The importance of fishing activities in the economy of a periphrical region, the case of andalucia

Report presented by the INSTITUTE FOR REGIONAL DEVELOPMENT, Seville (Spain)

Authors:
OSUNA LLANEZA, J.L.
CUERDA GARCIA - JUNCEDA, J.C.
VELAZQUEZ ALONSO, E.
BUENO SUAREZ, C.
GRÂVALOS GARCIA, E.

Les problèmes d'une économie pêcheuse dans une région périphérique.

AUTEUR PRINCIPAL:	OSUNA LLANEZA, JOSÉ LUIS;
CO-AUTERS:	CUERDA GARCIA - JUNCEDA, JOSÉ CARLOS; VELAZQUEZ ALONSO, ESTHER; BUENO SUÀREZ, CARLOS; GRAVALOS GARCIA, ESTHER.
AFFILIATION:	INSTITUTO DE DESARROLLO REGIONAL (INSTITUT DU DÉVELOPPEMENT RÉGIONAL)
ADRESSE:	AVENIDA DE RAMÔN Y CAJAL 35; E-41005 SEVILLE (ESPAGNE).
TÉL.	**+34-5-465.49.11**
FAX.	**+34-5-465.81.57**

Résumé

Le future du secteur de la pêche en Andalousie doit être analysé dans le contexte d'une stratégie de développement régional liée a une économie de plus en plus mondialisée.

l'union européenne, d'où l'Andalousie en fait partie, veut-elle être productrice de poisson, ou bien, exclusivement une commerçante des produits pêcheurs? la question est peut-être rhétorique, mais elle doit être présente dans toutes les réflexions en ce qui concerne le secteur de la pêche d'Andalousie.

les chiffres disponibles indiquent que le secteur de la pêche d'Andalousie, comme dans d'autres régions d'Europe, traverse actuellement une situation difficile. le scénario prospectif le plus probable est caractérisée par des difficultés d'accès aux ressources. d'autre part la valeur réelle des captures est fortement descendue à la suite du procès de libéralisation et internationalisation que nous vivons actuellement.

sans doute, dans ce difficile contexte, l'activité pêcheuse reste toujours un des composants centraux de l'économie du littoral d'Andalousie, tant en ce qui concerne la valeur de la production comme celui de l'emploi. en effet, d'une part la dimension et l'organisation de cette activité devra s'adapter a la nouvelle fonction d'Andalousie dans l'économie internationale. probablement l'avenir de quelques zones du littoral andaloucontinuara à dépendre du secteur pêcheur. définir quelles seront cette zones, c'est la première chose à faire. cela est stratégiquement nécessaire, pour affronter les problèmes du secteur pêcheur dans un futur. ceci devra se faire à l'aide d'une planification intégrée où la politique sociale devra jouer un rôle primordial en collaboration avec les politiques de ressources, de structure et du marché. un autre

aspect important pour que ce procès se développe sans problème majeur est une bonne intégration des acteurs clef comme le consensus politique, les secteurs sociaux, les entreprises affectées et la dotation budgétaire qui est nécessaire pour affronter ce problème.

Contents

I. Economic importance 0f fishing activities in andalucia

Following a structural analysis, the study on the situation of the andalusian fishing sector starts with general issues and goes onto particular ones, making an inventory of the most significant elements by which fishing activities are integrated into the andalusian productive structure, and identifying the relations underlying between them. So, first of ail, we will analyse the importance of fishing in and for the andalusian economy1[1], and then, the evolution of the elements of fishing itself; both referring to productive structure and to activities connecting with the industrial sector. The joining together of both study levels will determine the bottlenecks and trends that define, outline and condition the general scope of indicative interventions that will become necessary to undertake the modernisation of the fishing sector in the middle and long term.

The first analysis , following the sectorial and provincial distribution and its evolution over the last fifteen years, brings out --synchronically and diachronically-- the importance of fishing in the scope of the transformations undergone by the regional productive structure. The second one will show the vertebration of fishing activities in the andalusian economy and their pulling capacity.

Thus, the yuxtaposiyion of both approaches will facilitate a contrasted vision of the economic signification of fishing in the scope of regional economy and its contribution to the Spanish economy.

I.1. Contribution of fishing to production and employment in Andalucia

Most recent available data (BBV, 1995) show that in 1991 andalusian fishing activities generated 19.171 jobs and a production of52.251 million pesetas.

TABLE I

Distribution of production and employment 'n andalusian fisheries (1991) (Million pesetas and employees respectively)

	VAB	**EMPLEO**
REGION SURATLANTICA	4.0754	14.332
REGION SURMEDITERRANEA	11.497	4.839
ANDALUCIA	52.251	19.171

Source: Adapted from “Renta National de Espana y su distribution provincial. 1991”. BBV, Madrid, 1995.

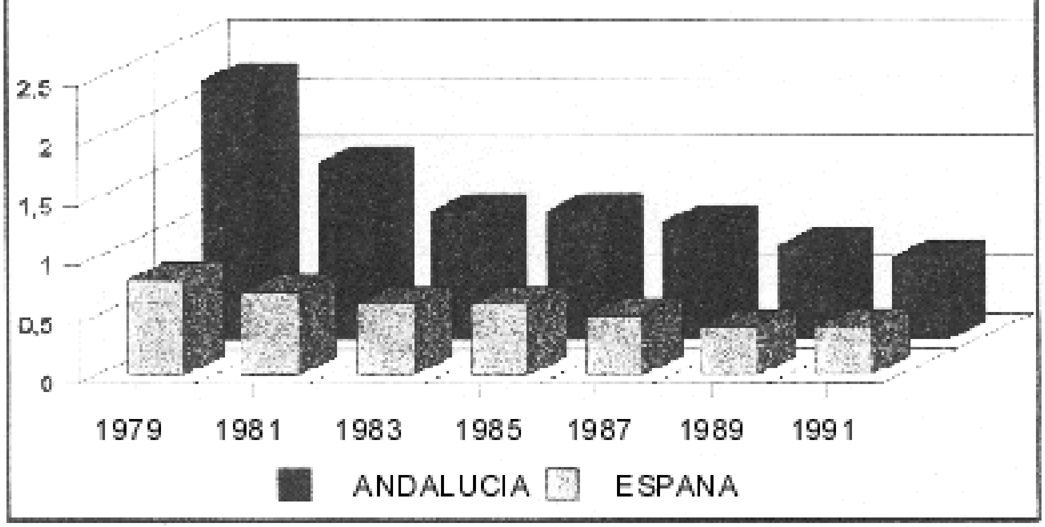
From the evolution of the sectorial distribution 0f production and employment in Andalucia over the last fifteen years, we should point up the constant process of tertiarization of the andalusian economy, the consolidation of the still weak industrial sector and the decrease of the primary sector both in terms of GVA and employment.

Fishing activities in Andalucia evolve following these general patterns. Thus, the decreasing trend that started in the first half of the eighties with the new scene of international agreements, and the rise of costs due to the increase of *inputs* such as energy prices, labour costs service costs, etc.

