

COMMISSION OF THE EUROPEAN COMMUNITIES  
Directorate-General for Fisheries

**Regional, Socio-Economic Study  
in the Fisheries Sector**

**ESPAÑA**

Galicia, Asturias, Cantabria, País Vasco

Document  
1992

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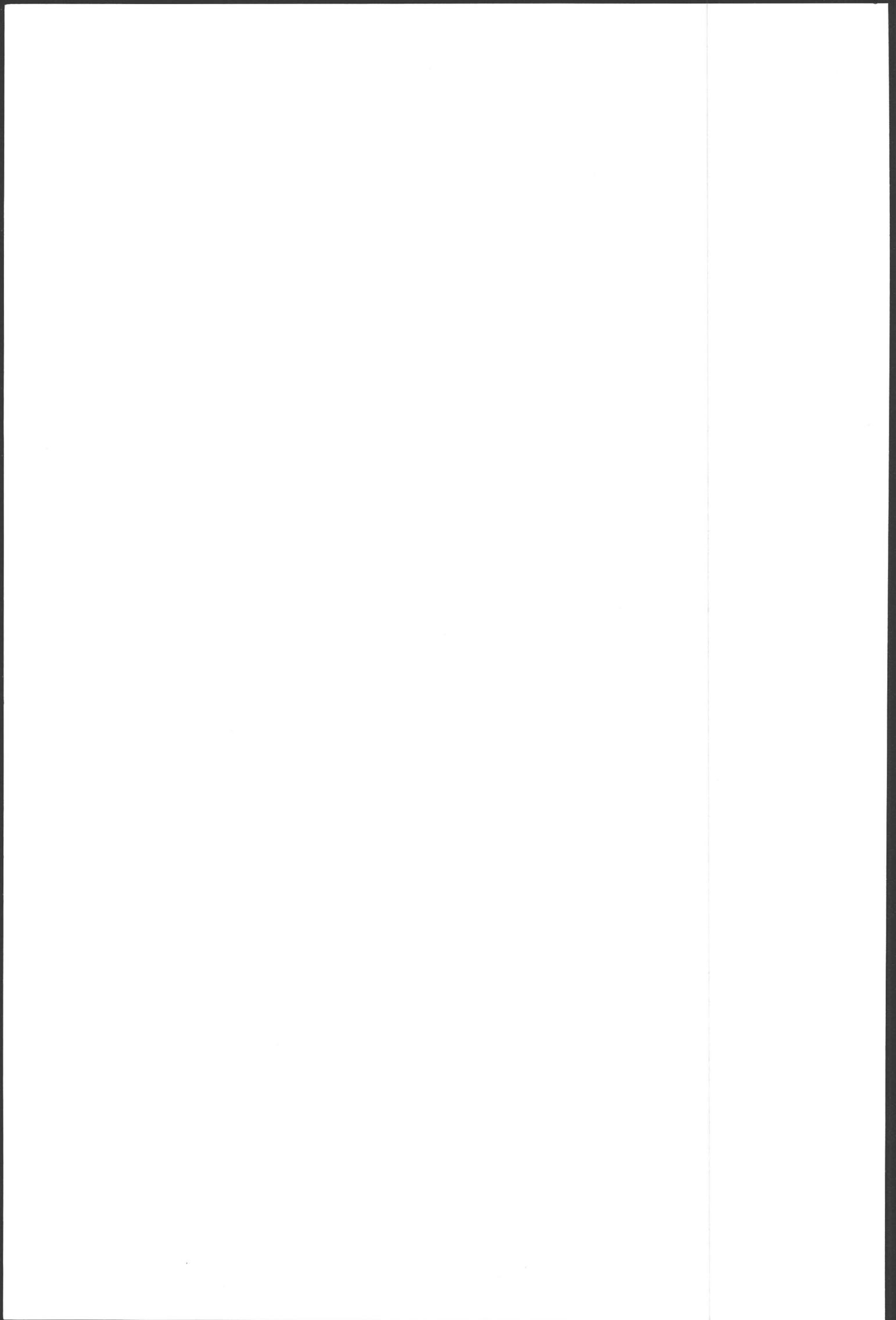
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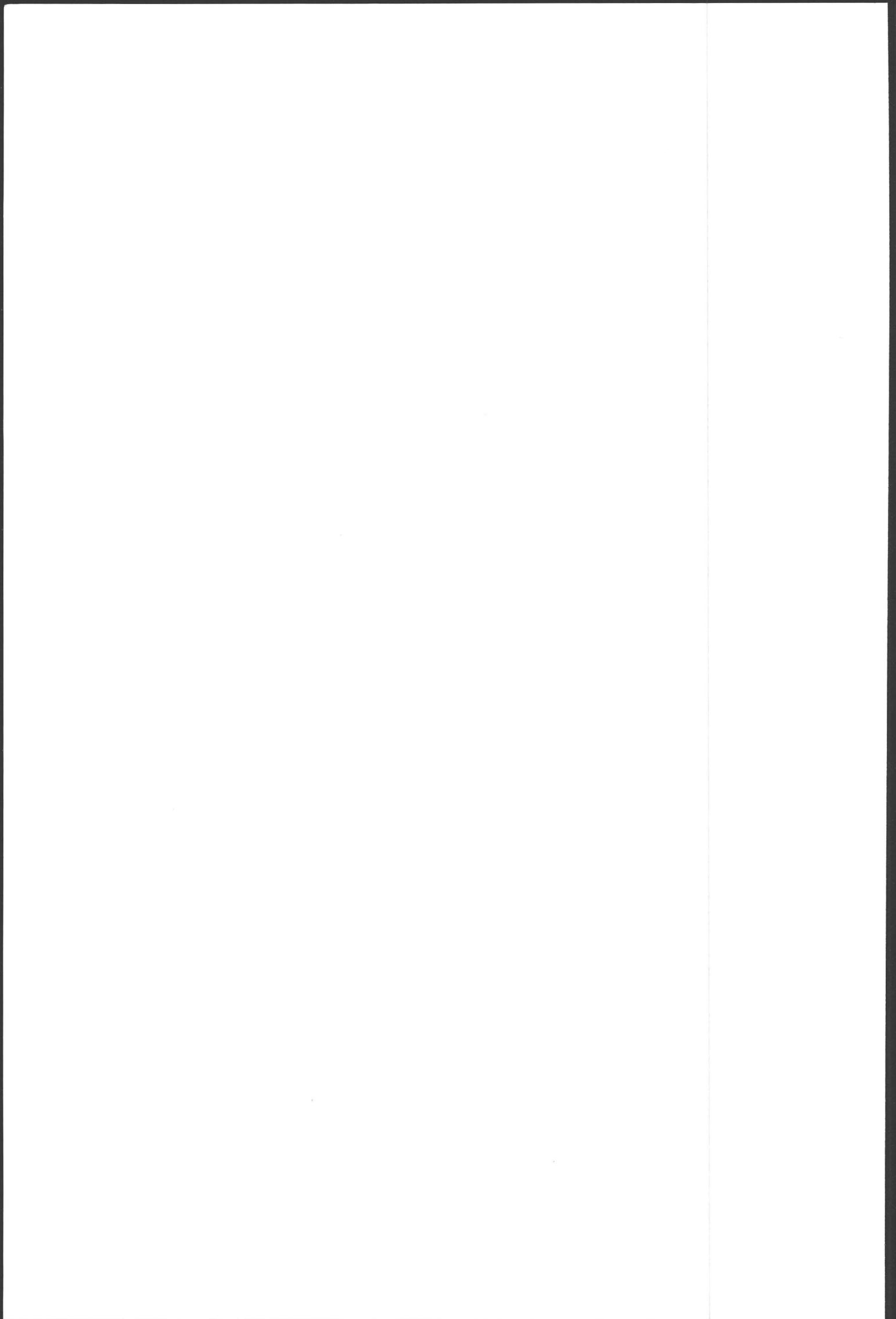
## A B S T R A C T

Las regiones comprendidas en el presente estudio (las Comunidades autónomas de Galicia, Asturias, Cantabria, País Vasco) cuentan con el 54 % del total de los tripulantes de buques de pesca de España (47.983 personas) y con otros 85.984 trabajadores empleados directamente en actividades relacionadas con la industria pesquera (acuicultura, transformación, construcción y reparación de buques de pesca, etc.), lo que arroja un total de 133.897 personas.

El estudio se centra en 20 áreas particularmente dependientes de la pesca y de actividades relacionadas con la misma, que cuentan con 121.316 puestos de trabajo y 2.000 ecus de valor añadido bruto, lo que supone el 5,5 % de todos los puestos de trabajo de las zonas y el 2,5 % del total del valor añadido bruto. La actividad extractiva supone el 40 % y el 29 %, respectivamente, de estas cifras. Los desembarques efectuados por las flotas regionales ascendieron en 1990 a 591.000 toneladas, de las cuales 269.000 correspondieron a la flota de altura y 322.000 a la flota de gran altura y de bajura. Tales desembarques supusieron el 66 % del total de desembarques nacionales (correspondiendo el 78 % a la flota nacional de altura y el 59 % a la flota nacional de gran altura y de bajura) y fueron efectuados por 11.249 buques con un peso de 429.570 toneladas de registro bruto (el 57 % y el 64 %, respectivamente, de la flota pesquera española), con una valor de 1.000 millones de ecus, aproximadamente.

La política comunitaria propuesta, tendente a reducir la flota y la actividad pesquera, se traduciría en una pérdida de puestos de trabajo directos e indirectos que afectaría principalmente a los tripulantes de la flota y, además, a los trabajadores empleados en actividades pesqueras (comercio al por mayor, transporte, transformación, etc.) y en los sectores de inversión (construcción de buques de pesca, industria naval auxiliar, etc.).

A fin de paliar las repercusiones de esta pérdida de empleos, se ha propuesto una amplia gama de medidas adaptadas a cada colectivo y tipo de zona en que reside; sin embargo, dado que las características profesionales de los tripulantes dificultan su desplazamiento a otros sectores sin reciclaje previo, es necesario hacer hincapié en estas medidas de reciclaje profesional (cursos básicos, especializados y de preparación profesional) dado que constituyen una política previa inevitable destinada a facilitar el desplazamiento referido anteriormente.



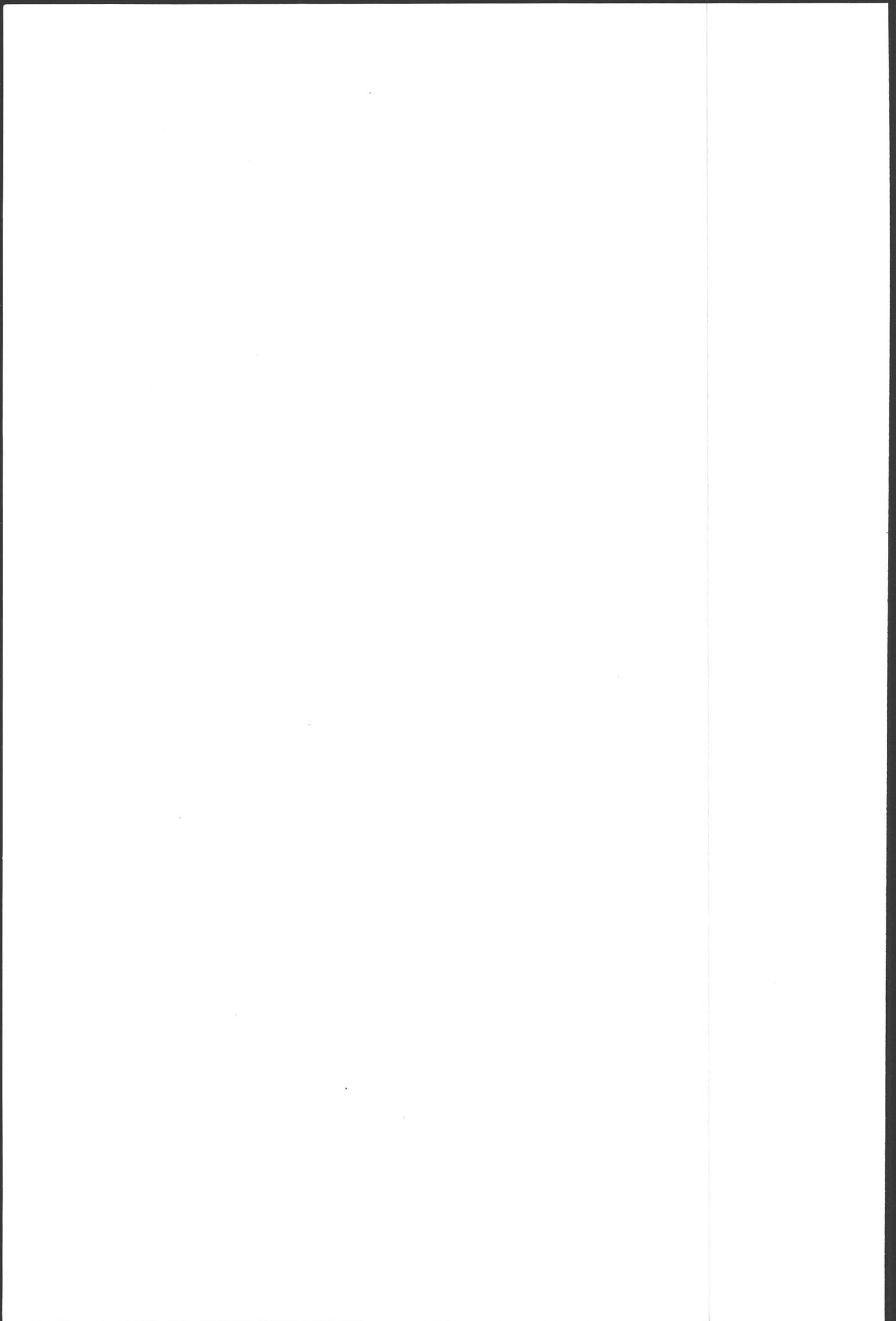
## ABSTRACT

The Regions covered by this study (the Autonomius Communities of Galicia, Asturias, Cantabria, Basque Country) supply 54% of Spain's total fishing boat crews (47,983 persons) as well as directly employing another 85,984 workers in activities relating to the fishing industry (aquaculture, processing, construction and repair of fishing vessels, etc.) yielding a total of 133,897 persons.

The study has considered 20 areas which are especially dependent on fishing and related activities. These areas supply 121,316 jobs and ECU 2,000m in gross added value, accounting for 14.0% of all jobs in the zones and 8.0% of all gross added value. Fishing represents 40% and 29%, respectively, of these figures. Landings carried out by Regional fleets amounted to 591,000 tonnes in 1990, of which 269,000 tonnes were landed by the deep-sea fleet and 322,000 tonnes by the midwater and coastal fleet. These landings represented 66% of the total domestic landings (78% of the landings by the domestic deep-sea fleet, and 59% of the landings by the domestic midwater and coastal fleet), and were performed by 11,249 vessels of 429,570 GRT (57% and 64% respectively of the Spanish fishing fleet), amounting to a value of approximately ECU 1,000m.

