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REGIONAL ASPECTS OF AGRICULTURE

IN THE SOUTH OF THE COMMUNITY

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## REGIONAL ASPECTS OF AGRICULTURE IN THE SOUTH OF THE COMMUNITY

The purpose of this study<sup>1</sup> is to describe the economic situation and especially the agricultural situation, in the southern regions of the Community. It also attempts to illustrate the different levels of development within southern Europe.

This seemed to us particularly topical in the light of the Commission's Communication to the Council, dated 1 April 1977, on Mediterranean agricultural problems<sup>2</sup> and also with regard to the Communication on guidelines for the development of the Mediterranean regions of the Community together with measures in the agricultural sector, otherwise known as the 'Mediterranean package', presented on 9 December 1977 and 3 January 1978<sup>3</sup>.

### I. Southern Europe

The definition of southern Europe adopted for the purpose of this study is extremely broad. We refer to the study on Agriculture in the Mediterranean Regions of the EEC<sup>4</sup> as a guide to its geographical extent. The aim has been to present data on all those regions entitled for one reason or another to be regarded as part of southern Europe. The disadvantages of a more limited approach are thus avoided; the regional presentation enables a more precise analysis to be made of the whole area.

This has also enabled us to avoid the practical disadvantages and controversies inherent in any attempt to define, and so limit, the Mediterranean agricultural area. These tend in any case to be a reflection of the political implications (the possible participation of 'marginal' regions in the benefits of the 'package'), rather than the outcome of a well-reasoned technical dispute.

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<sup>1</sup> For the methodological aspects and sources used, see Annex.

<sup>2</sup> See Doc.COM(77) 140 final; see also Opinion of Parliament of 19.1.1978 (Report by Mr Ligios on the effects of the Mediterranean policy on Community agriculture (Doc. 467/77 of 11.1.1978))

<sup>3</sup> See Doc. 470/77 (Report by Mr Ligios, Doc. 34/78 of 4.4.1978)

<sup>4</sup> Research and Documentation Papers, Agriculture Series No. 3, September 1976.

Our 1976 study opted for a pragmatic solution, referring to the limit of olive tree growth<sup>5</sup>. The Commission on the other hand, in its Communication of 1 April 1977, used as its criteria the climatic features and the proportion (with a threshold of 40%) of Mediterranean produce (durum wheat, rice, vegetables, flowers, tobacco, wine, olive oil, fruit excluding apples, citrus fruits and sheep) in the total agricultural production of a region<sup>6</sup>. This choice was open to criticism<sup>7</sup> since it managed to include or exclude certain regions in the Mediterranean agricultural area in a way which was often felt to be rather arbitrary<sup>8</sup>. The presentation of the 'package' also underlines the pragmatic nature of the proposed solution, for in the end the Commission put forward precise proposals for structural actions to be taken in a well-defined regional framework (Mezzogiorno, Languedoc-Roussillon).

It therefore seemed to us to be more useful to draw attention to evidence of regional variation within the southern part of the Community, while emphasizing certain aspects specific to the agrarian economy of these regions. This approach should also make it easier to assess the Commission's proposals.

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Southern Europe is not homogeneous; different areas may be distinguished within it, with regions such as Limousin, Auvergne, Valle d'Aosta and Trentino Alto Adige forming part of what may be considered the mountain region of Europe; others, such as Aquitaine, Midi-Pyrénées, Lombardia and Emilia Romagna, are southern by virtue of their relatively

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<sup>5</sup> See doc.cit., p.1.

<sup>6</sup> See doc. cit., p.8.

<sup>7</sup> See in particular the note drawn up by our Agricultural division, 'Synthèse des problèmes agricoles posés à la Communauté par les demandes d'adhésion de la Grèce, du Portugal et de l'Espagne' (Summary of Agricultural Problems posed for the Community by the Applications for Accession of Greece, Portugal and Spain'), produced for the EPD Group but available on application, dated 22 September 1977, pp.3-4.

<sup>8</sup> See also the report by Mr LIGIOS quoted above (January 1978) pp. 9-11 and Working Document PE 51.989 of 10.1.1978 drafted for the Committee on Agriculture's Working Party on Mediterranean Questions.

high average temperature (12 or 13° C), but do not belong to Mediterranean Europe in the strict sense, since the particular characteristics of the Mediterranean climate, such as the summer drought, do not obtain. This distinction is of some importance, as generally speaking the southern non-Mediterranean regions have conditions which are more favourable to agriculture than the Mediterranean regions. Even though the problem of low rainfall can be overcome in the latter regions by irrigation, this is an arduous business and requires additional investment which strains the profitability of farming.

The Mediterranean area, marked by a thick line on the maps, is not a homogeneous area either. We may distinguish the French Mediterranean regions (Languedoc-Roussillon, Provence-Côte d'Azur), the regions of central Italy, the continental Mezzogiorno and the three islands of Corse (Corsica), Sardegna (Sardinia) and Sicilia (Sicily).

With regard to Valle d'Aosta and Corse, some caution is needed in interpreting the map. Valle d'Aosta is not sufficiently strong economically for its figures to be considered statistically significant. In the case of Corse, certain data apply to Provence-Côte d'Azur and Corse together, whereas others apply to Corse as a separate entity.

This study takes 1970 as the reference year, for several reasons:

- the stability of exchange rates at that time,
- the healthy economic situation,
- the fact that it was an average year for agriculture,
- the adoption of the common organization of the wine market, and
- the availability of statistics.

The data do not represent present-day reality. To avoid the complications of disturbances in the exchange markets since 1970 - sometimes sparked off by monetary movements bereft of any economic justification - our study is based on the development of the regional economies between 1970 and 1975 expressed in national currencies.

## II. The economic situation in southern Europe

### (a) The level of productivity

A salient characteristic of the general situation of the economy in the southern regions in 1970, was the generally very low level of productivity. Here productivity, represented in this case by gross value added at market prices per active (employed) person, should not be confused with income made up of transfers of capital to the regions concerned by their central governments and the Community. On the other hand, productivity does show the

potential for creating wealth in these regions. In southern Europe, nine out of 27 regions had an added value per employed person below 4,000 EUR in 1970 and the next seven were between 4,000 and 5,000 EUR. In northern Europe, only Ireland had an added value figure below 4,000 EUR, the next 11 regions, most of them in the United Kingdom, being between 4,000 and 5,000 EUR, whereas 25 out of 37 regions were above the 5,000 EUR mark, compared with 11 out of 27 in the south. Nevertheless it will be noted that certain southern regions such as Rhône-Alpes, Provence-Côte d'Azur-Corse and Liguria had high levels of productivity in 1970.

Agricultural productivity was well below that of the economy as a whole in southern Europe, with an average of 2,398 EUR, per employed person in 1970 compared with 4,977 EUR per employed person for the whole of the economy (i.e. less than 50%). This gap is not peculiar to southern Europe. In certain northern European countries, such as Germany, the gap is even wider, in terms of both absolute and relative value. However, the cumulative effect of low productivity in both agriculture and the other economic sectors is very marked regional under-development.

It is interesting to compare the relative levels of regional productivity and agricultural productivity so as to distinguish cases of under-development which are more specifically agricultural in origin. Agricultural productivity is generally more widely dispersed than the productivity of the economy as a whole. Thus in agriculture the range of dispersion of the productivity index goes from 49 to 181 (taking the average for southern Europe as 100), whereas for all economic sectors together this dispersion ranges only from 53 to 135. It should, however, be emphasized that this dispersion of agricultural productivity is not reflected in the absolute figures.

There is a difference of 3,160 EUR between the agricultural region with the highest productivity level and that with the lowest productivity level, compared with a gap of 4,100 EUR for regional productivity as a whole (see Diagram No.1).

While in general the level of agricultural productivity follows that of the regional economy as a whole, Map 2 shows some differences within the agricultural sector. In terms of the contribution of agriculture to the regional economy, as represented by the proportion of agriculture in added value, the most agricultural regions are the Italian Mezzogiorno, Languedoc-Roussillon and Emilia Romagna. The highest figures for employment in agriculture are recorded by these regions together with Umbria, Marche and other southern regions of France. The example of Languedoc-Roussillon is particularly interesting since it shows that an agricultural region is not necessarily condemned to low economic productivity.



In the case of certain regions such as Languedoc-Roussillon and north-eastern Italy, there is clearly an urgent need for general economic development measures. In other regions such as south-western France (Limousin in particular), and central Italy, an increase in agricultural productivity could stimulate economic growth. The Italian Mezzogiorno clearly needs a combination of regional economic development and agricultural development.

(b) Regional growth of the economy

Regional growth between 1970 and 1975 (variation in gross value added by volume, Map 3) varied considerably within southern Europe. Insofar as available estimates are reliable, the French regions registered very low growth rates during this period, in fact there was a negative growth in four of the seven regions. Only the Rhône-Alpes region had a growth rate which may be regarded as satisfactory.

The tendency in France is for regional imbalances to become more marked, especially between the north and the south. In Italy, on the other hand, only Liguria had a negative growth rate during the period, but as a general rule the growth rate was low in the most industrialized regions (Piemonte and Lombardia). With the exception of Campania and Sardegna, the Mezzogiorno regions recorded a faster rate of growth than northern Italy. Thus unlike France, regional imbalances in Italy are showing a tendency to diminish in most cases. The fact that the Naples region is excluded from the general growth pattern is, however, disturbing, in view of its importance in the Mezzogiorno economy.

(c) Employment

This analysis of the growth by volume of regional economies should be seen in the light of data on employment. Even though the migratory balance (Map 4) remains very largely negative for the Mezzogiorno and Auvergne, the long-term consequences of the economic crisis, which has led to a decline in the number of jobs in northern Italy available for labour from the South, create the need for a higher growth rate in the south merely to sustain the same employment level. It will be noticed that the number of non-active persons dependent on one active person is already high in central and southern Italy and in Languedoc.

The regions affected most by unemployment (Map 5) are Provence-Côte d'Azur, Corse, Lazio and most of the Mezzogiorno regions. A high level of unemployment was also recorded in the three regions of Aquitaine, Midi-Pyrénées and Languedoc-Roussillon, whereas northern Italy and Limousin were the least affected.

Between 1972 and 1974, the highest increase in unemployment was recorded in all the French regions, and in Lazio and Campania (Map 5). During the period 1974-1976 this increase continued, spreading to the regions of northern Italy. Thus a future worsening of the employment situation throughout southern Europe must be feared. It will be noticed, however, that the situation in other European regions, particularly Denmark, the North and West of Great Britain and the whole of Ireland, is no less serious (Map 6).

(d) The regional growth of agriculture

Comparison of the growth by volume of agriculture with that of the economy in general (Map 3) clearly shows the former to have been generally much lower. Occasionally a relatively high agricultural growth rate compensates for mediocre results in the other economic sectors, as in Limousin and Auvergne, but more often than not, a low agricultural growth rate goes together with low growth in the regional economy. This is especially the case with the French regions. In Italy the Mezzogiorno regions registered a fairly rapid agricultural growth rate, but there was a decline in certain regions of central Italy, such as Umbria, Marche and especially Molise (which already had the lowest agricultural growth rate in Europe) and in Sardegna. This agricultural recession in the central Italian regions is particularly worrying, as a low-productivity agricultural economy can only accentuate the problems of regional development.

The diagram on the dispersion of growth (see Diagram 2) about the average shows a wider dispersion of agricultural growth (from 60 to 130) than of general economic growth. While agricultural growth has a dispersion of 70 points compared with 50 for total economic growth, it will nevertheless be seen that a high proportion of the agricultural regions have a growth rate between 90 and 110% of the 1970 level, whereas total regional growth is spread over a wider range, between 90 and 140% of the 1970 level.

III. Regional analysis of agriculture in Southern Europe

The general agricultural situation in the southern part of Europe has already been described elsewhere<sup>9</sup>. We shall therefore attempt to build upon the earlier study, in particular by giving a regional breakdown within southern Europe.

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<sup>9</sup> Research and Documentation Papers, Agriculture Series No.3, September 1976

(a) Agricultural structures

Southern Europe's agricultural structures are generally acknowledged to be far too small, even taking into account the more intensive character of production. Only four of the regions concerned (Limousin, Auvergne, Midi-Pyrénées and Sardegna) had an average farm size of over 20 ha in 1970 (Map 7). In the other French regions sizes were between 12 and 20 ha, whereas the average for the other Italian regions was below 12 ha (in nine of them it was even less than 6 ha).