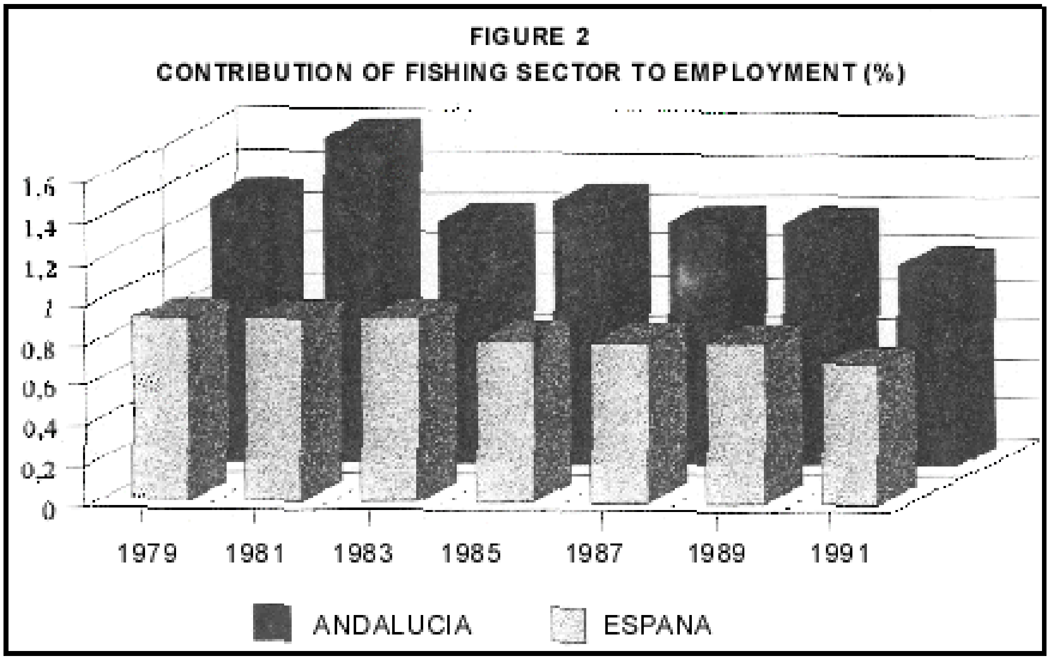
However, the persistence and importance of the fail in the contribution to the regional GAV and employment, makes us think that the external factors noted before were just the trigger of a crisis in the sector, who se roots lie in internal factors, and therefore it wolf have to be labelled as a structural one. In fact, andalusian fishing looses 1,5% of its contribution to the regional GAV (more than 68% over the last fifteen years) and just 0,3% of its contribution to employment. This different behaviour shows the importance of fishing activities as a shelter for employment rather than a GAV generating one. Within this context, it is also significant that the andalusian fishing surpasses the Spanish fishing sector in its relative contribution to employment by 75%. The figure is even more important if we consider that the andalusian economy suffers an unemployment rate which is ten points higher than the Spanish one.

FIGURE 1

CONTRIBUTION OF THE FISHING SECTOR TO PRODUCTION (%)



Source : Own, adapted from "Rental Nacional de Esapna y su distribucion provincial" (1979-1991). BBV, Madrid



Source : Own, adapted from "Rental Nacional de Esapna y sus provincias" (1979-1991). BBV, Madrid

Fishing represents in Andalucia an activity with a scanty specific gravity regarding to variables such as GAV, Intermediate Consumption, Foreign Trade, Employment, etc. Its relevance lies more in its deep social rooting rather than in its quantitative importance as compared to the andalusian economy as a whole2[2]

Chart II
Contribution 0f the fishing sector to andalusian economy (1990)(million pesetas)

	FISHING	**ALL ACTIVITIES**
ECONOMIC MAGNITUDES		
INTERMEDIATE CONSSUMPTION	38.314	5.098.135
GVA mp	50.505	5.841.639
EFFECTIVE PRODUCTION	8.819	10.939.774
EMPLOYMENT	49.512	4.403.814
EMPLOYMENT STRUCTURE	**49.512**	**4.403.814**
EMPLOYEES	17.601	1.203.544
WAGE COSTS	31.911	3.200.270

SECTORIAL STRUCTURE OF GVAcf WAGES AND SALARIES SOCIAL SECCURITY GROSS OPERATION SURPLUS	**29.673** 6.508 5.403 17.762	5.710.529 2.586.918 613.352 2.510.259
STRUCTURE OF GDP mp GVA mp VAT	**54.865** 50.505 4.360	**6.254.242** 5.841.639 412.603
IMPORTS FROM REST OF SPAIN FROM EUROPEAN UNION FROM REST OF THE WORLD	**43.761** 39.937 1.756 2.608	**3.484.213** 2.875.591 216.494 392.128
EXPORTS FROM REST OF SPAIN FROM EUROPEAN UNION FROM REST OF THE WORLD	**26.575** 23.233 1.740 1.602	**2.089.998** 1.479.031 361.353 249.614

Source: Tables Input-output, Institute de Estadistica de Andalucia (I.E.A), 1994

Chart III
Contribution of fishing to andalusian economy (1990)(percentages)

	% FISHING / TOTAL
ECONOMIC MAGNITUDES INTERMEDIATE CONSSUMPTION GVA mp EFFECTIVE PRODUCTION EMPLOYMENT	 0.75 0.86 0.81 1.11
EMPLOYMENT STRUCTURE EMPLOYEES WAGE COSTS	**1.11** 1.44 0.99

SECTORIAL STRUCTURE OF GVAcf	0.52
WAGES AND SALARIES	0.25
SOCIAL SECCURITY	0.87
GROSS OPERATION SURPLUS	0.70
IMPORTS	**1.24**
FROM REST OF SPAIN	1.37
FROM EUROPEAN UNION	0.80
FROM REST OF THE WORLD	0.66
EXPORTS	**1.25**
FROM REST OF SPAIN	1.54
FROM EUROPEAN UNION	0.48
FROM REST OF THE WORLD	0.64

Source: Tablas Input-Output, I.E.A, 1994

In 1990 fishing represented just 0,86% of the regional GAV, 0,81% of the effective production and 1,11% of employment, being its apparent productivity (GAV/employment) 2,2. This figure is much lower than the already low average relative productivity of the andalusian economy (3,6% for this indicator).3[3]

In 1990 fishing activities employed 23.300 people, 1,4% of total employment in the region. 75,5% are employees, a figure similar to the one of the andalusian economy (73,6%). Wage costs as compared to employees in fishing is lower than in the average of economic activities in Andalucia (1,8 and 2,6 respectively; fishing ranks fourteenth among the 78 activity branches, with one of the lowest wage cost/employee ratio).

The generation of GAV at factor costs, according to the payment of production factors, is distributed as follows:4[4]

- The share of wages and Salaries is 53% of the GAV, if we exclude Social Security costs, 64% if we include them.
- The remaining 35% is the Gross Operation Surplus.

Wage costs m the andalusian fishing sector represent 0,9% of total wage costs in the andalusian economy, while the gross operation surplus is just 0,7% of the regional one.

Regarding foreign trade, data shown by TIOA'90 are very significant. Imports amount to 43.761 million pesetas (some 1,2% of imports by ail activities), 90% originate in the rest of Spain, 4% in other member countries of the European Union and the remaining 6% in the rest of the world. Andalucia exported fishing products worth 26.575 million pesetas (87% to the rest of Spain, 7% to the rest of the European Union and 6% to the rest of the world).

We notice a trade deficit of the andalusian fishing sector with the rest of Spain of 16.164 million pesetas, a balance in its commercial relations with the rest of the European Union (16 million) and a meagre surplus with the rest of the world (1.006 million pesetas). Taking external relations as a whole andalusian fishing presents a deficit amounting 17.186 million pesetas, in accordance with the deficit of the region altogether (1.395.215 million pesetas, originating mostly from commercial relations with the rest of Spain).

Regarding the adjustment of domestic production to domestic demand5[5], fishing registers a 57,3%, way below the 70,2% achieved by the rest of activities of Andalucia as a whole. That is to say that just 57,3% of the domestic demand of fishing products is covered by the regional supply. This indicator denotes that the andalusian fishing supply shows an insufficient capacity to meet the demand of resources by the regional economy, and that fishing activities focus their commercial strategies on other areas (rest of Spain or international).

