual farmers with the stipulation that the latter shall sign crop contracts.

These contracts are of short duration and provide for the growing of the potatoes provided by the Federconsorzi according to procedures and with treatments which are laid down in advance. The contracts also stipulate that the farmers shall finally furnish seed potatoes with characteristics suitable for certification.

Although these contracts are an interesting feature in a very specialised sector their economic content is very limited in as much as they were an attempt to increase potato cultivation in a period when the market was firm but they have never been very successful and today they are even less so for the reasons noted above.

### 5.3.

The causes, effects and difficulties of vertical integration in the seed potato sector in Italy should be sufficiently clear from what has gone before.

The causes are to be sought in the fact that it was convenient for growers and merchants to take advantage of what at least appeared to be a particularly fortunate tendency in the seed potato market.



Farmers belonged to associations which, with the technical support of the Ministry of Agriculture and financial support from the Region, grew into cooperative associations. In addition this crop is not suitable for individual producers of the type usually found in Italy. That is to say farmers whose area in seed potatoes is very limited and represents only a marginal portion of the income and land cultivated by the farmer concerned.

The marketing authorities, in this case the Federconsorzi, either directly or through the agency of the provincial boards, have tried to increase their income by using crop contracts in order to transform the raw material (basic potatoes) into a consumer product (i.e. certified seed potatoes).

The farmers have willingly accepted the two solutions proposed to them because these rationalise their production at least in part by absolving them from marketing problems both as regards purchase of the raw materials and as regards the distribution of their products. They are also spared complicated technical problems such as those concerned with the plant health treatment of the crops. And crop contracts increased as did cooperatives especially because these did not have any problems of amortisation for the equipment which was provided to them free by the public authorities. However, this development was very limited, both with regard to the amount of the country covered and also to the quantities produced. It soon became apparent that producing on a national scale was not going to be as easy as had been foreseen and therefore the development of cooperation and crop contracts became increasingly difficult.

The fact that these forms of vertical integration failed to expand, called in question certain fundamental suppositions with regard to their economic profitability. Both technical assistance and treatments were provided at a loss and the marketing of the integrated product became difficult both for the cooperatives and for the Federconsorzi.

A slump in national potato consumption was the final barrier to any development of total production and also therefore to the vertical integration of seed potatoes. The latter are therefore increasingly imported from abroad.

However, the unprofitability of national production as compared with foreign prices is the reason for the lack of development of vertical integration in the seed potato sector in Italy. All other factors which might be considered and which are set forth in detail in the research table are consequently of very secondary importance.

## 6. WINE

### 6.1.

The production under contract of grapes for vinification is in fact non-existent. Private wine makers have always preferred to purchase grapes on the free market, without seeking prior agreements with the farmers.

The most one encounters in some zones is a sort of "understanding" between growers and manufacturers which nevertheless generally results in the conclusion of separate annual contracts, albeit between the same parties year after year, thus reducing competition to some extent.

### 6.2.

However, the great increase in wine-making cooperatives in Italy over recent decades, resulting in a cellarage capacity of over 40% of Italian production, still does not allow us to regard the wine sector as highly integrated. In fact, the wine growers' cooperatives (cantine sociali) confine themselves to making the grapes into wine, and in most cases have nothing to do with the subsequent stages of bottling and marketing.

Thus we cannot, at this level, speak of real integration, but if anything of an initial or partial integration, concerning only the first two stages of production and processing, whereby these are brought under one and the same organisational roof.

The following table shows the extent of cooperatives in the wine sector, and also enables certain comparisons to be made.

Wine growers' cooperatives operate in all regions, though varying in number and scope in each of them. The quantity of grapes processed by them in the 1970/71 campaign was substantially greater in Northern Italy (16,700,000 quintals), with Southern Italy in second place (some 6 million quintals), the Italian islands in third place, and Central Italy last of all.

	Wine-growing cooperatives			Cellarage capacity in Hl		Mean overall harvest yield	
	1952 (1)	1960	1970	1952	1970	1968	1969
Piedmont	35	78	73	394.580	2.361.627	5.415.150	
Liguria	-	-1	1	-----	1.500	361.850	
Lombardy	20	18	19	337.110	859.740	2.210.050	
Trentino/Alto Adige	35	45	43	392.700	1.313.271	1.108.300	
Veneto	25	44	55	566.410	5.334.700	9.039.500	
Friuli/Venezia Giulia	5	8	10	39.760	598.000	881.000	
Emilia/Romagna	76	84	102	1.265.080	5.488.200	6.982.150	
=====							
Tuscany	3	7	17	7.640	648.500	3.859.100	
Umbria	1	5	9	11.450	192.277	737.750	
The Marches	14	3	7	105.820	198.000	2.273.100	
Latium	7	15	19	125.430	922.000	4.862.800	
Abruzzi	-	4	17	-----	629.000	2.108.650	
Campania	2	3	6	9.370	285.000	3.247.650	
Apulia	33	57	121	499.210	3.990.500	11.619.800	
Basilicata	-	3	5	-----	124.000	639.000	
Calabria	-	2	8	-----	176.000	1.154.450	
Sicily	1	8	54	10.860	2.642.360	9.600.400	
Sardinia	6	21	35	67.870	1.899.855	1.938.150	
TOTAL	264	404	601	3.893.290	27.664.530	68.038.850	

(1) Including cooperative wine stores (Enopoli).

The customary legal form is that of a "Limited liability cooperative", the members of which are owner-, tenant- and share-farmers, who are under an obligation to pool with the cooperative the grapes they produce on their land (almost invariably all the grapes). The same growers also contribute to the capital of the cooperative (usually in proportion to the amount of grapes contributed) which is also directly managed by them.

An important innovation was introduced into the regulations governing farmers' cooperatives (cooperative agricole) by Article 7 of Law No. 127 of 17.2.1971, which makes provision for "delegated representation". This allows participation in the societies by members' families, who were previously excluded (even if they worked on the farm concerned) as lacking the requisite formal qualifications (owners of land, share farmers, etc.) for admission. This meant in practice that younger people (usually more amenable to the ideas of cooperation, as well as being better trained) were allowed to play an active part in the affairs of the cooperatives.

The number of known members of wine-growers' cooperatives on 20.9.1970 was 236,214.

The initiative for setting up wine growers' cooperatives lies with the farmers, unlike the case of the cooperative wine stores. Nevertheless, the advice and assistance provided by the cooperatives' trade associations are of importance. The economic aims were as follows : in the first place (the early decades of the 20th century) to relieve the individual growers of all the work of processing, by communally processing the grapes which, inter alia, resulted in the production of large quantities of wine of constant characteristics, a higher unit output, and utilisation of the by-products of vinification. Subsequently, as production increased, as growers became unable for technical reasons to process their own grapes, and as the number of private wine makers increased, it also became necessary to relieve the viticulturists of the urgent need to sell their products within the span of a few weeks, from a position of weakness vis-à-vis the buyers. To this was added the intention to obtain some of the income from processing.

But, as already stated, only a small part of the wine produced by wine-growers' cooperatives is bottled by them, and the omission of this important phase (which is one of the causes of these cooperatives' failure to achieve their stated aims) means that complete vertical integration cannot be said to exist.

We know that of the 601 wine-growers' cooperatives in existence, 194 have bottling plant. It is, however, difficult to establish how much of their own wine they bottle, since the individual cooperative with its customary small, semi-automatic bottling plant, hardly ever bottles all its own production. Since experience in the last few years has shown that bottling by individual cooperatives is not expedient because of the high costs of marketing specifically connected with the bottling process, and which are even higher than those of management and plant, the current trend is towards the formation of association of cooperatives (secondary cooperatives).

17 such associations are now operating (including one third - level association) with a membership of 220/230 wine-growers' cooperatives.

Relations between the associations and the wine-growers' cooperatives are governed by articles of association and rules of procedure and are a faithful reflection of those between primary cooperatives and growers. Each member-cooperative has one vote only, even when the general assembly of the association consists of several (3) members of the board of management of each individual cooperative. In early September each year, the Board of Management, working on the association's sales forecasts, submits to the general assembly for consideration proposals on the amounts of wine that members should make available to the association. Wine collection is staggered over the year. A special technical committee judges the wine contributed by means of a points system which, coupled with the strength of the wine, forms a basis for the final assessment. During the financial year (dates and amounts being laid down by the Board of Management) payments on account are made to member-cooperatives. At the end of each financial year, when the market value of stocks has been established, the prices to be paid for the lots of wine contributed are determined on a "strength - weight - points" basis.

This is the current trend which derives in particular from recognition of the inadequacy of the existing cooperative network which is close-meshed and widespread, but confined solely to processing the product. If the benefits sought from the wine-makers cooperatives are not to be dissipated in the subsequent phases of bottling and marketing, the growers must acquire control (still by means of the cooperative instrument) of the whole spectrum, i.e. from production to distribution of the finished product. There is no lack of difficulties in setting up secondary and third-level cooperatives, even though the State is trying to encourage them by substantial loans on easy terms and in some cases even by outright grants, and has stopped granting such facilities to individual cooperatives for the installation of bottling lines. Suffice to recall the reluctance of growers (especially those of the old school) where very large organisations are concerned. It seems clear that as we progress from primary to secondary and third-level cooperatives, their "basic" control becomes more difficult and their use as instruments by politicians or financiers becomes easier despite the fact that they still belong to the growers themselves. This is especially true at the higher levels of cooperation, where there is a danger of inefficient businesses being created, or of their being diverted into private channels.

Currently, there is support for the idea of creating secondary cooperatives at inter-provincial level for homogeneous areas (i.e. those whose products have similar characteristics) for the processing and manufacturing of the product, whilst leaving marketing to a third-level organisation. In Italy, there are 113 cooperative wine stores, 40 of which have their own bottling plants, with a total annual capacity of over 2,500,000 hectolitres.

Although set up, of course, for the same purposes as the wine-growers' cooperatives, these are nevertheless very different organisations, which are formed and to a great extent remain outside the control of the producers. They are owned by Farmers' Cooperatives, (Consorti Agrari) or their Federation, which are responsible for their management. Whilst the wine-growers' cooperative is a permanent instrument in the service of its members, the cooperative wine store is an instrument which the producers can use when they see fit.

By the very fact of their being created "from above", they have the advantage of being set up speedily, as opposed to the - sometimes exasperating - snail's pace which characterises the setting up of a wine growers' cooperative, which involves active participation by the viticulturists, and a cooperative spirit. The cooperative wine stores do not, therefore, lead to vertical integration, even in the form of "minority participation" : for the connection between the grower and the cooperative wine store is always loose and occasional, and generally occurs only when market conditions make it preferable for the farmer to place his grapes with the cooperative wine store rather than sell them on the open market.

It may therefore be said that as the number of cooperative organisations increases, a process of integration "from below" is taking place in the viticultural sector and, although limited as yet to some of the existing cooperatives which do their own bottling or are members of secondary associations, there are a number of signs which point to a definite increase in this trend.

### 6.3.

As regards integration in the strict sense, it is very difficult to collect homogeneous and significant data in the wine sector, and generally to quantify the phenomenon.

Nowadays, there are very few farmers indeed who carry out the entire production cycle on their own farm and sell the wine to the consumer.

As regards private wine manufacturers, it may certainly be said that they all buy grapes on the open market, or must from the wine-growers' cooperatives, and that this represents the basis of the whole or a large part of their production.

Consequently, we cannot speak of vertical integration. There are, however, wine producers - medium and small - who own, or less frequently rent land to grow their own grapes. In almost every instance



these are a few acres of vineyard which are cultivated with particular care so as to produce a first-class wine which, however, still represents only a small percentage of overall wine production.

Businesses of this type also exist in Emilia, but are more common in the areas producing well-known wines (Chianti, Barolo, Gattinara, etc.).

On the other hand, no information is available as regards the large Italian firms (Cinzano, Martini, Cora, Folonari, etc.) and European ones (Wine-Food-5 and former Ferrari Colissano establishments, etc.) which have tremendous scope for manoeuvre, particularly at the distributive stage.

Bearing in mind that 40 % of total Italian grape production is processed by the Wine-Growers' Cooperatives and the Cooperative Wine Stores, and another 40 % by private individuals, the quantity of grapes produced and processed by actual wine makers (i.e. integration in the strict sense) is estimated at some 5 % of the latter figure.

The main reasons for the lack of vertical integration (in the strict sense) in the Italian wine sector are explained below.

The first reason may be attributed to the technical requirements of production of wine for bottling, which call for suitable "blends" to obtain wines which have constant characteristics and impeccable stability. Annual variations in grape quality deriving from drought, frost and other factors have constituted an obstacle (not as yet surmounted) to integration, even in the form of contractual ties between maker and grower.

A second and more important reason is to be found in the present state of Italian viticulture. The situation is evolutionary since, in addition to the urgent national problems that have arisen in recent years, there is the need to conform to Community requirements which are still in dispute in the competent quarters between the representatives of the various countries.

Suffice to recollect Law No. 930 of 12.7.1963 on guaranteed vintages, which did not take effect until 1966, and which has called

for far-reaching reorganisation. At present, there are 127 "named" wines in Italy.

If the Zaccagnini-Boldrini bill goes through Parliament, it will involve further changes, because it would ban the name of a wine being used to indicate the wine produced from the grapes it bears, when the vines are cultivated in areas other than those where by long-standing tradition the wine produced (which bears the name of the vine) has become synonymous with the zone itself, or when the wine has not been produced in accordance with the regulations prescribed by the decrees approving production regulations. Its purpose is to prevent wine produced in Apulia from being called by the same name of a typical Romagna wine such as "Sangiovese", even if produced from grapes from the same vine.

It is thus natural that in a changing situation, the industry is also in a state of "wait and see" and that potential processes of integration proposed by one side or the other are being slowed down. The investment of capital in land for vineyards currently involves the risk that they may end up outside the areas specified in the decrees approving the regulations for named wines.