However, these data on average size should be interpreted with a certain caution, since the average conceals a reality very different from that in northern Europe, where there are roughly the same number of farms (taking those larger than 1 ha) in each category, with the exception of farms of '50 ha and above', which are considerably less numerous. At the same time the percentage of the total acreage occupied per category of farm increases steadily. Thus a balanced social structure does not prevent the larger farms from enjoying a dominant economic position. Farms of 20 ha and above, which represent 30% of the total number of farms, occupy 74% of the agricultural area.

The situation is radically different in southern Europe. Farms of 1 - 5 ha represent approximately 60% of the total number of farms, compared with 28% in northern Europe. Furthermore the number of farms per category diminishes rapidly: farms of 50 ha and above represent only 2% of the total. The large farms continue to play a significant economic role because they occupy more than half the total agricultural area. Farms of 5 to 20 ha are neither socially nor economically significant. However, in certain mountain areas, higher average acreage does not reflect greater economic importance because of the more extensive character of production. This is particularly the case in Limousin, Auvergne and Sardegna, and in the Alpine regions of Italy and the central Italian regions.

The development of the agricultural structures in southern Europe is not very encouraging. Data collected by the Community survey of agricultural structures in 1975 are not at present available for France, but it has been ascertained that it is in the regions of the north of Italy that structures are developing fastest. Between 1970 and 1975 the average size of farms increased least in the southern and western parts of Italy. The structural backwardness of the south of Italy compared with the north has therefore only increased during the period. Sardegna is a special case, since the average farm size actually declined between 1970 and 1975, as the land was being abandoned faster than the number of farms was declining.

(b) Hill farming and farming in the less-favoured areas

The mountainous regions of southern Europe (Map 8), it should be pointed out, already benefit from a certain degree of support under the Directive on mountain and hill farming and farming in certain less-favoured areas<sup>10</sup>. This Directive covers all the less-favoured areas of the Community and in particular provides aid per head of cattle for farmers in these areas. It may be wondered whether this Directive, which was based mainly on United Kingdom regulations, is adapted to the specific needs of Southern Europe.

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<sup>10</sup> OJ No. L 128, 19.5.1975

The Directive provides a table of coefficients for converting different types of livestock into a common denominator known as the livestock unit (equivalent to one dairy cow). These coefficients are established on the basis of the energy requirements for herds under the production systems practised in northern Europe. In the case of sheep, in particular, there must be some doubt as to the fairness of these coefficients when applied to southern European production systems. In northern Europe sheep only represent the first stage of sheepmeat production, and young lambs are usually sold for fattening on lowland pasture. In southern Europe there is very little lowland pasture and lambs are sold directly for slaughter.

The production of ewe's milk for cheese is also important in southern Europe: it increases the yield from livestock in these regions, where it is a relatively intensive form of production. Obviously coefficients for ewes based on the production of sheepmeat are not appropriate for the production of ewe's milk. If conversion coefficients were adjusted, this could perhaps improve the situation in the mountainous regions of southern Europe without increasing the burden of expenditure on the Guarantee Section of the EAGGF, as hill farming allowances are granted under the structural policy.

(c) Production trends

An examination of production in southern Europe shows appreciable differences between the different regions. The absolute level of productivity and the growth of agriculture have been considered in the previous section. Value added represents the difference between the production value and the value of intermediate consumption (regular current agricultural input minus depreciation). Trends in production and in intermediate consumption should both be considered in greater detail. The growth of agricultural added value was calculated by taking the two dates of 1970 and 1975 and calculating the difference at constant prices. There were fairly large movements between these two dates, both in volume and in the level of agricultural added value.

We have confined ourselves to considering production by volume during the period 1970-1975. It is in fact difficult to make international comparisons of production prices, since these are influenced by the general rates of inflation in the Member States' economies; and in the period 1970-1975, inflation rates varied somewhat between France and Italy. It may however be assumed that variations in the volume of production will have an effect on production prices from year to year. Either a decline in production would lead to an increase in prices and consequently production in value terms would change little (the opposite can also happen, with a decline in prices offsetting an increase in production) or price fluctuations would go hand-in-hand with a fluctuation in volume, the result being a highly unstable level of production value. The figures for intermediate consumption show a steady rise in volume, while there was a substantial rise

in value following the energy crisis. Volume and prices of final production of agriculture and of intermediate consumption in France and Italy are given in the accompanying table (see Table 1).

Comparison of average production by volume for the period 1970-1975 (Map 9) with the growth of gross value added in agriculture (Map 3) shows that, in most of the regions, stagnant production was accompanied by low value added growth. Limousin, Piemonte, Emilia Romagna and Umbria are exceptions. In these regions (save Umbria) a good year in 1975 made up for stagnation during the previous period. In the case of Aquitaine, Languedoc-Roussillon, Provence-Côte d'Azur, Liguria, Friuli, March and Molise, stagnation occurred both in production and in the growth of value added. The growth regions were mainly Lombardia and the Mezzogiorno, apart from Molise and Puglia.

Average production is not the only relevant yardstick for production trends between 1970 and 1975. It is also interesting to look at whether production varied much from one year to the next. Here it may be noted that the regions which show production growth have a generally very high degree of instability. Regions with a negative growth rate such as Aquitaine, Languedoc-Roussillon and Liguria also have a very high degree of instability. It is the regions with average production growth which show the highest stability from one year to the next.

(d) The importance of southern produce

Not only does the situation of agricultural production differ markedly from one region to another in southern Europe, but the size of typical southern production units also varies a good deal. In its Communication of 1 April 1977, on Mediterranean agricultural problems, the Commission drew up a list of products deemed to be Mediterranean. These were durum wheat, rice, vegetables, flowers, tobacco, wine, olive oil, fruit (excepting apples), citrus fruits and sheep. The Commission based its map of the Mediterranean regions on those areas where such products represented at least 40% of total agricultural production in 1973. The percentage of southern products in total production in 1975 is shown in Map 10. The data for France are underestimated, since durum wheat, rice, tobacco and olive oil are not included in the total. Apples were also included in the figure for fruit in the case of both France and Italy. These statistical lacunae are particularly noticeable with regard to Aquitaine and Trentino. On the other hand they do not alter the overall picture. It is interesting to note that in the case of certain regions and products there is a substantial variation in one particular product's share of total production from one year to the next. Thus wine represented 70.7% of available production in Languedoc in 1973, but only 57.4% in 1975. It will be noted that, except in the case of Umbria and Marche, the proportion of southern produce in all the Mediterranean

regions exceeded 40% in 1975. In four regions, Languedoc, Liguria, Puglia and Sicilia the proportion was over 80%; on the other hand, the only non-Mediterranean southern region where the proportion exceeded 40% was Trentino. If apples are excluded, the share of Mediterranean produce in this region falls to a mere 21%.

Some regions are characterized by the farming of a single product. Thus Languedoc-Roussillon and Corse are essentially viticultural regions, with wine representing more than 50% of available production. A distinction should be made in viticultural production between the production of table wines and quality wines. The above regions produce table wines, whereas such regions as Aquitaine, Provence and Toscana tend to produce quality wines. Vegetable production is concentrated to some extent in Provence, Liguria and most of the Mezzogiorno regions. Fruit production is more concentrated, in particular in the French Mediterranean regions (except for Corse), Trentino, Emilia Romagna and the south-western part of the Mezzogiorno (including Sicilia).

The figures produced by the Farm Accountancy Data Network (FADN) enable a more detailed analysis to be made of the different types of production per region and per category of farming land. The main results may be found in Tables 2-4. The FADN results are given in national currencies based on farm accounts. For the Community's presentation of results in 1975, the figures in national currencies were converted into European units of account. The European unit of account is derived from a basket of Member States' currencies floating with the movements on the exchange markets. Where farm production is intended for export, an accounting method based on exchange rates is justified; but where the accounts are for domestic use, as is the case with income, exchange rates based on equivalent purchasing power are more significant. Indeed, for countries with depreciating currencies, the domestic purchasing power of a currency is higher than its external purchasing power. For 1975 the Community Statistical Office calculated currency parities based on the purchasing power of all the goods and services of the economies of the Member States, and these may usefully replace parities based on the exchange markets<sup>11</sup>.

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<sup>11</sup> For the Community as a whole, 1 EURPA unit = 1 EUA

The tables show labour income, calculated first in EUA and then in parities of purchasing power (EURPA). The data in Tables 2-4 show product and costs per hectare, gross production per unit and labour income. The product per hectare line enables comparisons to be made between the different types of production such as viticulture, fruit and horticulture. However, within a given production method gross production per unit is a better basis for comparison. Labour income conforms to the definition established for the purposes of the structural policy by Directive 72/159, which states that after modernization a holding should be able to provide farmers with a labour income comparable to non-agricultural income.

(e) Viticulture

In the case of viticulture appreciable differences will be found on holdings from 5-10 ha between the regions of Rhône-Alpes and Veneto-Trentino-Friuli on the one hand and those of Languedoc-Provence-Corse and Toscana on the other. In the former regions a relatively high level of production per unit is found, due mainly to the fact that these regions produce quality wines. In Toscana, which is also a quality wine region, the low level of gross production per unit would seem rather to be due to the persistence of a polyculture system, preventing farmers from intensifying viticultural production. These differences in gross production per unit are reflected in the income figures. Thus income from the Rhône-Alpes region is double the figure for Languedoc-Provence-Corse; similarly, Veneto has double the Toscana figure.

In 1975 none of the Mezzogiorno holdings in the 5-10 ha category sent in returns, but figures for farms of less than 5 ha in Campania and Calabria show that more intensified production than in Languedoc and Toscana is not enough to compensate for structural deficiencies in earned income. Taking vineyards of 10-20 ha, we see that higher gross production per unit in Languedoc gives a labour income figure one third higher. In Veneto a level of intensification roughly equal to that of farms of 5-10 ha is reflected in a substantial improvement in labour income, thanks to the improved structural factor. Income in Veneto which was 60% higher than that in Languedoc on farms of 5-10 ha (on the basis of parities of purchasing power) is 123% higher on farms of 10-20 ha. The differences between Veneto and Languedoc are in fact even greater as labour income trends in Veneto in 1975 were very low on farms of 5-10 ha compared with the previous year. As to other years, between 1972 and 1974 trends were roughly similar between Languedoc and Veneto.



(f) Fruit farming

It will be noted that gross product per hectare is significantly higher for fruit than for viticulture, except in the Rhône-Alpes region. On farms of less than 5 ha, production per unit varies little between Languedoc, Trentino and Emilia Romagna. However, the level of production per unit of apples and other fresh fruits in Campania is clearly lower. The fact that citrus fruits have a gross production per unit double that of other fresh fruits (pears, peaches, etc.) does make fruit production seem more attractive, but product per hectare is still 40% below that of northern Italy. In Sicily, the 'product-per-hectare' level for citrus fruit farming is higher than that of Campania, but still below that of northern Italy.

Income per employed person varies more than product per hectare: from 1731 EURPAR in Campania to almost four times as much, 6489 EURPAR in Emilia Romagna. Here again, considerable differences may be found between the Mezzogiorno and the French and northern Italian regions, as in the viticulture sector. As acreage increases there is an appreciable improvement in income figures in all these regions, although the gap between the Mezzogiorno and the north of Italy becomes even wider.

Larger farms do not automatically enjoy higher incomes, as is shown by the Rhône-Alpes; here the low level of gross production per unit and of product per hectare, only half the Campania figure for other fruits, works against the efficient exploitation of land. Income consequently is well below that of other fruit farms in this category, including those of less than 5 ha. It will be noted that with the exception of the Rhône-Alpes region, fruit farm income exceeds income from viticultural holdings in the same acreage category in every case; and that the income of fruit farms of less than 5 ha often exceeds the income of viticultural holdings in a higher category. At the same time fruit farm income is much more stable from one year to the next than that of viticulture.