The analysis 0f adjustment between Production and Domestic Demand is rounded off by a further indicator (A' according to the TIOA'90) that facilitates the detection of the weight of foreign demand in the distribution of fishing production. Defining:

A'=P-X=O,46, the value shown by the adjustment indicator At lies way below the average resulting from ail the activities (value is 0,62).

Considering ail of the previous, fishing activities show production conditions that are not adjusted to the characteristics of regional demand, that furthermore is provided with imports.

Regarding intersectorial relations of fishing activities, that is, the way they are integrated in the production system altogether according to the weight of components like intermediate and primary consumption or intermediate and final demands, fishing can be classified as a primary activity, with tan important participation of these components in the Added Value and a lower specific weight of intermediate inputs, since the achievement of a final output does not imply a high degree of inputs supplied by other branches of activity. As a consequence, their degree of integration in the regional economy is low and with hardly any pulling capacity. These characteristics, however, are not shared by ail primary activities, since we can find other branches (cereals, leguminous, olive, forestry) with figher value and more integrated in the andalusian economy.

If we take note of the weight of intermediate demand as compared to total demand of fishing activities, we can conclude that fishing focuses its products basically on the final consumer, as happens with most services branches labelled as final ones. Therefore, within the TIOA'90, fishing is listed among the activities below average, both for the indicator Ui (weight of intermediate inputs in the total input structure of the branch) and for Wi (showing the weight of intermediate inputs in the global of fishing products).

Focusing on the degree of sensibility to variations in final demand of different activities, as well as in their pulling capacity, (shown in TIOA'90 with indicators Zk and Zq respectively), Tables show very illustrating results. Fishing results to be an activity with low pulling capacity on the rest of economic activities, with very few growth impulses on the regional economy as a whole, and showing little response to changes in the final demand; Fishing appears in neither case above the average, which is not surprising considering its high degree of extraversion.

I.2. Importance of fishing in the provinces and towns on the andalusian coastline

The importance of the fishing sector in the andalusian economy increases, if we consider that fishing activities are evidently carried out only in the coastal areas of five out of eight andalusian provinces, therefore its real importance must appear in the analysis of its contribution to provincial economies6[6] and its social and economic repercussions in the coastal fishing towns.

Chart IV

Provincial distribution of production and employment 'n the andalusian fishing sector (1991)

(Million pesetas id employees respectively)

	GVA	JOBS
ALMERJA	5.558	2.335
CADIZ	17.326	7.417
HUELVA	23.428	6.915
MALAGA	5.939	2.504
ANDALUCIA	52.251	19.171
ESPANA	229.103	94.675

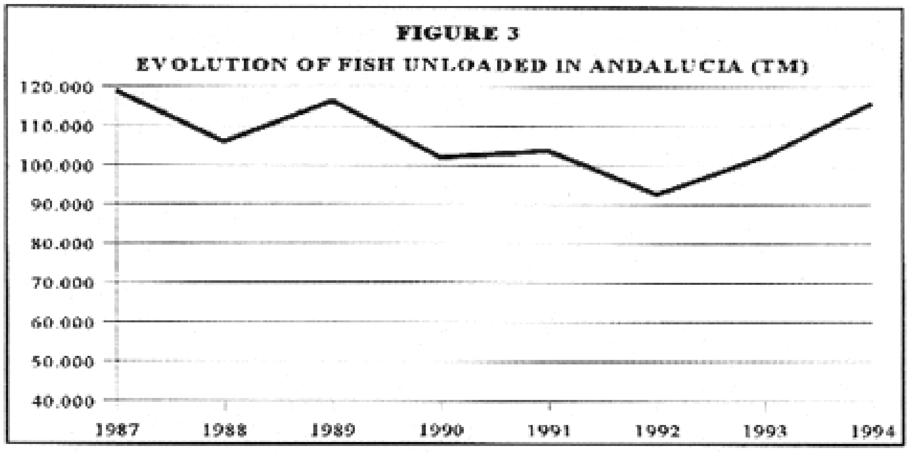
Source: Own, adapted from "Renta National de Espana y su distribution provincial" (1979-1991)

BBV, Madrid.

An analysis 0f provincial production presents again the problem of reliability of fishing statistical figures. A great part of the andalusian fleet does not unload its catches in its home harbour (the opposite is also true, many foreign vessels unload their catches in andalusian fish markets), there is also an increasing intervention of producers with sufficient business competence in the marketing process. Therefore, a large part of the fish unloading do not figure in the "Sales register" of fishmarkets.

In spite of the sizeable error, available statistical series enable us to analyse the evolution and the trend in unloading offish and fish prices over the time period 1987/947[7]

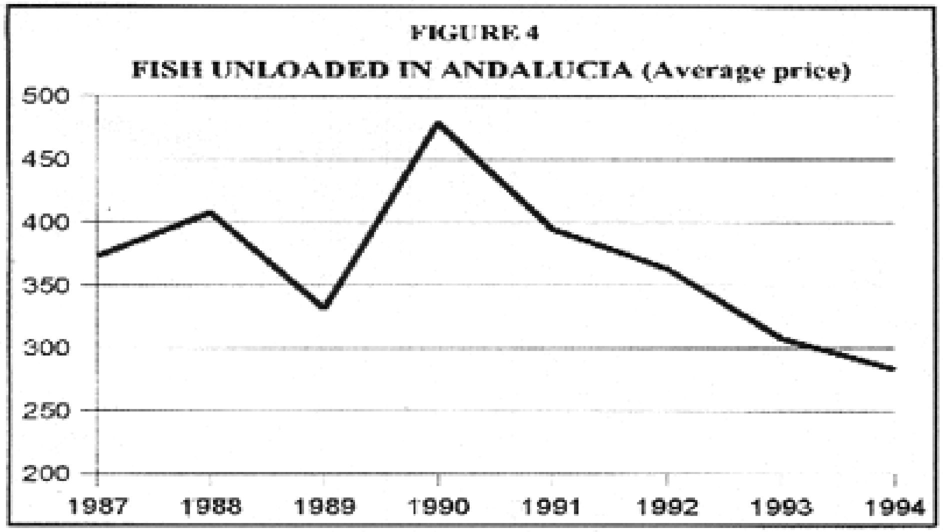
The volume of fish unloaded in Andalucia ranges, in the time period 1987/94 between 118.962 tons in 116.040 tons in 1994. There is a fail in production until 1992 and afterwards a recovery.



Source: Own, adapted from reports issued by the D.G.F. of the Junta de Andalucia.1995.

The value (in constant pesetas) 0f production unloaded in andalusian harbours reaches its peak in the year 1990 at 48.868 million pesetas and its minimum 1993 at *31.595* million pesetas.

Despite of an increase in the price per kilogram of fish (rough and regardless of species) of some 14% since 1987, this increase does not make up for accumulated inflation over those years. Furthermore, the average price of fish was 12% higher in 1986 than in 1993, which together with the high accumulated inflation rate over those years, leads us to believe that the andalusian fishing sector has suffered a dramatic fall in the real value of its catches.



Source: Own, adapted from reprts issued by the D.G.F. of the Junta de Andalucía, 1995.

The reasons that explain this situation are to be found in the low and far from appropriate infrastructure equipment of our harbours, which forces our fleet to unload and sell its catches in other harbours, in the impairment of the resources in our seaboard, in the difficulties in the access to foreign fishing ground, in the massive imports of fishing products from other countries, and of course, in the lack of transparency of the marketing channels of fishing products.