On the other hand, vertical integration may find fertile ground in the modern methods of viticulture which, by enabling machinery to be used for this "difficult" type of cultivation which has always been labour-intensive, reduces its costs considerably and enables the processing industries themselves to produce their own grapes.

#### 6.4.

We have seen that as far as the wine sector is concerned the only real integration is the cooperation which is fairly widespread throughout Italy, but confined to that part of the product which cooperatives produce and distribute to the consumer.

This is the trend which is continually increasing, especially as regards bottling and marketing. It has now become an obligatory outlet for the 600 or more wine-growing cooperatives. They came into being to defend the interests of the growers, which in the first place

called for communal processing with a consequent reduction in costs, and in the concentration of supplies to provide better bargaining power.

It is now apparent that it is not enough for operations to stop at this stage, and the aim is now to carry out the whole production cycle by means of the same cooperative instrument.

The credit facilities and tax relief now accorded on an increasing scale are not without importance to the development of wine-growers' cooperatives.

#### 6.5.

All viticulturalists have undoubtedly felt some benefits in the regions where wine-growers' cooperatives are most widespread : even non-members who sell their grapes on the open market usually succeed in obtaining better prices than in other areas.

Three main results of this form of integration may be summarised as follows :

- limitation of grape price fluctuations at different times and in different places, resulting in more regular incomes for growers, who are able to plan their crops with greater confidence;
- transfer to growers of that part of the proceeds deriving from the processing, manufacturing and marketing stages, from the circles traditionally concerned with such processes (manufacturers and merchants);
- viticultural improvements in the sphere of influence of the cooperatives;
- inculcation of a sense of responsibility into the farmers who, being called upon to manage their cooperatives, widen their knowledge of marketing problems and improve their business acumen.

## 7. TOMATOES

### 7.1.

For several years production under contract has been practised in the tomato sector in Italy.

This takes the form of cultivation contracts drawn up by agreements freely subscribed to by both parties under which one agrees to deliver, and the other to take delivery of, the total production obtained from a strictly defined area on specific terms.

In the main the agreement covers :

- 1) Production factors to be used (seed, fertilizers, fungicides;
- 2) Cultivation techniques to be used;
- 3) Delivery of the product;
- 4) Quality of the product;
- 5) Price of the product;
- 6) Dates of payment of the product.

#### 1) PRODUCTION FACTORS

The enterprises show great interest in the seeds which, moreover, are one of the determining elements for the success of the crop and the quality of the product processed. Almost all the enterprises endeavour to bring farmers to use those seeds which are considered to be the best. There are many which themselves supply seeds to the producer, but the latter is always free to obtain them from other sources. Only a few firms impose on the producer the obligation to obtain his supplies exclusively from them.

#### 2) GROWING TECHNIQUES TO BE ADOPTED

It is rare that enterprises impose on the producer by contract specific rules as to the way tomatoes are to be grown. In most cases general ideas are expressed, while certain enterprises endeavour to advise the producer to use the most suitable techniques.

But most of the integrating enterprises (about 60 %) do not supply any form of the technical assistance.

A small number of enterprises offer occasional services or intervene solely at the request of the producer.

Only the largest enterprises provide different forms of continuous technical assistance which make it possible to guide the farmer better and to intervene in time to remedy any possible emergence of unfavourable factors or of disease.

### 3) THE DELIVERY OF THE PRODUCT

This generally takes place at the establishment or in the collecting centres set up by the enterprise if it considers this necessary. Transport is supplied by the farmer, who pays for it if this has been the agreement, but in some cases the product is fetched directly by the buyer.

In many contracts it is laid down that the product will be delivered as and when it ripens and that the final date of delivery is fixed at 30 September, with a possibility of extension which is left to the discretion of the industrial partner.

In certain cases it is expressly stipulated that a product supplied after 30 September will be paid at a price which must be agreed on separately.

The buyer (industry) can establish a rotation in the periods of peak supply and the seller is obliged to accept this. It is particularly this clause, as the inquiries carried out among the farmers have confirmed, which sometimes is disadvantageous to the latter, in the sense that the product, or rather a part of it, may in the meantime become over-ripe.

One very important clause as regards delivery, lays down that the purchaser may cease to accept the products in the event of force majeure (damages to installations, strikes, etc.).

This clause should never be accepted by the farmer. It means, in fact that there is a transfer to the detriment of the agricultural sector, of a characteristic risk of the industrial branch to which, in the last analysis, there should be opposed another clause in favour of the agricultural sector, stipulating that if the crop were to be destroyed, industry should support at least a part of the cost of growing it.

All in all, acceptance of a clause of this type is a proof of the imbalance in the negotiating power of the parties concerned.

Production has to be supplied in special recipients which are made available by the buyer proportionately to the area under crop. (for example, 60 crates per Parmesan "biolca" - i.e. 3081.43 m<sup>2</sup>).

These recipients remain the property of the purchaser and the farmer has to return them at the end of the tomato year, or else he will be debited with the value of those missing. On delivery, the product is weighed and checked and the tare is deducted; in certain contracts the tare of the recipient is expressly indicated. Finally, the seller sometimes agrees that the purchaser shall have a commercial tare of 2 % for impurities.

As regards the recipients, it should be noted that these are sometimes supplied rather late and that this provokes over-ripening of the products.

#### 4) THE QUANTITY OF THE PRODUCT

All the contracts provide for a precise commitment on the part of the producer to supply all the tomatoes obtained from the area covered by the contract, independently of the unit yield. This undertaking is largely respected, even if, in certain years when production is low, it involves a smaller income for the producer. This fall in income is, however, more than offset by the guarantee of sale of the product even during marketing years when production is abundant.

In substance, the contracts do not provide for an undertaking concerning a quantity except in certain cases in the Salerno region.

Lifting of the whole production obtained from the areas which are the subject of the contract constitutes a considerable charge on the processor, particularly in the course of marketing years when there is surplus supply, when the price of the derived products falls, while the purchase price of the tomatoes fixed before the beginning of the marketing year remains unchanged.

## 5) THE QUALITY OF THE PRODUCT

All the contracts stipulate that the tomatoes must be delivered "healthy, red, and ripe". And some others add "clean, unbruised and without stalks". These are very general rules which do not make possible any evaluation of the real qualitative features of the product. In other words, there is no indication by which the tomatoes may be classified objectively, in accordance with their degree of ripeness, their colour, crevasses, the existence of rot and damage of other sorts.

For this reason, the wording of the contracts is susceptible of the most diverse interpretations and it is evident that each processing enterprise has the possibility of classifying the tomatoes according to criteria of its own, which do not always correspond to the real value of the product. This is particularly evident in the course of years of plentiful production, when the machinery for evaluation quality is practically transformed into a system for reducing the price fixed in advance.

While we are well aware of the substantial differences existing between fresh eating tomatoes and those for industrial processing, we consider it useful to repeat as an example the quality standards in force for the marketing of fresh eating tomatoes. The minimum characteristics are the following : the tomatoes must be entire and healthy, that is to say without any lesion or deterioration and exempt from any attacks of parasitical origin. When the characteristics of the category expressly provide for it, slight superficial healed cracks which do not jeopardise the keeping quality of the products are allowed. Furthermore, the tomatoes must be clean, i.e. without any traces of earth or dust, without pesticide residues or other chemical treatment products and free from all other impurities. They may not be wet or too damp and may not have any abnormal aroma or taste.

Without taking into account the extra and first categories, we will recall other features which are tolerated for the second quality. Healed cracks of a minimum length of 3 cm are allowed. As regards quality, it is tolerated that ten per cent of the tomatoes by weight or number do not come up to the characteristics of the category ; as regards calibre the waste may be as much as ten per cent.

## 6) THE PRICE OF THE PRODUCT

This is the chief element of the cultivation contract. There are several procedures for fixing the price, but in all cases the latter is valid for all the tomatoes delivered in the course of the marketing year. In this way, the two parties are guaranteed against the considerable variations which arise in the free market and which are linked with the very pronounced fluctuations of daily arrivals of tomatoes on the market. More precisely, the single price of the whole marketing year guarantees producers security of receipts from the product and enables the processing industrialist to establish programmes of sales of the derived products on the basis of the actual processing costs.

The main purchasing procedures laid down in the contracts may be summed up as follows :

a) A guaranteed fixed price determined at the time when the contract is concluded and thus independent of the evolution of the market in the course of the processing season; this is the criterion normally adopted in the province of Parma, in Lombardy and in lower Venezia.

The fixed price, particularly if it is determined before sowing or in the period immediately following, represents a very important factor for the balance of the market: it is determined with allowance for other variables than those that normally influence the formation of the purchase and selling price at the time of the harvesting of the product, or during the harvest.

This procedure is found in most of the contracts.

b) A guaranteed minimum price with an adjustment (premium) to be determined at the end of the season, taking into account the particular quality characteristics of the product or, more often, the evolution of the market. This approach, which is typical in the province of Piacenza, has the advantage of encouraging the producer to sign the contract, in view of the fact that the latter enables him to participate - even if only to a small extent - in any possible increase in prices, while protecting him from any unfavourable market trend. On the other hand, the payment of a modest premium is not a heavy burden on the processing enterprise, particularly since the latter fixes the amount in fairly arbitrary fashion.



c) A fixed price with reference to the prices actually paid by the leading enterprises in the region. This is a variant of the procedure of fixed price payments in the sense that the parties, instead of agreeing between themselves on a price level, fit in with the one established by other enterprises, which in this way automatically become the pacemarkers of the market.

This type of reference contracts is typical for the small and medium-sized firms in the Piacenza region and in Campania which, using this system, can ensure their supplies of tomatoes, without tying themselves down to a well-defined price from the very outset of the season. This advantage is counterbalanced by the danger of their excessive dependence on the decisions of one or more large firms which are powerful negotiators vis-à-vis the distribution sectors and can offer higher prices for fresh tomatoes than those implied by the trend of the market for derived products.

In the final analysis this is the price-fixing procedure which does not injure the interests of the agricultural producers, whereas it may jeopardize the balance between the costs and the receipts of the small processing firms.

According to the case, the price can be fixed free factory gate, the transport costs thus being borne by the farmer, or ex-farm, in which case the industry is responsible for transport.

Moreover, the fixed price is applicable to tomatoes meeting the quality criteria indicated. For the others, it is generally specified that there will be an appropriate reduction of the unit price.

Certain contracts also specify the price per quintal of the products to be considered as second quality and they lay down that the part showing defects, or whose calibre is below the one established, may not exceed 25 %. In this case, any product of which more than 25 % is defective is considered as rejects and is not accepted by industry.

According to other contracts, the defective product must be placed in separate cases.

d) Price partially fixed and partially related to the average price of tomato concentrate as this is to be found in the Bulletins of the Chamber of Commerce for the period between August and December. This procedure implies that the farmer bears a certain part of the market risk and protects the purchaser against any too great gap between the purchase prices of the raw material and the sales prices of the derived products. However, this method is gradually going out of fashion, since it does not present any real advantages for one or other party, both of whom prefer to know with certainty the purchasing and sales prices of the tomatoes as soon as they are shown.

#### 7) THE DATES OF PAYMENT OF THE PRODUCT

The contracts provide for payment of the tomatoes by instalments during or after their delivery and the payment of the balance in the course of a period between 11 November and early January. In certain cases, the processing firms grant the producers, at their express request, fairly sizeable advances at the time when the contract is signed, or at dates preceding the supply of the product. The amount of these advances rarely exceeds 20 % of the value of the products to be supplied.

The financing granted to producers by the processing enterprises is therefore of negligible importance. On the contrary, it is the producers which, to an not insignificant extent, finance the processing firms, since the advances granted by these during delivery of the product are lower than the value of the tomatoes supplied and the balance due is only paid two or three months after delivery has been completed. The financing granted by the producers attains considerable proportions in peak seasons when many firms hold up their payments, sometimes until the following spring, because they find it more difficult to market the processed products.

#### 8) DISPUTES

The inadequacy of the norms for evaluating the quality of an agricultural product is the basis of the least pleasant aspect of the vertical integration relationship in the Italian preserves industry, that is to say, the habit of eliminating rejects. This practice, which is

irreproachable from the formal point of view, and more than justified on the objective plane, becomes the instrument by which an unscrupulous industrial partner can unilaterally modify any earlier agreement concerning the level of the price to be paid, that is to say the very essence of the contracts.

The question of the elimination of rejects is connected with a defect in the bilateral integration relationships in the tomato sector, that is to say, the absence of any clauses providing for recourse to arbitration commissions in the event of dispute concerning the qualitative classification of the product. The general rule is that for these disputes also, the court of the chief city of the province in which the integrating enterprises has its head office is alone competent. It follows from this that the whole problem of possible disputes can only be resolved in the framework of the market power of the partners. The only exception is that of the enterprises situated in the province of Parma, where, thanks to an inter-branch agreement, there has for several years been an arbitration commission which has worked very effectively. In fact, this is a considerable exception since it concerns 2 907 600 quintals of tomatoes, or 30.9 % of the total quantity covered by bilateral integration.

Another relatively considerable drawback, and one which often provokes disputes between the farmers and industry, is the tenderometric degree, since the farmer is inclined to increase the weight of the fruit by letting it ripen longer.

## 7.2.

The existence of contractual agreements between agricultural producers and processing industries, even if they have many gaps makes for a more stable market. As we already pointed out above, the price of the tomatoes for processing results from the interaction of other forces than those which generally influence the traditional machinery of price formation for agricultural products, and which depends to a great extent and in the short term on the volume of production in the course of the season.

With the contracts, the prices of the tomatoes for processing are formed in the period which precedes by a few months the opening of the season and can, therefore, not depend on the quantity actually produced in the course of the year.