The proposed Community policy to reduce fleet and fishing activity would translate into a loss of direct and indirect jobs, which would mainly affect fleet personnel, but also the workers on land employed by shipowners and firms supplying sectors dependent on fishing activities (wholesale trade, transport, processing etc.) through to investment sectors (fishing boat builders, auxiliary naval industry, etc.).

In order to mitigate the effects of this job loss, a broad range of measures related to every collective and type of zone which they inhabit has been proposed; but, given the professional characteristics of the crew members that jeopardize their redeployment to other sectors without previous retraining, those measures of professional retraining (pre-professional, basic and specialized courses) must be emphasized as an unavoidable preliminary policy in order to facilitate this.



## A B S T R A C T

Les régions couvertes par cette étude (les Communautés autonomes de la Galicie, Asturies, Cantabrie et le Pays Basque) fournissent 54 % du nombre total des équipages de navires de pêche espagnols (47.983 personnes) et emploie directement 85.984 autres personnes dans des branches d'activité liées au secteur de la pêche (aquaculture, transformation, construction et réparation de navires de pêche, etc.), soit 133.987 personnes au total.

L'étude a été focalisée sur 20 zones qui dépendent fortement de la pêche et de ses activités connexes, avec 121.316 emplois (5,5 % du total régional) et une valeur ajoutée brute de 2.000 écus (2,5 %). Les activités d'extraction représentent respectivement 40 % et 29 % de ces chiffres. Les mises à terre effectuées par les flottes régionales ont pour leur part atteint 591.000 tonnes en 1990 (269.000 tonnes pour la flotte de haute mer et 322.000 par les flottes côtière et de pêche au large), soit 66 % du total national (mais aussi 78 % des mises à terre de la première flotte citée et 59 % de celles des deux autres). Réalisées par 11.249 navires jaugeant 429.570 TJB (soit respectivement 57 % et 64 % du tonnage des flottes précitées), leur valeur a atteint environ un milliard d'écus.

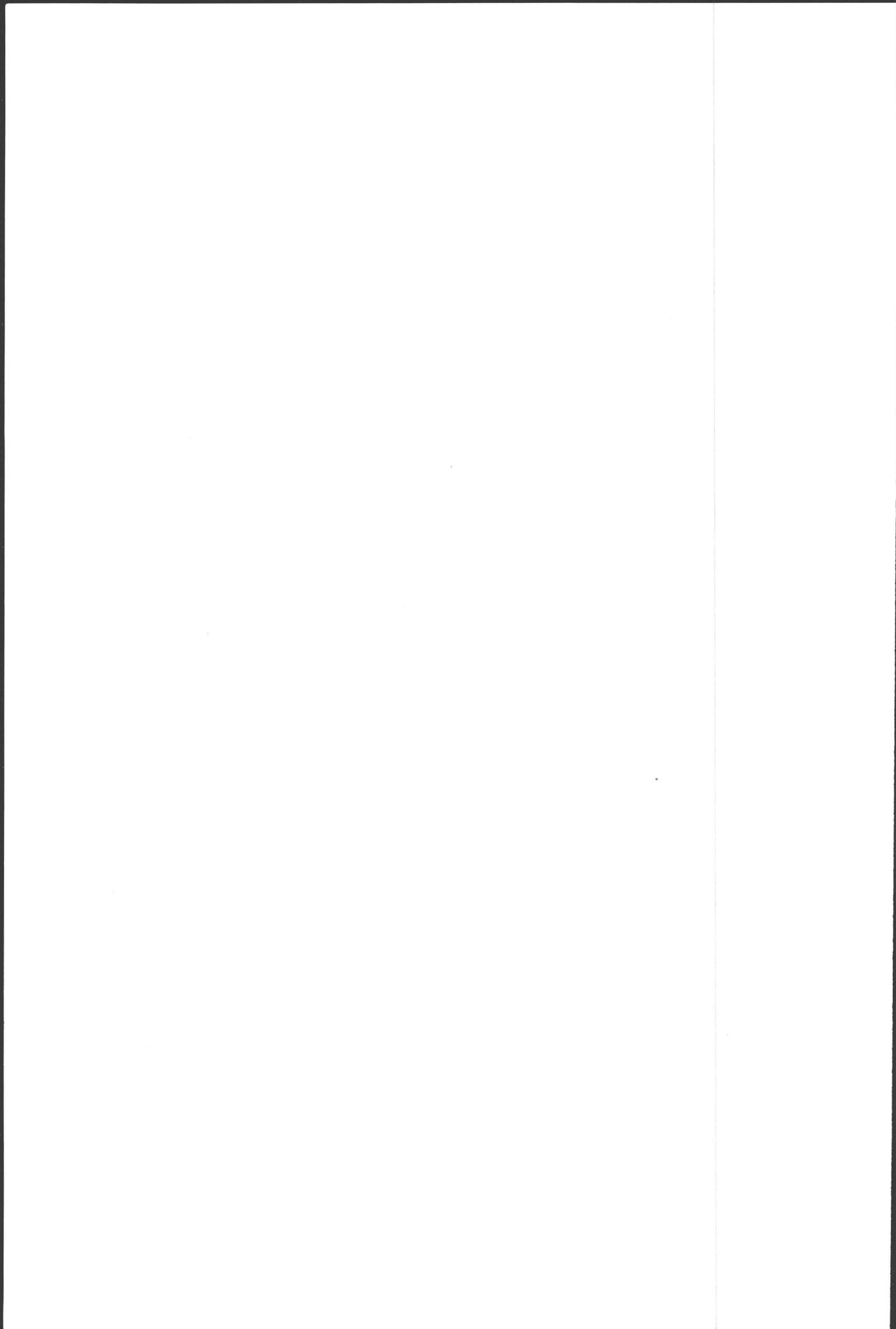
La politique communautaire proposée pour diminuer la taille de la flotte et les activités de pêche entraînera des pertes d'emplois directs et indirects qui toucheront principalement les équipages, mais aussi les travailleurs de certains secteurs qui ont besoin des activités de pêche (commerce de gros, transports, transformation, etc.), ainsi que d'autres secteurs d'investissement (construction de navires de pêche, entreprises navales auxiliaires, etc.).

Pour atténuer les effets de ces pertes d'emplois, un large éventail de mesures adaptées aux collectivités et à leurs zones de résidence a été proposé. Toutefois, comme les membres d'équipage, de par leurs caractéristiques professionnelles, sont difficiles à transférer sans recyclage préalable, il convient, pour faciliter l'opération, de mettre l'accent sur les mesures spécialement prévues en la matière (cours préprofessionnels, de base et spécialisés), qui constituent une étape préliminaire incontournable.

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## 1.- INTRODUCTION

This report focuses firstly on the reasons necessitating this study, defining its objectives and delimiting the geographical and sectorial fields that are its concern according to the criteria laid down by the Contractor. (Chapters 2, 3 and 4)

Chapters 5-7 contain the information and analysis made in meeting the objectives of the project.

## 2.- REASON FOR THIS SURVEY

The present situation of imbalance between available fishing resources and the fishing capacities of the EEC will effect a hardening of the Common Fishing Policy (CFP) as from 1992. This change will affect the countries of the Community with varying intensity.

This policy, basically orientated to the reduction of the fleet and the catches, will produce significant economic and social consequences which will logically affect more intensely those areas strongly dependent on fishing and related activities.

Within the framework of these considerations, this report will identify the areas most seriously affected, using several indicators to define them, and will propose "auxiliary measures" designed to offset the projected loss of employment which would result from the implementation of the proposed Community policy.

3.- OBJECTIVES

This responds to the following objectives:

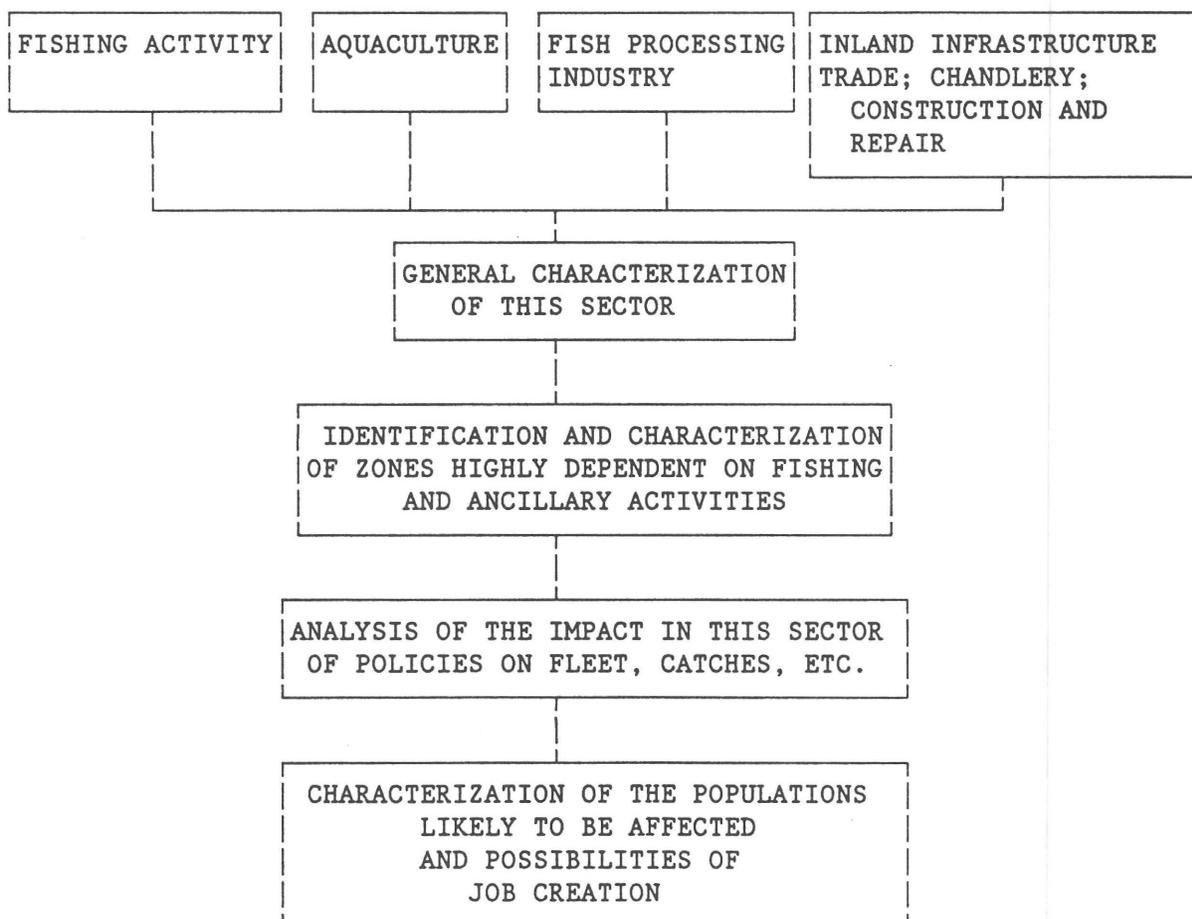
- Identifying and characterizing zones highly dependent on fishing and ancillary activities.

- Analyzing the socio-economic impact of a hardening of the Common Fishing Policy within the zones identified and characterized.

Defining the different measures, called "measures d'accompagnement" that the Commission should implement in order to solve the socio-economic problems stemming from the establishment of a Common Fishing Policy, and specially in order to generate alternative jobs for the fishermen and other people forced to quit their present jobs.

The chart shows the sectors surveyed and the order followed in the analysis of the information.

FIGURE N° 1



#### 4.- GEOGRAPHICAL AND SECTORIAL AREA

Region E.1 comprises, as defined in the survey contract, the following administrative units (Autonomous Communities):

- . Galicia
- . Asturias
- . Cantabria
- . Basque Country

A zone is a part of the Region where the economic and social activity is highly dependent on fishing and ancillary activities. The determination of the characteristics of these zones is the main aim of this survey.

The "extended zone" takes in some neighbouring population centres with significant industrial and services activities. This would be the target areas for policies of job creation.

The fishing and aquaculture sector, the focus of this survey, includes the catching and farming, maintenance, processing, conditioning and marketing of fishing and aquaculture.

Under the heading of "ancillary activities" are those activities dependent on the fishing and aquaculture sector, such as construction, maintenance and repair of fishing vessels and their equipment (gear, engines, electronic equipment, etc.), services and supplies to the vessels and breeding grounds, management and maintenance of fishing ports and their facilities, etc.

#### 5.- GENERAL CHARACTERIZATION OF THE SECTORS OF FISHING AND RELATED ACTIVITIES

Table I contents show the basic information for this Region as a whole.