The andalusian province wish the highest fish production is Huelva (accounting for 45% of the regional production and 10% of the Spanish one), followed by Cadiz; Malaga and Almeria. 'n terms of employment, Cadiz is the province that generates more jobs (almost 40%) closely followed by Huelva. In the two Mediterranean provinces, Malaga and Almeria, fishing is more important for the generation of jobs rather than of added value, which products closely linked with the touristic activities taking place on their coasts.

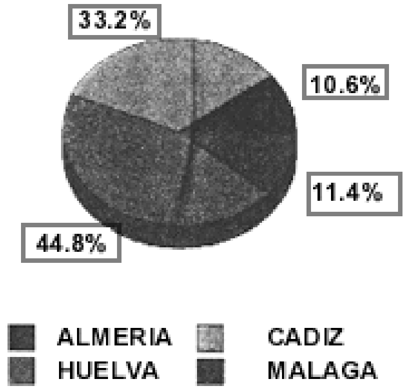
Chart V

Provincial contributions to regional and national production and employment (1991)

	GVA		**EMPLOYMENT**	
	REGIONAL SHARE	NATIONAL SHARE	REGIONAL SHARE	NATIONAL SHARE
ALMERIA	**10.6**	**2.4**	**12.2**	**2.5**
CADIZ	**33,2**	**7,6**	**38,7**	**7,8**
HUELVA	**44,8**	**10,2**	**36,1**	**7,3**
MALAGA	**11,4**	**2,6**	**13,1**	**2,6**

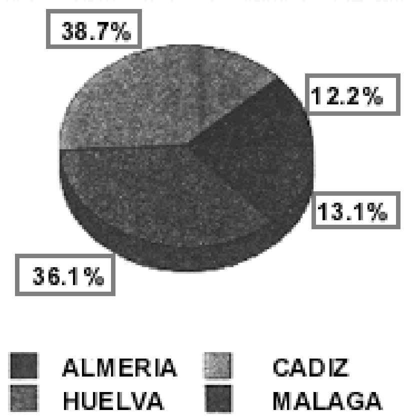
Source: Own, adapted from" Renta National de Espana y distribution provincial, 1991" BBV, Madrid, 1995.

FIGURE 5
PROVINCIAL CONTRIBUTION TO REGIONAL GVA



Source : Own, adapted from "Renta Nacional de Espana y su distribucion provincial, 1991".BBV, madrid, 1995.

FIGURE 6
PROVINCIAL CONTRIBUTION TO REGIONAL EMPLOYMENT



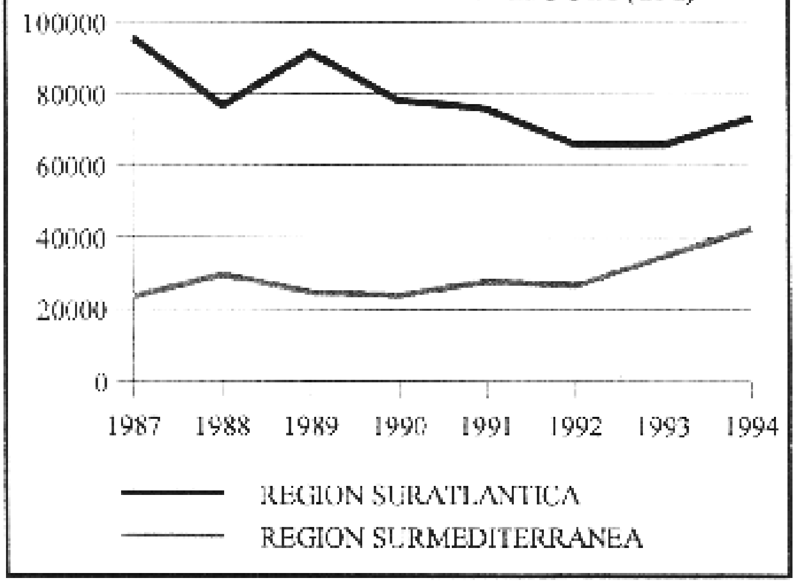
Source : Own, adapted from "Renta Nacional de Espana y su distribucion provincial, 1991".BBV, madrid, 1995.

In Huelva stands out the increasing contribution of fishing to the provincial primary sector (representing 32% of its GVA and almost of its employment) since, paradoxically, the latter has been set as a paradigm of modern agricultural development, based on exports of extra-early fruits and vegetables. Equally important is the contribution of the fishing sector to the primary sector in Cadiz (21% of GVA and *25%* 0f employment), which is based on wine production in the area of Jerez and on the emerging sector of ornamental plants and flowers. The values reached in Malaga and Almeria are also significant, considering the degree of specialisation and the morphological characteristics of theirs fleet and the degree of development achieved by intensive farming in the modern agriculture of the area.

Western Andalucia predominates over the rest of andalusian coastal provinces. Huelva and Cadiz provided for some 80% of the regional fishing production in 1987 and still maintained a high proportion -around 63%- in 1994. However, we can notice a decrease in its relative importance as compared to the south-Mediterranean region. We can notice the same evolution pattern m unloaded production in constant pesetas. The value of fishing in Huelva and Cadiz accounted for *58%* of the regional total in 1987, and just 55% in 1994, resulting from a higher production and especially from the higher prices achieved by fisheries devoted to species of a high market value, and having a modem technology and a skilled labour force.

FIGURE 7

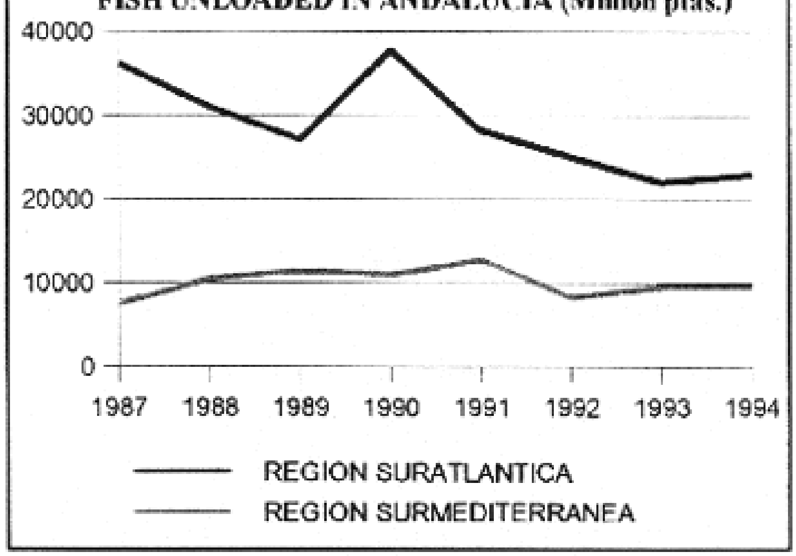
FISH UNLOADED IN ANDALUCIA (TM)



Source: Own, adapted from reports issued by the D.G.F. of the Junta de Andalucía. 1995.

FIGURE 8

FISH UNLOADED IN ANDALUCIA (Million ptas.)



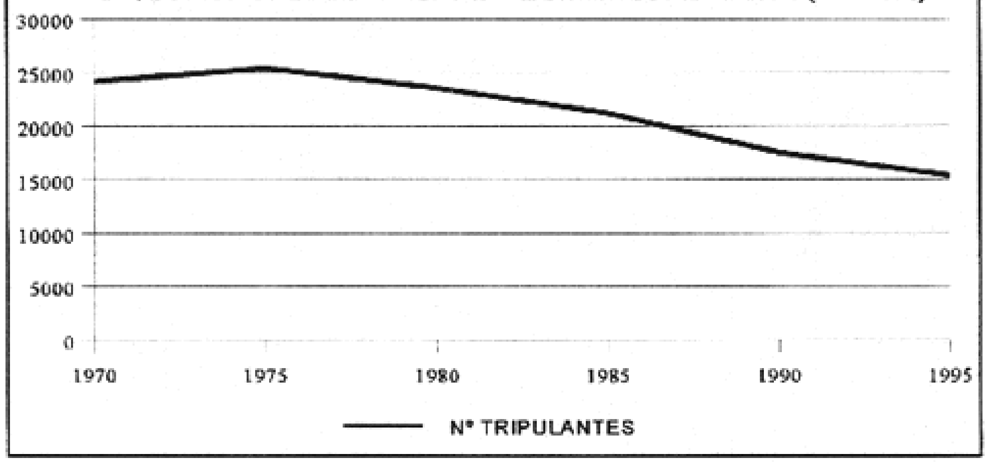
Source: Own, adapted from reports issued by the D.G.F. of the Junta de Andalucía, 1995.