These prices are stipulated between the contracting parties on the basis of the market situation of the preceding year, the volume of stocks of derived products, and the forecasts of transactors as to the conditions of supply and demand, both internal and external, in the course of the months immediately ahead.

The results obtained by the processing industry during the previous season have a considerable influence on the level of prices, for, if these results are satisfactory, the industrialists are more easily prepared to grant increases, whereas in the contrary case they tend to reduce the purchase prices, or at least to keep them unchanged.

It is of fundamental importance to underline that the agreement on prices is concluded in the setting of a contract. This enables the processing enterprises to agree with the producers, both on the level of the price and on the acreage to be put under tomatoes.

In this way, the area cultivated depends to only a small extent on the market situation of the previous year but is largely linked to the effective requirements of demand. In other words, there exists an instrument by which acreage under tomatoes can be controlled and, consequently, production as well. This production still varies from one year to another, but solely because of weather factors or agronomic techniques and, only partially, in accordance with the individual attitudes of the farmers themselves.

### 7.3.

While they constitute a remarkable progress in relation to the free market arrangements, the cultivation contracts do not yet make it possible to obtain effective coordination between the agricultural and the industrial sectors, nor to achieve a fair sharing of the technical and market risks between the two contracting parties.

As regards coordination, the processing enterprises do not always specify clearly the techniques of growing to be adopted and the method of using fungicides, pesticides and herbicides. Furthermore, there are still too many enterprises which supply insufficient quantities of seeds and inadequate technical assistance. In fact, the majority of producers are left free to grow their tomatoes as they think fit.

As regards the sharing of risks, serious drawbacks arise because of the imprecise indication of the dates and details of delivery of the tomatoes, particularly in periods of bumper crops, and of the absence of appropriate standards for evaluating quality and the persistence in certain areas of methods of determining price which are linked to the evolution of the market. Furthermore, many contracts are still concluded during the period following sowing, often at dates very close to the time when the fruit is to be harvested, whereas the non-implementation of the clauses of the contract is still a frequent practice on the part of both partners, particularly as regards the engagement concerning the delivery or fetching of the product. The farmer himself is often hesitant to sign very specific contracts before the beginning of the tomato year, particularly as regards the extent of the areas to be cultivated, the choice of varieties, and the determination of a fixed price.

Finally, there does not exist a single large-scale inter-branch agreement laying down objectives, quality rules and a season price valid for all producers and all processing enterprises. The only agreement in force at the present time, i.e. the Parma agreement, does not more than govern certain minor relationships.

#### 7.4.

In general, the negotiations are carried on between the various preserving firms and the different farmers.

However, in the tomato sector there exist 28 cooperatives specialized in collective negotiation, which is practised above all in the Maremma.

These are bodies whose economic importance is slight and whose negotiations concern only a few thousand quintals of products.

7.5.

It may be claimed that the forms of contractual engagement in the tomato production sector are met with above all in North and Central Italy.

However, differences of some importance exist from region to region.

In the Eastern Emilia contracts are generally concluded before sowing and on the basis of a guaranteed fixed price, since in this region the processing enterprises are not very numerous and the growing of tomatoes without a contract and without a fixed price would involve serious risks for the producers.

In Maremma, also, contracts are concluded before sowing and cover the major portion of the tomatoes. Furthermore, in view of the recent development of this crop in the region, the supply of production factors and technical assistance are on a larger scale. All firms having plants in the region deliver large quantities of seeds to producers and control the crop in the course of growing and harvesting of the product either through their technicians, or through those of the enterprises interested in the supply of production factors or the purchase of derived products.

The existence of marketing cooperatives for fresh vegetables is another feature of the tomato markets in the Maremma. Many cooperatives are attached to organizations of higher level, depending on development corporations (Ente di Sviluppo), while others have been founded spontaneously by the local farmers on their own initiative. The prime object of the cooperative is to negotiate with the processing industry the disposal of the total tomato production of its members, and the second to supply these same members with production factors and ensure them technical assistance. In this way, the cooperative exercises the typical functions of intermediary on the one hand and, on the other, coordination functions at the production stage, which, in other regions, are looked after by the processing industry itself.

In Umbria, a special form of contractual links is still quite common. This is the processing of the product by the preserving firm for the account of the producer. These contracts, which cover about 40 % of the tomatoes processed by industry in this region, can be

compared to a system of barter, in that the producer supplies fresh tomatoes to the processing firm and obtains in exchange a certain quantity of preserves.

In their relationships with the small farmers, the processing firms also employ intermediary collectors, whose task is to get the contract signed, deliver the seeds and transport the products on behalf of the firm in question. But the presence of these intermediaries should not deceive us. The contractual link remains quite evident, not only because the collector works for the account of the enterprise, but because the contract is concluded between each producer and the processor and the farmer enters on a specific undertaking to supply all the tomatoes obtained from the area cultivated. Furthermore, by supplying the seeds, the enterprise in a way becomes owner of the product.

In Sardinia, and more particularly in Cagliari province, the establishment of a large processing plant has brought about considerable changes in the course of recent years, not only in tomato-growing techniques, but also in the relation between agriculture and industry. The new enterprise has developed the Roma variety and has undertaken to ensure continuous assistance to producers as regards growing techniques and the rational utilization of fertilizers and pesticides.

Moreover, the enterprise has replaced the old methods of purchasing tomatoes by a very detailed cultivation contract. This contract is signed before the beginning of sowing, between the enterprise and the farmer, who is explicitly aided by his trade organization. The contract precisely defines the location and area of land to be put under tomatoes and contains rules on the supply of seeds, free technical assistance to the producer and other arrangements aimed at obtaining a high-quality product.

The contract lays down that at the time of delivery, lot by lot, the tomatoes shall be classified in the presence of the producer, a representative of the enterprise and a representative of the trade organization.

A prime quality is laid down : it concerns healthy, red, ripe tomatoes with the calibre of the Roma variety, and there is a second quality consisting of red tomatoes, of which no more than 25 % show defects, or again healthy tomatoes which do not possess the characteristic

calibre of the Roma tomato. The contract also provides that all tomatoes whose proportion of defects exceed 25 % shall be considered as rejects and therefore not paid for.

The price is fixed before the beginning of the tomato year between the enterprise and the organizations of the producers so that the latter confine themselves to accepting what is already embodied in the contract. An appreciable difference is provided for between the first and second quality (400 to 600 lire per quintal) in order to encourage producers to improve growing and harvesting techniques. The price refers to tomatoes free at farm gate. If the producer delivers directly to the factory, he receives compensation in the light of the distance, determined according to schedules drawn up by common accord with the producer organizations.

The abovementioned arrangements doubtless represent a great progress in the relationships between farmers and the industry, particularly when it is remembered that they are being applied in regions where these forms of negotiations are traditionally unknown. Particularly remarkable is the intervention of the producers' organizations which not only assume certain characteristic functions of the intermediaries, but also guarantee the application of the contractual provisions for the defence of their members. In order to meet the expenditure involved in providing these services, the organizations charge the producers 30 lire per quintal of tomatoes delivered. This amount is held back, by contract, by the processing firm at the time when the product is paid for.

In the Marches and the Abruzzi region cultivation contracts are taking on increasing importance.

Generally the seeds are supplied by the preserving firm at reduced prices, but the rules concerning the methods of evaluation of the quality of the products are inadequate, for here again they refer to the traditional mention of "healthy, red, ripe and clean tomatoes". There are two ways of fixing the price :

(i) The price is fixed as soon as the agreement is concluded  
(closed contract)

(ii) There is a guaranteed minimum price with a possible premium related to the average final settlement price of other preserving firms,



which have purchased at least 10 000 quintals of tomatoes in the region (open contract).

The contract also provides for the payment of a lower price for tomatoes which are split, slightly diseased, small or not completely ripe. As in Umbria, a part of the products delivered can be exchanged by the producer for tomato sauce for family use.

In certain regions of Eastern Sicily, where the main transforming plants are at present situated, there are contractual links between the farmer and the industrialist.

These contracts set out in clear and detailed fashion how the tomatoes are to be grown and delivered and also the prices. In particular:

- 1 - They determine the location and extent of the area to be put under tomatoes and also the varieties;
- 2 - They specify the growing techniques to be adopted by laying down the time of pricking out and, particularly, the processes for fertilization and the use of fungicides;
- 3 - They commit the farmer to deliver the whole product obtained from the area covered by the contract, and also lay down penalties in the event of failure to do so.
- 4 - They indicate the qualitative features of fruit intended for processing into peeled tomatoes, in such a way as to distinguish it with a certain degree of objectivity from tomatoes intended for the production of concentrates;
- 5 - They fix very different prices for the two types of tomatoes, the price of peeling tomatoes being roughly double that of tomatoes for the production of concentrates;
- 6 - They stipulate that the tomatoes must be paid for at the latest one week or fifteen days at most after the date of delivery of the different lots.

In view of the situation existing in the region, it is not easy, however, to ascertain whether these contracts are really observed, and how far, by one and the other party.

To conclude, by examining each region in detail we can list the provinces in which there are contractual links :

LOMBARDY

Mantua, Brescia, Pavia, Cremona

VENETIA

Padova, Rovigo (production under contract is however fairly limited)

EMILIA ROMAGNA

Contractual links exist in the provinces of :

Piacenza, Parma, Reggio Emilia, Modena, Bologna, Forli.

With the exception of Forli, contractual forms are on the increase in all these provinces.

MARCHES

Macerata, Ancona, Ascoli Piceno

TUSCANY

Arezzo, Sienna, Pistoia, Grosseto

UMBRIA

Perugia

LATIUM

Rome, Latina

ABRUZZI and MOLISE

Campobasso, Teramo, Pescara

CAMPANIA

Caserta

APULIA

Brindisi (in this region contracts are often only verbal)

SICILY

Agrigento, Syracuse, Palermo, Caltanissetta, Ragusa (it should be noted that these forms are tending to disappear in this last province)

SARDINIA

Cagliari.

Furthermore, it may be stated that in Lombardy and Emilia contractual integration links are so widespread, at least as regards the growing of tomatoes for processing, that in certain provinces there is often no market for this product when offered at prices resulting from negotiations carried on at the time of harvesting.

However, precise information concerning the quantities thus dealt with in relation to all production marketed in each area of origin is lacking.

#### 7.6.

Forms of participation in the tomato sector are practically non-existent in Italy.

#### 7.7.

Forms of unilateral integration, i.e. those based on a single management of the production processes at the different stages, are also very far from widespread.

The processing cooperatives are limited in number, of minor importance as regards the volume of processed products and, in general, their relations with their members do not differ in substance from those linking the farmer to the private industry in the region.

The importance of the unilateral form of integration constituted by direct ownership by preserving firms of tomato-growing farms is moreover no greater. The enterprises concerned are generally small or medium-sized and the raw material thus obtained covers only a limited part of their production.

The case of preserving industries which directly cover their raw material requirements by planting land held on lease is also rare. This form results almost solely from the unwillingness of certain farmers to accept an arrangement of the contractual type of their production and the tendency of some enterprises, whose capital is foreign, to apply methods in use in the countries of the parent companies.

Integration of unilateral type is more widespread in the South than in other regions, not only because of the existence of cooperatives, but also by reason of the contribution made by farms belonging to the

owner of the processing firm involved, which have brought into existence a relatively widespread spirit of imitation.

If we review the reasons for the development of integration in the tomato sector from the angle of the farmers, the following comments are appropriate.

7.8.

First of all, the main reason which incites the Italian tomato producer to participate in vertical forms of integration is the perishable nature of the product, which makes necessary an investment as safe and profitable as that offered by the processing industries. Thanks to the vertical forms of integration, the farmer eliminates his trading difficulties (difficulties in placing his product) and by often accepting a fixed price, transfers to his partner the risk of obtaining particularly low prices.

Another reason - not extremely important, however - is the possibility of avoiding the technical risks due to inexperience in the matter of growing techniques by procuring adequate technical aid which would be difficult to obtain in any other way.

As regards the industrialists, the motives which lead them to practice integration are diverse, but the chief ones can be related to security of supply in the form of constant inflow and the possibility of obtaining finished products with well-determined characteristics.

Furthermore, by agreeing to a price in the contracts concluded prior to sowing, industry can calculate its production cost allowing for a normal profit margin, compare it with the anticipated receipts, and thus be in the position to fix a programme of work.

The problem of financing is also of considerable importance. If we examine the dates of payment laid down in the various contracts, we note that, to a not insignificant extent, it is the producers who finance the enterprises, in view of the fact that the advances granted by the latter in the course of the delivery of the product are lower than the value of the tomatoes supplied and that the balance of the amount due is paid only two or three months after termination of delivery.

The financing granted by the producers assumes considerable proportions in seasons of high production, when many enterprises postpone their payments until the following spring because they meet with difficulties in selling the derived products.

7.9.

In the light of the above, the effects of contractual and vertical integration in the tomato sector are fairly evident and confirm the most traditional hypotheses.

First of all, these phenomena have occurred in those regions which are comparatively the most developed. This is one of the sectors in which we must mention, among the reasons for vertical integration, the basic trend of agriculture - we should in fact have discussed it earlier - which aims at social and economic development. It is therefore to be foreseen that integration will extend also to the less developed areas once the gap between these and the regions which are more advanced economically and with respect to trade organizations has been narrowed.

In this connection, the Government's planning policy, should it be carried out as laid down in Project 80 and the plan now being approved, could constitute a useful encouragement to the spread of forms of agricultural integration.

This is a suitable point at which to make some remarks of a general nature as regards the aid which the Italian State provides for the development of the forms in question. This matter had been explicitly proposed as the subject for analysis and discussion at the first meeting of the Working Party held in Brussels in December 1971 by the author of this report himself.

However, in the light of the studies carried out, we are forced to conclude that the contribution of the Italian State in this field has been a very tiny one.