The activities reflected in these tables are:

##### Fishing sector

- . Fishing activities
- . Aquaculture and shellfish harvesting
- . Processing industry (of goods derived from fishing and aquaculture)
- . Marketing, storage and other activities of this sector

##### Ancillary sector

FIGURE 1

REGION E.1



TABLE I  
GENERAL CHARACTERIZATION OF FISHING  
AND ANCILLARY SECTORS (REGION E.1)

FISHING ACTIVITIES		
	REGION	% SPAIN
<u>FISHING VESSELS</u>		
. NUMBER OF VESSELS	11,249	57%
. GRT	429,570	64%
. ENGINE POWER (KW)	1,075,658	54%
. CREW	47,748	54%
<u>CORPORATE SHIPOWNERS</u>		
. NUMBER OF COMPANIES	7,200	43%
. NUMBER OF ONSHORE JOBS	3,150	30%
<u>LANDINGS (1990)</u>		
. VOLUME (thousands of tonnes)	591.0	66%
- DEEP-SEA	269.0	78%
- MIDWATER AND COASTAL	322.0	59%
. VALUE (millions of ECU)	978.6	52%
- DEEP-SEA	285.1	49%
- MIDWATER AND COASTAL	693.5	55%
AQUACULTURE AND SHELLFISH HARVESTING		
	REGION	% SPAIN
<u>SALTWATER AQUACULTURE</u>		
- COMPANIES		
. MUSSELS	2,000	99%
. OTHER MOLLUSCS	1,200	99%
. PURIFYING FACILITIES	59	86%
- EMPLOYMENT (permanent and temporary)	7,089	*
- PRODUCTION ADULTS (1990)		
. VOLUME (thousands of tonnes)	176.1	96%
. MUSSELS	170.0	98%
. OTHERS	6.1	63%
. VALUE (millions of ECUs)	105.4	81%
- PRODUCTION IN HATCHERIES (1990)		
. VOLUME (thousands of units)	75.1	31%
. VALUE (millions of ECUs)	3.2	17%
<u>INLAND AQUACULTURE</u>		
- COMPANIES		
. NUMBER OF COMPANIES	34	24%
. EMPLOYMENT (permanent and temporary)	115	24%
- PRODUCTION (1990)		
. VOLUME (thousands of tonnes)	5.1	29%
. VALUE (millions of ECUs)	13.8	29%
<u>SHELLFISH HARVESTING</u>		
NUMBER OF ONSHORE SHELLFISHERMEN	14,520	*

\* No data available

PROCESSING INDUSTRY		
	REGION	% SPAIN
- NUMBER OF COMPANIES	210	53%
. CANNING	132	80%
. FROZEN GOODS, PREPARED FOODS & FRESH GOODS	54	39%
. DRYING AND SALTING	18	25%
. INDUSTRIAL USE AND NON-HUMAN CONSUMPTION	6	56%
- EMPLOYMENT (permanent and temporary)	10,405	58%
- PRODUCTION VOLUME, 1989 (thousands of tons)	356,000	58%
- PRODUCTION VALUE, 1989 (millions of ECUs)	1,192,3	58%

MARKETING, STORAGE AND OTHER ACTIVITIES OF THIS SECTOR		
	REGION	% SPAIN
<u>INLAND INFRASTRUCTURE</u>		
. NUMBER OF FISHING PORTS	131	54%
. NUMBER OF FISH-MARKETS	90	52%
. FISH REFRIGERATION CAPACITY	435.000M3	44%
<u>HANDLING, STORAGE, DISTRIBUTION</u>		
. TAX LICENSES, WHOLESALE TRADE	1.914	67%
. EMPLOYMENT	5.973	64%

ANCILLARY ACTIVITIES		
	REGION	% SPAIN
<u>CONSTRUCTION, MAINTENANCE, AND REPAIR OF FISHING VESSELS</u>		
- SHIPYARD LAUNCHINGS IN THIS REGION, 1990 (100 GRT) FOR THE NATIONAL MARKET	30	83%
. EXPORTED	6	15%
- NUMBER OF SHIPYARDS (100 GRT)	14	82%
- NUMBER OF SMALL AND REPAIR SHIPYARDS	37	*
- EMPLOYMENT	5,215	*
<u>NAVAL GOODS TRADE</u>		
- NUMBER OF TAX LICENSES	115	29%
- EMPLOYMENT	803	26%

\* No data available

## 5.1.- Fishing

### The Fishing Fleet

As of 1/1/91 data from the General Council of Fisheries showed a regional fleet consisting of 11,249 vessels with a tonnage (GTR) of 429,570 and 1,075,658 K.W., manned by 47,748 persons. This data reflects the active fleet (boats currently fishing), motorized and unmotorized.

With respect to Spain as a whole, the Region E.1 fleet makes up the following percentages: 56.6% ships, 63.9% tonnage, 54.4% KW, and 54.8% crew members.

Galicia, one of the four Autonomous Communities included in the Region has 83% of all vessels registered and 71% of regional tonnage.

The average tonnage and KW for boats in this Region is 38 tonnes and 96 KW respectively. The average number of crew members is 4.3. The Basque fleet greatly exceeds these averages while the Asturian fleet lies at the opposite extreme.

All 11,249 vessels registered in this Region can be classified into one of six broad categories.

Gill net vessels and longliners are most numerous (respectively, 2,988 and 2,976 vessels), after which come multipurpose vessels (2,565). The other three categories comprise a far lower number of vessels.

Trawlers, on the other hand, are ahead by GRT (they amount to 59% of the whole fleet GRT), following those that use bag-nets (19%) and longliners (16%). Gill net vessels, however, scarcely represent 3% of the whole fleet GRT. Trawlers, purse seiners and longline vessels together amount to 38% of the total number of vessels and 94% of the whole fleet GRT.

Trawlers, on average, have 359 GRT; purse seiners, 125; and longliners, 24 GRT.

Table II contents indicate that Galician vessels are most often small gill-net and all-purpose vessels; Asturian and Cantabrian vessels are, firstly, longliners and, secondly, gill net and all-purpose vessels. In the Basque Country longliner vessels predominate.

By GRT, trawlers and longliners are the most significant in Galicia; purse seiners and trawlers in the Basque Country; longline vessels and trawlers in Asturias, and purse seiners in Cantabria.

TABLE II  
FISHING FLEET

<u>COMMUNITY</u>	<u>TOTAL</u>	<u>TRAWLERS</u>	<u>PURSE SEINERS</u>	<u>LOGLINERS</u>	<u>GILL NETS</u>	<u>ALL PURPOSE</u>	<u>OTHERS</u>
<b>GALICIA</b>							
Number of vessels .....	9,303	529	382	2,218	2,660	2,270	1,245
Tonnage (GRT) .....	304,845	207,933	29,955	47,409	9,973	7,470	2,105
Engine power (Kw) .....	718,104	390,227	90,576	134,814	50,910	40,212	11,360
Crew .....	34,490	10,121	3,493	8,129	5,397	5,295	2,055
<b>BASQUE COUNTRY</b>							
Number of vessels .....	894	132	202	361	66	127	6
Tonnage (GRT) .....	102,198	38,252	46,204	15,807	716	1,086	131
Engine power (Kw) .....	270,760	89,228	117,988	54,568	3,947	4,707	316
Crew .....	8,027	2,171	3,164	2,149	215	303	25
<b>ASTURIAS</b>							
Number of vessels .....	753	25	9	285	178	143	113
Tonnage (GRT) .....	11,061	3,767	597	4,323	1,601	490	282
Engine power (Kw) .....	46,829	9,541	1,920	20,776	8,899	3,811	1,877
Crew .....	3,088	316	98	1,327	591	509	247
<b>CANTABRIA</b>							
Number of vessels .....	299	16	61	112	84	25	1
Tonnage (GRT) .....	11,467	2,207	4,904	3,047	1,078	227	4
Engine power (Kw) .....	39,965	5,400	15,914	11,923	5,533	1,237	44
Crew .....	2,143	193	936	626	290	96	2
<b>TOTAL</b>							
Number of vessels .....	11,249	702	654	2,976	2,988	2,565	1,365
Tonnage (GRT) .....	429,571	252,159	81,660	70,586	13,368	9,273	2,522
Engine power (Kw) .....	1,075,658	494,396	22,398	222,081	69,289	49,967	13,597
Crew .....	47,748	12,801	7,691	12,231	64,937	6,203	2,329

SOURCE: S.G.P. (M.A.P.A.). Quoted from *Mar*, 287. September, 1991. (Data dated 1/1/1991).

Based on information taken from regional government censuses, the above table does not necessarily match the one produced by the S.G.P.: (8,712 vessels and 41,179 crews), 77% of the fishing fleet consists of small vessels of up to 20 GRT. These vessels (some 6,700) which are involved in coastal fishing, are manned by approximately 13,500 persons, a ratio of 2.0 persons per boat. It should also be noted that of these 6,700 vessels, close to 4,100 have up to 2.5 GRT.

Another 13% of the vessels, mainly engaged in midwater fishing, have between 20 and 250 GRT and account for 38% of all registered crewmen. These comprise approximately 1,130 vessels and 14,000 crew members, an average of 12.4 crew members per vessel.

There are approximately 900 vessels of over 250 GRT, concentrating mainly on off-shore fishing. They employ 13,700 crewmen, and an average of 15.2 crew members per vessel.

On the Autonomous Community level, the division of the fleet by GRT and length offers an approximate idea of the greater or lesser importance of the different types of fishing within each Community.

The following table was drawn up on the basis of information on the operative fishing fleet obtained from the General Council of Fisheries' January 2, 1991 census, (number of vessels), as well as data compiled by the regional governments based on the regional fleet census (1988/1990) between 1988 and 1990 (fleet structure based on tonnage and length).

TABLE III  
DISTRIBUTION OF REGIONAL FISHING FLEET

	<u>GALICIA</u>	<u>ASTURIAS</u>	<u>CANTABRIA</u>	<u>BASQUE COUNTRY</u>	<u>TOTAL</u>
Up to 20 GRT .....	81%	89%	64%	29%	77%
Up to 250 GRT .....	8%	11%	36%	54%	13%
> 250 GRT .....	11%	--	--	17%	10%
TOTAL	100%	100%	100%	100%	100%
< 9 M Length .....	67%	66%	22%	13%	60%
9-18 M Length .....	15%	27%	46%	28%	21%
> 18 M .....	18%	7%	34%	59%	19%
TOTAL	100%	100%	100%	100%	100%

SOURCE: Own compilation based on regional government censuses (1988/1990) and General Council of Fisheries (1991)

#### Fishing fleet within the framework of the CFP

Since 1986, and following the directives issued in the EEC Ruling 4028/86, the Community has combined policies of renewal and modernization of fishing fleet with other policies of reduction of the number of vessels and tonnage of the fleet. The former have been implemented through EEC aid to those regions classified as Objective One. Between 1986 and 1990, EEC financial support has aided exclusively the construction and modernization of vessels longer than nine metres (twelve metres for trawlers) which meant the exclusion of an important part of the regional fleet. Nevertheless the Spanish subsidies have been mostly applied to those vessels excluded from EEC aid.

Some experts estimate that 20% of the fleet has been renewed thanks to this policy.

In order to implement the latter the final withdrawal from service of the vessels has been subsidized.

The modification of the above Ruling in December of 1990 (EEC Ruling 3944/90) has allowed access to Community subsidies of vessels whose length is between five and nine metres. Other measures have also been implemented to accelerate the reduction of the fleet, the exportation of vessels, and the setting up of joint ventures.

The above-mentioned measures were included in the Multiannual Guidance Programme for the 1987-91 fishing fleet, which was approved in March 1988. The programme established reduction objectives for the active Spanish fleet. By December 31, 1991, the overall tonnage had to stand at 588,590 gross registered tonnes (GRT) and 1860,689 KW which, with respect to January 1, 1987 meant a 6%

reduction in GRT and 5% in KW. The most affected fleets are those that fish in the domestic fishing area and in waters of third countries with whom they have fishing agreements.

The European Economic Community is now considering taking more action in this respect, even though it needs further data on the most affected fisheries and the fleets that operate in them.

To this end, the recommendations for preparing the Multiannual Guidance Programme for 1992-1996 insist on relating the type of fleet to specific species or groups of species so as to determine the objectives of the fishing effort system according to areas.

### Fishing

The regional fleet, which is the largest in the EEC operates in Spanish, EEC and third country waters.

The fishing zones within Spanish waters are the Bay of Biscay, the Northwest coast, the southern part of the South Atlantic coast and the waters surrounding the Canary Islands.

As of 31/12/90 there were 2,011 registered vessels authorized to fish the waters north of Spain, mostly purse seiners (39%) and those using set longline techniques (31%).

The Galician fleet, by far the largest in the Region, participates in these expeditions using a variety of techniques. Line fishing is carried out in the coastal regions and in the Galician rias. These are 20 to 30 tonne vessels engaged in primarily sardine fishing, with mackerel, jack, etc. playing a secondary role in the catch. Trawlers (100-170 GRT), longline vessels and gill net vessels operating the continental shelf near the Galician coast bring a wide variety of species to market (sardines, horse mackerel, conger eel, octopus, mackerel, etc.). In addition to these, using lobster or other techniques, there is a large number of vessels of under 20 tonnes whose activity has a great economic and social impact on many coastal communities, depending on the catch.

Coastal fishing vessels in the Basque Country concentrate mainly on large tuna, anchovies and verdel. This is also the case in Cantabria, while the registered fleet for Asturias catches sardines, anchovies, horse mackerel, etc.

The Spanish waters under discussion support a considerable volume of fishing activity, although this is somewhat controlled by the requirement that vessels must register according to fishing techniques used in order to obtain permission to fish the different Spanish waters.

According to data gathered from specialists, the species which are most affected by overfishing are hake, megrim and monkfish.

Pollution is another factor influencing the deterioration of fishing grounds and causing stock reduction (smaller catch size and smaller fish).

The regional fleet fishes mainly in EEC zones VI, VII, VIII and IX .

Sardines, anchovies and tuna, etc. are captured in zone VIII, using 40 to 125 GRT purse seiners. 200 GRT trawlers and longline vessels operate in Zones VI and VII, capturing mainly hake and monkfish. Article 158 of the Treaty of Accession establishes that 300 vessels, included in a closed register, may operate in these zones until 1995, while only 150 of them may operate at any one time (CIEM Vb/VI: 23 vessels; CIEM VII:70 vessels; CIEM VIIIabd: 57 vessels). All but 5 are allowed to fish only demersals. Article 160 the Treaty authorizes specialized fishing activities all or part of the year, without restrictions on tuna fishing and allows for another 435 fishing anchovies, pomfrets and sardines. Fishing trips last for 21 days.

It is forecast that in 1992 the Spanish fleet will catch 326,402 tonnes of fish, of which 31% will be horse mackerel, 23% blue whiting, 10% anchovies and roughly the same percentage for mackerel.

<u>Type of fish</u>	<u>Area</u>	<u>Quantity for 1992 (in tonnes)</u>
Anchovies	VIII, IX	32,740
Pollock	Vb, VI, VII	1,210
Blue whiting	VbIIIab, VIIIC, IX, X	74,430
Black wrasse	Vb, VI, VII, VIII abd	2,000
Hake	VIIIC, IX	29,610
Horse mackerel	VIII	101,270
Mackerel	Vb, VI, VII, VIIIabde	30,160
Place	VIIIC, IX	120
Sole	VIIIb, VIIIC, IX	855
Megrims	Vb, VI, VII, VIIIabde, VIIIC	19,740
Monkfish	IX	3,030
Prawn	Vb, VI, VII, VIIIabde, VIIIC,	13,050
Cod	IX	18,187
Total	Vb, VI, VII, VIII ab	326,402
	SV, 3M, 3NO, 2J3KL	

After the signing of the Accession Treaty, the following was established for Portuguese waters:

- \* Trawling: 18 vessels
- \* Longline fishing: 130 vessels
- \* Bluefin tuna: 150 vessels

The Guadiana agreements further establish a list of 30 vessels of various types authorized to fish the estuary. The 39 boats known as 'famelas', operating on the shores of the Miño, should be added to this list.

The deep sea and off-shore vessels operate in the waters of third countries. The following are the main fishing grounds:

\* CECAF:

- Morocco: Trawling for hake and shrimp
- Morocco and the Sahara bank: sardines

- Sahara bank: cephalopods
- Mauritania: shellfish
- Mauritania: Trawling for fresh hake.
- Senegal, Gambia, Guinea Bissau: shellfish
- Nigeria, Cameroon, Western Guinea, Gabon: Trawlers and crustacean freezer processing ships

\* ICSEAF:

- Angola: 300 GRT vessels. Crustacean fishing.
- Mozambique: Tuna. Freezer processing ships.

\* Falklands and Patagonian Platform

- 800 to 1,000 GRT vessels catching mainly hake and squid.