(g) Horticulture

In the horticultural sector (vegetables and flowers) regional differences in income are less marked. On the other hand, production methods vary considerably between Provence on the one hand and the Italian regions on the other. In Provence, a very high product per hectare and per unit is obtained thanks to high input costs; results at this level of intensification are only partially reflected in labour income. In Italy, gross production per unit in Liguria is double that of Veneto, which is 73% higher than that of Campania. Turning to income, it will be noticed that incomes in Provence are slightly more than twice as high as incomes in Campania, while in Italy the gap between Liguria and Campania is in the ratio of 1 : 1.6. At the same time, the stability of income from year to year is generally higher than

that found in the case of fruit and viticulture.

(h) The agri-foodstuffs industry

The value of agricultural production depends to a great extent on marketing opportunities and hence on commercial structures, as also on the opportunities for processing produce at the farm. Within the European Community the importance of the agri-foodstuffs sector varies widely, both between the different Member States and between regions. In certain countries gross value added at market prices for the 'Food, beverages and tobacco products' sector is higher than the value added of the 'Products of agriculture, forestry and fishing' sector.

The agri-foodstuffs industry is based chiefly in the industrialized countries, where the agricultural sector is relatively small; but even in other countries such as the Netherlands, France, and Italy, where agriculture has a more balanced role in the economy, the size of the agri-foodstuffs sector varies greatly. This may be explained in the Netherlands by the processing of foodstuffs of overseas origin such as cocoa and tobacco. On the other hand, in the southern regions of France and in Italy this difference cannot be explained by external factors.

It is chiefly in the large consumption regions such as Lombardia, Rhône-Alpes and Lazio, that food processing is important. The value of the agri-foodstuffs industry in the central and southern regions of Italy and in the south-west regions of France, represents less than 50% of agricultural value added. The inadequacy of the agri-foodstuffs sector is particularly marked in four regions: Sardegna, Calabria, Basilicata and Molise, where value added is less than 25% of agricultural value added.

Methodological Note

The regional statistics published by the Statistical Office of the European Communities are the main source used in this study. The publication 'Economic Aggregates' was used for drawing up Map 1 on gross value added per active person and gross value added per active person in agriculture. We decided to take gross value added at market prices rather than at factor cost for the following reasons. Estimates of the trend in gross value added calculated at market prices are more recent; with regard to the agricultural sector, we thought it better not to take account of subsidies and taxes linked to production for a study which was concerned with productivity rather than incomes<sup>1</sup>. Map 2 is based on the same data as the first map, but expressed in a different way.

The employment statistics are also drawn from 'Economic Aggregates' (Total employment per branch) and not from 'Population, employment and living conditions'. The latter was used for compiling Maps 4, 5 and 6 on employment and employment trends between 1970 and 1975.

Map 3, on the growth rate of value added by volume 1970-1975, was based on data provided by the Statistical Office in national currencies at current prices. This information was corrected by using figures for trends in the level of gross value added during the period. We did not take account of different trends in the levels of gross value added in the different regions of a single country. The growth rates of gross value added by volume of agriculture (also shown in Map 3) were calculated by a different method. The data for Italy are drawn from the INEA agricultural yearbook which calculates the gross value added in current and constant prices for each year. In the case of France, the figures for current prices of agricultural value added taken from the agricultural accounts for the individual 'départements' were corrected by reference to trends in the levels of agricultural value added. Thus, the data for France and Italy are not strictly comparable. Moreover, the map on the growth of value added in agriculture is not strictly comparable with that

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<sup>1</sup>For a fairly recent study of income based on regional statistics see 'Regionale Einkommensdifferenzierung in der Landwirtschaft der Europäischen Gemeinschaft' - (Deutsches Institut für Wirtschaft, Berlin, April 1977)

of the growth rate of regional value added and that of value added in agriculture per active person. The growth rate of value added in agriculture was calculated on the basis of data from agricultural accounts, whose coverage is not as wide as that of the national accounts, since forestry and fishing, for instance, are excluded. Finally it will be noticed that the two maps on growth rates do not take account of trends in the active population during the period 1970-1975, and are therefore not directly comparable with trends in value added per active person in 1970.

With regard to the more specifically agricultural part of the study, rather more disparate sources had to be used. The data on agricultural structures was taken from national publications containing the results of Community surveys from 1970 to 1975. The map on the less-favoured areas (Map 8) was based on data from the 'Environment' chapter of 'Population, employment and living conditions' in the Community regional statistics series. Map 9, showing average production for 1970-1975 and its lack of stability, was based on national data compiled from 'département' agricultural accounts and from the INEA. They are therefore consistent with those on trends in agricultural value added in Map 3. The same data were used for Maps 10 and 11, on the relative importance of southern produce. Here data are given in value terms.

Lastly, the table on value added in the agri-foodstuffs industry as a percentage of agricultural value added was calculated on the basis of data from 'Regional Economic Aggregates' and therefore conforms with national accounts, rather than agricultural accounts.

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The maps were designed to show regional imbalances within southern Europe. To keep the presentation simple, the number of categories of size was confined to four. These categories were based systematically on histograms of the dispersion of data and they represent the natural groupings which emerge for each subject. These groupings may not be in line with the normal statistical groupings or indeed with an arithmetical or geometric progression. Certain groupings which appear to be significant in southern Europe may not be significant in the Community as a whole. To avoid excessive disparity in the presentation of separate regions of southern Europe, consistency with overall Community data was adopted for Map 1. To simplify map-reading, the most heavily-shaded areas represent the least-favoured regions from the point of view of the

criterion chosen. Thus low productivity per active person is heavily shaded, as is a substantial level of dependence on southern produce.

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The Directorate-General for Research and Documentation would like to thank the Regional Statistics Division of the Statistical Office of the European Communities for its valuable assistance in preparing the present study. It is scarcely necessary to add that any error is entirely the responsibility of the Directorate-General for Research and Documentation.

Régions de l'Europe méridionale



Régions méridionales françaises :

1. Aquitaine
2. Midi-Pyrénées
3. Limousin
4. Auvergne
5. Rhône-Alpes

Régions méditerran. françaises :

6. Languedoc-Roussillon
7. Provence-Côte d'Azur
8. Corse

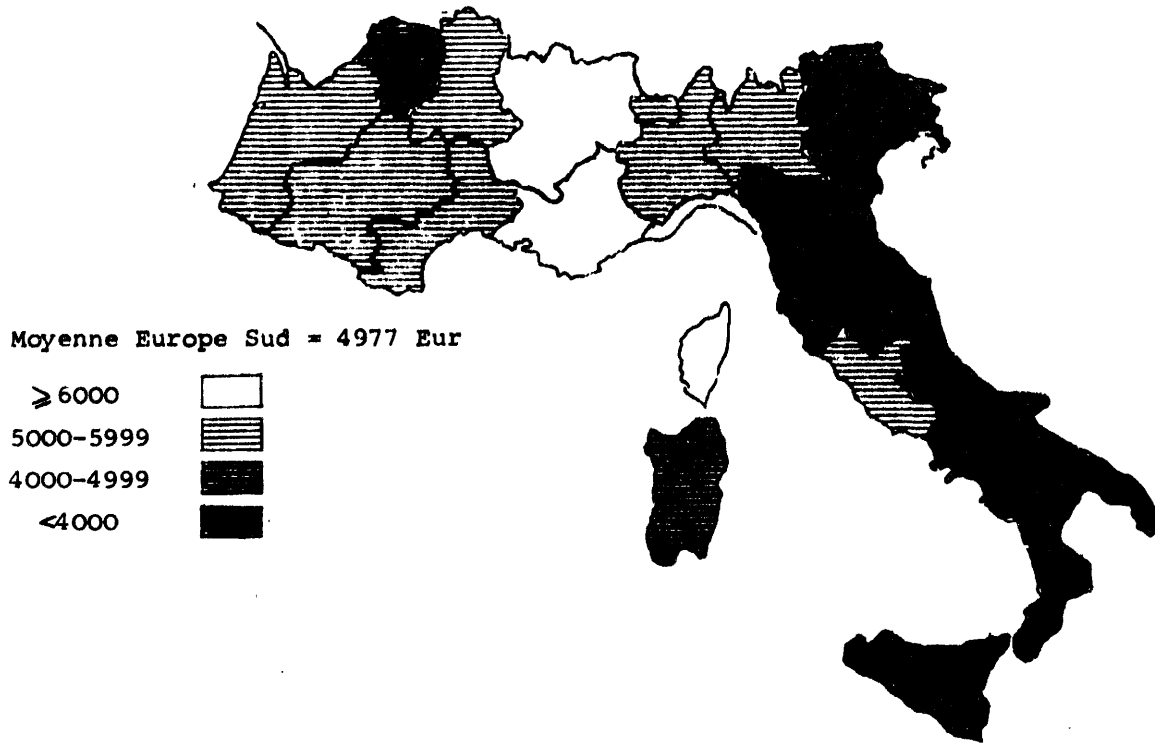
Régions du Nord d'Italie :

9. Valle d'Aosta
10. Piemonte
11. Lombardia
12. Trentino-Alto Adige
13. Veneto
14. Friuli-Venezia Giulia
15. Emilia-Romagna

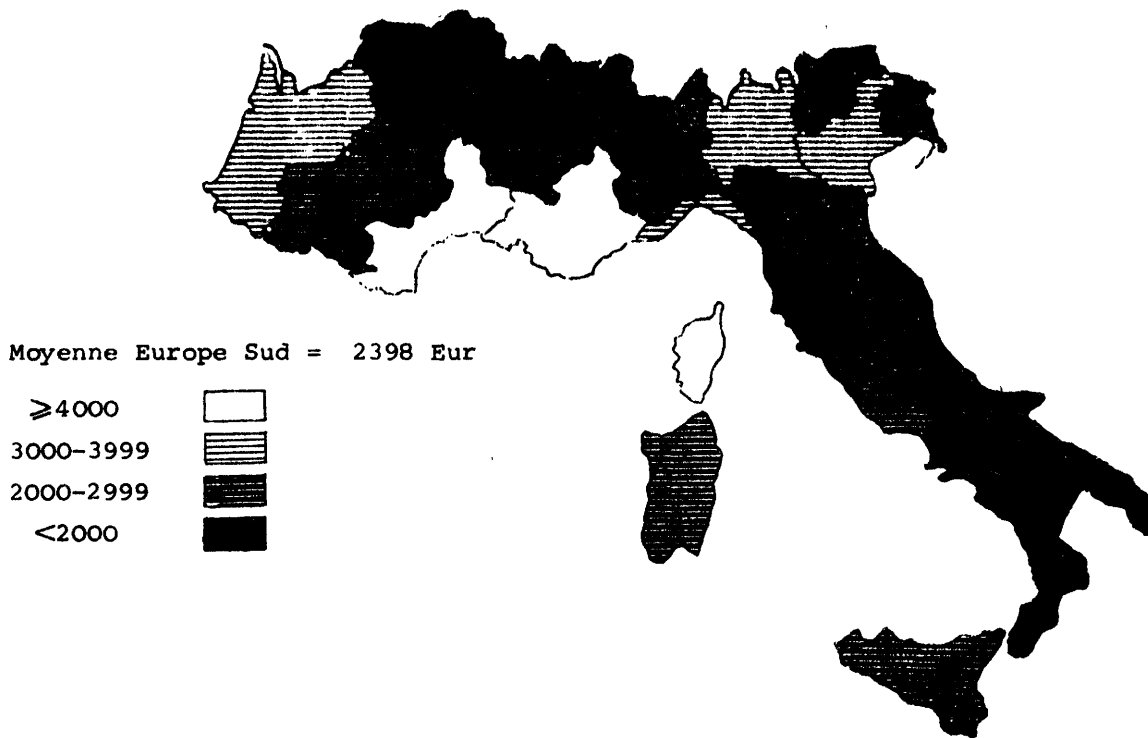
Régions méditerranéennes italiennes :

16. Liguria
17. Toscana
18. Umbria
19. Marche
20. Lazio
21. Abruzzi
22. Molise
23. Campania
24. Puglia
25. Basilicata
26. Calabria
27. Sicilia
28. Sardegna