A clear policy has always been lacking in this sector and this is why no special measures have been taken - except for a few sporadic and general actions of encouragement at the level of the Inspectorate of Agriculture - with a view to the development of vertical integration.

The incentives traditionally utilized to this end - in particular those of a fiscal and financial nature - have not been applied either. The only forms of support are those provided for in the Green Plan for the development of cooperatives and bodies on the same footing. These interventions, although they are useful for cooperatives already operating, are certainly not essential for the creation of new bodies. The situation is different in those areas where there exist reform and development bodies which can make a much more substantial contribution, but are in danger of creating non-spontaneous, and therefore weak, cooperative organizations, particularly when it is a matter of overcoming economic difficulties, even of a secondary nature.

As regards the question whether the abovementioned State intervention could encourage greater development of integration, the reply is certainly in the affirmative, but we will speak of this again when we come to our conclusions.

Similar questions could be asked as regards the action of the farmers' organizations. We have seen that so far this has been fairly limited, both at territorial level and as regards the arguments advanced by the organizations in question. It must, however, be pointed out that there is a certain tendency to step up this intervention due to increasing awareness on the part of the farmers.

This greater awareness is largely due to the fact that the effects of integration, which in the tomato sector is mainly founded on contracts, have greatly benefited both the farmers and their partners.

Without wishing to go on repeating myself, I must note that the case of vertical integration in the tomato sector in Italy is a classical one which has all the traditional repercussions on the economy of the two contracting parties.

7.10.

It would therefore be desirable to develop integration on a larger scale, and in particular production under contract, as this form appears to be the one best suited to the two parties and the one which, in the last analysis, involves the fewest difficulties.

In substance, the difficulties which arise are due to the structure of the market in tomatoes for preserving in certain regions of the country where this market is still dominated by the demand side, which can establish the prices it thinks fit.

The ambient conditions, psychological factors linked with the fear of changing traditional and deep-rooted situations of imbalance of power, market-cornering middlemen who do very well for themselves as go-betweens linking production and processing, and, in a general way, the lack of an adequate spirit of association in the wide sense among the farmers of the abovementioned regions are the main obstacles in the way of the expansion of growing under contract in those areas where this has not yet spread.

Some people have pointed out lately that the recent imports of tomato concentrates from certain foreign countries (particularly extra-EEC) have also inhibited the development of tomato-growing under contract, in view of the fact that the contracts became less attractive for the processing industries, which were free to acquire foreign concentrate at lower cost.

To my mind the problem does not so much concern the relationships between imports and the expansion of contracts as those between imports and production. It is obvious that if these imports enable the processing firms to have access to raw materials cheaper than those produced in the country, it will no longer be to their advantage to obtain their supplies on home markets, quite apart from any consideration of the method of supply, whether by contract, direct growing or purchases on the free market.

The problem must therefore be considered as a whole and not only from the angle of its repercussions on the expansion of vertical integration.

## 8. PEACHES FOR THE CANNING INDUSTRY

### 8.1.

The growing of peaches under contract for industrial purposes is developing very rapidly in Italy. This phenomenon is, however, of recent origin but it already covers 550 hectares of specialised peach orchards already producing or in the course of being planted.

The contracts are generally concluded by producers associations in the name of and on behalf of their associates who also sign the same contracts but merely for purpose of confirmation. This takes place in the Forli area and generally in Emilia-Romagna which is the most typical area for this crop.

The contract specifically covers delivery of the entire peach crop produced in specialised orchards. The crop must consist of a specific variety, with firm flesh, suitable for industrial processing in syrup. Each delivery is sampled by the removal of a given percentage (usually 5 per cent) of the baskets.

Deliveries must take place as and when the fruit reaches its correct point of ripeness, and the fruit itself is then collected in containers provided by the purchaser several days beforehand (generally 10 days). Deliveries are made to collection centres set up by the contracting association to which the purchaser pays the cost of collection.

The price for first quality fruit is fixed each year; this is a guaranteed price part of which is broken down - with a view to a possible supplementary integration - into the cost of labour, of secondary raw materials and also the price of the processed product.

The price is paid by fortnightly instalments of some 50 per cent of the value of the fruit delivered; the final payment is made 30 days after the last delivery.

Contracts usually run for 10 years or for the entire period during which the peach trees bear fruit.

More detailed contracts for industrial peaches are entered into by the cooperatives of the Ente Delta Padano and the second stage consorzio



for the processing of fruit and vegetable products known as Stabilimenti riuniti Colombani Pomposa which has been set up under the auspices of and with assistance from the Ente Delta Padano within the area for which the latter is competent.

## 8.2.

This is a very interesting example of integration. The second stage consorzio is an association of 23 first stage cooperatives and also includes the Ente Delta Padano.

The customary legal form is that of a limited or unlimited liability cooperative company, the members of which are bound to deliver the peaches they grow to the cooperative. The cooperatives are directly managed by the producers, who thus assume the risks of production and marketing which, however, are limited thanks to the existence of the second stage consorzio already mentioned above. The gains of the members are based on sale prices minus the cost of administration.

The industrial peach production cooperatives mentioned here include farmers of all ages and all kinds provided that they meet the extremely wide conditions laid down by the statutes.

The initiative for the development of these cooperatives and also for the second stage consorzio was taken by the Ente Delta Padano in cooperation with growers associations and even single growers.

The economic motivation was that of protecting the production of individual growers, a reduction in production costs, stable selling prices thanks to concentrated offer and financial and technical assistance to the individual grower.

From the viewpoint of the cooperatives and the consorzio, motivations were guaranteed supplies in quantities foreseen in the contracts signed by the members and fruit of the desired quality. This being assured thanks to investment plans in accordance with a programme drawn up at regional level with appropriate technical and marketing standards.

Relations between the first stage cooperatives and the consorzio or rather the canning factory are subject to the contract mentioned

above, which is still in the process of being case in the final form which it will assume in the years to come. The contract follows the general lines laid down in point 8.1., except that in some of its clauses it is slightly more favourable to the growers, who do not therefore intervene directly but through their cooperatives or the Ente Delta Padano.

### 8.3.

Non-cooperative processing industries have also recently carried out important forms of vertical integration which, unlike what has gone before, concern factories situated in the South of Italy. These industries are directly responsible for canning factories which process the crop of some 250 to 300 hectares of peach orchards either in production already or about to go into production. If these figures are added to those previously given, it appears that vertical integration in the broadest sense covers 8 to 900 hectares of specialised peach orchards which represent some 40 per cent of the total area cultivated in peaches in Italy.

### 8.4.

Consequently industrial peach growing is a highly integrated sector. The trend is definitely towards expanded integration both with regard to orchards already in production and new plantations which are continually being made.

The basic reason for the expansion of this integration is to be found in an increased demand for peaches by the canning industry and the particular appropriateness of the various forms of integration for the satisfaction of the interests of the canners and the growers alike.

Except in cases where there is a development agency, and even in these cases what follows has some bearing on the matter, the initiative has always come from industry which has sought for contracts and has even planted its own orchards for the double purpose of ensuring a raw material which is adequate with regard to quality and quantity and also in order to produce a demonstration effect for growers outside the

company whose fruit can serve as a useful complement to that which the cannery grows itself.

Industry has therefore once again played an essential part in the development of integration. In the sector under consideration it has been especially fortunate in finding a class of growers who are particularly advanced from a technical and economic viewpoint and with a strong spirit of association which has enable growers combines or boards and other organizations under the direct control of the growers to play a leading part. This, as we have seen, is not the case in many other sectors of agriculture.

The considerable excess of demand by the industry over supply from the growers in the sector of canned for more than half a century, but it is only in the past few years that there has been a considerable increase in production all over the world on account of an ever greater demand for canned fruit. In highly industrialised countries more than half the fruit produced is processed. Most of this consists of peaches in syrup, although in Italy there is some processing of peaches in so-called nectar which uses raw materials of secondary quality.

Recent estimates for the six country Common Market show that consumption of peaches in syrup is some 115,000 tons per year, whereas production, which fluctuates considerably from one year to another, is about 30 to 35,000 tons. Consequently the six countries are obliged to import considerable quantities of canned peaches from countries outside the Community.

This phenomenon is particularly interesting for Italy, a country which both naturally and traditionally is well adapted to production of the fruit in question. Unfortunately, however, little or nothing has been done in Italy to preserve this privileged position. Only a few industrial and cooperative groupings and some development agencies have turned their attention to this problem, convinced as they have been of the need to find a solution to the crisis which has for years been strangling fruit production and the canning industry in Italy which has mainly confined itself to tomato products.

The main national industries, even those in the North, continue to be dependent on the South for large quantities of peaches which are insufficient for their needs and are therefore the subject of competition by various purchasers, with the consequence that the price of fresh peaches is not comparable with that of the processed product. In addition, the fruit purchased by the northern canneries has come a long way by express transport and this increases its costs while decreasing its quality.

In recent years the national industry has been busy fighting for the Italian market. This has led to extreme forms of competition. However, no attention has been paid to the fact that other markets could have been sought in countries which are not Member States of the Community.

A partial justification for this is due to the great difficulties the industry has to face in supplies of raw material because the quantities grown in Italy are not sufficient for the capacity of the canneries. It is interesting to note that the feverish and unsuccessful search for processing qualities of peaches by the industry was taking place at the same time as the glut of table peaches and destruction of many orchards which used to grow this fruit.

#### 8.5.

Confronted with the situation described in the previous paragraph, it is logical that both the industry and the growers should have taken steps to increase national production and have found reciprocally advantageous grounds in the form of vertical integration that has already been explained.

The effects, which were immediate, have mainly consisted in a considerable increase in the income of growers. The latter, as stated already, were well prepared both technically and economically and showed a consistent cooperative spirit which enabled them to specialise their orchards radically and on the basis of a plan covering at least 10 years. This reconversion has been facilitated by the important credit incentives provided by the public authorities, both central and regional, and by the technical assistance forthcoming from industry, the agricultural inspectorates and the development agencies.

Integration has not led to stable markets. Although prices have not gone below the minimum for many years, this is in no way due to integration but to the structural imbalance between supply and demand. The minimum is based on the price of processed foreign peaches competing with the national product.

On account of the great quantities of these imported peaches on the Italian market, and given the high price of the national product for reasons already stated, consumer prices have not felt the effects of increased peach growing for processing on an integrated basis.

For these same reasons, the non-integrated growers have never had any problems in disposing of their crops. However, they have been more affected by the problem of technical assistance, and their crops have usually been lower than those of the integrated growers, and this has had an effect on sales prices and the income per farm.

There is therefore a growing tendency to integration on the part of non-integrated growers with a gradual loss of importance in the case of the latter.

#### 8.6.

It would therefore appear that there are no particular difficulties in the way of vertical integration in the field of industrial peaches, especially peaches processed in syrup.

The only unknown factor is the market tendency, but as the market seems far from saturation point, it is likely that the development of integrated orchards will continue unabated for several years.

Producers' associations can play an important part here provided that they consist of skilled growers.

The psychological obstacles which generally hinder vertical integration in other sectors, do not exist for any industrial peach growing. This is because the industry is not in a strong bargaining position and must therefore produce high quality products.

## 9. PIGMEAT, BUTTER AND CHEESE

### 9.1.

The pigmeat, butter and cheese sector has been dealt with last in the present study for the following reasons :

a) It is a sector which is particularly important both quantitatively and qualitatively, and has a major influence on the agricultural economy of various regions and provinces;

b) It is a sector which should be particularly suited for vertical integration;

c) However, it is a sector where, as things stand at present, integration in the various forms covered by this study has not developed at all, except in terms of cooperation. But the question should now be faced of whether it is proper for such cooperation to be regarded as a form of vertical integration, actual or potential. It may be asked why this question has not been raised earlier, since cooperation as a form of integration has already been mentioned - and will be brought up again later.

The reason for following the principle of discussing the cooperatives in a study on vertical integration in Italian agriculture lies not so much in the conviction that the cooperatives are integrated forms of agricultural activity, but rather in the fact that they are practically the only forms of concerted agricultural action that can give producers greater bargaining power in processing and selling the produce of their farms. The cooperatives may also thereby succeed in changing the relationship between agriculture and other production sectors, which is the aim underlying the development, indeed the very existence, of vertical integration in the broad sense in agriculture.

For these reasons, cooperation will be discussed summarily, while reserving the possibility of developing the argument further should this serve the ends of the collective study.

Finally, it must be explained why it was considered expedient to group together for treatment three products (pigmeat, butter and cheese) for which separate reports were planned.

The fact is that in Italy these three products are generally considered together in the sense that the by-products of the conversion of milk into butter and cheese - particularly in the cheese factories of Lombardy and Emilia which together account for most of the cheese manufacture in the country - are used as pig-feed. Such feedingstuffs, supplemented by solid feed bought on the market or partially supplied direct by the members of the cooperative, may, in such cases, become an altogether preponderant economic factor in the management of the cooperative in question and their effect on the income of the farm may therefore be at least as determinant as that of butter and cheese.

## 9.2.

As already mentioned, production under contract in the pigmeat, butter and cheese sector is practically non-existent. As regards pigmeat, only one instance is to be found and that in a region of the Mezzogiorno where it may be doubted whether good conditions (climate, consumer market, etc.) for pigs rearing exist. Therefore, this type of enterprise does not seem to have much potential for growth in the region in question.

As regards butter and cheese, there are no known instances worthy of mention, unless one is to consider as contracts the negotiations which are concluded at the beginning of the agricultural year between processors and dairy farmers whereby the latter are committed to supply the former with all their produce, generally over a period of one year. These are contracts freely concluded at a price calculated in a variety of ways (fixed price, return-related price, reference price, etc.), but which have nothing to do with the spirit and the logic of production under contract with which this study is concerned since they contain no element of vertical integration.