Focusing on employment, the crews of the andalusian fishing fleet add up to 24.141 men out of Spanish total figures of 110.728, which represents a 21,8% of ail Spanish fishermen. This high percentage places Andalucia second among the Spanish maritime regions behind Galicia and in front of the Bask Country.

However, employment has fallen by 36% between 1975 and 1995, as a consequence both of fleet reduction and to a higher technological level, which has resulted in reducing crew members by a half since l975.

FIGURE 9

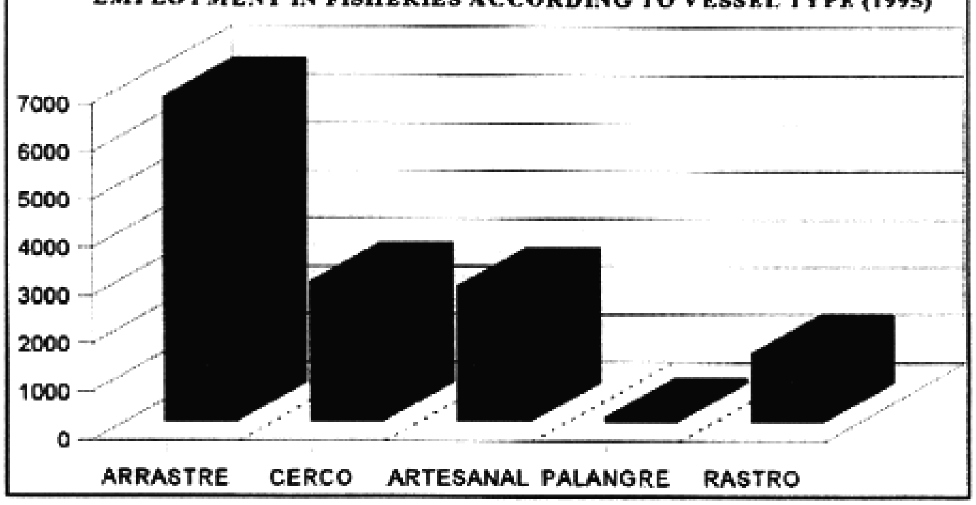
EVOLUTION OF EMPLOYMENT IN THE ANDALUSIAN FLEET (1970-1995)



Source: Own, adapted from the yearbooks of the D.G.F. (1970-1985) and the yearbook (1990) and the Census (1995) of the Junta de Andalucía.

FIGURE 10

EMPLOYMENT IN FISHERIES ACCORDING TO VESSEL TYPE (1995)



The fleet that generates most direct jobs in Andalucia is the one devoted to trawling fishing --arrastre-- (46% of total figures in 1995), followed by the rounding --cerco--

and crafting --artesanal-- fleets (21% and 22%), path --rastro--(9%) and fishing-line –palangre--(barely 1%)

I.3. Fishing activities: Their specific weight in the towns on the andalusian coastline

The analysis carried out shows the specific weight of fishing activities in the andalusian coastline, which is a determining factor for the future of the sector and especially for the towns where fishing activities are carried out. According to available data and to the results oh the analysis we can conclude the following:

1. The contribution of fishing to the GVA, despite the present decreasing trend, is almost twice as much as the national average.

2. The contribution of andalusian fisheries to the regional employment *50%* higher than the one of Spanish fisheries to national employment. However, the job reduction in the regional fishing sector has lead to a reduction by a third in the signification of fishery employment as compared to regional totals.

3. Fishing activities are more important within the context of andalusian economy as "shelter" sector for employment rather than as GVA generating sector.

4. Apparent productivity of fisheries in spite of being rather low, reaches values that are significantly higher than those of the Spanish fishing sector.

5. The gross operating surplus of andalusian fisheries amounts to a mere 32% share in the generation of GAV tot cost of factors.

6. The qualitative and quantitative importance of the fishing sector does not impede the presence of an age-old trade deficit with the rest of the country. This means that the production conditions of the andalusian fishing activities do not meet regional demand.

7. Fishing activities are only slightly integrated into the andalusian economy as a whole, and therefore have little drawing power.

We can therefore conclude that fishing activities show the characteristics of a primary, backward, small and periferic economic sector; from that it follows that its economic importance must be considered in the scope of local and provincial economies, according to its social meaning, and not forgetting that the general economic analysis tits in the characteristics of an underdevelopment model: "enclave" economy, low secorial integration, low average productivity, extraversion etc. All these problems are enhanced by the fact that they must be placed within an economy with a low development profile like the andalusian one.

II. Strategic analysis of bottlenecks, potentialities and basic trends.

From the strategic analysis point of view, two issues build up the unavoidable scene in the future of the andalusian fishing sector:

A) Liberalisation in international trade.
B) Changes in consumer habits, due to new lifestyles.

In this general setting the main bottlenecks in the fishing sector are the following:

- Insufficient knowledge of own domestic fishing resources, operating scheme and potentiality.
- A sector with low vertical and horizontal vertebration, and with a high social and economic importance for the andalusian coastal towns and areas.
- An old fleet, only slightly technified, and undergoing a severe reconversion.
- Net operating returns of fishing activities lie far below of potential returns.
- Individualistic shipowners, lack of contact with the market, with characteristics more similar to those of traditional crafting activities than to industrial, technified and value-added generating ones.
- Little adaptation of marketing sector to new information technologies, globalisation of markets and changes in consumer habits.
- Weak transformation industry, that in spite of manufacturing high quality products has not been able to devise a new strategy in order to confront increasing competition in world markets.
- Inadequate social protection and professional recycling services to confront the reconversion of the sector with minimum costs.

II.1. A Sector with low vertical and horizontal vertebration, and With a high social and economic importance for the andalusian coastal towns and areas.

Fishing activities in Andalucia show the characteristics of a primary, backward, small and periferic economic sector; whose economic importance must be considered within the wider context of its contribution to local and provincial economies, and above ail, its social signification. The modernisation of the andalusian fishing sector starts from a clearly unsatisfactory situation, which shows many of the characteristics of an underdevelopment model in a general economic analysis:

"enclave" economy, low sectorial integration, low average productivity, extraversion, etc. Ail these problems are enhanced by the fact that they must be placed within an economy with a low development profile like the andalusian one.

All of the previous render it necessary to take into account not only the important total figures of the andalusian fishing sector -a yearly production of 116.040 Tm generating 19.171 direct jobs, but also to establish, together with social and economic agents, a strategic future orientation for a sector that, as we have previously seen, represents a significant percentage 0f production and employment in the provincial economies of Huelva and Cadiz, and whose apparent productivity, in spite 0f being low, reaches considerably better values than those of the Spanish fishing sector.

II.2. An old fleet, only slightly technified, and undergoing a severe reconversion.