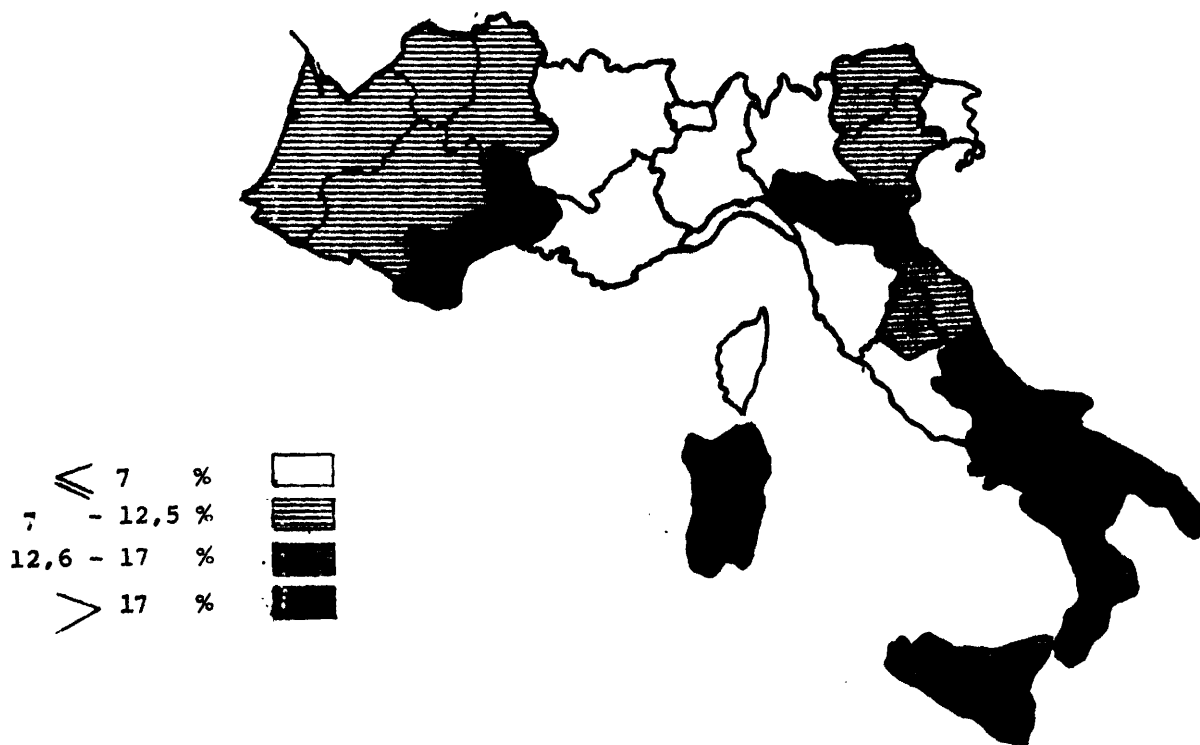
Valeur Ajoutée Brute aux Prix de Marché par Actif 1970



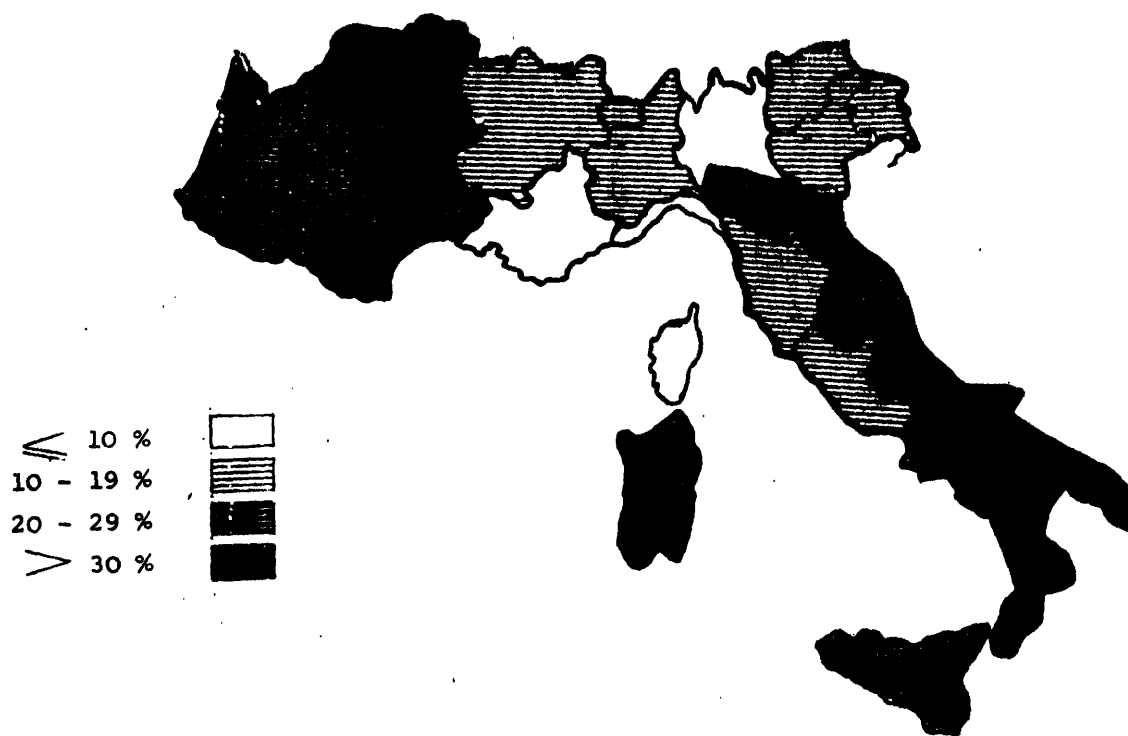
Valeur Ajoutée Brute aux Prix de Marché de l'Agriculture par Actif 1970