## 9.3.

As regards participation, we return to the cooperatives. They are highly developed in the dairy sector where they differ greatly as to their legal forms, dimensions, contractual powers and other features.

At 31 March 1971 the total number of dairy cooperatives in Italy was 2 654, with 2 218 in the north, 67 in the centre, 113 in the south and 256 in the islands.

This shows a clear regional differentiation, reflecting the areas of production.

There are big differences between the cooperatives comprised in the above figure but they can be substantially broken down into three basic types : dairies worked on a rota basis, cooperative dairies and cheese factories, producers' associations.

Moreover, the rota dairies are not true cooperatives, being generally de facto companies without legal status.

Considering, however, that their function is to provide mutual aid between the members to enable them to exploit their respective produce more economically, they can well be grouped with the cooperatives, into which they naturally tend to develop.

The rota dairies are based on the pooling of milk by a group of farmers between whom a rota system is set up; on the day when it is his turn, each member of the group receives the milk from the others, processes it and the resultant product is at his disposal. His turn comes round again when he has replaced the milk he received on the previous occasion. In the case referred to, the milk is processed by the former on his own premises, but since not all the farmers may be good dairymen or have premises suitable for processing, the milk is sometimes processed on shared premises by a dairyman working under the supervision of the farmer whose turn it is. Common costs are periodically shared in proportion to the amount of milk made available by each member.

The rota dairies hold good even when part of the individual farmer's produce, which is excessive in relation to his domestic needs, must be sold.

For such cases, however, there is generally the dairy cooperative, which often adopts the legal status of cooperative, appropriates all the milk produced by the members, processes it and sells the produce, distributing the net proceeds at the end of each agricultural year in



proportion of the amount of milk supplied by each member. The farmer often receives advances and occasionally keeps part of the produce for domestic use. The dairy cooperative makes more complex management demands, particularly when it takes on large dimensions and becomes a cooperative cheese dairy. In fact, besides channelling production into certain unchanging product lines, whose existence is constantly justified by consumption, it takes on the features of a technical and commercial organization identical to that of industrial cheese factories.

In these ways the farmer, although he is part of a broader combination, still goes on processing milk direct in order to obtain a variety of products.

Nevertheless, farmers also combine in cooperatives just for the sale of milk, hence giving rise to producers' associations for the supply and sale of sizeable, uniform consignments of milk which make it possible to negotiate unit prices that are more profitable than the prices the members would obtain if they sold the milk they produced individually. The milk may also be supplied to processors or to public or private centres which pasteurize, homogenize or sterilize it for human consumption.

Often the associations - which are also included in the above statistics - manage these centres at their own expense, have their own apparatus for the processes referred to, and sell drinking milk direct to the consumer through the appropriate commercial organizations. In such cases, surplus milk which is not consumed as drinking milk may be delivered by the association to processors or may be processed by the association itself, if it has the necessary apparatus.

There are other less important forms of cooperative which we shall not analyse here, and we conclude this exposition, it being understood that the subject can be pursued further presently, if need be.

#### 9.4.

Vertical integration "from below" is practically non-existent in the strict sense of the term. That is to say, there are no instances of forms of integrated production achieved through direct acquisition by

stock-farmers or milk producers of production stages beyond the strictly agricultural stage. However, there are a number of cases of integration "from above" : in other words, integration achieved through the initiative of sausage-makers or processors of dairy products who have subsequently taken over a number of production stages prior to processing. In this way, they have created important integrated chains, which have not, however, directly involved either individual farmers or their organizations and associations. On the other hand, farmers are involved indirectly in the sense that in certain cases animals are bred and milk produced directly by integrated industrial concerns at a lower unit cost than that achieved by individual farmers and their cooperatives; this is due to organizational reasons, scale and trading economies, financial considerations and so on. These chains thus serve to keep the market within limits which never go above certain specific levels. Their influence on the market is, however, not as important and immediate as might at first appear. The volume of direct and integrated production carried on by slaughterers or sausage-makers on the dairy industry is, in fact, rather limited in relation to their total processing operation. It follows, therefore, that these processors still depend to a large extent on the market for purchasing the necessary raw materials for processings.

In this connection, it may be asked why such manufacturers should prefer to obtain supplies on the open market rather than conclude delivery or other contracts with farmers or stock breeders.

The answer is simple and divides essentially into two parts :

(a) For pigment and milk the requirements of product uniformity are less stringent than is the case with other agricultural products dealt with here;

(b) The processors prefer in their own interest to exploit to the full the disorganization and lack of transparency of the market, which they are able to dominate by overpowering the agricultural element which would, without doubt, be much strengthened through contract production;

(c) Finally, the problems of technical assistance, financing, commercial outlets and so on - which are very often the reason for resorting to contract production are much less marked in the sector under consideration than in others.

9.5.

In the light of the foregoing, it is extremely difficult to deal with the causes of the development, or lack of development of vertical integration in the sector in question, and with the reactions, weaknesses and difficulties that it has encountered in Italy.

Apart from the general, well recognized reasons for the growth of cooperatives which are given as the typical causes of the movement (see 9.3. above) and the fact that processors have undertaken integration "from above" with the object of assuring themselves of at least part of the raw material they need for processing (and in the desired quality), of strengthening their bargaining position with the producer farmers from whom they buy the rest of the necessary raw material, and lastly of eliminating, or rather appropriating, production profits other than processing profits, very little else remains to be said.

Integration in the abovementioned forms has not in fact had any noticeable effect on the structure of producer farms or on other elements which have come under general consideration in the course of this analysis.

Also, the growth of cooperation has not had the slightest effect either on consumption and consumer prices or on farmers who are not members of cooperatives and who - as has already been pointed out elsewhere - have not only remained unharmed by their voluntary exclusion from the cooperatives but, on the contrary, have directly benefited from it, being able to enjoy the market protection afforded by the cooperative movement and also from the better conditions offered them by the processing industry in its effort to obtain increasing control of the market and make life difficult for the cooperatives.

The reasons for the lack of growth of contract production, however, have already been covered above.

## 10. CALVES AND YOUNG CATTLE

### 10.1.

The production of beef and veal is characterised by a wide variety of relationship between stock breeders, suppliers of feeds and other raw materials, butchers and distribution chains.

There is a formal distinction between breeders of white meat calves and breeders of bullocks and heifers. These two sectors are clearly distinct both as regards organisation and the relationships between the various persons concerned in the circuit.

The better organised sector is that of white meat calves, for this production is organised on an industrial scale and because the relationships in question are not of an agricultural type.

In most cases the white meat sector is organised by manufacturers of artificial milk who select the breeders. These are usually farmers with enough land and manpower for the management of the farm to be economic. The capital is supplied by the producer of artificial milk.

The latter supplies all the necessary material for production (calves, milk, medicines, etc.). However, there are several different forms of arrangements from an economic point of view.

These are as follows :

(a) Breeders who pay for these products at the end of the cycle and who then sell the animals to private butchers. They are thus running a financial risk, but this category is a very limited one.

(b) Breeders who receive money for the meat they have produced, all expenses being at the charge of the supplier of the materials, the farmer providing the stabling, labour force, etc.

(c) Breeders who receive a guaranteed minimum sales price thus being covered against all risks.

In most cases, contracts are signed between individual breeders and the suppliers; it is very unusual for there to be a contract between a group of breeders and the suppliers.

This is due to the fact that the initiative comes from the producers of artificial milk who sign contracts on a case-by-case basis with individual farmers.

Consequently the manufacturers are not only organised for producing artificial milk but also for the import and collection of suckling calves and in many cases also for the slaughter of fattened calves.

In this sector there are no participation relationships apart from a few large cooperatives, and it may be said that there is no real form of integration. However, many large milk manufacturers are indulging in an activity close to integration by providing the breeders with calves and products and then collecting, slaughtering and marketing the meat produced.

In conclusion, the white meat sector is at present governed by contracts of various kinds; it is very unusual to find any form of integration; consequently bilateral contracts are predominant over any other form of relationship.

Moving now to the red meat sector, that is to say animals whose weight ranges from 4 to 500 kilos, the situation is even less well defined than in the previous one.

In this case the feeds are agricultural products and relationships therefore exist between these different parties are bilateral and there is no commercial unity in the process.

In most cases financing contracts are signed between dealers in weaned calves and the breeders, or between the latter and those who have weaned the calves. In this case the finishers obtain facilities of a more or less interesting nature concerning payment for the finished animals. This enables them to work with little capital.

Normally, the finishers do not dispose of much capital, and for fattening on an industrial scale much capital is required. They must therefore find sources of financing which are either banks or, as has been said, dealers in calves for fattening. The sales relationship is the traditional one between the breeder and the butcher, the latter being responsible for marketing. Agreements are now being stipulated which cannot be defined as forms of vertical integration, between wholesale butchers or large distribution chains with whom breeders are under contract for standard production at guaranteed prices, generally on a basis of delivery to the slaughter house, with or without the

purchaser having provided the calves for fattening. In connection with these agreements a chain of weaners is growing up. They take the suckling calves provided by the future purchasers of weaned calves on the basis of a production contract with provisions as to the feeds to be used. They are usually paid on the basis of the weight gained by the animal while in their care.

It can thus be seen that the calf sector is not organised on well defined contractual basis and except in the case of a few cooperatives there is no form of participation in management nor any true kind of vertical integration.

## 10.2.

Vertical integration is very limited even though it be fairly diversified. In addition it is practically concentrated in the northern part of the country.

Its economic impact on the beef and veal market is very limited, but the process is only beginning. However, it is generally thought that future development on a wider scale would be very difficult.

Among the reasons generally adduced as obstacles to this development, are the lack of sufficient incentives to make it appropriate to set up integrated production in various fields, and the lack of conviction on the part of breeders associations, which although they exist show no interest in vertical integration.

What is required are powerful associations of breeders and butchers with chains of distribution sufficiently widespread for it to be possible to establish organisations which could have contractual power at national level on account of their physical and economic importance.

Unfortunately, we in Italy are still very far from such solutions, because not only do breeders lack the spirit of association but also because any initiatives that are taken from individuals (usually manufacturers) who have their own interests to develop in the beef and veal sector. In addition the Italian trade structure is antiquated but difficult to change.

The result has been an extension of bilateral relations at breeder level without any development to other steps in the cycle.

Advantages to breeders are usually of an economic and organisational nature which has led to increased production generally covered by adequate contracts and to a development and improvement in installations and technique with a consequent economic profit on production costs.

This has led to income which are greatly superior to those of traditional farms and has made for a more rational structure of farms with specialised crop productions directed towards stock breeding (maize). However, this type of organisation is organised and financed by businessmen and manufacturers of feeds and not by finishers or those who market the product. This inevitably leads to consumer prices which are higher than those which would obtain were there is a vertical integrated cycle.

## 11. EGGS AND POULTRY

### 11.1.

The study of contracts which exist in the poultry-farming sector makes it possible to note certain features concerning :

- duration of contracts;
- supply of production factors by the integrating enterprises;
- the fixing of prices and payment dates for production factors;
- the obligations imposed on the production of integrated farms;
- supervision of the rules of the contracts;
- the fixing of the price and conditions of payment for the product of which the integrating enterprises take delivery.

#### Duration

The duration of the contracts varies according to the stage of the production process at which integration takes place. On the whole, however, it is possible to state that it is generally a year, sometimes six months, and, on rare occasions, two years.

Only the incubation enterprises, in order to be able to plan their activities, insist on contracts with the breeding farms covering several production cycles and, in the case of large undertaking, even several years.

On fattening farms, it is rare for the duration of contracts to exceed the solar year or even a single production cycle.

In the marketing eggs sector on the other hand, contracts covering several production cycles are generally required.

#### Supply of production factors and services by the integrating enterprises

Using the forms of vertical integration based on a contract, the integrating enterprise can, to a greater or lesser degree, influence the decisions made by the integrated farms, not only by keeping an eye on the choice of the type and the determination of the quantity of production, but also by supplying the main production factors.



The great majority of enterprises supply all or part of the most important production factors (feedingstuffs, one-day chicks, vaccines, disinfectants, drugs, equipment and fixed installations, or technical and health assistance services).

Among these factors, practically all the enterprises engaging in integration supply one-day chicks.

In the case of broilers, it happens frequently that the integrating enterprise - particularly if it is a large one - supplies, in addition to the chicks, the feedingstuffs, the drugs and the technical assistance.

The supply of the feedingstuffs (alone or with other production factors and/or services) concerns two-thirds of the enterprise which practice integration at the fattening stage and a little less than half of those working in the hatching eggs sector.

The supply of equipment and/or fixed installations is rare. What is very important is the technical and health assistance service, which constitutes an essential element - at the level of the integrating enterprise - with a view to rationalizing qualitative characteristics and controlling the volume of supply.

In the poultrymeat and marketing eggs sector, 60 % of the integrating firms provide a technical assistance service which may be considered very effective, since it is supplied directly and continuously.

There is a certain degree of correlation between the supply of the technical and health services and the size of turnover, in the sense that the quantity and efficiency of the services provided increase as the integrating enterprises grow in size. The larger enterprises are in a position to bear heavier charges, since they can spread the costs over a higher volume of sales.

#### Fixing of prices and payment dates for production factors

In principle, the prices of the production factors furnished directly or indirectly by the integrating enterprise can be fixed :

a) At the time when the contract between the integrating enterprises and the enterprises integrated is concluded.

b) At any other time.

The first alternative is by far the most widely utilized; the fixing of prices at other times is rather sporadic and only practised by a few integrating enterprises of very modest size.

It must also be pointed out that the prices of the production factors may possibly not be fixed if the payment procedures for the finished product do not require that they be taken into account.

This formula is used by about one third of the firms in the poultry sector, and by nearly 10 % of those which practise integration at the breeding stage.