\* CIEM

- Cod fishing (Summer)

\* NAFO

- 850 GRT vessels catching mainly cod and haddock.

\* ICCAT

- State-of-the-art freezer processing ships

Resources within the frame of the CFP

The Treaty of Accession of Spain to the EEC established the procedures for access to Community waters, the number of vessels which could fish simultaneously in them and the percentage of participation in the TACs, complying with all conditions in force since 1986.

The EEC Ruling 3094/86, that established some technical measures for the preservation of the fishing resources, and Ruling 170/83, that instituted a common regime for conservation and management of fishing resources, have also determined the exploitation of those resources by Spain.

A fundamental aim of these measures has been to delimit fishing activity, matching the catches to the available resources.

The application of the rulings contained in the Commission Report of 1991 to the Council and to the European Parliament on the Common Fishing Policy have had only partial success due to inadequacies in the present system of resource management: coverage for TACs, multi-species fishing grounds, massive discards in the sea, effects on the environment, unoperative control measures, etc.

Present situation of the fishing activity

In 1990, 591,000 tonnes of fish and fish products were landed in this region, constituting 66% of total national catch. The estimated value of these catches was ECU 978,6 m, representing 52% of the national total.

In relation to the number of crew members (47,9833 data obtained from records at the Instituto Social de la Marina (Navy Welfare Institute), the average obtained is 12.3 tonnes and ECU 20,400.

The volume and value of the catch rose 9% and 26% respectively as compared

to that of 1986.

Midwater and coastal fishing account for 54% of the overall volume of saltwater fishing and 71% of its total value. This Region's ports receive 59% of the national volume, but only 55% of the value.

Some 37,215 crewmen man the midwater and coastal fishing boats. Thus if 322,000 tonnes is unloaded at port, this comes to 8.7 per crew member, which is 30% below the 12.3 figure for the entire Region. The pro-rata catch value (ECU 693.5 m/37,215) is ECU 18,650.

Some 10,045 vessels with an average crew of 3.7 participates in this type of fishing.

The subregion of Galicia registered midwater and coastal catches of 216,000 tonnes, worth ECU 432.8 m. This means Galician ports unload 67% of all the regional catch, but only 62% of the overall value. For Pontevedra, Coruña and Lugo, the three coastal provinces making up this subregion, the first two account for 92% of volume of catch and 89% of value. In 1989 demersal fish constituted 49% of all midwater and coastal catches in this subregion with pelagic species representing another 43%, the main species being hake/whiting, sardines, tuna, horse mackerel and blue whiting.

The Cantabrian subregion, which is made up of the provinces of Asturias, Cantabria, Vizcaya and Guipúzcoa, brings in 106,000 tonnes of the type of fish studied, which is worth ECU 260,7 m, some ECU 2,459 per ton (23% above the same ratio for the subregion of Galicia). The largest catches (1990 data) are brought in by Vizcaya (35,475 tonnes), with the three remaining provinces bringing in similar quantities between them: Guipúzcoa (25,167 tonnes), Asturias (23,977 tonnes) and Cantabria 21,896 tonnes)

The highest value per ton unloaded is registered in Guipúzcoa (ECU 3,091 per ton).

Pelagic fish clearly predominate in the overall midwater and coastal catches unloaded in this subregion (76%) (1989 data).

The main species landed are anchovies, tuna, horse mackerel, mackerel, with the following distribution respectively for 1990: 22,908 (22% of total), 19,462 (18%) and 13,465 tonnes (13%).

Other significant species are 'verdel' (10,943 tonnes), sardines (8,626 tonnes), hake (6,987 tonnes) and whiting (3,253 tonnes).

Deep-sea fishing brought in some 269,000 in 1990 worth ECU 285.1 m, or ECU 1,060 per ton (as compared with 2,140 by midwater and coastal fishing).

Some 10,768 persons man the 1,204 deep-sea fishing boats (8.5 crewmen per boat). This, related to the figures for catch unloaded, is 25.0 tonnes and ECU 26,480 per crew member.

A few ports in Pontevedra and Coruña receive 100% of all deep-sea fish caught. Out of 269,441 tonnes, 74% arrive at Pontevedra ports (basically Vigo). In terms of value, the ECU 285.1 m are divided 65% and 35% respectively between the provinces of Pontevedra and Coruña.

Demersal fish represented 41% of volume of midwater catch unloaded in 1989, pelagic fish accounted for 39% and mollusc/crustaceans made up the remaining 20%. Hake/whiting, tunas, cephalopods and cod were the most significant species.

The fundamental problems faced by the fishing activity in this Region, as is the case for the rest of Spain and the other countries in the EEC, is the progressive reduction of fishing possibilities.

This situation has led to the existing fishing fleet being considered too large for the different countries in the EEC in relation to their zone of operation.

In percentage indicator terms (number of vessels, GRT, sea-going personnel) Spain, and this Region especially, should not be greatly affected, but the situation changes when absolute figures are considered due to the significant role of the Spanish fishing fleet in the fishing activity of the Community as a whole.

In general terms, vessels operating in coastal waters, commonly known as "the craft fleet", could be the most affected in the future. Overfishing and industrial pollution of these waters is seen to significantly reduce the total percentage of landings. As the landed tonnage/person rate is substantially lower than in the other fishing activities the negative effect on employment and the economy of several coastal townships can be predicted as being severe. An aggravating factor is that the skills required in this activity cannot easily be deployed in other types of activity.

Other forms of fishing activity will also be affected in the future by a reduction in the possibilities of fishing to a greater or lesser degree, depending on the kind of fleet and the fisheries where they operate. Most likely these reductions will affect midwater fishing more than deep-sea fishing because the latter has access to exploitation of new species, alternative, less exploited fisheries, etc.

This sector as a whole has suffered difficulties caused as much by a reduction in catches due to the exhaustion of the fishing grounds as by the limitations of access to its traditional fisheries.

TABLE IV  
LANDED AMOUNT 1990 (TONNES)

ZONES	DEEP-SEA	MIDWATER & COASTAL	FARMS	SEAWEED & SARGASSO	TOTAL
RIA OF VIGO	171017	54755	12562	222	238556
RIA OF PONTEVEDRA	7264	12194	3594	4	23056
RIA OF AROUSA	22106	17807	39911	6	79830
<b>PROVINCE OF PONTEVEDRA</b>	<b>200387</b>	<b>84756</b>	<b>56067</b>	<b>232</b>	<b>341442</b>
RIA OF AROUSA	48175	24865	12724	135	85899
RIA OF MUROS AND NOIA		10973	2883	5	13861
RIA OF CORCUBION		584		53	637
RIA OF CAMARIÑAS		1776		188	1964
RIA OF LAXE		7051		122	7173
RIAS OF CORUÑA AND BETANZOS	20879	66902	1735		89516
ESTACA DE BARES		2850	4		2854
<b>PROVINCE OF LA CORUÑA</b>	<b>69054</b>	<b>115001</b>	<b>17346</b>	<b>503</b>	<b>201904</b>
LUGO COAST		16223		585	16808
<b>PROVINCE OF LUGO</b>		<b>16223</b>		<b>585</b>	<b>16808</b>
<b>TOTAL GALICIA</b>	<b>269441</b>	<b>215980</b>	<b>73413</b>	<b>1320</b>	<b>560154</b>
VALDES		786		29	815
AVILES		18479			18479
GIJON		4712			4712
<b>ASTURIAS</b>		<b>23977</b>		<b>29</b>	<b>24006</b>
CANTABRIAN COAST		21896	72		21968
<b>CANTABRIA</b>		<b>21896</b>	<b>72</b>		<b>21968</b>
GREATER BILBAO		63	1		64
BERMEO		10167			10167
ONDARROA		25245			25245
<b>PROVINCE OF VIZCAYA</b>		<b>35475</b>	<b>1</b>		<b>35476</b>
DONOSTIA		14495			14495
GUETARIA		10672			10672
<b>PROVINCE OF GUIPUZCOA</b>		<b>25167</b>			<b>25167</b>
<b>TOTAL CANTABRIAN COASTLINE</b>		<b>106515</b>	<b>73</b>	<b>29</b>	<b>106617</b>
<b>TOTAL REGION E.1</b>	<b>269441</b>	<b>322495</b>	<b>73486</b>	<b>1349</b>	<b>666771</b>

SOURCES: MAPA and Regional Fishing Councils

NOTES: 1) DEEP-SEA: Frozen fish + green cod  
MIDWATER & COASTAL: fresh fish  
2) PARKS & FARMS: Products used in the industry are not included

Apart from the necessary securing of reasonable agreements in order to guarantee the activity of the Regional and Spanish fleet, an alternative measure for obviating most of these difficulties has been the constitution of joint ventures with non-EEC countries for securing safer and easier access to non-EEC fisheries.

## 5.2.- Aquaculture and shellfish harvesting

In Region E.1 saltwater and continental aquaculture reached production levels of ECU 122,4 m in 1990, 73% of the national total. 86% of this figure corresponds to saltwater aquaculture, with 54% applying specifically to mussels.

In 1990, 176,118 tonnes of saltwater aquaculture products for consumption or processing were obtained, with the following distribution: 170,000 tonnes of mussels, 2,740 tonnes of flat oysters, 2,175 tonnes of clams, 224 tonnes of other molluscs, 570 tonnes of turbot and 355 of salmon.

In addition to this, 75 million units of mollusc seed and fish larvae were harvested.

Saltwater aquaculture development has been constant in the Region E.1 since the outset of the former Multiannual Guidance Programme (1987-1991), with the exception of mussels production, whose figure for 1990 is only 70% of the average figure for the period 1985-1988.

Production increase (for adults) has exceeded the forecast for 1991 in some species (clam, salmon); in others (for instance, turbot) it has not, but it has been significant.

Strong growth was also registered in larvae (fish), broods (crustaceans) and seeds (molluscs) although the projected harvests for 1991 were exceeded in only the first case.

Trout production and other species of inland aquaculture have kept stable.

Saltwater and continental aquaculture directly employs some 7,100 persons, 2/3 of whom are in full-time positions. 83% of all jobs correspond to mollusc farming sectors, mainly mussels. Mollusc farming employs some 3,200 family businesses (2,000 of these only raise mussels).

The Multiannual Guidance Programme (1992-1996) has been conceived on the same guidelines as the former, establishing with respect to sea species two levels of priority for different species, and limiting itself to three species of inland aquaculture.

The wonderful natural setting, the maintenance and diversification of demand (except for the products of inland aquaculture) and the investment made favours recovery in mussel production and the continuance of growth for the other species.

Obstacles to this development proceed mainly from the environmental situation, due as much to the activity's effect on it as to its pollution by other industries. This issue is being controlled through legislation.

On the other hand, to secure the production of fry and seed has been and still is essential for the development of this sector.

In short, it can be said that this is a subsector with a bright future though, logically, always playing a secondary and complementary role to the main fishing activity, with a very limited capacity to absorb workers diverted from other sectors.

The fundamental problem regarding shellfish harvesting in Galicia, though not exclusive to this location, arises from the need to sustain rational exploitation. This is done through policies professionalising the harvesting workforce, fixing minimum sizes for the harvested species, and, finally, implementing policies that allow for appropriate preservation and development of the resources.

### 5.3.- Processing industry

During the eighties this sector, both in Region E-1 and Spain as a whole, experienced an intensification of industrial concentration, accompanied by a sharp decline in the number of companies and jobs which fell to its lowest point in 1985. Since then production has recovered and current figures register above those at the beginning of the decade.

Now, this trend corresponds also to that experienced by the most important subsector, preserved and semi-preserved goods. The subsectors of processing frozen goods and prepared dishes have evolved positively, helped not only by changes in consumption but by the scarcity and rising prices of the fresh product. Nonetheless the presence of this activity in this Region is less significant than preserved and semi-preserved goods because the processing factories are utilized located close to the big consumption centres (Madrid, Barcelona, etc.).

There are 210 companies involved in fish processing or aquaculture products in this region (53% of the national figure, 396 companies). Of these, 204 process foods for human consumption. The majority of them (132 concentrate mainly on the production of canned goods, preserved or semi-preserved food). By geographical area, the largest number of companies is concentrated in Galicia (119) with Cantabria a distant second (51).

The observed trend for the eighties indicates a decrease in the number of companies, from 350 in 1980 to 210 in 1989, due to lockouts or mergers in the canning and drying and salting sectors, caused by several factors, including outdated industrial organization, rising input costs and imports. This decreasing trend would have been steeper had it not been for an increase in the number of companies involved in freezing processing as a partial result of increased consumer demand the number of concerns fell most sharply in Galicia, from 178 to 119.

The majority (22 out of 25) of the most important companies in the subsector of canned goods is located in this region, including the top ten. It is an activity dominated by family business, with scant foreign investment and marked fragmentation in comparison to other European countries. Nevertheless, the top ten process almost half the annual production of canned fish. Except for the most important among them relationships with shipowners are not frequent, although a process of increasing integration is on the way.

Companies engaged in semi-preserved anchovies, concentrated in Cantabria, are family businesses of middle or small size. They are very dependent on highly variable seasonal catches, which obliges them to partially rely on imports.

The frozen products processing sub-sector is widely dispersed over the whole country because the companies and their facilities tend to locate close to the big consumption centres. Nonetheless, some companies with an important proportion of the national production are located in this region.

These companies are highly integrated, in the catching sector through different types of relationships: corporate shipowner property, joint ventures with foreign companies, or with other national companies to fund shipowner companies, etc. On the other hand, the biggest companies participate not only in wholesaling but also in retailing to small shops, and they produce processed goods together with pre-cooked or prepared dishes. This sub-sector is also integrated with medium size and small companies -often constituted as processing rooms, producing frozen goods of different degrees of processing, although they also process fresh goods. Their number has risen in recent years following the increasing demand for frozen products.

Finally, drying and salting companies, a declining sub-sector due to increasing difficulties in obtaining raw materials. Most of the companies are still based on craftwork and they are often linked to wholesalers. The most important companies (located in Coruña, Pasajes, and Irún) have their own fleets or are integrated in cartels with some catching involvement.

The product processing industry comprising fishing and aquaculture registered permanent and seasonal employment figures of 10,405 individuals in the Region (1989), 58% of the national total. Employment fell sharply in the eighties both in the country as a whole (30% less) and in the Region (40% less). Galicia accounts for about two thirds of the employment in this industry in the area which we are researching.

The industry of preserved and semi-preserved canned goods registers the highest rate of temporary employment (estimated at 25% of the jobs), due to the seasonality of the catches of anchovies, tuna fish, mussels, sardines, etc. The same phenomenon, and for similar reasons, occurs in the sub-sector of fresh fish processing and the drying and salting industry, though to a lesser degree.

In contrast, the industry processing frozen goods is the one with the lowest proportion of temporary employment, due to the preserving method, and also to the fact that by operating in different seas they secure the regularity of raw material inputs.