Part de l'agriculture dans la Valeur Ajoutée 1970

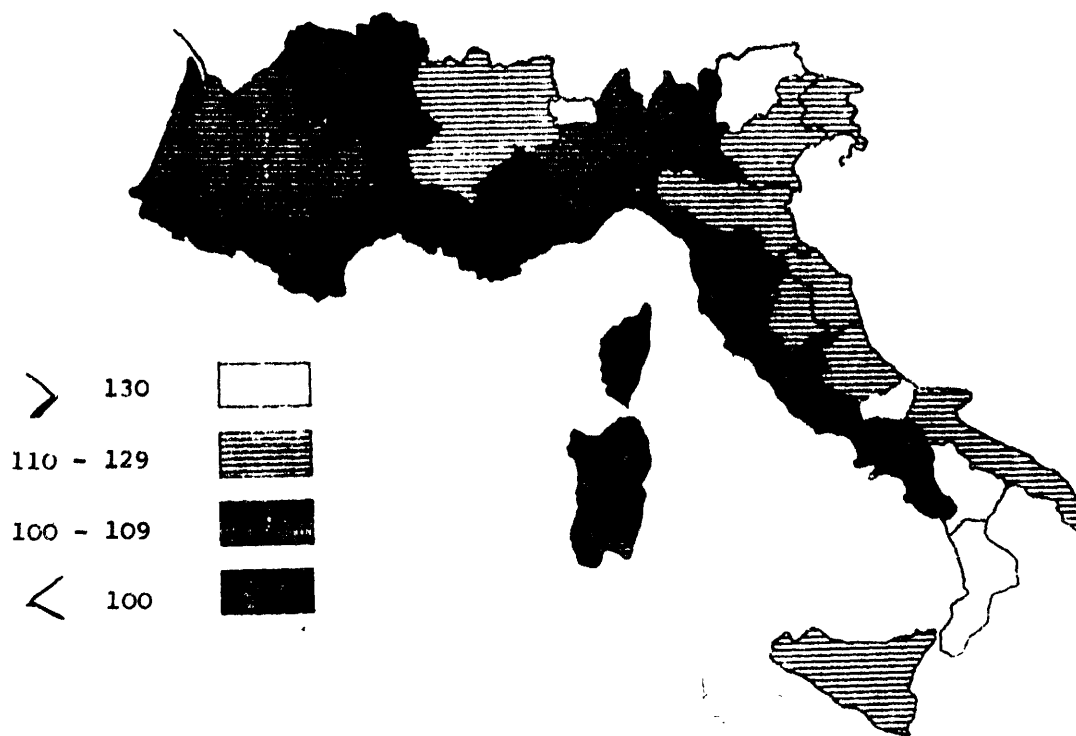


Part de l'agriculture dans l'emploi 1970

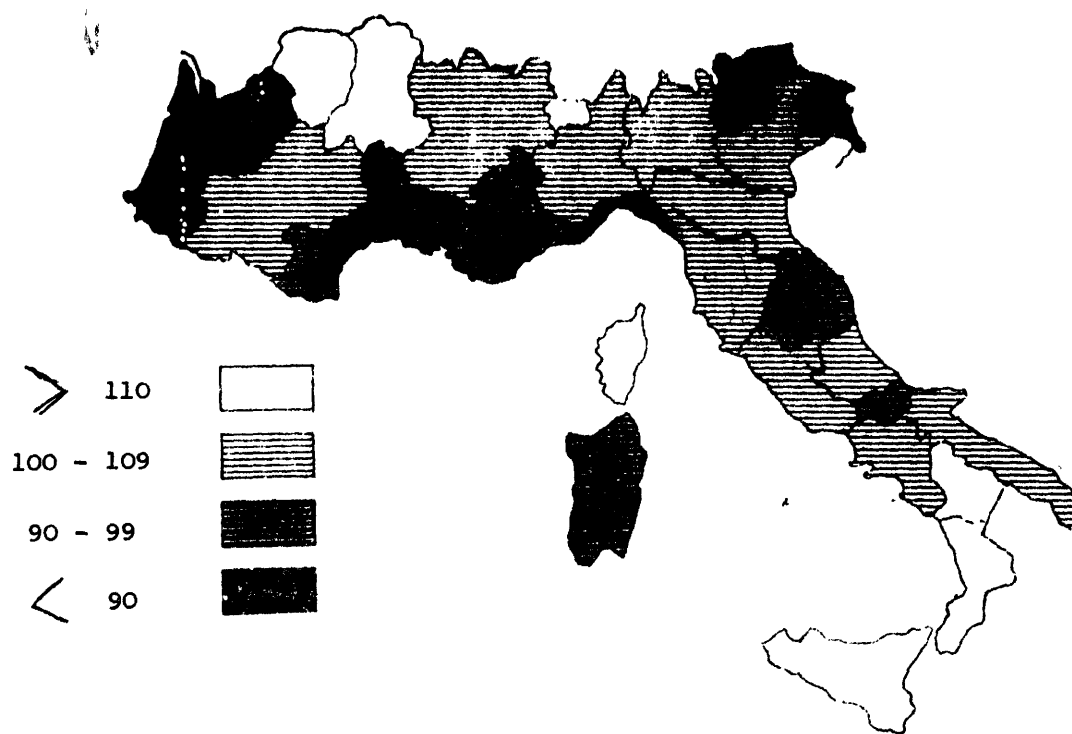




Croissance de la valeur ajoutée brute en volume 1970-75

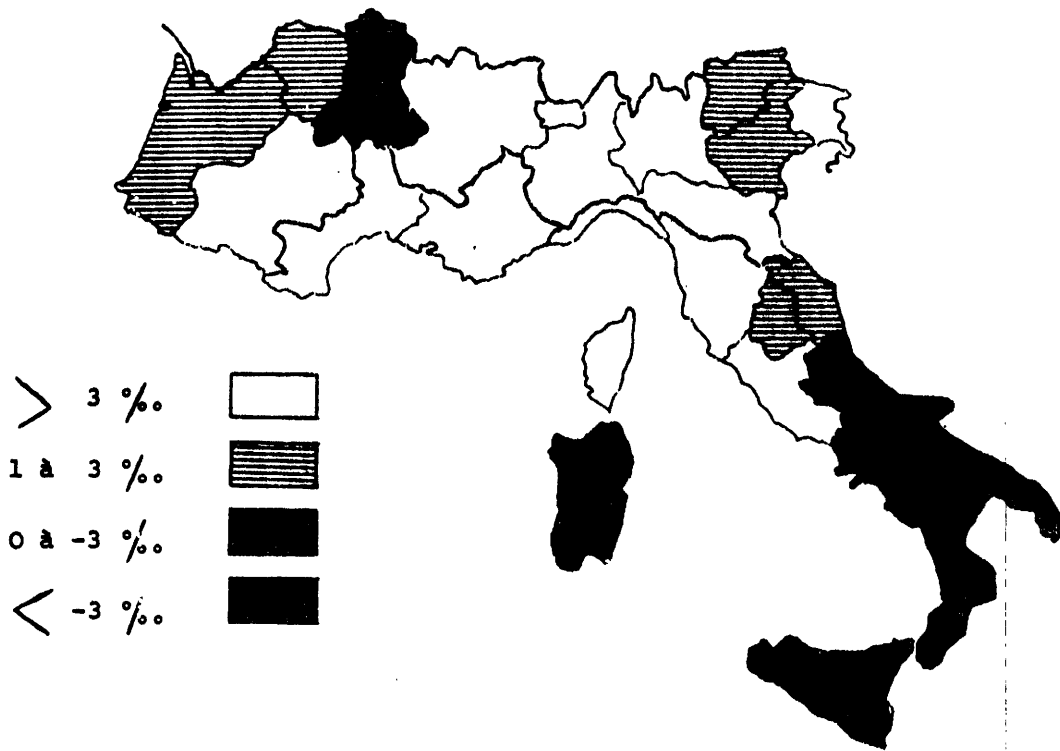


Croissance de la valeur ajoutée brute de l'agriculture en volume 1970-75

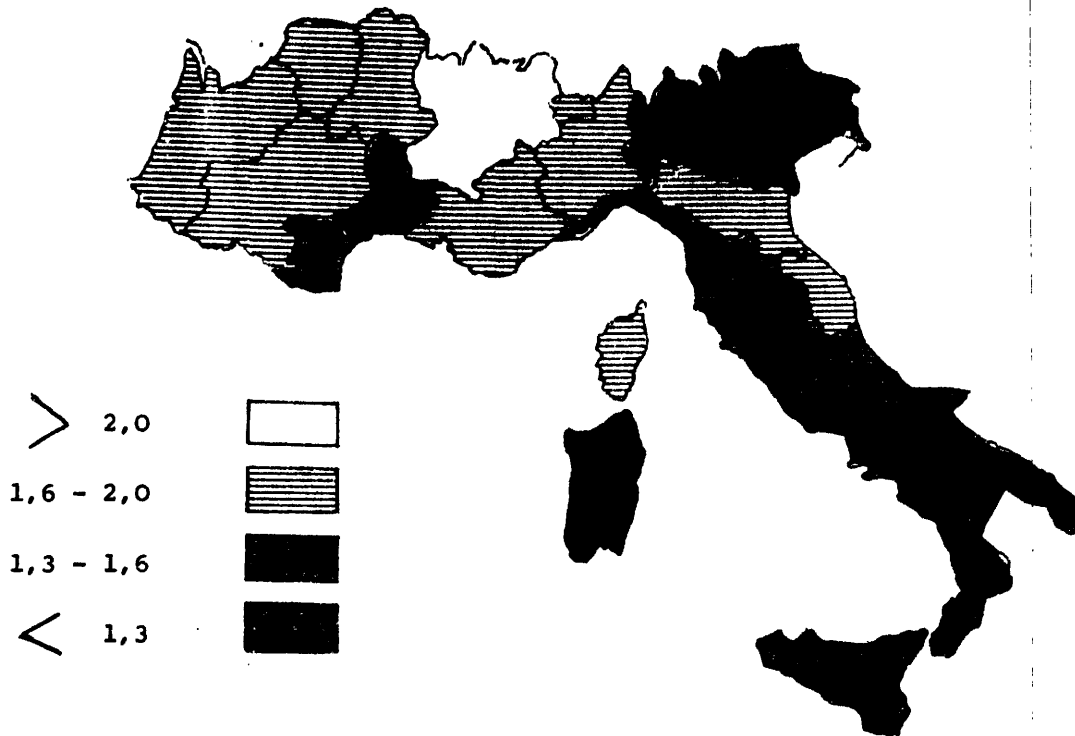


Carte n° 3

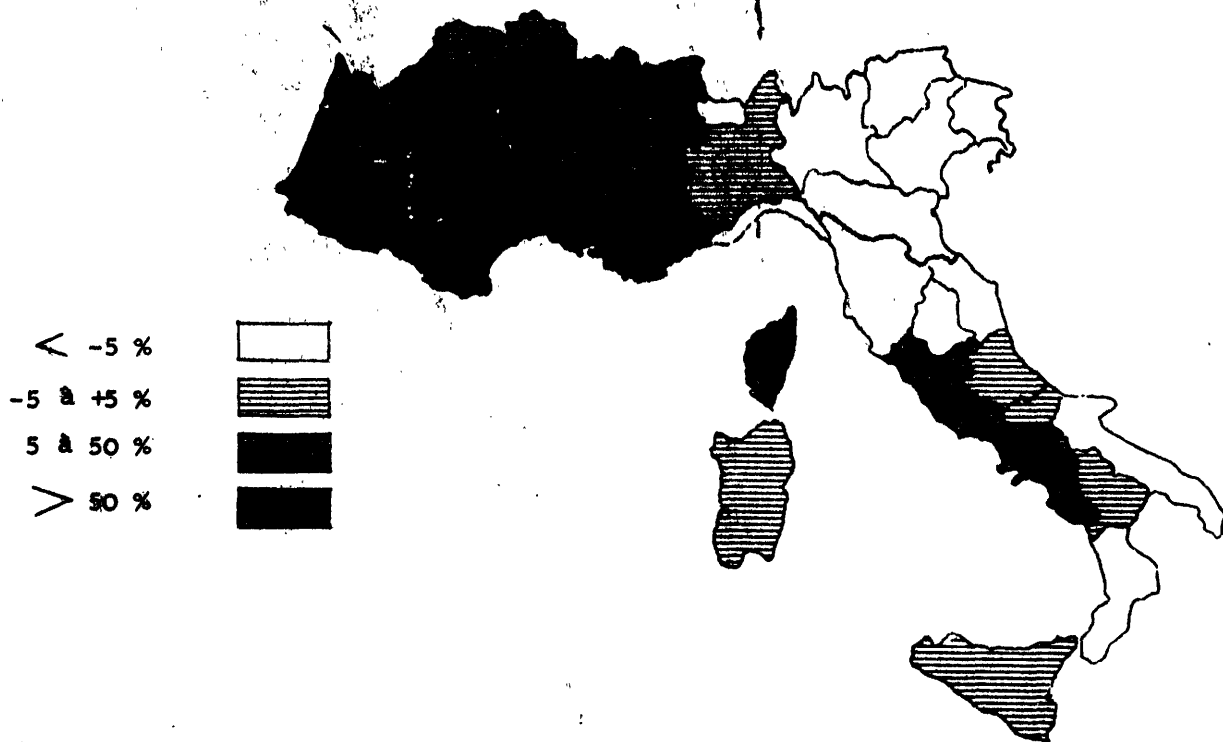
Solde migratoire de 1970 à 1975



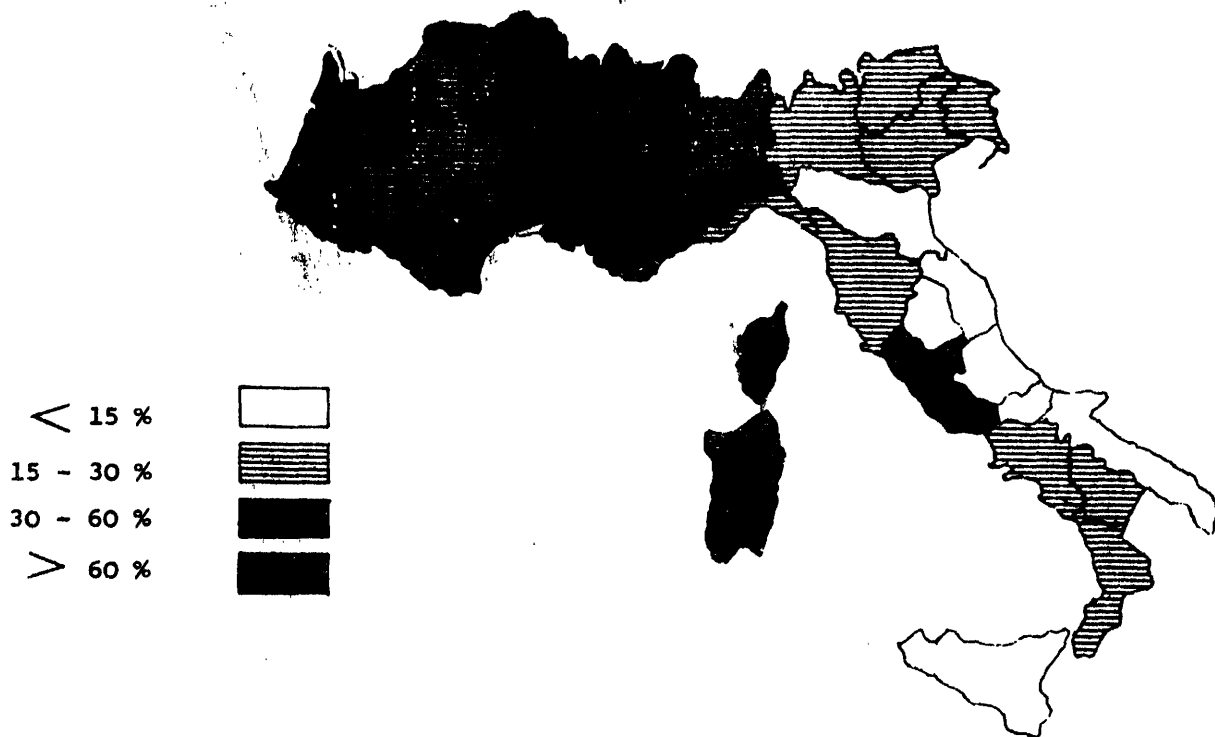
Personnes inactives à la charge d'un actif (1975)



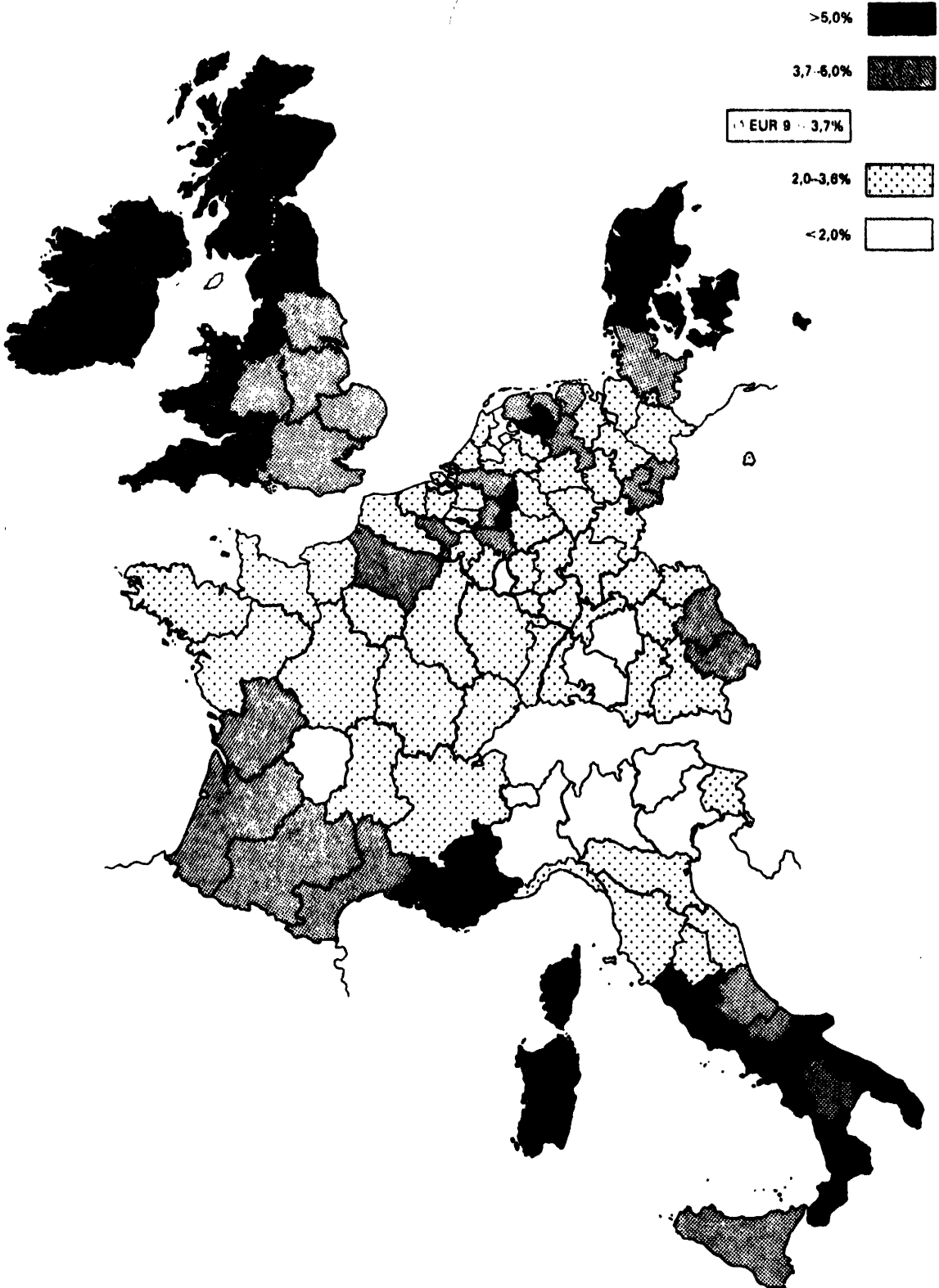
Augmentation du Chômage entre 1972 et 1974