As regards the payment dates, no substantial difference is to be found according to species raised and size of farms. In general, the balance is established at the time of payment of the finished products and, in some cases, at another time.

#### Obligations imposed on the production of the integrated enterprises

The integrating enterprises have a tendency to insert in all the integration contracts rules concerning how the production of the integrated farm is to be organized.

These obligations may concern :

- the volume of production
- the delivery dates of the product
- the type and quantity of the feedingstuffs
- the type of chicks to be raised
- the breeding techniques.

As regards quality, there are no special rules, but only general standards, and this leaves the evaluation of the quality characteristics to the discretion of the integrating enterprise.

The integrating enterprises endeavour to insert a greater number of obligations into the contracts concerning breeding of poultry and layers of table eggs, whereas they impose less of these in contracts concluded with mass breeding farmers.

This is because of the greater negotiating power and better technological set-up of the latter.

The obligation most often found is that concerning the delivery dates, even if it is sometimes relatively flexible. Another obligation provided for fairly frequently by the integrating firms concerns the quantity of products which they wish to receive.

The type and quantity of feedingstuffs to be given to the birds raised play an important role for those enterprises which take broilers and fine quality poultry, in view of the fact that the feed ration of the broilers can vary and consequently give final results which differ widely. On the other hand, their importance is less in the case of integrated farms producing laying hens for marketing or hatching eggs.

The percentage of enterprises which lay down in the contract what breeds of chicks shall be raised is very high.

The rules concerning breeding techniques are fixed by those integrating enterprises working in the sector of poultrymeat or marketing egg layers. About half also fix such rules for breeding firms. In some cases, continual assistance is even ensured.

#### Respect of the contractual rules

The main clauses ensuring respect of the contractual rules relating to production concern :

- the supply of technical media;
- technical assistance;
- refusal to take delivery of production;
- payment of lower prices;
- the grant of premiums on the price.

In general, firms guarantee the respect of the rules by one or two clauses and only very large enterprises lay down several clauses.

The most frequent clauses are those concerning the supply of technical media and assistance.

In the contracts concerning broilers, prices are often reduced when the contractual rules concerning production have not been observed.

Payment of lower prices is practised only in the marketing and hatching eggs sector, and this solely by small firms.

In the case of broilers and hatching eggs, a few large-scale enterprises grant premiums with a view to encouraging observance of the contractual norms concerning the production of the integrated farms.

Fixing of the price and terms of payment of the products of which the integrating enterprises take delivery

The price paid on delivery of the products is the most important element of the integration contract, either because it influences the behaviour of the integrated producer, or because it is the basis of the planning activity of the integrating enterprise.

Enterprises which integrate farms breeding poultry for meat production generally pay a guaranteed fixed price established at the time when the contract is concluded.

Another frequent mode of settlement consists of payment at the end of the cycle of a certain remuneration calculated on the basis of the ratio between the quantity of feedingstuffs (in kg.) and the quantity of products (in kg.).

This method stimulates the breeder and tends to increase the volume of production since it improves the feedingstuffs/meat conversion index.

Other methods, such as the fixing of a guaranteed minimum price with possible adjustments, or of a price within lower and upper limits referred to quotations on a specific market are little used. In the marketing eggs sector, the price is fixed either at the time when the contract is concluded, or by referring it to the prices of certain markets or bodies (commercial, etc.).

For hatching eggs, the price is generally established at the time of conclusion of the contract.

In general, the prices and remunerations fixed are almost always paid in cash by the integrating enterprise to the integrated enterprises at the time when the product is delivered or immediately afterwards.

11.2.

In the broiler sector, about 30 % to 40 % of production is covered by integration contracts.

Most of the enterprises practise contractual integration with breeding farms, and the others (one third) with fattening farms.

In the two types of integration, the degree of concentration is high as regards the large-scale enterprise, and it reaches a maximum level in integration at the stage of breeding with a view to final production. Contracts are of a little moment in the production of turkeys and guinea fowls, while they have a certain importance in the marketing eggs sector (5%).

11.3.

At regional level it should be noted that enterprises which practise contractual integration in the broiler raising sector are mainly concentrated in the areas of Northwest Italy and in Emilia Romagna (35 % in each case of the total integrated sector for the country as a whole).

As regards marketing eggs, most of the firms which control farms producing the layers are to be found in Emilia Romagna and Central Italy, whereas integration at the breeding stage is more widely spread in Northwest Italy. Among the few integrating enterprises in the sector of fine quality poultry, we may note a slight numerical predominance in Venetia.

If, moreover, we examine the territorial breakdown of the integrating enterprises as a whole, (that is to say, all those practising integration in the various sectors and at the different stages of the production and distribution process), we note that the enterprises which control the greatest number of poultry farms (both breeding and for final production) and the greatest quantity of stock are to be found in Lombardy and Venetia.

11.4.

It is rare for the integrated farmers to participate in the integrating enterprises. One exception is the Cip-Zoo S.p.a., to whose registered capital almost all the farmers integrated into its production cycle contribute by paying small sums.

This seems to be an isolated phenomenon, and the initiative of the operation was taken by the integrating company itself.

The headquarters of the company are in Lombardy.

It must be noted immediately that we are dealing here with purely formal participation aimed at linking the farmers more closely with the integrating enterprise, whose decisions they have no power to influence.

It therefore goes without saying that this participation does not really bring any advantage to the farmers concerned.

11.5.

In a few centres we may note unilateral, vertical integration of the very first order in the poultry industry.

This concerns complete or almost complete integration which begins with selection at the "FOUNDATION" or "GRAND-PARENTS STOCK" stage and continues until the marketing of the product, via the feedingstuff factories, breeding farms and slaughtering plants (or the egg packaging centres).

However, in order to analyze this type of integration, we must first of all study the different phases of poultry production and then identify the various degrees of integration proper to the integrating enterprises.

The different phases of poultry production are the following :

Phase 1:

Breeding of reproducing animals ("grandparents"). (No enterprise is specialized in this because, directly or indirectly, the birds are imported);

Phase 2:

Breeding of parent chicks;

Phase 3:

Production of merchant chicks;

Phase 4:

Breeding of poultry for fattening or for the production of marketing eggs;

Phase 5:

Slaughter and preparation of the poultry and packaging of the eggs, also preserving and the activities connected with the marketing of the product.

As regards integration in the strict sense, it must therefore be noted that in the broiler sector 20 % of the firms engage in only one phase of the production process. In most cases, this means hatcheries of small and medium-size enterprises whose activity consists exclusively of the incubation of hatching eggs to produce merchant chicks.

The enterprises which control breeding and incubation plants represent a larger share (about 35% of the total of the integrated sector).

These forms of integration are often started by the hatcheries.

Still among the enterprises working in the broiler sector, the integration of the activities concerned with the breeding of fattening birds with slaughtering activities is of some importance (16 %). This is due to the fact that it is more profitable, particularly in Northern Italy, to sell the broilers slaughtered rather than live, thus avoiding an intermediary stage.

Less numerous, but certainly important, are those enterprises which work as far as the slaughtering stage, starting from the production of the merchant chicks (7.6 %), or even from mass or selective breeding (7.7 %).

These forms of vertical integration seem to be more widespread among the large enterprises.

The medium-sized enterprises, on the other hand, are among those which control the breeding and incubation installations.

In the marketing eggs sector, it is particularly the enterprises dealing solely with the incubation phase which predominate (34.9 %). The hatcheries ensure their supply of hatching eggs by periodic contracts concluded with the breeding farms.

The percentage of enterprises producing merchant chicks and raising marketing egg layers is insignificant, whereas those which add to these two phases the marketing stage for the eggs represent a higher proportion (23 % of the enterprise in the sector).

On the whole the degree of integration as regards marketing eggs is lower than in the broiler sector, particularly where firms of small and medium dimensions are concerned.

The number of these enterprises which are in a position to extend their activity from the first phase upstream of production to the marketing of the finished product is more limited because of the greater volume of capital needed for plant and operations to raise the laying hens.

Finally, as regards the fine-poultry sector, most of the enterprises raise birds for meat and market the finished product directly.

To this category belong 37 % of the firms working in the turkey sector and 47.7 % of those producing guinea fowl.

All this is explained by the fact that the sector is relatively young as regards the development of intensive breeding, and this justifies the still clear separation which exists between the various stages of the production processes.

In general, the enterprises which take the initiative in the different forms of integration are :

- THE HATCHERIES
- THE SLAUGHTER AND PACKAGING PLANTS

The hatcheries can engage in upstream integration (mass breeding farms supplying the eggs) and downstream (breeding farms for poultry or for layers of marketing eggs which raise the chicks for the account of the hatcheries and deliver them to these afterwards).



The slaughterhouses and packaging plants integrate only the production of breeding farms for poultry and layers of marketing eggs.

(a) In the case of broilers, the relative shortness of the fattening cycle calls for careful planning of incubation at the right time. This is why the integrating enterprises tend to control the sources of supply of the hatching eggs.

In 1968, about 85 % of the products incubated were supplied by firms' own farms (about 40 %) or by integrated farms (about 45 %). Only around 7 % of the hatching eggs for the production of broilers were bought from breeding farms which were not linked by any commitment.

In the fine poultry sector, we note considerable differences. In the case of turkey poults, more than half the hatching eggs are imported, whereas as regards guinea fowls, about 60 % of the total stock is provided by farms belonging to the hatcheries themselves. A small percentage is supplied via contracts.

In the sector of layers of marketing eggs, the main source of supply is breeding farms which are part of the enterprise itself (about 50 %).

(b) The policy of supply to slaughter houses tends to vary according to the species of bird concerned. In the case of fine poultry, most of the animals slaughtered in 1968 were bought on the market.

In this sector, the forms of integration are less frequent than where broilers are concerned.

Supplies to slaughterhouses are ensured in small quantities by farms which are part of the enterprises themselves and by others linked with them by contract.

As regards broilers, about 60 % of the animals slaughtered come from farms to which the fattening of the chicken had been entrusted under an ad hoc contract.

However, only the large-scale enterprises organized the different phases of the production of broilers in such a way that they can cover the major parts of the quantities necessary for slaughter by supplies from the integrated farms.

(c) The main source of supply is represented by poultry farms linked with the packing firms by integration contracts (about 40 %). Supply from farms raising layers are belonging to the packing firms themselves is not very considerable. In this sector, contrary to what was noted for the slaughtering plants, recourse to the market is proportionately more widespread among the large enterprises than among the small and medium-sized ones.

#### 11.6.

The reasons for the development of the vertical integration process in poultry production are of a technical or market nature, or both at the same time. They are reasons which can also largely be connected with the structural conditions which are increasingly characteristic of the firms working, not at the production stage properly so called, but above all at market level.

The reasons of a technical nature can be recognized in the close interdependence between the quality of the products obtained and the production factors utilized.

The market reasons which favour the development of vertical integration processes are uncertainty as to prices and uncertainty as to production.

The uncertainty as to prices is linked to the fact that for poultrybreeding techniques have developed to a point where they allow of an extraordinary expansion of supply in a very short time, which has been reflected in sagging prices because of the inelasticity of demand. Along with uncertainty as to price goes uncertainty as to production.

This in its turn provokes considerable uncertainty for the branches up and downstream from the production process for broilers or marketing eggs as regards the placing of the products or the availability of the product to be treated.

However, in the case of poultry production, the basic reasons are both of a technical and market nature, in the sense that it is impossible to evaluate exactly whether the first have clearly predominated over the others, or vice versa.

With its modern bases and structures, poultry production is characterized by a substantial and progressive lengthening of the production cycle which is tending to become stabilized between one year and about one year and a half.

If we then consider the grandparents, we note that the cycle of production of the table chicken is between a minimum of 800 days, that is to say two years, and a maximum of 1500 days.

This substantial increase in the production cycle, which is a result of the modern techniques for producing broilers, is a factor which appreciably increases the uncertainty of the market and also an essential factor in the expansion and acceleration of the vertical integration process.

Another equally significant reason for the development of the process of vertical integration in poultry production is to be found in the new structural features which enterprises upstream and downstream from production at the typically agricultural stage are tending to assume.

We are not alluding to the enterprises producing foundations, whose dimensions, expressed in terms of capital, are such that it may be claimed at present that the Italian market, for example, is too small to justify the development of an enterprise of this sort.

We refer for example to the enterprises running poultry dressing installations. According to lessons learned in the United States, the optimum dimensions vary between 5 000 and 200 000 animals per hour. Furthermore, the success of these enterprises on the market is increasingly linked with very advanced differentiation of production, that is to say, an increase in the variety of products offered on the market.

In addition, the success of these enterprises on the market increasingly depends on intense and widespread publicity campaigns. In our days, in the chicken sector as in others, the most paying publicity is not founded on the price but on the fame which the producer has acquired by other forms of persuasion.

Furthermore, there is another factor: the firm working at the dressing stage and operating on the market is obliged to increase its size, since this is the only way of facing up the requirements which flow from the new structure of demand as this is developing following the evolution of the distributive system and the establishment of large purchasing grouping and distribution chains (supermarkets). The outstanding feature of these groupings is very strong concentration of demand and purchases.

In substance, the characteristics of the farming enterprise operating on the market are a longer production process, a very large volume of capital utilized, a considerable need for qualified personnel, a complex organization and indispensable coordination between the specialists it must necessarily have at its disposal. In fact, a modern enterprise wishing to operate successfully on the market is obliged to increase considerably the rigidity of its production programme, because of the increased utilization of capital and longer production times. Consequently, the large enterprise or the modern poultry undertaking, operating on the market, must plan its production, that is to say, reduce market uncertainty to a minimum by substituting for the machinery of the market an autonomous determination of the prices of the factors utilized, of the prices of the products placed on the market, of the quantities of factors utilized, and for the quantities of products placed on the market.