Over the last eight years the andalusian fishing fleet has undergone a severe reconversion that has reduced its relative importance both in the Spanish and in the Community contexts. As we have previously mentioned, by the end of 1994, the andalusian fleet was made up by 2.944 vessels. An expansion period over the 1 960s and 1 970s was slowdown by a period of slowdown of growth and even a slight recession in the 1 980s. The fleet has adjusted severely its capacity in the present decade (Total tonnage has gone down from 120.061 GRT in 1986 to 94.820 GRT by the end of 1994).

It seems to be evident that the strategy assumed in order to face the crisis of the late 1 970s, consisting of favouring a fleet with higher storage capacity and range (a clear example of "forward escape"), is broken in the early 1990s with a severe adjustment due to the consolidation of the C.F.P. and the new international restrictions in the access to fishing-grounds belonging to third countries.

The bipolarization of the technical structure of the fleet caused by the increase of the traditional craft fleet, the decrease of the half-industrial fleet and the sustained trend towards concentration in the great deep-sea fishing fleet presents a disturbing scene not as much from the quantitative point of view but from the qualitative point of view. There are several reasons for this reasoning:
- Sectorial devertebration, and the resulting increase in the concentration of social and economic risk in the coastal periphery of a region which shows and alarming lack of capacity to vertebrate economic activities.

- This bipolarised fleet leaves a scanty manoeuvring margin to those responsible for working out an appropriate fishing policy.

- Breaking of the process of accumulation of wealth in the social base as a consequence of the failure in the model "traditional fishing skipper – pre industrial shipowners - industrial businessman"; this leads to cracks in the social tissue and even worse, it renders impossible the emergence of modem undertakers from the base of the sector itself

- Tendency towards the development of black economy models in the small scale craft fleet, since this acts as a buffer for the traumatic reduction of the middle sized fleet.

II.3. Net outputs of the fishing sector far below their potential outputs

The fail of the outputs is caused by all the general facts we have mentioned before, and more specifically by:

- Ageing of the fleet, resulting in higher operating costs and a reduced technological efficiency.

- Impairment of andalusian fishing-grounds, as a consequence of the constant breach of arrangement and control measures, pollution problems, absence of regulation of activities by harbours, fleets and fishing zones, etc. and finally of the increased pressure on the resources due to the increase in the traditional craft fleet.

Important limitations in the access to international fishing-grounds due to the change that has taken place in the international scene over the last twenty years and the difficulties stemming from the Community Fishing Policy, which tries to achieve an unstable balance between the coherency of its internal and external resources policy and the demand for supplying its internal market of fishing products.

- Fall of prices of andalusian fishing products over the last ten years.

However, the fail in the amount of fish unloaded should not be considered as the main present bottleneck for andalusian fishing activities; value of production, reduction of costs by means of job cuts and/or black economy practices, along with the investment power well organised businessmen have shown over the last years, do not seem to indicate a fail in the net outputs of these activities, all though they remain below the potential outputs.

II.4. Individualistic shipowners, lack of contact with the market, with characteristics more similar to those of traditional crafting activities than to industrial, technified and value-added generating ones.

The structure of the fleet we have already analysed shapes the presence in the fishing sector of shipowners that share more characteristics with crafting activities than with industrial ones. Indeed, taken as a whole, the undertakers of fishing activities in Andalucia are not dynamic, modem and flexible. They find it difficult to adapt to circumstances in a changing scene where the market has a leading role that formerly rested on volume of catches and now rests in their quality.

The property distribution of production units shows a very wide base of subsistence economies that are family owned a small group of companies concentrating the property of industrial vessels.

Furthermore, and as a consequence of the bipolarization we pointed out before, undertakers associations [t]are heterogeneous, scattered and reluctant to overcome the traditional individualism shared by all small proprietors in all economic activities of the primary sector.

II.5. Little adaptation of marketing sector to new information technologies, globalisation of markets and changes in consumer habits

New consumer habits linked to the transformations in the marketing (great surfaces, refrigeration and conservation methods)and distribution sectors, point towards an increase in the demand of frozen and refrigerated products which demands an unavoidable modernisation of fish markets. On the other hand, the demand of fresh fish in Andalucia is maintained by deeply-rooted consumer habits among the population. This has lead the demand to remain unchanged despite their creasing pressure of imports, due to opening up of markets, and its main consequence has been the fail of prices for those species with lowest elasticity/return.

Wholesale marketing offish and seafood, fresh and frozen is carried out mainly be means of three charnels: wholesale markets and distribution companies located in the Food Units of the MERCA network (the most important one), the central markets depending directly from town governments and the private wholesale distributors.

In any case, one of the most important strategic bottlenecks of the andalusian fishing sector is the persistence of opaque marketing charnels whose main characteristics are the highly number of intermediate figures, non participation of supply in the formation for price at first sale, oligopoly in the demand, and higher final consumer prices, which in no case means higher income levels for the producers. The situation is so irregular that it is absolutely necessary to correct it, favouring a greater presence of the producers in the defence of quality and price of their products in a free market, relying on the possibilities opened by the introduction of new computer technology and data transmission within transparent marketing charnels.

We have already pointed out has established for this purpose Producer organisations within the Market Policy of the C.F.P.; however, the adaptation difficulties of many social agents, their structural weakness, and the resistance of figures presently involved in the marketing process are serious handicaps for an effective operation of andalusian Producer Organisations. Besides, it presents a wide set of possibilities in the scope of the consolidation of the single fishing market and the use of new information and telecommunication technologies for the traditional economic sect ors, instruments of a high potential for the modification of the unsatisfactory value-added chain we can see in the fishing sector now.

II.6. Weak transformation industry, that in spite of manufacturing high quality products has not been able to devise a new strategy in order to confront increasing competition in world markets.

Fishing derived industries enjoyed a boom that has faded out as transformation costs have risen and competitive demands have increased with the incorporation to a more open world market, into which Andalucia has entered in unfavourable conditions as a result of a transition period imposed by a too long and discriminatory Adhesion Treaty, even when compared with third countries.

It is an automatic sector, with small-sized companies, but dominated by the few very large ones. The sector has gone through a period with an excessive development of business with a weak financial structure and little investment power. Many of them will have to undertake heavy investments in order to comply with sanitary regulations. Community financial subsides co-financed by the Spanish government have been foreseen for the modernisation of installations. There are two basic sub-sectors, elaboration of sea products (handling, elaboration and freezing) and canning.

The demand for frozen fish, replacing fresh fish, maintains a sustained growth, which implies a diversification of the supply and a need for more aggressive marketing strategies. Even so, traditional andalusian canned preserves such as sardines, mackerel melba and salted fish have been able to consolidate, by means of a strong concentration process and a strict respect to its age-long quality standards, and now can confront the largest single market in the world in reasonable conditions but not free of risks.

From the strategic point of view, in the future transformation industries will have to guarantee the supply of fresh high quality domestic fishing products, improve its technology, rationalise its productive process, diversify its supply, improve the design of the final product and face marketing in a more aggressive way, differentiating the product by means of an image or an original denomination offering no doubts for the consumer. This demands an inter-business co-operation resulting in improving their position against national and international competition. The most important pitfall is the new sanitary regulation on production and marketing of fishing products, that might challenge the feasibility of some companies.

II.7. Inadequate social protection and professional recycling services to confront the reconversion of the sector with minimum costs.

There is a quantitative fail in total employment level in regular fishing activities, but from the qualitative point of view the greatest difficulty lies in the substitution of the oldest workers by youngster entering fisheries. In the last seven years the distribution of employment has changed substantially: The ten points lost by the deep-sea fleet and the three points lost by the great deep-sea fleet have joined the coastal craft fleet.