In the 1980's the processing industry was faced with a growing scarcity of raw material, a need which it has filled by imports. Between 1980 and 1990, the imported raw materials rose from 10% to 20% of the tonnes consumed by this sector.

Hake and marlin species imports are significant. In 1989 the regional fleet supplied 53% of the volume consumed by the freezing and processing industry. The same is true of the tuna family, where 14% of all raw material used in the canning and packing industry came from third countries. Third imports of cephalopods, crustaceans, anchovies, etc. are significant.

To sum up, this is an activity suffering job reductions due to the following factors:

- . Scarcity of raw material
- . Need of resources for modernization
- . Political and administrative limitations to its export activity

Furthermore, companies do not fully utilize their capacities due to several factors, including the importation of foreign products, etc.

Regarding canned goods in particular, Portugal and Morocco enjoy advantageous trading conditions, which, in the general opinion, has contributed in this sector to a decline in Spain's export to the EEC market.

The basic guidelines of Community policy regarding the processing sector try to increase the competitiveness of the companies to adjust their processes of production to the new needs of demand and to develop new companies (except for sardine canning). (Community Aide Scheme for Spain. Processing and marketing of fishing products. Objective 5(a). 1991-1993).

The specific investment is directed to the technological modernization of processing and packing machinery and equipment, improvement in storage and raw material handling rooms, quality of equipment and hygienic-sanitary control, etc.

#### 5.4.- Inshore infrastructure, handling, storage, distribution

The 131 ports along this regions coastline are distributed by Autonomous Community as follows:

. GALICIA .....	86
. ASTURIAS .....	19
. CANTABRIA .....	8
. BASQUE COUNTRY.....	18
. TOTAL .....	131

Ten of these ports are considered of national interest and consequently are ruled by the Central Administration and managed by its respective Council of Port Works. The others belong to the Autonomous Administrations jurisdiction.

The policies of the different administrations have as a frame of reference the Programme for the Improvement and Adaptation of Facilities of the Spanish Fishing Ports, 1989-1993 (EEC Rulings 4028/86 and 2321/88). The investment allotted to the Region in these four years amounts to ECU79,6m, 54% of the figure corresponding to Galicia, basically directed to improving the conditions of the subsidies for fishing vessels, refrigeration facilities, building and ice provisioning.

In these 131 ports there are about 90 fish-markets, 53 of them (59%) being located in Galician ports. These markets are managed by fishermen's unions ("guilds"), shipowners, fishermen's cooperatives or other groups. Operations of trading, handling and storage of fish products are commonly undertaken in those which are more modernized.

The 90 markets, spread over 53,228 square metres (i.e., an average surface of 591 square metres), have an annual trade of approximately 343,000 tonnes (average for 1986-1988). This class of fish-market deals basically in fresh fish.

About 80% of the surface occupied by fish-markets in this region is located in the main 10 ports, Pasajes, Vigo and Coruña -in that order- being the most important. The three of them together make up approximately half the surface occupied by fish-markets.

#### Handling, storage and distribution of fishing and aquaculture products.

The processes and agents involved differ according to the product in question (fresh, frozen or from aquaculture settings).

Landed fresh fish products initially go to fish-markets to be sold. There they are classified by species and size and part of them is transferred, under controlled temperatures, to outhouses called processing rooms. According to information from the General Directorate of Ports, infrastructures dealing with fish handling and canning cover a surface of 41,132 sq. m in those 10 ports that concentrate on the majority of landings.

The commercial wholesalers, operating in these fish markets buy the products by auction to send later to central or local markets, processing factories, etc. Information about the number of fresh fish trading companies is scarce.

Owners personally manage their own business in 85% of all companies. 95% of the companies are family ventures with hardly any formal structure and an extremely low level of mechanization (80% of all tasks are manual).

The main problem for port wholesale trade in this region (and in the rest of Spain) is the lack of storage facilities equipped for fish classification, processing, packing and preservation (or the insufficiency of the existing ones). Other problems are related to the packs and cans used. The Sectorial Plan for 1990-1994 has directed research into these problems and also to other aspects such as access to the settings, parking areas, road traffic, etc.

Marketing at destination point takes place basically in three operating centres:

- Traditional wholesale central markets
- Wholesale markets belonging to the Mercasa Network - modern settings where most fish destined for the big urban areas is marketed -
- Independent traders and wholesale importers who buy the fish in the original port and sell it to shop-keepers.

The total figure for people employed in wholesale trade at destination point should be 4.000. Nonetheless, only 60% of marketed fish products come from this region. Therefore, to be precise, only 2,400 of these people can be said to be employed in marketing fish products from this region.

Frozen products marketing networks differ very much from those for fresh products. Big fishing companies have often created subsidiaries wholesaling at destination point, participate in processing factories, handling rooms, etc., or have reached agreements to operate jointly. Producer organizations play an important role in the marketing of some species from point of origin.

Frozen products go to following destinations:

- Frozen tunafish (mainly yellowfin tuna and striped tuna) are almost all consigned to the canning industry.
- Frozen cephalopods (mainly squids, shotfin squids, and octopuses) are most often directed to sea products processing rooms.
- Frozen hake destinations are divided between processing rooms and direct consumption.
- Frozen seafood goes mainly to direct consumption.

Companies marketing frozen goods located in this Region are concentrated around the port of Vigo.

According to available information (CAMERDATA), there are 1,914 tax-licenses registered in this region (legally allow wholesaling operations in fresh, frozen, salted fish, etc.). The employment calculated for these companies amounts to 5,973 people. It must be taken into account that 51% of the licensees are independent operators, as against companies.

	REGION E.1	% SPAIN
Number of tax licences for wholesale marketing	1,914	30%

#### 5.5.- Ancillary activities

Construction and repair of vessels has a strong presence in this Region, shipyard production being orientated mainly to the national market.

At present the companies producing vessels of more than 100 GRT try to divert their production to other countries.

About 17 out of 32 existing shipyards launched fishing vessels bigger than 100 GRT, amounting to 53,304 GT.

In 1990, shipyards in Region E.1 produced 30 of the 36 fishing vessels sold to the national market, and 36 of the 39 vessels exported.

During the second half of the eighties this subsector has carried on important construction and modernization of the Spanish fishing fleet (thus effectively reducing its average age) thanks to subsidies offered jointly by the EEC and the Spanish administration.

In this context, ECU137.8m were designated for construction and modernization of vessels between 1986 and 1990, 53% of which was allocated to region E.1. This aid amounted to 25% of the previous budget. It must be pointed out that between 1986 and 1990, 104 construction projects were subsidized amounting to a total investment of ECU 182.5 m (averag investment, 18 million), and also 498 modernization projects amounting to an investment of ECU 115.3 m. Galicia received substantially more aid and had more projects approved than any other autonomous Community.

To these investments, co-financed by the EEC, must be added nationally subsidized Spanish entrepreneurship orientated to vessels of less than 9 metres in length. It is estimated that these investments have amounted to ECU1,538.5m in the last five years (545.3 million from the EEC).

These special national subsidies are justified because EEC subsidies excluded small vessels, which constitute the majority of the Spanish and regional fishing fleet. The modification in 1990 of EEC Ruling 4028/86 opens new perspectives, because the Community participates now in subsidies to vessels shorter than nine metres in length (a minimum of five metres for construction and ECU3,846 for modernization), financing them through the structural funds.

Concurrent with modernization of the EEC fishing fleets (which is to go ahead for some time), has been the proposal, since 1986, concerning the viability of progressively reducing the number of vessels, establishing tasks of annual reduction for every country. Some policies have been implemented with this aim as, for instance, subsidies for definitively leaving fishing activities.

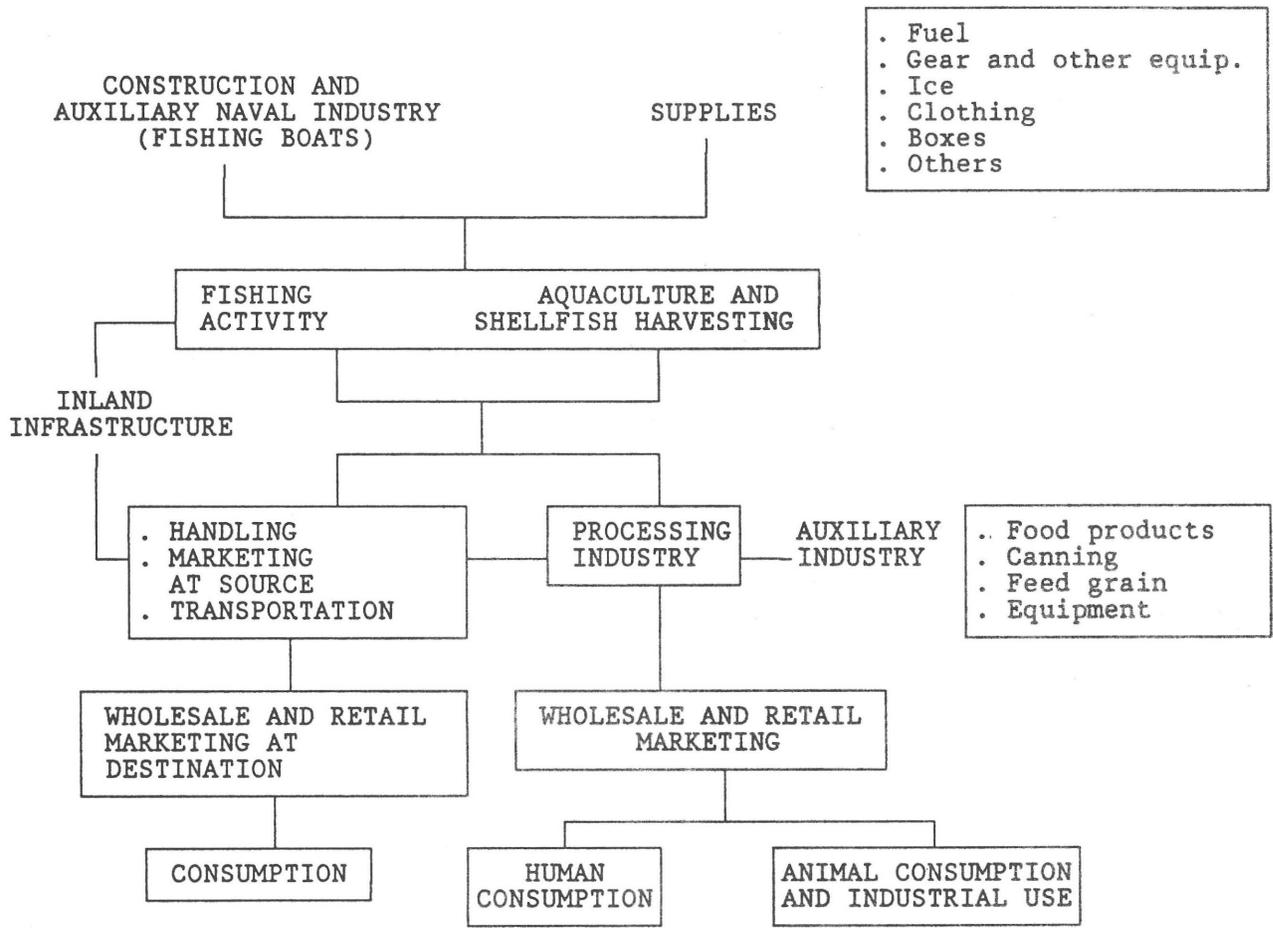
The modification of Ruling 4028/86 has defined several policies aimed at the reduction of the fleet: constitution of joint ventures, subsidies for shipbreaking, and vessel exportation.

The projected reduction of the fleet, which will be intensified in the future, together with a renewal policy, are obviously the basic components to be taken into account in order to estimate the impact on the sector of ship construction and those indirectly dependent on it.

At present, the possible reduction of exploitation of resources and the absence of agreements with countries outside the Community, as well as the loss of fishing grounds such as Namibia, have led to a number of modern vessels being taken out of service. This fact, in addition to the general trends in the fishing sector, negatively affect the construction and repair industry and the auxiliary naval industry, which latter has a strong presence in the Basque Country.

5.6.- Relationships between the different activities in this sector

The following chart shows the connections between the different activities in this sector and ancillary activities:



## 6.- IDENTIFICATION OF ZONES HIGHLY DEPENDENT ON FISHING AND ANCILLARY ACTIVITIES

### 6.1.- Delimitation of zones

In order to delimitate the zones of this report we have proceeded as follows:

First of all, we have selected every population centre or business engaged in ancillary activities.

These population centres have been chosen for their geographic proximity and administrative districts.

After delimiting these zones, other dependent areas were chosen if they met one of the following conditions:

- 1º) Number of fishermen higher than the provincial average.
- 2º) Tonnage of the fishing sector higher than the provincial average.
- 3º) Employment figures in absolute terms, are significant, even though not higher than the provincial average.

According to these criteria we delimited twenty zones highly dependent on the fishing sector, taking in a total of 154 population centres.

These zones are located in eight provinces and four Autonomous Communities within Region E.1 (Figures 5 to 8). This Region accounts for about 54% of all sea fishermen in Spain.

In this respect, the Community of Galicia, to which 71% of the fishermen in this zone belongs (crews on ships registered in the ports in each zone), is in the largest in Spain, followed by the Basque Country (19%), Cantabria (6%) and Asturias (4%).

In the Community of Galicia, the province of Pontevedra accounts for 63% of all fishermen. And, within this province, the Ria of Vigo has 68% of all fishermen in the province.

In the province of La Coruña, which represents 31% of the regional total, prominent is the Ria of Arosa (27%) and the Ria of Coruña and Betanzos (26%).

In the Community of Asturias, the zone of Avilés accounts for almost half the number of fishermen in the Community.

In the Community of Cantabria we have delimited a single zone.

Finally, in the Basque Country, foremost in the province of Biscay (66%) is the zone of Bermeo (50%) and, within the province of Guipúzcoa (34%), Donostia (68%).

As for the number of jobs connected with the fishing sector,

the overall picture is slightly different.

Thus, the Community of Galicia acquires greater relative importance (74%) and within it, although Pontevedra is still the leading province (59%), the figure for La Coruña rises (37%). In the province of Pontevedra the same can be said about the Ria de Vigo (65%) and that of Arosa (22%).

In the province of La Coruña the Ria of Arosa acquires greater importance, (33%) as does the Ria of Coruña and Betanzos (33%), which overtakes the former.

In the Community of Asturias, (4%) for which overall figures are lower, the Avilés zone is the most important one (41%).

The Community of Cantabria and the Basque Country also lose importance to the benefit of Galicia.

In the Basque province of Biscay, Bermeo (43%) retains its first place but loses points -as does Ondarroa (34%)- to Bilbao, which is only important with respect to the number of fishermen.

There are no relevant changes in the zones of Guipúzcoa.