Augmentation du Chômage entre 1974 et 1976

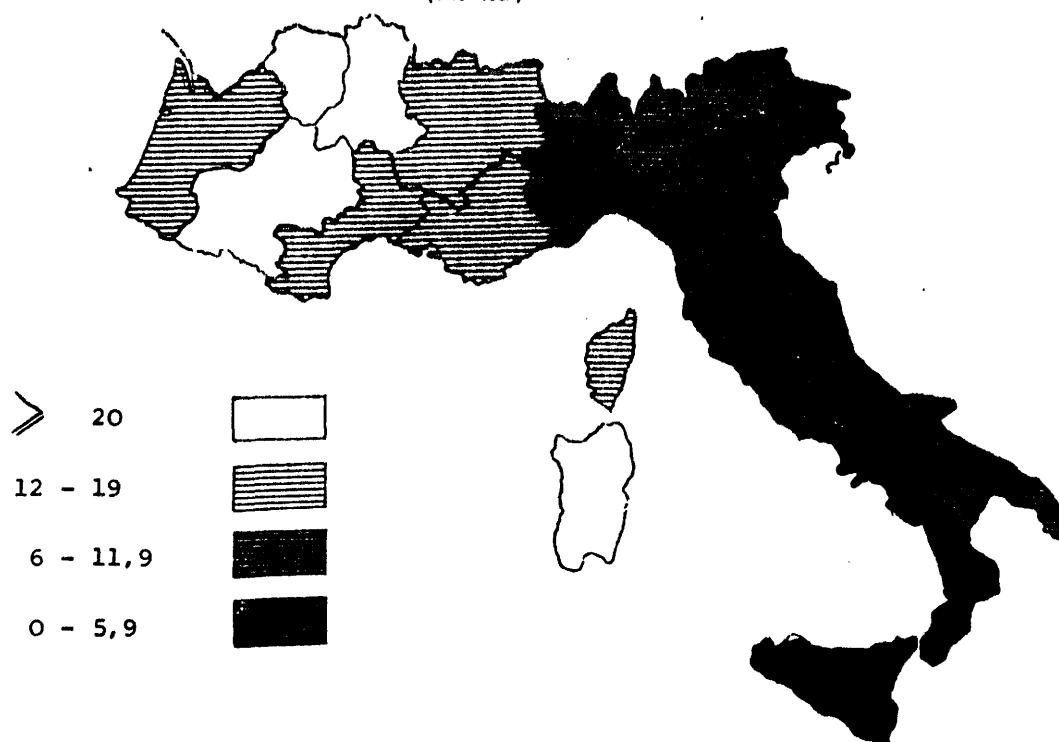


Chômage 1975

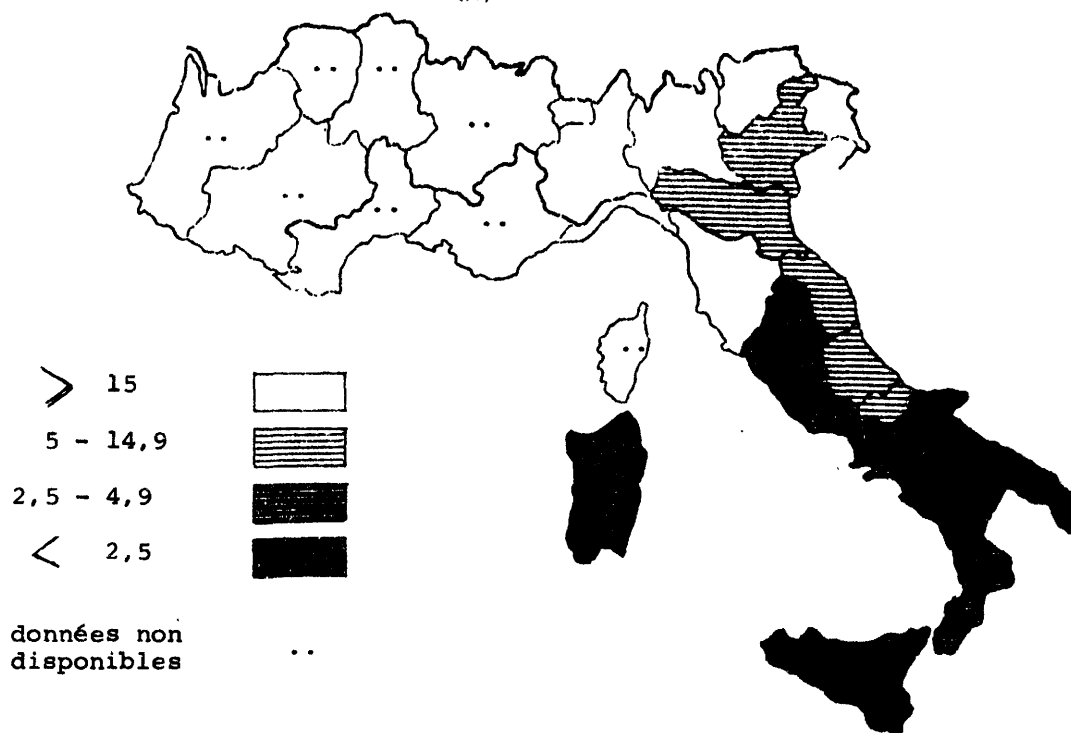


Carte n° 6

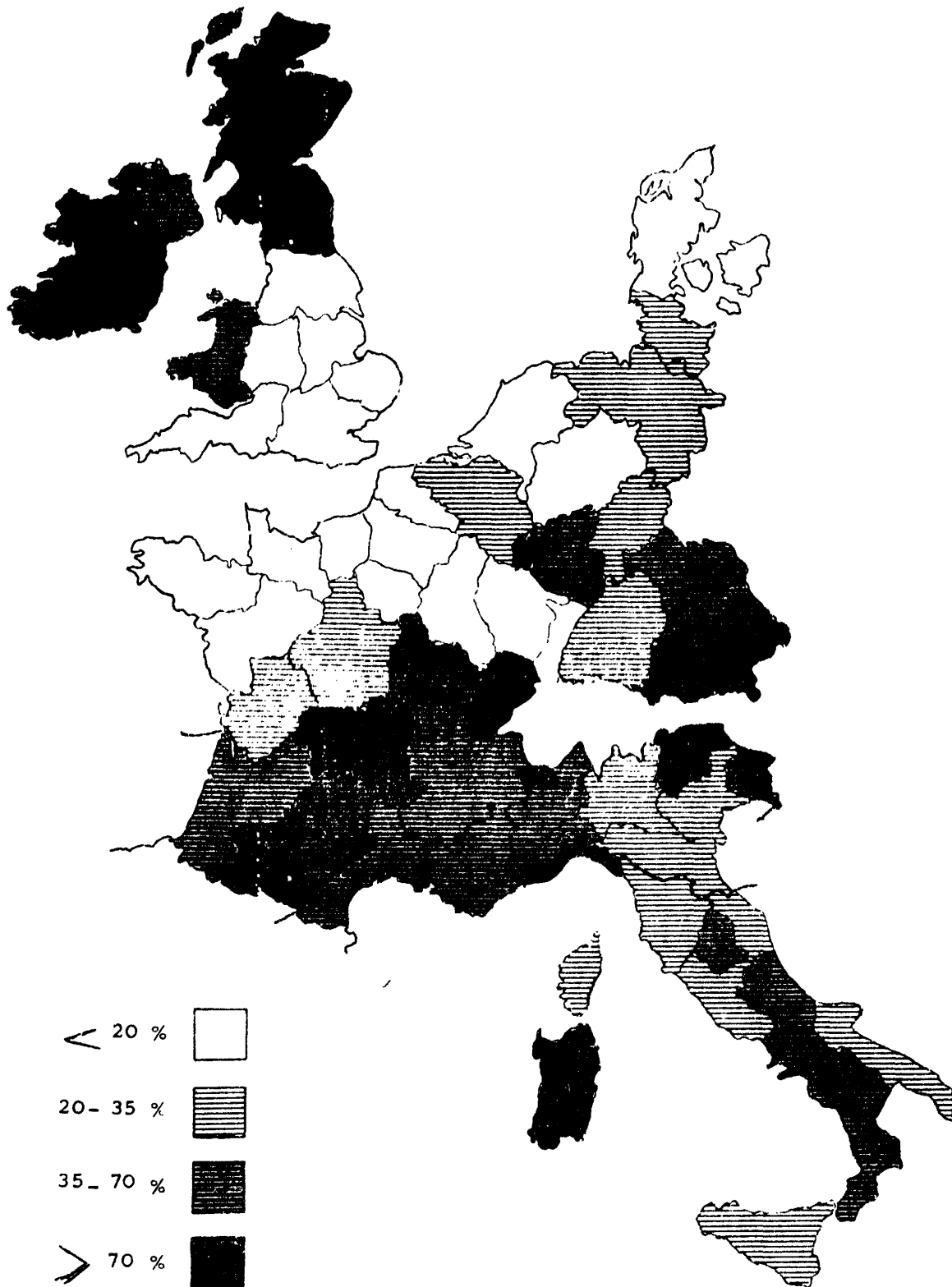
Superficie moyenne des exploitations de 1 ha SAU et plus 1970  
(en ha)



Augmentation de la taille moyenne des exploitations de 1 ha SAU  
et plus 1970-1975  
(%)