The risk of this tendency lies in the fact that only the industrial fleet would be in a condition to assume part of the labour force surplus of the half-industrial fleet. But the difficulties for this transfer are evident: a) The quality of life provided by the industrial fleet are by no means attractive for the youth; b) Surplus labour force originating in the seem-industrial fleet does not meet the professional requirements demanded by the activity in distant fishing-grounds (there is a deficit in boatswains, classifiers, freezers, etc.) and furthermore, its age structure does not facilitate this transfer, because the higher division in the organisation of work on board, with higher technological level limit their incorporation; c) Wages of unskilled workers are higher in certain types of craft fisheries, and even in some temporary mainland activities (such as construction, seasonal agriculture, etc.).

This situation leads us to emphasise the need for a Social Policy that includes working conditions, retirement, social assistance, education and vocational training, following the principles of justice, social wellbeing and maintenance of income levels.

It is therefore urgent to undertake the interventions needed to take advantage of the main potentialities we have mentioned as the high quality of the products from our coasts, greatly appreciated by demanding consumers, especially on the coastline and in those areas where the most important economic activities focus on tourism, and a distribution and marketing network covering the whole of Andalucia.

III. Conclusion: the new role 0f fishing activities in andalucia

We have already mentioned that the reality of Andalucia places us in a peripheral economy, highly dependant on primary activities in general and on fishing in particular, socially and economically devertebrated , with little organisation and business capacities, low income and productivity levels, and above all with the highest unemployment rate in the European Union.

There is no doubt that in such a context, a technologically efficient, economically profitable, socially advanced and ecologically sustainable sector has an important role to play in the economic development of the region; it is true that the size, organisation and marketing of the activity will have to adjust to the new role of Andalucia in the international economic scene, but certain areas of the andalusian coastline, especially in the western part of the region, will still rely heavily on fishing activities.

The results of the implementation of the Common Fishing Policy of the European Union (C.F.P.) seen from the point of view of southern fisheries can be labelled as meagre, if not erratic or contradictory. The C.F.P. is a complex political and economical construction, developed upon the principles of freedom and equality, but referring to an activity whose nature demands rules to limit the access to resources and equality in the access conditions. this turns the distribution system into the cornerstone of sectorial policy, being the leading thread of the delicate balance that has been reached.

Under these circumstances the andalusian fishing sector does not take a share of the distribution and does not have, resulting from the long crisis, sufficient investment capacity to benefit from the subsidies for restructuring the sector offered by Brussels. indeed, its industrial fisheries are carried out in seas of third countries, the craft fisheries of the Atlantic do not share quotas with other community fleets, and the fishing policy of the Union in the multi -species fisheries of the Mediterranean has not been totally defined yet.

Facing this panorama, one of the main interests for Andalucia since its integration into the fishing policy of the European Union lies in the force of the latter in the negotiation of stable and profitable fishing agreements with third countries. However, this alleged negotiating power has obtained contradictory results this far; if the negotiation with Angola can be labelled as a positive one, in the case of Morocco, the general assessment is totally different. The new agreement with Morocco began in December *1995.* It has a vital importance for the regional fisheries. In Morocco operates 68% of the vessels working in foreign fishing-grounds, accounting for 32% of the GRT and 57% of the employment of the andalusian international fleet, and supplying two thirds of the total regional production.

The Agreement now in force establishes a progressive reduction of the fishing possibilities, affecting basically the varieties of trawling north, fishing-line, cerco north and cephalopods. in general terms, it has been foreseen the loss of 84 vessels of the andalusian fleet and 897 jobs. The new limitations on the trawling variety will affect basically the harbours of Almeria, Malaga, Punta Umbria and Huelva; the four of them account for almost a half of the andalusian fleet in the Moroccan fishing-ground (48% of tonnage and 43% of jobs). Limitations on the fishing-line variety will affect basically the harbour of Algeciras, which sends 30% of its fleet to Moroccan grounds. 'n the cephalopods variety the town mostly affected will be El Puerto de Santa Maria which accounts for 53% of this fleet. Barbate accounts for 100% of the north cerco fleet fishing in Moroccan waters.

The Modernisation Plan for the Andalusian Fishing Sector being coherent with the Common Fishing Policy of the European Union, National Fishing Policy and social, economic, ecological and territorial reality of the region intends to achieve the following general goals:

* To achieve a management of fishing resources capable of guaranteeing their balanced exploitation.

* To set up a structural policy aimed at suiting fishing capacities to existing resources and to improve the sector's productivity and cost-effectiveness.

* To maintain a market organisation to establish marketing requirements and to guarantee a better valuation of fishing products and their transformation.

* To improve the trailing of human resources and to carry out research as a guarantee for the future of the activity.

* To promote the interests of our fleet abroad, that is, to favour the reaching of agreements with third countries and a beneficial concertation in the national, community and international scene.

* To favour in Andalucia a social fishing policy in the same conditions as resources, structure and marketing ones.

We find ourselves in a situation of a transcendental importance. The implementation of the reform of the structural funds takes place at the same time of the extension of the membership of the Union Treaty to new countries -- which are also great fishing powers at European and world level

• This is the reason for the continuing and frustrated demands for a Social Fishing Policy with the same relative importance within the European Fishing Policy as the Resources, Structure and Marketing Policies, a demand that will continue arriving at the highest instances. And this because in Andalucia it is the Social Fishing Policy the one that vertebrates the enormous and complex legislative apparatus, loaded with regulations, directives, recommendations and opinions that nowadays build up an opaque body without any contact with the social reality it is supposed to meet.

Therefore, Andalucia has to demand a practical presence of fisheries in the reform of the European Fund of Regional Development, complementing Structural and Marketing Policies with a Social Policy, by means of the European Social Fund, 50 that the necessary adjustment, is not a traumatic one that stirs up social conflicts with irreparable consequences.

STATISTICAL APPENDIX.

I.1.CONTRIBUTION 0F FISHING TO PRODUCTION AND EMPLOYMENT IN ANDALUCIA

CHART I
EVOLUTION 0F THE CONTRIBUTION 0F THE SECTOR TO ANDALUSIAN PRODUCTION (1979-1991)
(percentage of regional totals)

	AGRICULTURE	FISHING	INDUSTRY	SERVICES
1979	13,1	2,2	23,6	61,1
1981	11,0	1,5	27,8	59,7
1983	10,7	1,1	27,7	52,5
1985	12,4	1,1	24,8	61,6
1987	9,7	1,0	25,8	63,5
1989	8,9	0,8	27,6	62,7
1991	9,7	0,7	27,2	62,4

Source: Own, adapted from "Renta National de Espana y su distribution provincial' (1979-1991). BBV, Madrid.

CHART II
EVOLUTION 0F THE CONTRIBUTION 0F THE SECTOR TO ANDALUSIAN EMPLOYEMENT (1979-1991)
(Percentage of regional totals)

	AGRICULTURE	FISHING	INDUSTRY	SERVICES
1979	28,3	1,3	18,3	52,5
1981	24,9	1,6	29,1	44,4
1983	18,8	1,2	*25,0*	60,6
1*985*	19,0	1,3	26,3	53,4
1987	18,5	1,2	24,1	*56,2*
1989	16,2	1,2	25,2	57,5
1991	14,4	1,0	25,2	59,3

Source: Own, adapted from "Renta National de Espana y su distribution provincial" (1 979-1991). BBV, Madrid.

CHART III
EVOLUTION 0F FISH UNLOADED IN THE PROVINCES 0F ANDALUCIA (TM)

	ALMERIA	CADIZ	HUELVA	MALAGA	ANDALUYCIA
1987	**16.718**	**78.112**	**17.389**	**6.743**	**118962**
1988	**11.373**	**61.411**	**15.236**	**17.982**	**106 002**
1989	**10.544**	**75.115**	**16.650**	**14.04**	**116.358**
1990	**11.089**	**63.033**	**15.183**	**12.699**	**102.004**
1991	**13.837**	**61.467**	**14.413**	**14.051**	**103.768**
1992	**10.017**	**51.053**	**14.940**	**16.639**	**92.649**
1993	**18.614**	**50.472**	**17.300**	**16.215**	**102.601**
1994	**23.265**	**57.036**	**16.467**	**19.272**	**1116.040**

Source: Own, adapted from information facilitated by the D.G.F of the Junta de Andalucia, 1995.