FIGURE Nº 4

CHARACTERIZATION OF THE ZONES ACCORDING TO THE TOTAL NUMBER OF JOBS DEPENDENT ON THE FISHING SECTOR.

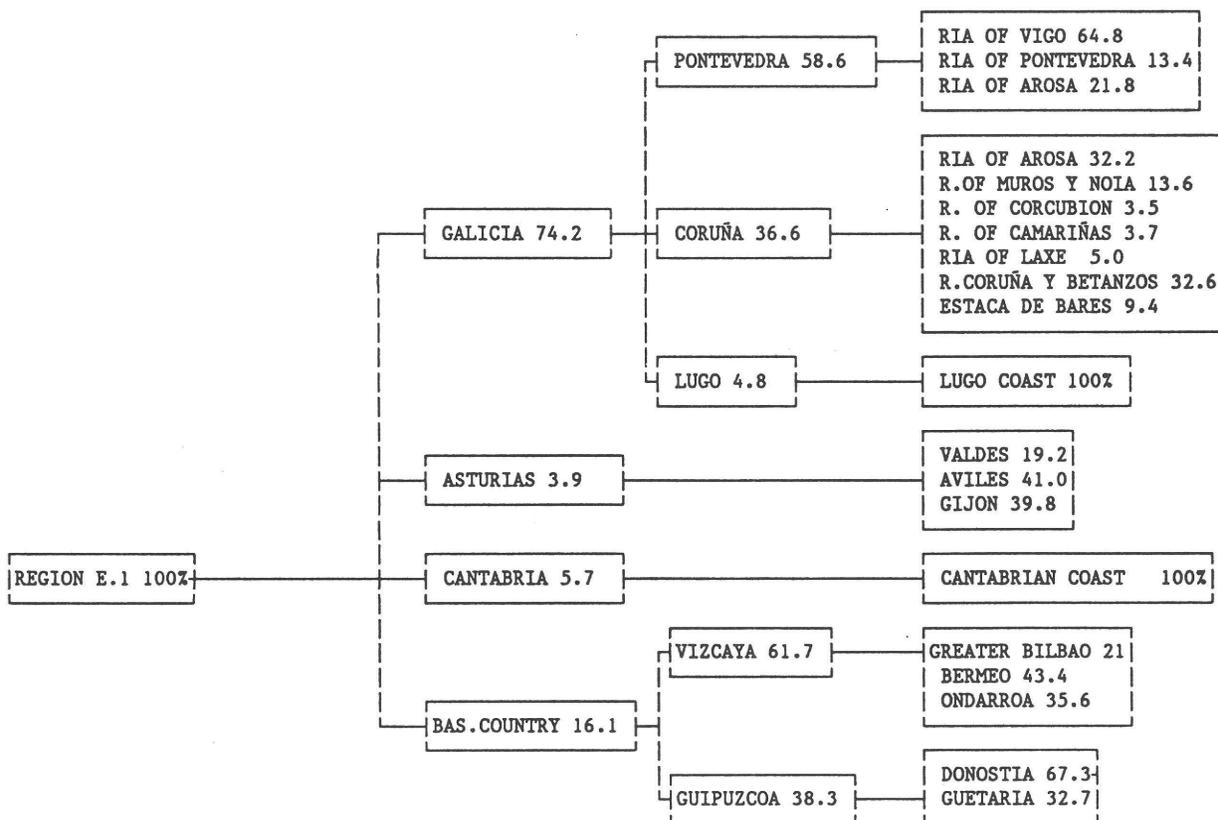


TABLE V  
DEPENDENCY RATE (FISHING ACTIVITY ZONES)

Z O N E (1)	GENERAL FEATURES OF THE ZONES					NUMBER OF JOBS IN FISHING AND ANCILLARY ACTIVITIES (5)					VALUE ADDED OF FISHERIES AND ANCILLARY ACTIVITIES					RELATIVE DEPENDENCE				DEPEN- DENCE ON EC QUOTAS
	TOTAL POPULATION	WORK FORCE (2)	TOTAL NUMBER OF JOBS (3)	G.V.A. (4)		FISHERMEN ONLY	OTHER JOBS (F)			TOTAL	LANDINGS & FIRST HANDLING(6)	OTHER ACTIVITIES (I)			TOTAL	IN TERMS OF JOBS (%)		IN ECONOMIC TERMS (%)		
				TOTAL *	PER CAPITA **		AQUACUL- TURE	PROCESSING INDUSTRY	OTHER (7)			I 1	I 2	I 3		E/B	G/B	H/C	J/C	
A		B	C	D=C/A	E	F 1	F 2	F 3	G=E+F	H	I 1	I 2	I 3	J=H+I						
RIA OF VIGO	385,623	141,390	108,543	3,096	8,029	14,472	922	2,037	16,760	34,191	151.2	10.2	54.4	315.8	531.6	13	31 ½	5 ½	17	
RIA OF PONTEVEDRA	149,652	51,106	41,985	1,175	7,850	3,192	586	663	2,658	7,099	17.8	3.6	17.7	44.8	83.9	7 ½	17	2	7	
RIA OF AROUSA	69,057	28,096	21,301	490	7,099	3,618	2,039	1,358	4,495	11,510	18.7	35.8	36.3	54.8	145.6	17	54	4	30	
TOTAL FOR PONTEVEDRA *	604,332	220,592	171,829	4,761	7,878	21,282	3,547	4,058	23,913	52,800	187.7	49.6	108.4	415.4	761.1	12 ½	30 ½	4 ½	16	
RIA OF AROUSA	59,820	24,834	20,610	378	6,316	2,837	1,988	1,552	4,233	10,610	38.6	10.6	37.7	58.4	145.3	14	51 ½	11	38 ½	
RIA MUROS Y NOIA	33,608	13,387	10,752	219	6,516	1,681	318	105	2,387	4,491	12.1	2.6	2.5	32.5	49.7	15 ½	42	6 ½	23	
RIA OF CORCUBION	12,885	5,166	4,462	72	5,614	525	5	57	560	1,147	1.6	---	1.4	10.1	13.1	12	25 ½	2 ½	18	
RIA OF CAMARIÑAS	13,548	5,908	5,176	61	4,474	630	25	24	554	1,233	1.7	---	0.6	12.8	15.1	12	24	3 ½	25	
RIA OF LAXE	26,703	11,284	9,964	110	4,127	841	31	40	728	1,640	5.9	---	1.0	15.6	22.5	8 ½	16 ½	5 ½	20 ½	
RIA OF CORUÑA	414,125	148,839	119,667	3,798	8,447	2,732	207	930	6,881	10,751	123.9	1.8	22.6	100.1	248.4	2	9	3 ½	7	
ESTACA DE BARES	24,443	10,625	9,230	150	6,129	1,262	10	452	1,338	3,062	5.8	0.1	11.0	23.4	40.3	14	33	4 ½	27	
TOTAL FOR CORUÑA *	585,132	220,043	179,861	4,488	7,670	10,508	2,584	3,160	16,682	32,934	189.6	15.1	76.8	252.9	534.3	6	18 ½	4 ½	12	
LUGO COAST	35,268	18,774	10,810	212	5,998	2,187	17	372	1,766	4,342	30.0	---	7.3	26.7	64.0	20	40	15 ½	30	
TOTAL FOR LUGO	35,268	18,774	10,810	212	5,998	2,187	17	372	1,766	4,342	30.0	---	7.3	26.7	64.0	20	40	15 ½	30	
TOTAL FOR GALICIA *	1,224,732	459,409	362,500	9,161	7,724	33,977	6,148	7,590	42,361	90,076	407.3	64.7	192.5	668.3	1,359.4	9 ½	25	5	14 ½	
VALDES	42,690	17,192	15,199	238	5,571	416	55	19	423	913	2.4	1.1	0.6	9.6	13.7	3	6	1	6	
AVILES	117,795	42,637	34,209	604	5,128	1,019	10	94	822	1,945	27.0	---	2.8	21.7	51.5	3	5 ½	5	8 ½	
GIJON	301,858	107,808	85,210	2,578	8,541	645	---	47	1,195	1,887	8.0	1.2	1.4	22.3	32.9	1	2	½	1 ½	
TOTAL FOR ASTURIAS *	462,343	167,637	134,618	3,420	7,397	2,080	65	160	2,440	4,745	37.4	2.3	4.8	53.6	98.1	1 ½	3 ½	1	3	
CANTABRIA	268,396	95,227	78,529	2,566	9,561	2,913	274	1,239	2,541	6,967	27.9	2.7	31.8	46.0	108.4	4	9	1 ½	4	
TOTAL FOR CANTABRIA *	268,396	95,227	78,529	2,566	9,561	2,913	274	1,239	2,541	6,967	27.9	2.7	31.8	46.0	108.4	2	9	1 ½	4	
GREATER BILBAO	565,304	214,385	178,358	6,491	11,483	357	---	29	2,139	2,525	0.1	---	1.0	55.5	56.6	0	1 ½	0	1	
BERMEO	23,448	8,942	7,759	226	9,617	2,977	---	339	1,913	5,229	11.5	---	11.4	51.4	74.3	38 ½	67	7	33	
ONDARROA	17,058	7,236	6,181	149	8,726	2,620	---	140	1,531	4,291	38.0	---	4.7	42.6	85.3	42 ½	69 ½	26 ½	57	
TOTAL FOR VIZCAYA *	605,860	230,563	192,298	6,866	11,332	5,954	---	508	5,583	12,045	49.6	---	17.1	149.5	216.2	3	6 ½	1	3	
DONOSTIA	206,266	87,021	74,633	2,578	12,501	2,080	---	238	2,716	5,034	35.1	0.8	7.8	82.2	125.9	3	6 ½	1 ½	5	
GETARIA	19,056	8,478	7,153	178	9,374	979	---	102	1,368	2,449	13.9	---	3.3	42.4	59.6	14	34	10 ½	33 ½	
TOTAL FOR GUIPUZCOA *	225,322	95,499	81,786	2,756	12,231	3,059	---	340	4,084	7,483	49.0	0.8	11.1	124.6	185.5	4	9	2	7	
TOTAL CANTABRIAN COASTLINE *	1,561,921	588,926	487,231	15,608	9,993	14,006	339	2,247	14,648	31,240	163.9	5.8	64.8	373.7	608.3	3	6 ½	1	4	
Z.DEPENDENCE E.1.*	2,786,653	1,048,335	849,731	25,069	8,996	47,983	6,487	9,837	57,009	121,316	571.2	70.5	257.3	1,042.0	1,967.7	5 ½	14	2 ½	8	
TOTAL E.1.	5,797,038	2,348,595	1,974,800	47,508	8,195	47,983	7,099	10,405	68,410	133,897	571.2	77.2	272.2	1,282.4	2,203.0	2 ½	7	1 ½	5	

SOURCES: INE (1991), INEM (1990), MAPA (1990), BBV (1987 updated 1990), Regional Fishing Councils (1988-1990), CISE (1989) and others.

\* Figures in millions of ECU.

\*\* Figures in ECUS. (1 ECU= 130 PTS.)

(1) Every zone contains several municipalities

(2) Active Population in the working age group

(3) Including self-employed

(4) Gross Value Added

(5) Permanent and temporary employment. Only direct employment. Fishermen: personnel on board

(6) Landings of Spanish ships in the zone

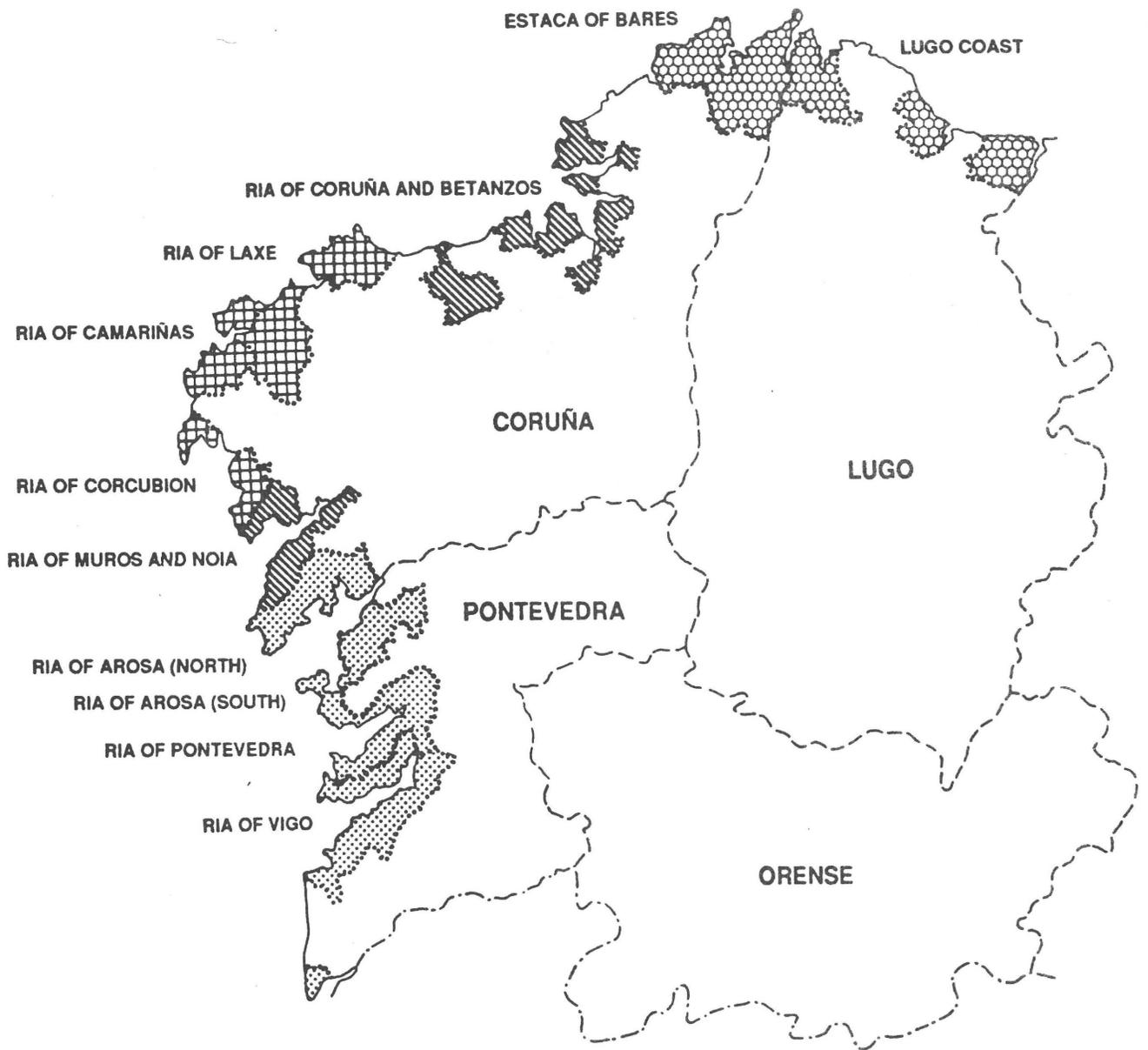
(7) Management and maintenance of port infrastructure, construction & repairing of fishing boats, auxiliary naval industrial fishing, wholesale trade of ship components, wholesale fish processing industry, onshore corporate shipowner activity shellfish harvesting & other. This last category has been estimated from input-output tables which would include textiles, a whole range of services provided to companies that are associated with transport, fuel, credit institutions, etc. (See Table VI)