It is only by watching over prices and quantities that the large market enterprise can plan its production and operate with success. It is evident that the only way - or the most paying way - to achieve this planning activity which offers itself to large enterprises is the elaboration of a process of vertical integration.

All these reasons have led the poultry farmers and their industrial partners to implement forms of integration based on contracts.

According to certain experts in these sectors, the principal reason for the development of contractual integration is to be found, however, in the progressive expansion of the animal feedingstuffs industry.

The development of this industry, which is not accompanied by a parallel expansion of the breeding sector, has been the point of departure of forms of integration based on the prepayment of the capital to build the plant and purchase the feedingstuffs and birds, and also on the undertaking to accept the output at a price fixed in advance.

11.7.

As a result of technological trends and vertical integration, the traditional type farm has now lost a substantial part of its importance as a source of supply of poultry products.

At present, rural poultry farms account for only 10 % of the total supply of meat chickens and a little less than 30 % of marketing eggs.

All this has contributed to the creation of a type of poultry-raising enterprise which is fundamentally new in Italian agriculture, i.e. an enterprise where poultry production is not a subsidiary activity, but the only predominant activity, if not, indeed, the only activity at all.

Another important aspect is the strong trend towards the concentration of enterprises which is not found in any other sector of agricultural production. It has been noted, for example, that the turnover of the five largest Italian firms as regards poultry breeding alone accounts for more than 40 % of total turnover in the branch.

In order to analyse the effects of integration, we must see whether it is practised up or downstream.

When the integrating centres are upstream from production they can provoke market crises should the integrating firms be poorly informed or motivated by contingent interests which lay the main stress on the promotion of their own commercial or industrial activities. This can happen when the poultrymeat sector is integrated with firms manufacturing feedingstuffs.

The contrary situation occurs when the integration occurs downstream from production, i.e. through firms which are in the market and know its requirements and those of consumers and can thus develop a sound and effective activity so as to direct all the various stages of production with marketing as the final objective.

Then, in the case of vertical integration between extra-agricultural categories (feedingstuffs industries, supermarkets, etc.) and non-associated agricultural enterprises (i.e. those which are without adequate horizontal integration) it can happen that the strong divergence in negotiating power between the integrating firms and the integrated farmers transforms the latter into de facto even if not de jure employees and enables the integrating enterprise to obtain a gradual shift of the advantages in its favour.

The proper judgment on these conclusions could be discussed at length.

In any case, it is impossible not to take account of the conditions in which the farmers (for whom agriculture was the chief or secondary activity) who are today the partners in vertical integration found themselves before industry offered them the opportunity to integrate. It is beyond doubt that these conditions were clearly worse, as regards structures and incomes, than they are today.

This remark allows for the repercussions which the integration of poultry breeding has had on the stability of the relevant markets. As we have already pointed out, these markets are exposed to the grave risks of glut with the falling prices this entails.

This fact has beyond doubt been reflected in a considerable advantage for the consumer, who has again found a market which, precisely for price reasons, he was well on the way to abandon before the development of integration.

The person who has benefited most particularly from this development of production capacities is therefore the consumer. The new technologies have drastically reduced production costs. It is sufficient to say that, in relation to the traditional breeding techniques, the conversion index of feedingstuffs into meat has fallen

by a third and that, simultaneously, the time necessary to produce a unit of poultry has gone down by more than half (the weight remaining the same of course). Over the last 15 years, the consumer price in current lire of poultry products has remained practically unchanged, and we may even talk of a reduction in the case of eating chickens. If it is remembered that the purchasing price of money has fallen by about 40 % over the same period, it is easy to see that in reality the new technologies have made it possible to reduce the consumer price of poultry products by half.

The second beneficiary from the increase in production is the nation at large. The growing volume of supply of poultrymeat at constantly falling prices has made it possible to satisfy in overabundant measure a demand for animal protein, which is rapidly expanding because of the increased purchasing power of consumers, so that poultrymeat at present represents about 25 % of the annual meat consumption of the average Italian. If it is considered that our beef and cattle requirements have required constant resource to foreign markets during the last fifteen years, it may rightly be considered that the development of poultry production has made it possible appreciably to limit the deficit on the Italian trade balance in the agricultural and food products sector.

11.8.

At this point, we think that it is advisable to analyse the reasons or difficulties which have prevented and are preventing greater development of integration in the strict sense in the poultry-breeding sector.

These difficulties can be boiled down to three considerations.

First, the process of poultry production is articulated into two phases which call for great competence, both from the occupational angle and in the matter of enterprise management, competence in the latter being particularly necessary.

Consequently, this form of integration can and does give rise to economies of concentration or integration.

Another reason which impedes unilateral integration is connected with the fact that, for certain production phases - in particular the raising of broilers or the production of eggs i.e. the production of the product which will be consumed by the client - various circumstances render the profit margins which can be achieved so restricted that integration at this stage is not a paying proposition and that the integrating enterprise is much better off if it operates at other stages of the market.

A third consideration is linked to the fact that the different market stages are characterized by dimensions which differ considerably from the optimum dimensions, that is to say, those which permit the maximum reduction of production costs. In general, at the typically agricultural stage, i.e. the stage of the production of marketing or table eggs and of broilers, the optimum dimensions and the largest economies of scale are achieved with dimensions decidedly smaller than those familiar in the installations and activities of other market stages.

In other words, there exists in the range of activities which make up poultry production, a certain rivalry between the different production processes, a rivalry which is reflected in a substantial increase of costs in the case of the development of genuine integration.

In addition to the above mentioned technical considerations, it must be remembered that one of the chief obstacles to the extension of any form of integration in the poultry branch is the absence of any clearly defined public action.

The rapid and considerable expansion of poultry production made possible by the present progress of technology requires, as first condition, stability of the sector and strict control of supplies, and this can at present be achieved only by generalization of the vertical integration relations between the poultry producers and the commercial enterprises, relations which at present are still in a fairly embryonic stage.

The prerequisite for the generalization of vertical integration links is the rationalization of the existing contracts.



What is lacking at present is protection for the agricultural producer, in view of the fact that in many cases the contractual rules are not specific enough as regards the "grading" of the quality of the product and this prevents any transparency in determining the price of the products supplied and remuneration of the production factors used.

This also reflects the gaps in internal legislation as regards the marketing of poultry products.

These gaps consists above all :

- a) In the absence of any rule to grade the quality of the products at the consumption stage;
- b) In the absence of any effective information for the consumer.

Furthermore, another impediment to these forms of integration is the attitude of the law with respect to "lackland" enterprises, since, as regards taxation and social security, these enterprises are put on the same footing as industrial firms.

In order to evaluate the serious injury which this causes to animal production in Italy, it must be remembered that enterprises having no land means all those excluded from agriculture within the meaning of Article 65 of the Single Text, i.e. all those where breeding exceeds the normal possibilities of the land and where fodder production is not sufficient to cover almost all the requirements of the animals raised.

If this provision remains in force, small Italian family farms will never be able to raise livestock on a paying basis and will be obliged to disappear or to produce fruit, flowers or vegetables which are already very much in excess of requirements.

Since this is the state of affairs, the tax authorities, the INAM, the INAIL, and the INSP are allowed to consider as an industrialist a peasant who owns only one hectare of land and who, instead of abandoning it, has managed to use it to breed a large number of chickens.

## 12. CONCLUSIONS

As the examination of the charts on the individual products considered in this inquiry has shown, there has been a quite considerable growth of vertical integration in Italian agriculture, although in practice it has affected only a few products (brewery barley, sugar, wine, tomatoes, industrial peaches, eggs and poultry) and only a certain form of integration (production under contract) which has been far more important than participation and vertical integration proper.

### 12.1.

The causes of this growth are very well known and reflect almost exactly what is said in the best theoretical treatises on the subject.

For farmers these causes have generally been of two kinds :

- (a) technical;
- (b) market-inspired.

As regards the first of these, it should be remembered that technical standards were generally low in many of the production sectors under consideration before forms of vertical integration were introduced in the production cycle.

The promise of technical assistance in the broadest sense of the term - particularly in the production sectors where it could effect major changes in the qualitative and quantitative aspects of production without weighing heavily on the assisted farmer's finances - has therefore been a decisive factor in the decision of a number of farmers to leave traditional production methods for integrated ones.

The second set of causes may, however, be attributed to the attraction for traditional Italian farmers of being able to eliminate at least in part - or at any rate to identify and circumscribe before harvesting - the main market uncertainties : the selling price and the demand for their products.

For a proper understanding of this fact, it is necessary to be familiar with the situation in the Italian agricultural market. It has

virtually always been at the mercy of demand and has consistently made the worst use of its great bargaining power, due to over-concentration of supply, the perishable nature of products, and with other factors, some of them outside the field of economics, relating to the market cycle and country life itself.

Therefore, with very few exceptions, such as producers of industrial peaches today could be said to be, farmers have often experienced difficulty in disposing of their produce and the wide fluctuations in agricultural market prices have almost always been entirely to their detriment that they had large quantities of produce on their hands when prices were low, and very little to offer when they were high.

The opportunity of finding a buyer immediately at an acceptable price - acceptable, that is, in relation to the prices they would have expected to obtain ultimately on the market (at harvest-time) - has therefore impelled them in some cases either to initiate common action directed towards integration or to accept in their entirety the integration offers made to them, principally by the processing industry.

Moreover, even in past times the wish to eliminate commercial risk, if only in part, has led to contracts being concluded prior to harvest-time; these were very numerous in several production sectors and were regarded as advantageous by the farmers even without all the side-benefits offered by vertical integration.

Here it should be remembered that the two main groups of causes which encouraged the growth of vertical integration in Italian agriculture have exercised a joint, rather than a separate influence. It is thus difficult to say what would have happened if vertical integration had not offered the opportunity of eliminating at the same time the technical and the commercial risks involved in agricultural production.

However, the growth of integration in some sectors (egg production, tomatoes, industrial peaches) would probably have come about for technical reasons, whereas in others (brewery barley, sugar, wine) marketing motives alone might have sufficed.

It should be noted that, in addition to the two basic types of causes dealt with so far, others have played a part in promoting integration.

Mention has already been made of the fact that the integrated farmer is able to obtain from the integrating agency technical assistance in the broad sense of the term - and hence also the provision of means of production and administrative services - at prices below market level.

In some cases, other more or less irrational developments deriving from passive imitation of what had been done by others may also have had some influence. By this I mean that in certain districts many farmers have become integrated almost entirely because other colleagues of theirs in whom they had faith or who enjoyed a certain amount of prestige as leaders in these districts had done likewise. This does not mean that economic factors have not also played some part in the process. They have, but in a form which cannot be estimated in the results. These farmers have had faith in the decisions of others and it is only afterwards that they have been able to judge whether they have been right in their choice.

In this connection it is rather strange to note how in a number of cases (with the possible exception of sugar and industrial peach production) farmers have placed much more trust in the choices of their colleagues than in the advice of the associations.

The fact that these associations have little power of persuasion is moreover linked to their extremely limited activity in the sector with which we are dealing.

Due account should be taken of this in assessing the chances of success for any new activities or responsibilities concerning the growth of integration which might be assigned to them.

What the associations or spontaneous imitation have not succeeding in doing has been done, however, by the processing industries, which are virtually the sole partners of the Italian farmer (if one excluded the cooperatives).

These industries have been the real dynamo behind vertical integration in Italy, and the question might therefore be asked why they have persistently performed this function, which amounts to an examination of the reasons for the involvement of the industrial partners in vertical integration in Italy.

Here too, the causes may be sub-divided into two main categories :

- (a) quantitative reasons, i.e. security of supply;
- (b) qualitative reasons, i.e. guaranteed supply of the desired type of product for processing.

The first of these, I feel, calls for little comment. Concern about securing given quantities of products has been greatest in sectors where supplies were inadequate. Brewery barley and industrial peaches are typical examples.

For the second category, however, it may be said that concern about obtaining a product with specific quality features has been fairly general, affecting not only sectors where supply was plentiful but also those already referred to where supply was inadequate. In fact, even in sectors with plentiful supply industry has often been faced with a wide range of quality in products, coinciding with over-fragmented supply and a lack of precise policy guidelines for the development of the nation's agriculture.

The other reasons which may have induced the processing industries to expand vertical integration on such a scale in Italian agriculture can certainly be rated as secondary compared with those given above.

## 12.2.

As to the effects of vertical integration in Italy, the following should be noted.

Except in certain rather special cases, resultant scale economies have not been appreciable whether as regards provision of the means of production or at the processing or marketing stages.

Particularly where processing is concerned, there has in fact been little change in the structure of processing concerns since before the introduction of vertical integration. It is perhaps only malting and peach-canning concerns which have benefited from it in this way.

However, there has been an appreciable effect on the farmers' income and consequently on farm structures.

With regard to the first point, vertical integration has brought about considerable improvements by providing generally a higher and more stable (i.e. less variable) income. In practice, it has in fact greatly reduced the technical production risk and virtually eliminated the commercial risk.

Notwithstanding the growth of integration it may be seen that Italian farmers' income is still too low and too variable, particularly when compared with that of their counterparts in many other EEC countries, and above all when compared with income in other branches of the economy, such as industry and services. However, two points should be made here. First and foremost, the growth of integration has not yet borne all its fruits in the sense described above; secondly, the gap between the level and stability of Italian farmers' incomes and these of farmers in other EEC countries and of other branches of activity would have been far greater if vertical integration had not developed in the manner just described.

This beneficial influence of integration on the earnings of the Italian farmer has made possible a number of changes in the structures of integrated farms.

These are mainly changes in scale, achieved either through bigger investments in equipment and other means of production or through enlargement of the area under cultivation.

Farmers have financed such increases in scale largely out of their own resources, thanks to the increased savings which the growth and the less variable nature of farm income have made possible.