CHART IV
EVOLUTION 0F FISH UNLOADED 'N THE PROVINCES 0F ANDALUCIA (Million constant pesetas)

	ALMEMA	CADIZ	HUELVA	MALAGA	ANDALUYCIA
1987	6.072	29.794	6.421	1.436	43 723
1988	3.723	24.633	6.490	6.716	41 562
1989	4.956	24.392	2.806	6.429	38.583
1990	4.991	31.000	6.946	5.931	48.868
1991	6.733	22.097	6.161	6.019	41.010
1992	2.548	19.266	5.803	5.716	33.333

1993	4.702	16.518	5.535	4.840	31.595
1994	4.544	17.617	5.380	4.943	32.484

Source: Own, adapted from information facilitated by the D.G.F- of the Junta de Andalucia, 1995.

CHART V
EVOLUTION 0F FISH UNLOADED IN THE PROVINCES 0F ANDALUCIA.
(Average prices)

	ALMERI	**CADIZ**	**ITUELVA**	**MALAGA**	**ANDALUCIA**
1987	347	381	369	213	373
1988	269	401	426	373	408
1989	849	325	168	458	332
1990	421	492	457	467	479
1991	458	359	427	428	395
1992	256	377	388	344	363
1993	272	327	320	298	308
1994	171	310	327	256	283

Source: Own, adapted from information facilitated Andalucia, *1995.*

CHART VI
CONTRIBUTION 0F FISIHNG ACTIVITIES TO THE PRIMARY SECTOR IN TERMS 0F PRODUCTION AND EMPLOYMENT (1991)

	GVA FISHING GVA PRIMARY SECTOR	**FISHING JOBSI JOBS IN PRIMARY SECTOR**
ALMERIA	4,7	4,7
CADIZ	21,0	25,3
HUELVA	32,0	26,6
MALAGA	9,5	9,3
ANDALUCIA	7,1	6,6
SPAIN	8,4	7,4

Source: Own, adapted from "Renta National de Espana y su distribution provincial, 1991". BBV, Madrid, 1995.

CHART VII
EVOLUTION 0F FISH UNLOADED
(TM) (1987-1994)

	SOUTHATLANTIC REGION	S. MEDITERRANEAN REGION
1987	95 501	23 461
1988	76 647	29 355
1989	91.765	24.593
1990	78.216	23.788
1991	75.880	27.888
1992	65.993	126.656
1993	65.772	34.829
1994	73.503	42.537

Source: Own, adapted from information facilitated by the D.G.F. of the Junta de Andalucia, *1995.*

CHART VIII
EVOLUTION 0F FISH UNLOADED
(Million constant pesetas) (1987-1994)

	SOUTHATLANTIC REGION	S. MEDITERRANEAN REGION
1987	36.215	7.508
1988	31.123	10.439
1989	27.198	11.385
1990	37.946	10.922
1991	28.258	12.752
1992	25.069	8.264
1993	22.053	9.542
1994	22.997	9.487

Source: Own, adapted from information facilitated by the D.G.F. of the Junta de Andalucia

CHART IX
APPARENT PRODUCTIVITY 0F THE FIS HING SECTOR AND THE PRIMARY SECTOR (1991)

	PRIMARY SECTOR	FISHING SECTOR
ALMERIA	2,36	2.38
CADI	2,82	2,34
HUELVA	2,81	3,39
MALAGA	2.32	2.37
ANDALUCIA	2.55	2.73
SPAIN	2.12	2.42

Source: Own, adapted from "Renta National de Espana y su distribution provincial, 1991". BBV, Madrid, *1995.*

2. Bibliography.

Consejeria de Agricultura y Pesca. La Agricultura y la Pesca en Andalucia. Memoria 1994. Edited by Consejeria de Agricultura y Pesca-Junta de Andalucia. 1994.

Cuadrado Roura, J.R. El crecimiento regional espanol ante la integraciôn europea. Edited by Instituto de Estudios de Propectiva. Madrid 1990.

Euro Antalya S.A. Carta de Recursos Pesqueros. Edited by Direcciôn General de Pesca-Consejeria de Agricultura y Pesca- Junta de Andalucia.

Gonzâlez Laxe, F. El sector pesquero espanol ante la Comunidad Econômica Buropea. Edited by R.E.A.S.-M.A.P.A. Madrid 1984.

Gorizâlez Laxe, F. La economia del Sector Pesquero. Edited by Espasa Calpe. 1988.

Instituto Social de la Marina. Revista Mar. Varios Nûmeros. Edited by ISM-Ministerio de Trabajo y Seguridad Social.

Montero Llerandi, J.M. Gentes del Mar una aproximaciôn Sociolôgica al Trabalo. Edited by ISM-Ministerio de Trabajo y Segurida Social. Madrid 1989.

Montero Lierandi, J.M.Proceso de industrializaciôn y condiciones de trabajo; el sector pesquero onubense. Edited by Junta de Andalucia. Sevilla, 1986.

Osuna Llaneza. J.L. El Sector Pesquero Andaluz: Una Politica Econômica a medio plazo. Tésis Doctoral-Sevilla 1988.

Sânchez Vellisco,C y Encinas Gorizâlez. Politica de Ordenaciôn Pesquera. M.A.P.A.-S.G.T. *1985.*

Servicîo de Ordenaciôn Mercados Pesqueros. Estadisticas de producciôn Pesquera Andaluza.

Pesca Fresca 1987-1994. Edited by Direcciôn General de Pesca-Consejeria de Agricultura y

Pesca- Junta de Andalucia.

Varios Autores. Informe Anual del Sector Agrario en Andalucia 1994. Edited by Unicaja. 1994.

Varios Autores. Jornadas Sobre Economia y Sociologia de la comunidades pesqueras-Universidade de Santiago de Compostela. Edited by Ministerio de Agricultura y Pesca. Madrid 1989

8[1] The study of the importance of the fishing subsector in and for Andalucia, is undertaken a doble approach to the two available sources: the national income of Spain (BBV ? 1995) and Input - Output Tables (TIO, 1990 IEA, 1994)

9[2] Input - Output tables of Andalucia, 1990 (TIOA490) Its publication in 1994 by the andalusian Statistical Institute, despite being a somehow far horizon, enable an analysis of the different branches of activity with a greater detail. Existing connections between different branches of activity, composition of aggregated demand, pulling of the different activities on the regional economy as a whole, among others are basic variables for strategic economic decision making

10[3] From among the 78 branches in the TIOA'90 classification, Fishing surpasses only six ones.

11[4] If we consider net taxes and indirect taxes on the products(VAT) GDP at market prices is distributed as follows: 58% is the share of wage costs (Wages and Salaries plus Social Security) while the gross operation surplus falls down to 32%.

12[5] The TIOA'90 include different indicators (A and A') that express the part of the demand of products derived from fishing activities, due to reident units covered with regional supply.

13[6] Due to the very little importance of fishing in the province of Granada (only one harbour with some importance, Motril), and to its fishing administrative dependence from Almeria, when referring to "Almeria", we include the provinces of Granada and Almer'ia

14[7] Detailed information on species and fishmarkets in "Statistical figures of andalusian fishing production. Fresh fish. 1987-94. Directorate General of Fisheries Ministry of Agriculture and Fisheries. Junta de Andalucia.