\* Figures for survey zones only (not whole province)

FIGURE 5

ZONES DEPENDENT ON FISHING AND ANCILLARY ACTIVITIES

REGION E.1.: GALICIA



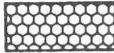
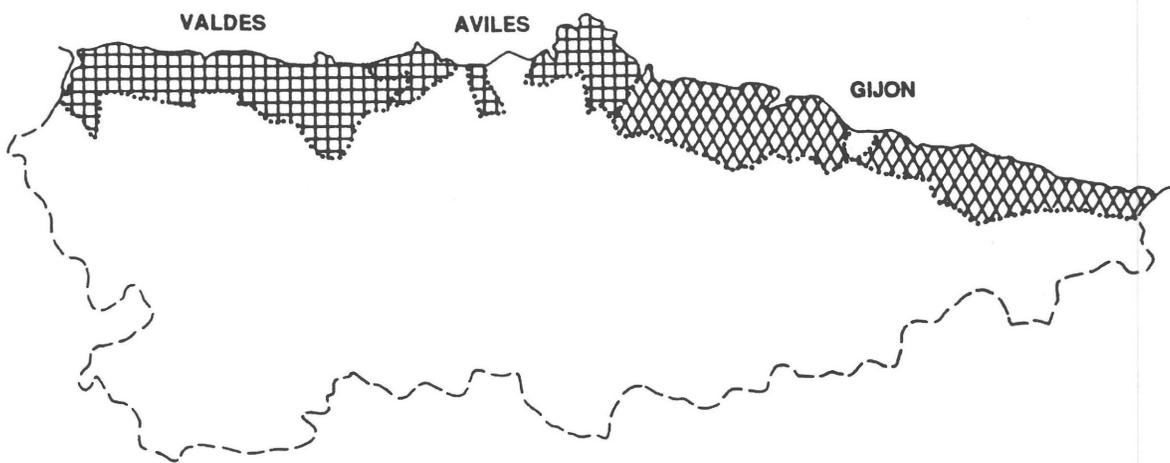
-  ZONES WHERE ALL SURVEY SECTORS AND INCLUDED
-  ZONES WHOSE PRINCIPAL ACTIVITIES ARE FISHING AND AQUACULTURE
-  ZONES WHOSE PRINCIPAL ACTIVITIES ARE FISHING AND PROCESSING INDUSTRIES
-  ZONES PRIMARILY ENGAGED IN FISHING

FIGURE 6

**ZONES DEPENDENT ON FISHING AND ANCILLARY ACTIVITIES  
REGION E.1.: ASTURIAS**



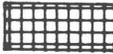
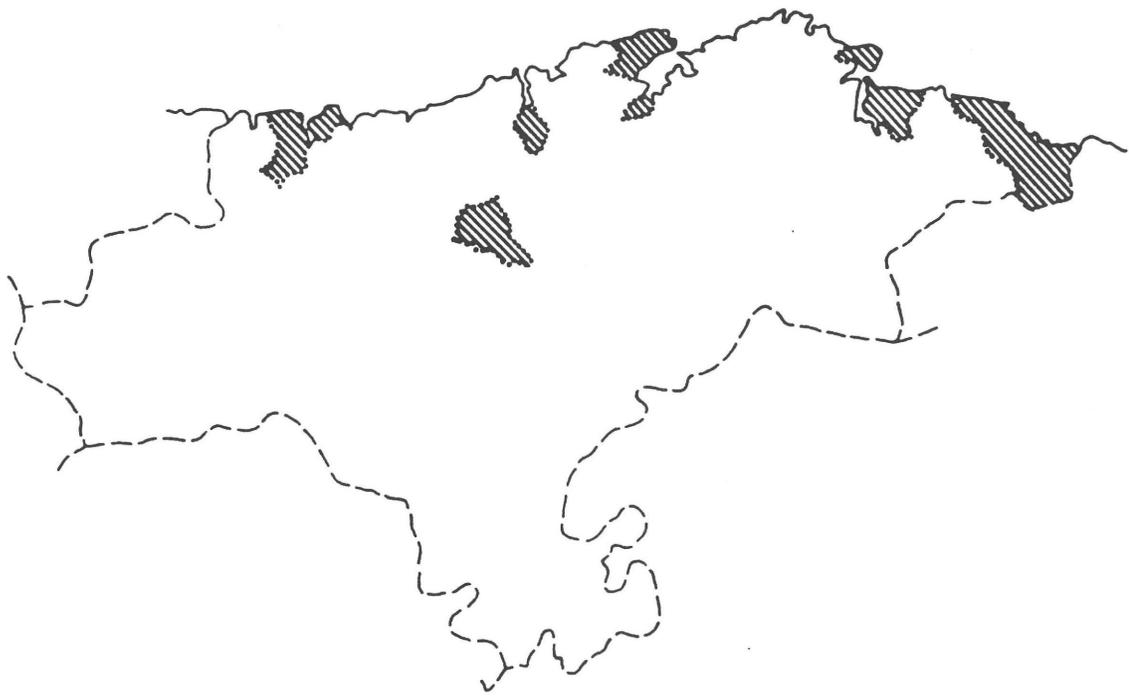
-  ZONES PRIMARILY ENGAGED IN FISHING
-  ENGAGED IN SHIPBUILDING AND ANCILLARY INDUSTRIES

FIGURE 7

**ZONES DEPENDENT ON FISHING AND ANCILLARY ACTIVITIES  
REGION E.1: CANTABRIA**

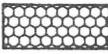


 ZONES WHOSE PRINCIPAL ACTIVITIES  
ARE FISHING AND AQUACULTURE

FIGURE 8

**ZONES DEPENDENT ON FISHING AND ANCILLARY ACTIVITIES**  
**REGION E.1: BASQUE COUNTRY**



-  ZONES WHOSE PRINCIPAL ACTIVITIES ARE FISHING AND PROCESSING INDUSTRIES
-  ZONES PRIMARILY ENGAGED IN FISHING
-  ENGAGED IN SHIPBUILDING AND ANCILLARY INDUSTRIES

## E.1. REGION: MUNICIPALITIES

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>VIGO ESTUARY</b>	<b>PONTEVEDRA</b>	<b>GALICIA</b>
<b>HIGHLY DEPENDENT MUNICIPALITIES</b>	<b>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</b>	
. Baiona . Cangas . Guarda (A) . Moaña . Nigrán . Redondela . Soutomaior . Vigo . Vilaboa	. Mos . Porriño	

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>PONTEVEDRA ESTUARY</b>	<b>PONTEVEDRA</b>	<b>GALICIA</b>
<b>HIGHLY DEPENDENT MUNICIPALITIES</b>	<b>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</b>	
. Bueu . Marín . Poio . Pontevedra . Sanxenxo		

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>AROUSA ESTUARY</b>	<b>PONTEVEDRA</b>	<b>GALICIA</b>
<b>HIGHLY DEPENDENT MUNICIPALITIES</b>	<b>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</b>	
. Caldas de Reyes . Cambados . Grove (O) . Ribadunia . Vilagarcía de Arousa . Vilanova de Arousa	. Catoira	

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>AROUSA ESTUARY</b>	<b>CORUÑA</b>	<b>GALICIA</b>
<b>HIGHLY DEPENDENT MUNICIPALITIES</b>	<b>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</b>	
. Boiro . Puebla del Caramiñal . Rianxo . Ribeira	. Dodro	

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>MUROS &amp; NOIA ESTUARY</b>	<b>CORUÑA</b>	<b>GALICIA</b>
<b>HIGHLY DEPENDENT MUNICIPALITIES</b>	<b>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</b>	
. Muros . Noia . Porto do Son		

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>CORCUBION ESTUARY</b>	<b>CORUÑA</b>	<b>GALICIA</b>
<b>HIGHLY DEPENDENT MUNICIPALITIES</b>	<b>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</b>	
. Carnota . Cocubion . Fisterra	. Cee	

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>CAMARIÑAS ESTUARY</b>	<b>CORUÑA</b>	<b>GALICIA</b>
<b>HIGHLY DEPENDENT MUNICIPALITIES</b>	<b>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</b>	
. Camariñas . Muxía	. Cee	

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>LAXE ESTUARY</b>	<b>CORUÑA</b>	<b>GALICIA</b>
<b>HIGHLY DEPENDENT MUNICIPALITIES</b>	<b>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</b>	
. Laxe . Malpica de Bergantiños . Vimianzo		

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>CORUÑA &amp; BETANZOS</b>	<b>CORUÑA</b>	<b>GALICIA</b>
<b>HIGHLY DEPENDENT MUNICIPALITIES</b>	<b>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</b>	
. Ares . Betanzos . Coruña (A) . Ferrol (E1) . Laracha . Miño . Mugardos . Oleiros . Pontedeume . Sada . San Sadurniño	. Arteixo . Bergoño . Caballas . Cambre . Carballo . Culleredo . Fene . Neda	

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>ESTACA DE BARES</b>	<b>CORUÑA</b>	<b>GALICIA</b>
<b>HIGHLY DEPENDENT MUNICIPALITIES</b>	<b>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</b>	
. Cariño . Cedira . Ortigueira . Mañón		

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>LUGO COAST</b>	<b>LUGO</b>	<b>GALICIA</b>
<u>HIGHLY DEPENDENT MUNICIPALITIES</u>	<u>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</u>	
. Foz	. Cervo	
. Ribadeo	. Xove	
. Vicedo	. Mondoñedo	
. Viveiro		

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>VALDES</b>	<b>LUGO</b>	<b>GALICIA</b>
<u>HIGHLY DEPENDENT MUNICIPALITIES</u>	<u>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</u>	
. Castropol		
. Coaña		
. Franco (El)		
. Navia		
. Tapia de Casariego		
. Valdés		

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>AVILES</b>	<b>ASTURIAS</b>	<b>GALICIA</b>
<u>HIGHLY DEPENDENT MUNICIPALITIES</u>	<u>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</u>	
. Avilés	. Corvera de Asturias	
. Carreño	. Muros del Nalón	
. Cudillero		
. Gozón		
. Soto del Barco		

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>GIJON</b>	<b>ASTURIAS</b>	<b>GALICIA</b>
<u>HIGHLY DEPENDENT MUNICIPALITIES</u>	<u>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</u>	
. Colunga		
. Gijón		
. Llanes		
. Ribadedeva		
. Ribadesella		
. Villaviciosa		

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>CANTABRIA COAST</b>	<b>SANTANDER</b>	<b>GALICIA</b>
<u>HIGHLY DEPENDENT MUNICIPALITIES</u>	<u>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</u>	
. Argoños	. Cartes	
. Astillero (El)	. Medio Cudello	
. Castro Urdiales	. Reocín	
. Colindres	. Torrelavega	
. Corrales de Buelna (Los)	. V. de S. Vicente	
. Laredo	. Villaescusa	
. Polanco		
. San V. de la Barquera		
. Santander		
. Santoña		

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>GREATER BILBAO</b>	<b>VIZCAYA</b>	<b>GALICIA</b>
<u>HIGHLY DEPENDENT MUNICIPALITIES</u>	<u>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</u>	
. Abanto-Zierbana	. Arrigorriaga	
. Bilbao	. Barakaldo	
. Getxo	. Galdakao	
. Portugalete	. Larrabegua	
. Santurtzi	. Leioa	
	. Muskiz	
	. Ortuella	
	. Valle de Trápaga	
	. Zarátamo	

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>BERMEO</b>	<b>VIZCAYA</b>	<b>GALICIA</b>
<u>HIGHLY DEPENDENT MUNICIPALITIES</u>	<u>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</u>	
. Bermeo	. Arrieta	
. Elantxove	. Busturia	
. Lemoniz	. Gatika	
. Mundaca	. Gauteguiiz	
. Plentzia	. Guernica-Lumo	
	. Maruri	
	. Meñaca	
	. Morga	
	. Muxika	
	. Munguia	
	. Errigoiti	
	. Urduliz	

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>ONDARROA</b>	<b>VIZCAYA</b>	<b>GALICIA</b>
<u>HIGHLY DEPENDENT MUNICIPALITIES</u>	<u>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</u>	
. Lekeitio	. Amoroto	
. Ondarroa	. Etxebarria	
	. Guizaburuaga	
	. Markina-Xemein	

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>DONOSTIA</b>	<b>GUIPUZCOA</b>	<b>GALICIA</b>
<u>HIGHLY DEPENDENT MUNICIPALITIES</u>	<u>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</u>	
. Donostia	. Irun	
. Hondarribia	. Rentería	
. Pasaia		

<u>ZONE</u>	<u>PROVINCE</u>	<u>AUT.COMMUNITY</u>
<b>GETARIA</b>	<b>GUIPUZCOA</b>	<b>GALICIA</b>
<u>HIGHLY DEPENDENT MUNICIPALITIES</u>	<u>MUNICIPALITIES IMPLEMENTING EMPLOYMENT POLICY</u>	
. Getaria	. Eibar	
. Mutriku	. Elgoibar	
. Orrio		
. Zumaia		

## 6.2. Characterization of employment in the dependent areas of the E.1 region

Fishing and ancillary activities directly employ 133,897 people in Region E.1, although only 121,316 actually reside in the zones considered highly dependent (TABLE VI).

Within these zones, 97,317 jobs are in fishing and aquaculture (offshore and inland) and sectors that supply goods and services, and 23,999 jobs in activities allied to the former.

This first grouping can be subdivided into two main groups: fishing and ancillary activities. The former represent 74% of the 97,317 direct jobs mentioned above.

The other 26% corresponds to onshore personnel engaged in naval industry, services, etc. Prominent is employment in ship construction (21%) and auxiliary naval industry and commercial activities.

Among those activities dependent on the fishing sector and aquaculture (20%), the processing industry is foremost, accounting for 41% of all jobs.

The employment figures shown in TABLE VI are taken from various sources; the main ones are included at the bottom of the table.

The following is important in order to understand the table:

- Shellfish harvesting scores high on the natural shoals market, having great economic and social significance in the Galician sub-region, specifically with reference to marine (mussels, oysters) or continental aquaculture.
- The figures for shipbuilding and ship repairing in the fishing industry and for the auxiliary naval fishing industry refer only to the employment of shipbuilders, manufacturers and wholesalers whose main activity is fishing-related.
- The employment figures have been divided into two groups: The first sub-total corresponds to fishing, aquaculture, shellfish catches and their supply activities. The second corresponds to those sub-sectors whose activities are based on fish products and aquaculture (wholesale distribution, transport, processing industry).
- Both sub-totals have been obtained with the help of direct coefficient tables (input-output) and the sections entitled "Others" were obtained from the difference between the sub-total and detailed activities. "Others" also refers to direct and region-resident employment and includes a range of activities: clothing, various services afforded to companies pertaining to transport, maintenance and upkeep of dock infrastructure, credit institutions and insurance companies, etc.