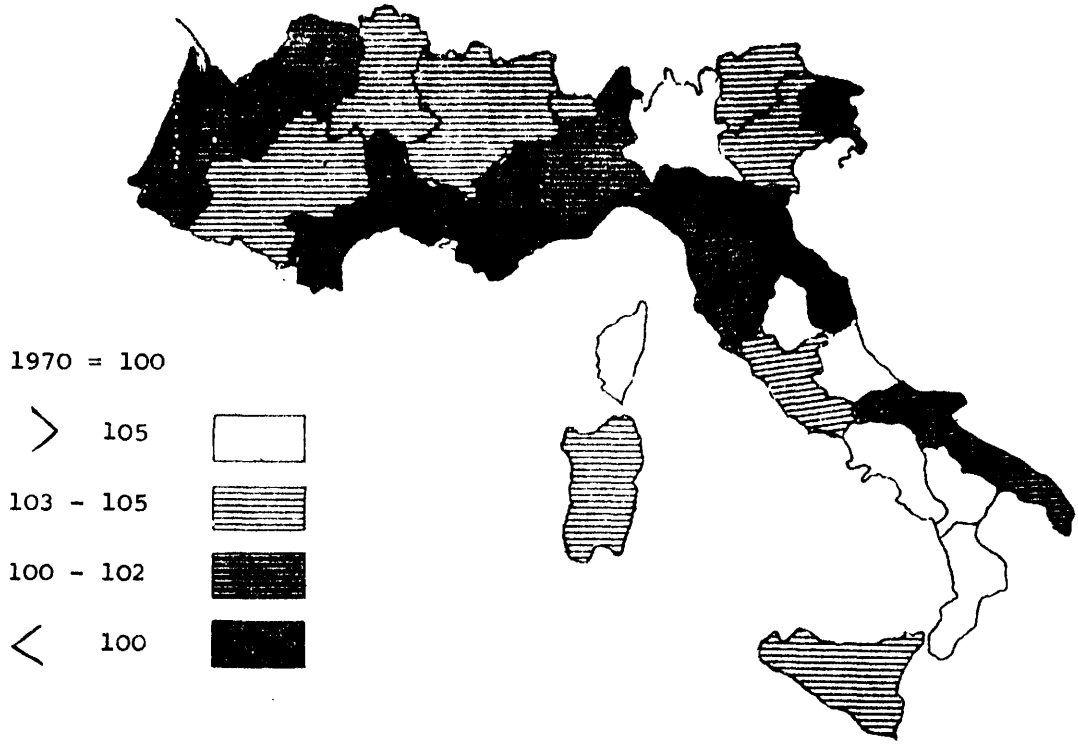


IMPORTANCE DES ZONES DEFAVORISEES

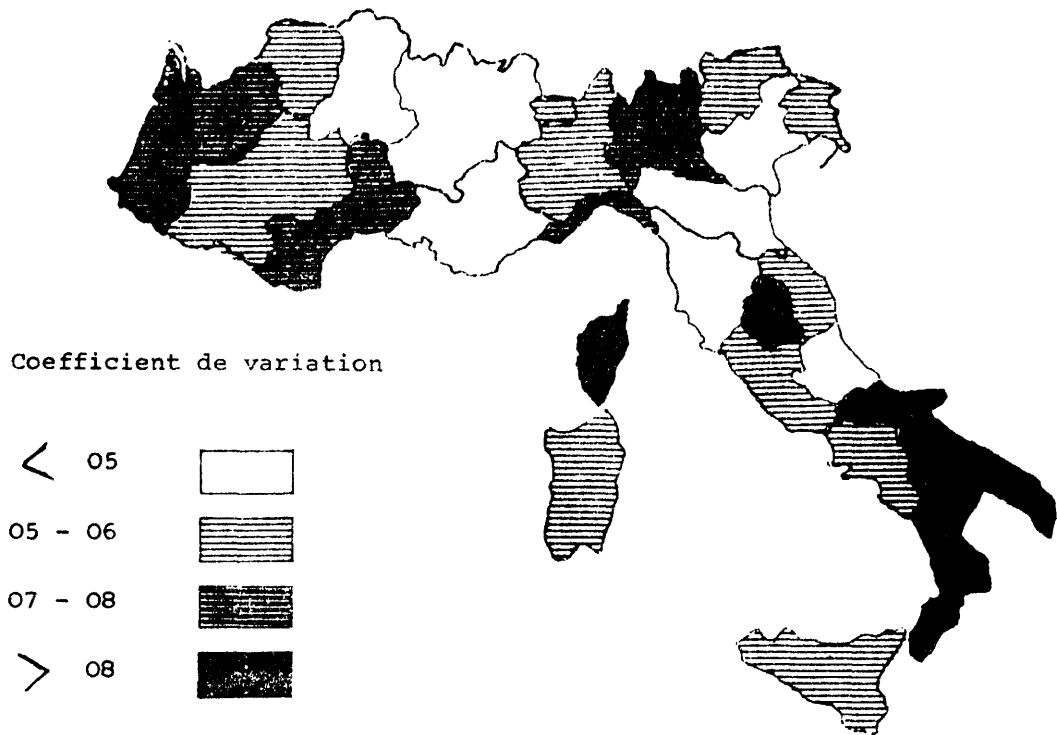


Carte n° 8

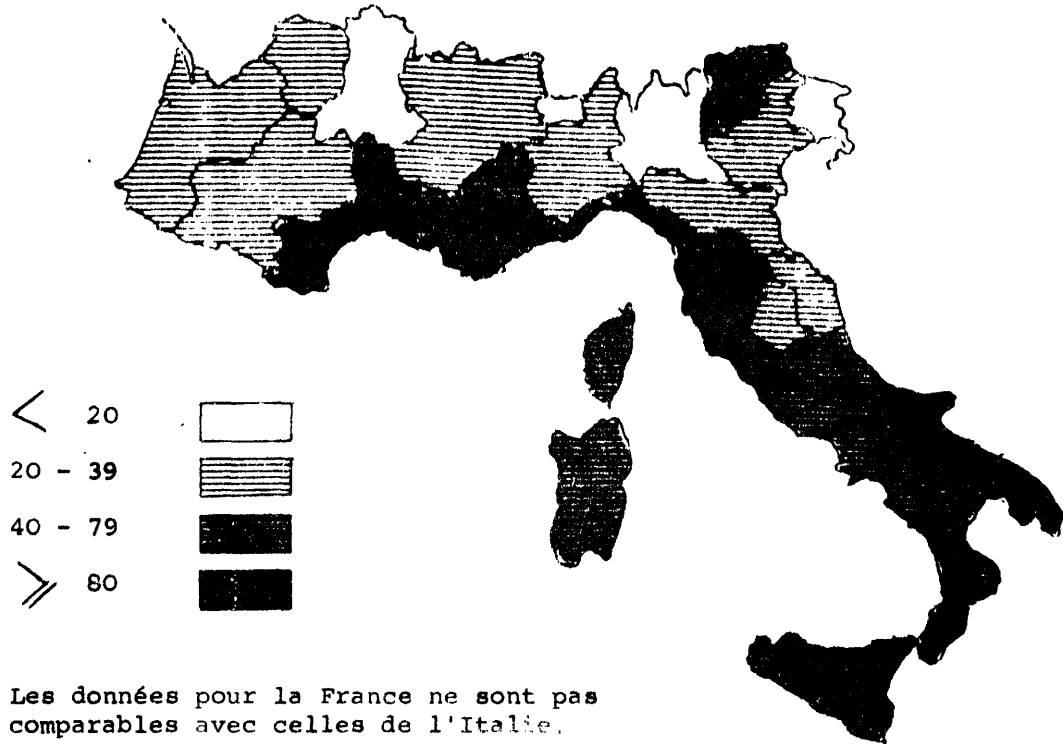
Production moyenne 1970-75  
(en volume)



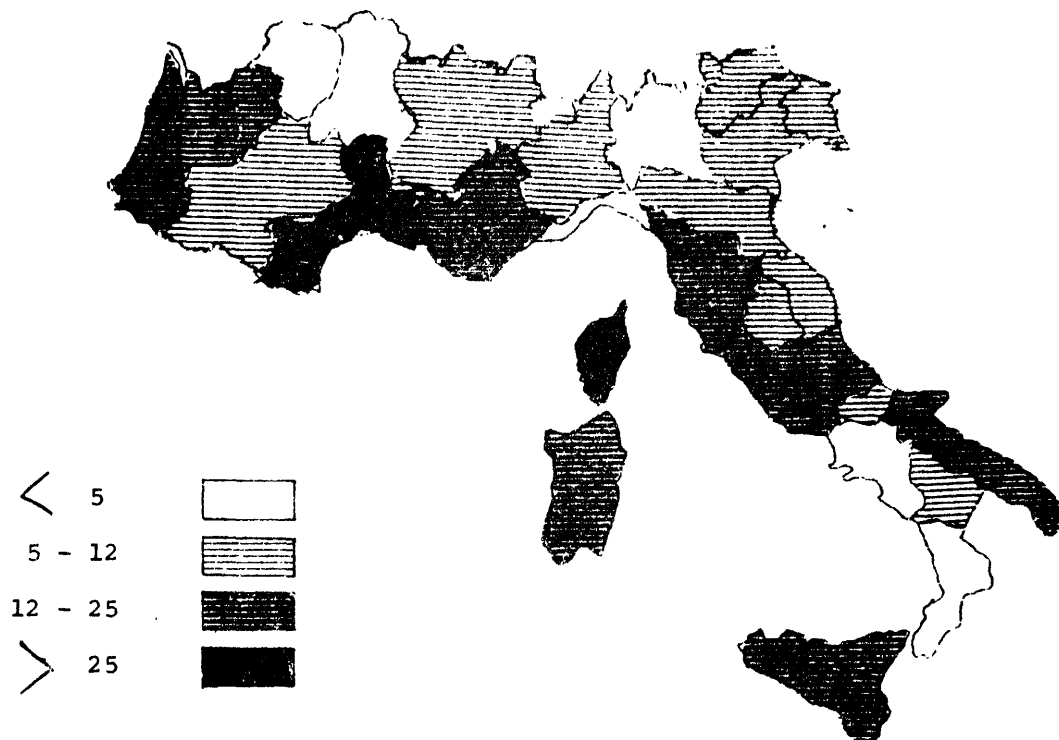
Instabilité de la Production 1970-75  
(en volume)