On the other hand, it cannot be said that integration has done much to improve borrowing facilities for integrated farms. Financial interventions by the integrating agencies are in fact not very sizeable on the whole, though they could have made considerable direct or indirect contributions to the volume of bank loans (made available on ordinary terms or under the special legislation on agricultural credit) for integrated farms.

For this to happen, it would in fact have been necessary for the banks to pay particular attention, in carrying out investigations

on agricultural credit, to the personal situation and the economic position in the strict sense of farms seeking credit. However, Italian banks which provide financing for farms are still preoccupied with land value, which are affected only indirectly by vertical integration, so that in fact the integrated farmers' capacity to offer the banks which they approach for loans of various durations collateral guarantees of a material or personal nature is not increased.

However, this does not alter the fact that, should Italian banks change their attitude and adopt the line described above - as is to be hoped, incidentally - the growth of vertical integration will have done some important groundwork for new, easier solutions to the financial problems of farms.

Also in this connection it should be stressed, at the risk of labouring the point, that the development of vertical integration in Italian agriculture varies immensely. This diversity has created basic differences in the effects of integration.

Consequently, it is impossible to generalize, and in any discussion on the subject reference must always be made to the individual products under consideration.

Hence, it is equally impossible to generalize, for example, about the type of contract which is the most favourable for the three groups of operators (producers, processors and consumers) involved in integrated production. On the whole, it can be said that all contracts have so far been basically advantageous or at least not disadvantageous for all three groups.

The group which has been least affected by the process is, in fact, the consumer, except perhaps in the case of eggs and poultry production. Production under contract and integration in the broad sense of the term have not, in fact, substantially changed the previous relationship between sellers and final consumers; on the contrary, their effects have been almost exclusively limited to the relationship between producers and processors.

The latter have, in fact, been able to secure raw materials qualitatively and quantitatively more suited to their own needs on terms which are relatively advantageous in that they have become less and less subject to fluctuation.

Greater market stability is a result which has greatly affected to producers too. True, it cannot be said with any certainty that production under contract has greatly affected the balance of supply and demand in absolute terms. However, given the almost total disorganization which reigned on the markets for many products before the spread of production under contract, its contribution can only have been positive.

Furthermore, Italian contracts are almost exclusively delivery contracts, a type of contract which does not downgrade the farmer socially but if anything raises his social and economic status.

In connection with this, there are those who fear that the conclusion of contracts obliges farmers inevitably to accept the conditions imposed upon them by their opposite numbers - conditions which would not, therefore, be at all favourable to the farmer. It is certain that these conditions are actually dictated to a great extent by the industrial processors themselves; it is equally certain that their bargaining power is far greater than the farmers'.

However, it is pointless to talk in absolute terms in this field. The matter should be treated only in relative terms, in other words comparing the terms which the farmers are able to obtain through contract production with those which they negotiated before this form of production was propagated. Seen in this light, there is no doubt that the farmers' bargaining power in the traditional market was far more limited than it is now and that the terms imposed upon them under that system were distinctly worse than under the various contracts now agreed in each sector. It can, therefore, be stated unhesitatingly that these contracts have generally helped to better the farmers' economic position.

As already mentioned, they have also been helped by the elimination of market outlet problems which had troubled them at various times in the turbulent history of Italian agriculture.

The contracts - particularly delivery contracts - have reduced the farmers' commercial risks at the same time.



They may, therefore, be expected to develop further either in sectors where they are already present (barley, sugar, tomatoes, peaches, eggs and poultry) or in others (pigs, calves and young cattle) where they have not yet developed for reasons which are various but essentially traceable to two facts: until now manufacturers have always preferred to operate exclusively on the free market, and individual and associated farmers have never been strong enough to impose their views and requirements.

How production under contract develops in Italy will doubtless depend too on what action can be taken - if and when necessary - by the public authorities (i.e. the State, but the regions above all) in the form of facilities and tax concessions in particular, better rules and regulations in the sector, and lastly a simple advertising and promotional operation, with the basic object of disseminating technical knowledge.

Producers' associations could also play an important part here. However, they have so far been working in other fields and have only rarely had anything to do with production under contract.

They could either work at persuading those members who are least inclined to enter into contracts by breakings down the psychological barriers which keep such farmers in wholly traditional structures, or they could regroup the farmers to give them a stronger hand in relation to the processers, or lastly they could provide technical, legal and administrative supervision of the contracting process.

The latter activity is already taking place in both the sugar and the industrial peaches sectors and seems to be producing particularly satisfactory results.

As has already been pointed out, the farmers have less bargaining power than the contracting processers. The main reason for this is that most Italian agricultural markets are still dominated by demand, but there is also the fact - already mentioned - that the initiative has always been securely in the hands of the processers throughout almost the whole range of contracts.

In this way, they have helped to strengthen Italian agriculture, set a course for it and bring about substantial changes which would otherwise have been extremely difficult. Therefore, the most important aspect of the spread of contracts in our agricultural system remains its promotional effect, which has made the farmer more enterprising, improving him through knowledge of his rights and duties, and making his more organized and better equipped technically.

The technical assistance and standardization provided or imposed directly or indirectly by the industrial partners have been of fundamental importance.

This is a structural change which, though perhaps not very apparent and not measurable in terms of form area, number of employees or other such indicators, is nevertheless extremely important and capable of radically changing production patterns in farming.

Its effects have also been felt indirectly and partially by farmers who have not yet begun contract production. Unlike what is happening in other countries, the spread of contracts has not in fact worsened the position of non-integrated farmers. On the contrary, the benefits of production under contract have been partially reflected in traditional production too, whether on account of the already mentioned educative effect on these farmers too of the spread of techniques more advanced than the traditional ones, or because of the general improvement in the markets from which all farmers have benefited.

### 12.3.

Under the preceding points - and particularly in the last part of the paragraph summarizing - Point 12.2. - I dealt with the relatively vigorous growth of contract production in Italy.

Therefore, no particular weaknesses or difficulties stand in the way of the further development of this particular form of vertical integration.

Weaknesses and difficulties are rather to be found in examining the non-development of participation and vertical integration in the strict sense of the term.

These may essentially be found in the excessively abrupt transition which would be necessary in order to get away from the traditional agriculture - which is still dominant in most of the sectors under consideration - and achieve highly sophisticated forms of agriculture, such as the participation of individual farmers or their associations in industrial enterprises requiring a certain attitude of mind, an organizational sense, a technical, financial, economic and administrative preparation as well as a marketing-orientated approach to production problems : elements which are certainly not to be found in the average Italian farmer.

Production under contract makes the demands enumerated above, but to a lesser extent. Furthermore, in the transition from the traditional to the integrated structure based on contracts the farmer can count on a driving force and technical, financial and other aid helping him to make the qualitative leap involved by the advance to non-traditional farming.

The need to emphasize the social function of contract production in the broad sense becomes evident yet again. It may well be asked whether this particular type of vertical integration should not be considered a necessary phase whose functions are possibly not final but only transitional. In other words, the question is whether this is not a necessary step (I might even say an educative step, not to mention its economic, technical, commercial functions etc.) on a road which will undoubtedly lead Italian agriculture, also, away from traditional structures either to integrated structures in the strict sense or to participation.

I have no hesitation in replying in the affirmative, because I really do think that such a step is necessary. And it is in this sense, too, that an upsurge in contract production may be expected in Italian agriculture.

However, this does not mean that Italian agriculture cannot develop along other lines.

In particular, a straightforward answer cannot be given to the question of whether it is possible for producers' associations to organize the market horizontally in such a way that it is not absolutely necessary to integrate vertically to improve the farmers' returns.

If Italian agriculture were in a particularly brilliant and advanced position there would probably be no doubt about the answer. Instead, given the true state of that country's agriculture, it may reasonably be said that the farmers' income can be appreciably increased even by simply improving the horizontal organization of the market. Once again, the argument is relative and would be pointless if couched only in absolute terms. The argument for vertical integration in the strict sense as a vital tool for improving the farmers' income is thus one which has its application in a medium- or long-term context and which will only be valid when the average level of farmers income rises appreciably above its present mark.

In any event, almost all instances of vertical integration in the strict sense to be found in Italian agriculture have come about - as has repeatedly been pointed out - on the initiative of the processors who, in so doing, hoped to solve problems not substantially different from these solved by production under contract. In certain cases, particularly where integrating agencies with foreign capital are concerned, it cannot even be said that there were specific reasons for integration, but only the need to conform to the international company's policies, already applied by its associates in other countries.

Farmers interested in such processes are very few in number and have usually no very specific motivation. One may say that their motives are roughly the same as those of the integrated parties in any vertical integration process.

There is practically nothing that needs to be said about participation. It is virtually unknown in Italy, which is not surprising when one considers that it constitutes an even more sophisticated stage in the integration process than integration in the strict sense.

Such is clearly not the case if within participation one includes cooperation - as has been done for descriptive purposes in dealing with the individual products. For that, the arguments already set forth are valid and need not be elaborated here.

In conclusion, it is necessary to remember, however, that other factors apart from those considered so far have also prevented the

easy growth of vertical integration in the strict sense and of participation in Italian agriculture.

It is, for example, regrettable that there has been a failure at the legislative level to clarify the relationships mentioned above, because this forces operators to adopt complex practices to solve problems which simple legislation could make very much more approachable (both psychologically and economically) for the parties concerned.

This is particularly true of taxation, under which the sector in question receives no preferential treatment.

Other noteworthy factors are the structures of the enterprises which process and market the products in question. As for the structure of farms, that has already been discussed above.

Indeed, it is clear that if the distributive and industrial set-up were less fragmented the need to secure specific products in precise, predetermined quantities and qualities might be more pressing. This is of course on the assumption that a less fragmented set-up did not give rise to oligo- and monopsonistic situations, turning the integrating agencies' bargaining power into a dangerous force.

Also, greater thrust and a management which is more concerned about the medium- and long-term development of farming instead of than always (or almost always) taking a short-term view of problems - which seems to be the prevailing trend, however, in much of the processing industry and the national distribution set-up - could lead to preference being given to a more secure, rational, albeit often more costly supply system (such as vertical integration makes possible) over the unplanned but in the short run less onerous (traditional system).

As can be seen, we are still dealing with fundamental problems which affect the whole socio-economic structure of the country and cannot be solved quickly or easily.

However, in several sectors Italian agriculture seems to be thriving. It is now a matter of consolidating what has been achieved so far before undertaking further development towards more advanced forms of integration. Once the specific socio-economic situations summarized above have been changed, this further development will no longer appear to be a dream - as it might today - but may at last be considered possible.

BIBLIOGRAPHY

1. M. Bonsembiante e G. Ghiericato, Gli allevamenti bovini nelle Venezie e nella Comunità economica europea, Ed. CADAM, Padova, 1969.
2. La cooperazione nella frutticoltura piemontese, Ed. Associazione piemonte Italia, Torino, 1966.
3. Atti del VI Convegno nazionale bieticolo dell'Associazione nazionale bieticoltori, Roma, 1969.
4. Zootecnica italiana 1970, Ed. U.S. Feed Grains Council, Roma, 1970.
5. F. Catella, L'integrazione verticale. Si può discutere, non si può ignorare, in "U.N.A., Notizie di avicoltura", Roma, aprile 1971.
6. F. Catella, Funzioni e compiti dell'integrazione nell'avicoltura, Relazione al convegno promosso dall'U.N.A. con il patrocinio dell'Unioncamere veneta, Vicenza, 7/8 Aprile 1968.
7. G. Galizzi, L'integrazione in avicoltura, in "Atti dei convegni collaterali della XV Mostra internazionale avicola", Ed. C.C.I.A.A., Varese, 1968.
8. O. Passerini Glazel, Integrazione e potere contrattuale in agricoltura, Relazione all'Esposizione industriale Bresciana, 1967.
9. T. Malaguti, Istituti giuridici per consolidare il potere contrattuale degli agricoltori, Relazione all'Esposizione industriale Bresciana, 1967.
10. P.E. Antonioli, Aspetti dell'integrazione nelle coltivazioni erbacee, Relazione all'Esposizione industriale Bresciana, 1967.
11. V. Esposito De Falco, Tendenze e prospettive dell'industria conserviera in Italia e nel Mezzogiorno, in "Passegna economica", Napoli, settembre-ottobre 1971.
12. A. Picarelli, L'industria delle conserve vegetali in Campania, Ed. Giannini, Napoli, 1969.
13. L. Potito, L'economia delle aziende conserviere. Ed. Giannini, Napoli, 1970.
14. G. Chironi, Integrazione verticale e agricoltura contrattuale nel settore ortofrutticolo italiano, Ed. I.N.E.A., Palermo, 1971.
15. G. Galizzi, I processi di integrazione verticale nella produzione ortofrutticola, in "Atti della conferenza nazionale per l'ortoflorofrutticoltura", Palermo, 1967.
16. Indagine sui centri d'ingrasso dei vitelloni, Ed. I.R.V.A.M., Roma, 1970.
17. Strutture della produzione e processi di integrazione verticale in avicoltura, Ed. I.R.V.A.M., Roma, 1970.
18. Indagine sullo stato e le prospettive del mercato degli orticoli trasformati Ed. I.R.V.A.M., Roma, 1969.
19. E. Rullani e G. Volpato, I problemi del settore lattiero caseario con particolare riferimento al veneto, Ed. Cedam, Padova, 1971.
20. La cooperazione lattiero casearia nella regione lombarda, Ed. Cassa di risparmio delle provincie lombarde, Milano, 1966.
21. Unione Italiana delle Camere di Commercio, Industria, Artigianato e Agricoltura, Rapporti fra agricoltura ed industria conserviera, Atti del convegno di studio organizzato a Parma e Salerno nel 1967-68, Roma 1969 (contiene articoli di : M. CASARI, G. GAETANI D'ARAGONA, G. GALIZZI e C. VANZETTI, R. COLTRERA e S. VACCA', M. MOLE, etc...).