Productions méridionales en % de la Production totale 1975

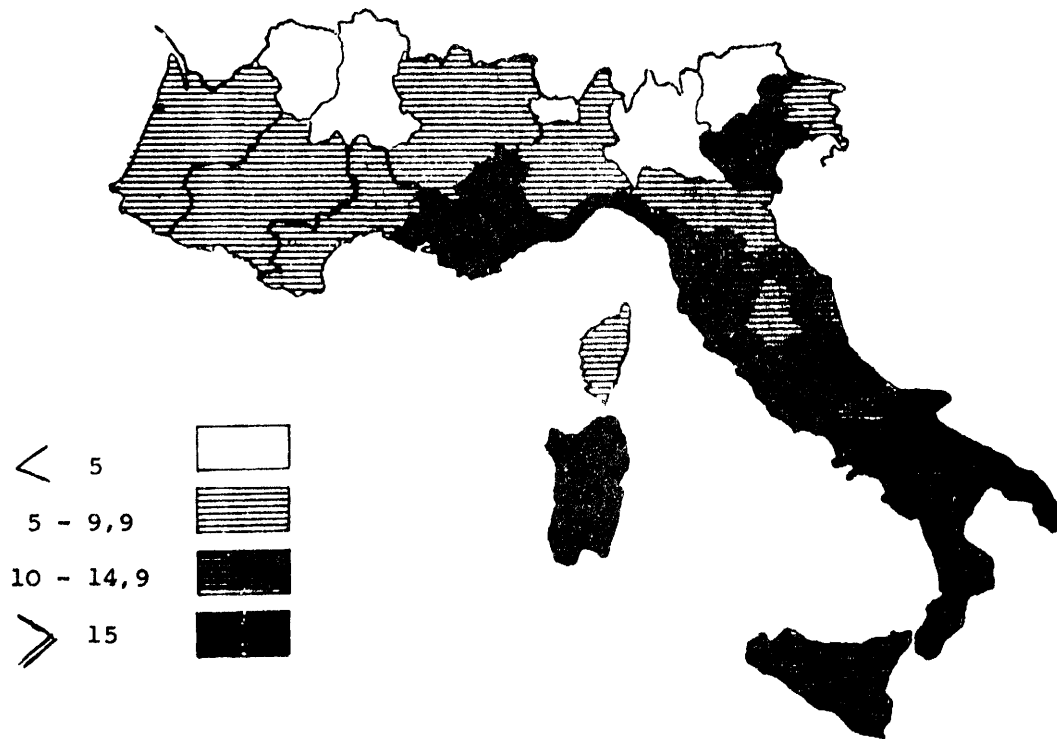


Production viticole en % de la Production totale 1975

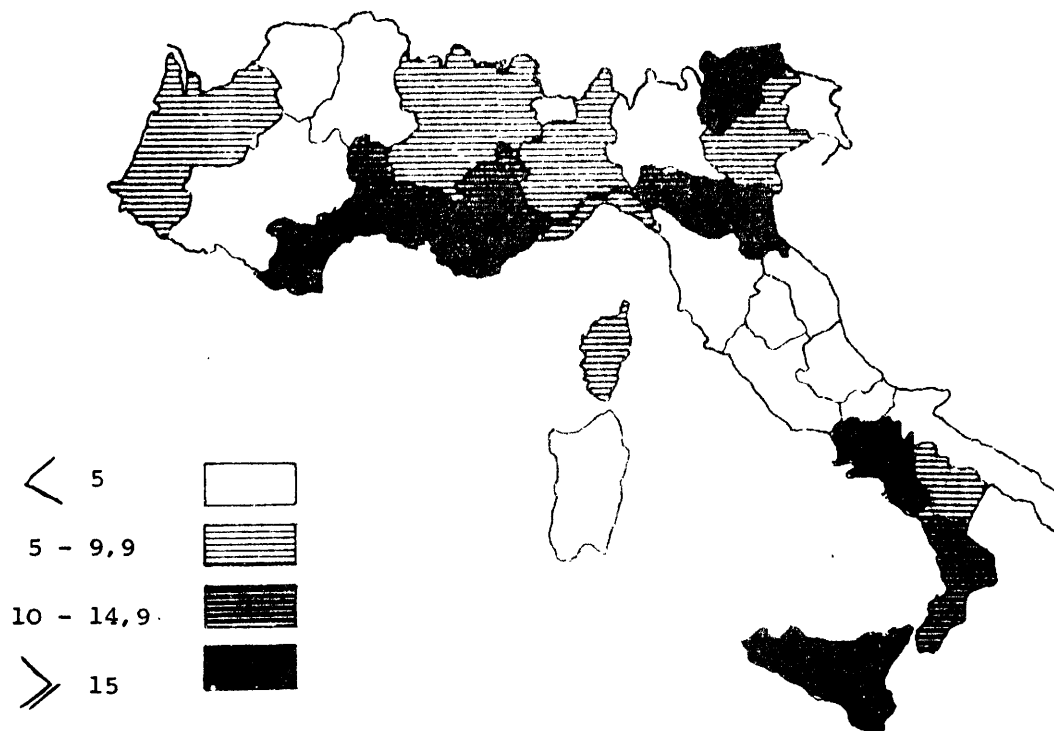




Production de légumes en % de la Production totale 1975

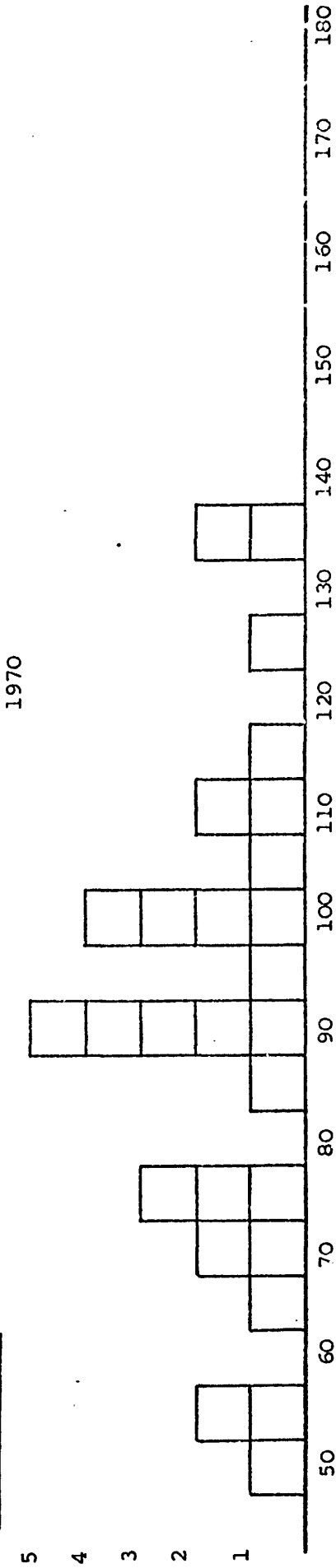


Production de fruits en % de la Production totale 1975



Indice de dispersion de la Valeur Ajoutée Brute aux prix du marché par actif

Graphique n° 1

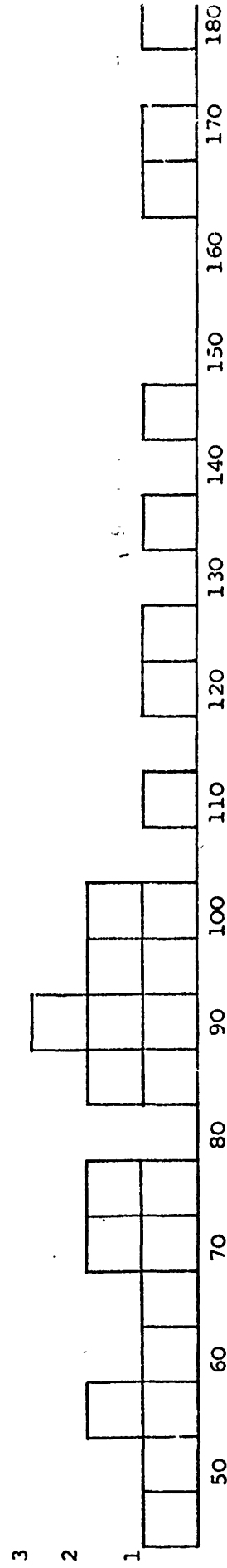


Nombre de régions

Indice régional de la Valeur Ajoutée par actif

Moyenne Europe Sud = 100 = 4977 Eur

Indice de dispersion de la Valeur Ajoutée Brute aux prix de marché par actif dans l'agriculture 1970



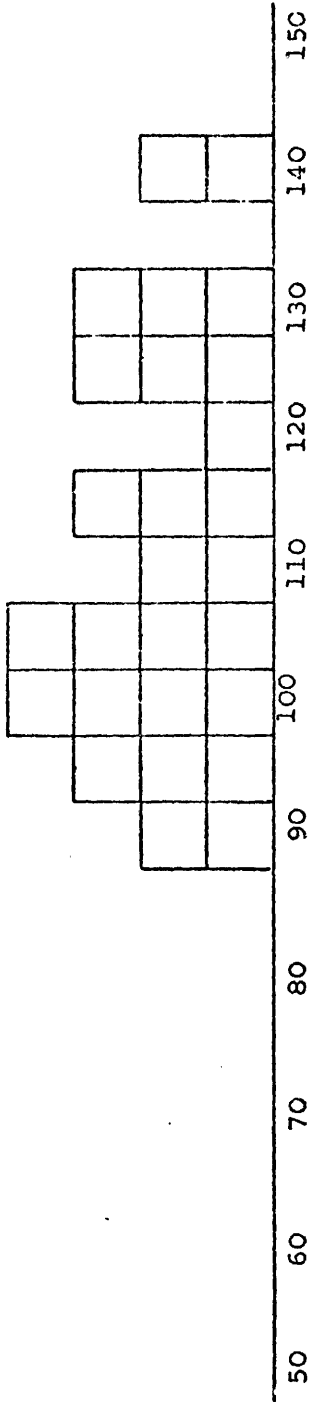
Indice régional de la Valeur Ajoutée par actif dans l'agriculture

Moyenne Europe Sud = 100 = 2398 Eur

N.B. Chaque case représente une région

Indice de dispersion de la croissance de la valeur ajoutée brute 1970-1975

1970 = 100



Indice de dispersion de la croissance de la valeur ajoutée brute de l'agriculture 1970-1975

1970 = 100

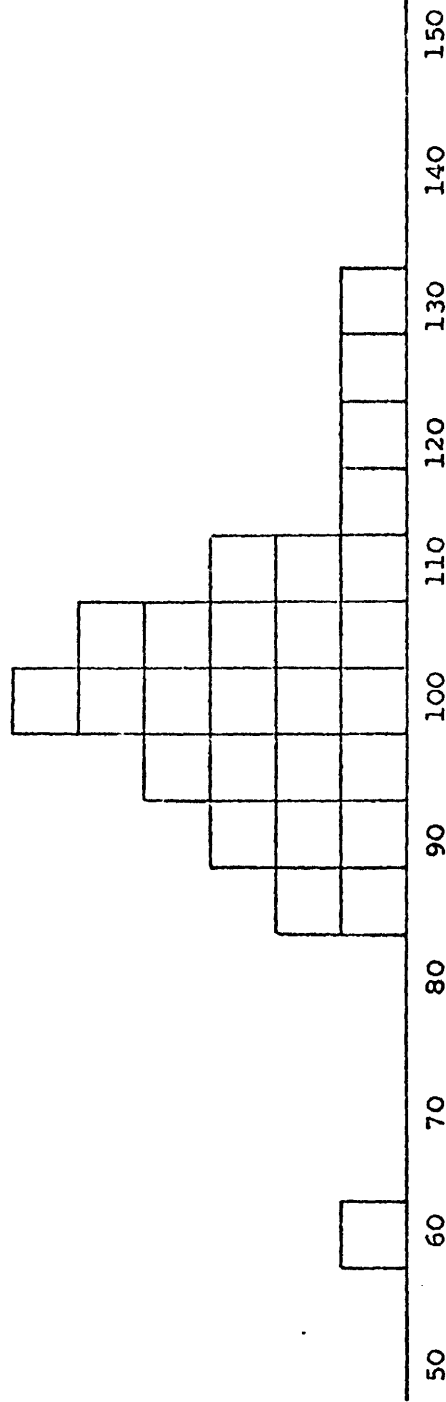


Table 1

FINAL PRODUCTION OF AGRICULTURE

1970 = 100

	<u>VOLUME</u>						<u>PRICES</u>					
	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
FRANCE	100	103.8	107.2	116.0	115.7	110.0	100	104.4	120.1	136.4	143.3	154.7
ITALY	100	101.4	96.6	104.0	106.2	108.9	100	103.4	111.6	137.2	165.1	191.4

INTERMEDIATE CONSUMPTION

FRANCE	100	108.3	117.9	131.0	130.8	125.2	100	105.0	110.0	127.0	166.1	175.7
ITALY	100	104.2	105.7	116.9	119.3	121.9	100	111.6	118.9	134.0	188.0	216.5

Source: Eurostat Agricultural Accounts

Table 2

## VITICULTURE

	5-10 ha			< 5 ha
	Rhône-Alpes	Languedoc Provence-Côte d'Azur Corse	Veneto Trentino Friuli	Toscana  Campania Catalona Molise
In EUA	2917	1212	2137	1397
Gross product/ha	1238	774	1108	418
Cost/ha	3864	1412	2336	1923
Gross production/unit	6862	3426	4231	967
Labour income	6344	3167	5121	1170

	10-20 ha		
In EUA	1426	1966	900
Gross product/ha	1005	787	468
Costs/ha	1514	2467	1005
Gross production/unit	4546	7760	2500
Labour income	4201	9369	3018



Table 4

H O R T I C U L T U R E

	< 5 ha					
	Languedoc Provence-Côte d'Azur Corse	Veneto Trentino Friuli	Liguria	Campania Calabria Molise		
In EUA						
Gross product/ha	26874	3322	6596	5020		
Costs/ha	20670	1487	2301	2116		
Gross production/unit	41280	7281	14005	4191		
Labour income	6924	2951	3747	2279		
In EURPA						
Labour income	6401	3572	4535	2758		

Table 5

VALUE ADDED IN THE AGRI-FOODSTUFFS INDUSTRY AS A PERCENTAGE OF  
AGRICULTURAL VALUE ADDED IN 1970

<u>COUNTRY</u>									
UK	336	Germany	165	Belgium	139	Netherlands	97	Luxembourg	80
		France	61			Italy	51		

REGIONS WITH A STRONG AGRI-FOODSTUFFS INDUSTRY (> 75% of agricultural GVA)

Lombardia	110	Rhône-Alpes	94
Provence-Côte d'Azur	102	Lazio	77

REGIONS WITH A MEDIUM-SIZED AGRI-FOODSTUFFS INDUSTRY (50-75% of agricultural GVA)

Liguria	69	Piemonte	66	Emilia-Romagna	58
Trentino-Alto Adige	67	Friuli-Venezia Giulia	66	Valle d'Aosta	52
		Toscana	64		

REGIONS WITH A SMALL AGRI-FOODSTUFFS INDUSTRY (25-50% of agricultural GVA)

Umbria	49	Auvergne	38	Midi-Pyrénées	33	Abruzzi	29
Campania	43	Marche	36	Languedoc-Roussillon	31	Sicilia	27
Veneto	41	Aquitaine	35	Limousin	30	Puglia	27

REGIONS WITH A VERY SMALL AGRI-FOODSTUFFS INDUSTRY (> 25% of agricultural GVA)

Sardegna	21	Basilicata	18
Calabria	20	Molise	13