TABLE VI  
DIRECT EMPLOYMENT PROVIDED BY FISHING AND ANCILLARY ACTIVITIES IN DEPENDENT ZONES OF REGION E.1

ZONES	CREWS	ON SHORE CORP. SHIP - OWNER ACTIV.	AQUA-CULTURE	SHELL - FISH HARV.	FISH. BOAT AND REPA.	AUX. IND. FISH.	SALE OF GEAR & NAUT. SUP. FOR F. VESS.	(1) OTHERS	SUB-TOTAL	WHOLE SALE DIST.	TRANS-PORTATION	PROCES. INDUS-TRY	(1) OTHERS	SUB-TOTAL	TOTAL
RIA OF VIGO	14472	986	922	3803	2217	1134	303	4215	28052	1243	865	2037	1994	6139	34191
RIA OF PONTEVEDRA	3192	153	586	692	49	42	10	930	15654	151	191	663	440	1445	7099
RIA OF AROUSA	3618	37	2039	2083		84	2	1054	8917	521	216	1358	498	2593	11510
<b>TOTAL FOR PONTEVEDRA *</b>	<b>21282</b>	<b>1176</b>	<b>3547</b>	<b>6578</b>	<b>2266</b>	<b>1260</b>	<b>315</b>	<b>6199</b>	<b>42623</b>	<b>1915</b>	<b>1272</b>	<b>4058</b>	<b>2932</b>	<b>10177</b>	<b>52800</b>
RIA OF AROUSA	2837	94	1988	2215		40	17	875	8066	269	219	1552	504	2544	10610
RIA OF MUROS AND NOIA	1681	115	318	1286				519	3919	38	130	105	299	572	4491
RIA OF CORCUBION	525	8	5	198	40		1	162	939	17	41	57	93	208	1147
RIA OF CAMARIÑAS	630	14	25	112				194	975	73	49	24	112	258	1233
RIA OF LAXE	841	17	31	211				259	1359	27	65	40	149	281	1640
R. CORUÑA AND BETANZOS	2732	225	207	2735	300	320	185	843	7547	1578	211	930	485	3204	10751
ESTACA DE BARES	1262	32	10	566			2	360	2262	25	98	452	225	800	3062
<b>TOTAL FOR LA CORUÑA *</b>	<b>10508</b>	<b>505</b>	<b>2584</b>	<b>7323</b>	<b>340</b>	<b>360</b>	<b>205</b>	<b>3242</b>	<b>25067</b>	<b>2027</b>	<b>813</b>	<b>3160</b>	<b>1867</b>	<b>7867</b>	<b>32934</b>
LUGO COAST	2187	119	17	619	80		5	548	3575	81	75	372	239	767	4342
<b>TOTAL FOR LUGO *</b>	<b>2187</b>	<b>119</b>	<b>17</b>	<b>619</b>	<b>80</b>		<b>5</b>	<b>548</b>	<b>3575</b>	<b>81</b>	<b>75</b>	<b>372</b>	<b>239</b>	<b>767</b>	<b>4342</b>
<b>TOTAL FOR GALICIA *</b>	<b>33977</b>	<b>1800</b>	<b>6148</b>	<b>14520</b>	<b>2686</b>	<b>1620</b>	<b>525</b>	<b>9989</b>	<b>71265</b>	<b>4023</b>	<b>2160</b>	<b>7590</b>	<b>5038</b>	<b>18811</b>	<b>90076</b>
VALDES	416	34	55		152			150	807	18	19	19	50	106	913
AVILES	1019	151	10		39			370	1589	93	46	94	123	356	1945
GIJON	645	74			741	20		234	1714	20	28	47	78	173	1887
<b>TOTAL FOR ASTURIAS *</b>	<b>2080</b>	<b>259</b>	<b>65</b>		<b>932</b>	<b>20</b>		<b>754</b>	<b>4110</b>	<b>131</b>	<b>93</b>	<b>160</b>	<b>251</b>	<b>635</b>	<b>4745</b>
CANTABRIAN COAST	2913	337	274		700		8	894	5126	128	90	1239	384	1841	6967
<b>TOTAL FOR CANTABRIA *</b>	<b>2913</b>	<b>337</b>	<b>274</b>		<b>700</b>		<b>8</b>	<b>894</b>	<b>5126</b>	<b>128</b>	<b>90</b>	<b>1239</b>	<b>384</b>	<b>1841</b>	<b>6967</b>
GREATER BILBAO	357	34			240	1456	148	119	2354	96	8	29	38	171	2525
BERMEO	2977	247			120	80		989	4413	85	71	339	321	816	5229
ONDARROA	2620	105			80			870	3675	132	62	140	282	616	4291
<b>TOTAL FOR VIZCAYA *</b>	<b>5954</b>	<b>386</b>			<b>440</b>	<b>1536</b>	<b>148</b>	<b>1978</b>	<b>10442</b>	<b>313</b>	<b>141</b>	<b>508</b>	<b>641</b>	<b>1603</b>	<b>12045</b>
DONOSTIA	2080	159			160	940	44	813	4196	262	67	238	271	838	5034
GUETARIA	979	209				586	21	383	2178	10	32	102	127	271	2449
<b>TOTAL FOR GUIPUZCOA *</b>	<b>3059</b>	<b>368</b>			<b>160</b>	<b>1526</b>	<b>65</b>	<b>1196</b>	<b>6374</b>	<b>272</b>	<b>99</b>	<b>340</b>	<b>398</b>	<b>1109</b>	<b>7483</b>
<b>I. CANTABRIAN COSTALINE*</b>	<b>14006</b>	<b>1350</b>	<b>339</b>		<b>2232</b>	<b>3082</b>	<b>221</b>	<b>4822</b>	<b>26052</b>	<b>844</b>	<b>423</b>	<b>2247</b>	<b>1674</b>	<b>5188</b>	<b>31240</b>
<b>TOTAL ZONES REGION E.1</b>	<b>47983</b>	<b>3150</b>	<b>6487</b>	<b>14520</b>	<b>4918</b>	<b>4702</b>	<b>746</b>	<b>14811</b>	<b>97317</b>	<b>4867</b>	<b>2583</b>	<b>9837</b>	<b>6712</b>	<b>23999</b>	<b>121316</b>

SOURCES: MARINE SOCIAL INSTITUTE, REGIONAL FISHING COUNCILS, MAPA, PEDECA, CAMERDATA, CISE AND OTHERS. 1989-90

(1) The difference after applying technical coefficients to direct employment (Input-Output tables). "Others" include textiles, a whole range of services provided to companies associated with transport, fuel, credit institutions, etc (estimated for zones)

\* Figures for survey zones only (not whole province)

### 6.3.- Socio-demographic features of these jobs

Women are a small minority in this sector (4% of all jobs). This proportion is valid for three out of the four Autonomous Communities under study (in Cantabria women constitute 12% of all jobs). (table VII)

By age structure, most of the workforce is included in the 25-54 age group (73%), while in Cantabria there is slightly more staff aged over 54 than under 25. That is, people employed in this sector in Cantabria would be relatively older than those in Galicia or the Basque Country.

Regarding educational background, most of the workforce has completed primary school (61%), followed by those with secondary education (26%). Nevertheless, there is a larger percentage of people without educational qualifications (11%), concentrated in Galicia and the Basque Country. By Autonomous Communities, Galicia has the lowest average educational level (more than three out of four workers has no secondary education) whereas Cantabria and the Basque Country are above average for employees with secondary or further education (44% and 51% respectively).

68% of the workforce are employees and 32% self-employed. The proportion of recruited labour is higher in the Basque Country (96%) than in Cantabria (62%).

Finally, the unemployment rate in Region E.1 reached 7% of the active population in the fishing sector (but 16% in Asturias, and slightly below the average figure in Galicia).

### 6.4.- Gross value added per job

Regional G.V.A. per job stands at around Ecu24,100. This figure falls to 16,452 when considering only the fishing sector and ancillary activities.

The highest income is located in the Basque province of Guipúzcoa (Ecu24,789) and the lowest (Ecu14,415) in the Galician province of Pontevedra.

By zones, those engaged primarily in fishing are the ones with the lowest relative income (for instance, the Rias of Corcubión and Muros in Galicia).

On the other hand, the Donostia and Guetaria zones (province of Guipúzcoa) far exceed the average, with an income of Ecu24,000. Their principal activities are shipbuilding and auxiliary industry.

Avilés (Principality of Asturias), with an income of Ecu26,478 (the highest in the region, despite being engaged primarily in fishing), is an isolated case. The zone of Gijón, also in Asturias, whose main activities are shipbuilding and auxiliary industry, nevertheless has an income below the Regional average.

TABLE VII  
SOCIO-DEMOGRAPHIC PROFILE OF THE WORKFORCE  
IN THE FISHING SECTOR IN REGION E.1.  
 (Vertical percentages)

<u>E.1.</u>	<u>GALICIA</u>	<u>ASTURIAS</u>	<u>CANTABRIA</u>	<u>BASQUE COUNTRY</u>	<u>TOTAL</u>
SEX					
. MALE	97%	95%	88%	97%	96%
. FEMALE	3%	5%	12%	3%	
4%					
OCCUPATION					
. SELF-EMPLOYED	35%	*	38%	4%	32%
. EMPLOYED	65%	*	62%	96%	4%
AGE					
. - UNDER 25	16%	*	13%	16%	16%
. 25 - 54	73%	*	75%	70%	73%
. OVER 54	11%	*	12%	14%	11%
QUALIFICATIONS					
. NO STUDIES	11%	*	--	7%	11%
. PRIMARY	65%	*	56%	42%	61%
. SECONDARY	23%	*	38%	47%	26%
. FURTHER	1%	*	6%	4%	2%
UNEMPLOYMENT RATE	6%	16%	*%	7%	7%

SOURCE: INE 1.990

TABLE VIII  
GROSS VALUE ADDED PER JOB FOR FISHING AND ANCILLARY ACTIVITIES  
(FIGURES ARE GIVEN IN ECU)

ZONES	G.V.A.			
	PER	JOB		
RIA OF VIGO .....	15,547			
RIA OF PONTEVEDRA .....	11,819		VALDES .....	15,005
RIA OF AROSA .....	12,649		AVILES .....	26,478
			GIJON .....	14,415
PONTEVEDRA * .....	14,415		ASTURIAS * .....	20,674
RIA OF AROSA .....	13,694		CANTABRIA .....	15,559
RIA OF MUROS .....	11,067		CANTABRIA * .....	15,559
RIA OF CORCUBION .....	11,421		GREATER BILBAO .....	22,416
RIA OF CAMARIÑAS .....	12,247		BERMEO .....	14,209
RIA OF LAXE .....	13,720		ONDARROA .....	19,879
RIA OF CORUÑA .....	23,105		VIZCAYA * .....	17,949
ESTACA DE BARES .....	13,161		DONOSTIA .....	24,000
CORUÑA * .....	16,226		GUETARIA .....	24,336
LUGO COAST .....	14,740		GUIPUZCOA * .....	24,789
LUGO * .....	14,740		TOTAL CANTABRIAN COASTLINE * .....	19,472
GALICIA * .....	15,092		DEPEND. ZONES E.1. * .....	16,219
			TOTAL REGION E.1. ....	16,452

SOURCE: Compiled by CISE

\* Figures for survey zones only (not whole province)

TABLE IX  
 VALUE ADDED IN FISHING AND ANCIL. ACTIVITIES IN THE DEPENDENT ZONES OF REGION E.1.

ZONES	FISHING	SALTW. ACTV. OF SHIPOWNER COMP.	AQUA-CULTURE	FISH-ING BOAT BUILD-ING	AUX. SECT. IND.	SALE OF GEAR & NAUT. SUP. FOR F. VESS.	OTHERS	SUB-TOTAL	WHOLE-SALE TRADE	TRANS-POR-TATION	ON - SHORE INDUS-TRY	(1) OTHERS	SUB-TOTAL	TOTAL
RIA OF VIGO	151.2	15.3	10.2	78.6	23.6	6.8	92.8	378.6	28.0	27.8	54.4	42.9	153.0	531.6
RIA OF PONTEVEDRA	17.8	2.4	3.6	1.7	0.9	0.2	20.5	47.2	3.4	6.1	17.7	9.5	36.7	83.9
RIA OF AROUSA	18.7	0.6	35.8		1.7	0.0	23.2	80.1	11.7	6.8	36.3	10.7	65.5	145.6
<b>TOTAL FOR PONTEVEDRA *</b>	<b>187.7</b>	<b>18.3</b>	<b>49.6</b>	<b>80.3</b>	<b>26.2</b>	<b>7.0</b>	<b>136.5</b>	<b>505.9</b>	<b>43.1</b>	<b>40.7</b>	<b>108.4</b>	<b>63.1</b>	<b>255.2</b>	<b>761.1</b>
RIA OF AROUSA	38.6	1.9	10.6		0.8	0.4	27.0	79.2	5.9	7.1	37.7	15.4	66.1	145.3
RIA OF MUROS Y MOIA	12.1	2.3	2.6				16.0	33.0	0.8	4.2	2.5	9.2	16.7	49.7
RIA OF CORCUBION	1.6	0.2		0.4		0.0	5.0	7.2	0.4	1.3	1.4	2.8	5.9	13.1
RIA OF CAMARIÑAS	1.7	0.3					6.0	7.9	1.6	1.6	0.6	3.4	7.2	15.1
RIA OF LAXE	5.9	0.3					8.0	14.2	0.6	2.1	1.0	4.6	8.3	22.5
R. CORUÑA AND BETANZOS	123.9	4.4	1.8	3.0	6.3	4.1	26.0	169.5	34.7	6.9	22.6	14.9	57.3	248.4
ESTACA DE BARES	5.8	0.6	0.1			0.0	12.0	18.6	0.6	3.2	11.0	6.9	21.7	40.3
<b>TOTAL FOR LA CORUÑA *</b>	<b>189.6</b>	<b>10.0</b>	<b>15.1</b>	<b>3.4</b>	<b>7.1</b>	<b>4.5</b>	<b>100.0</b>	<b>329.6</b>	<b>44.6</b>	<b>26.4</b>	<b>76.8</b>	<b>57.2</b>	<b>204.8</b>	<b>534.4</b>
LUGO COAST	30.0	2.4		2.4		0.1	12.6	47.4	1.7	2.2	7.3	5.4	16.6	64.0
<b>TOTAL FOR LUGO</b>	<b>30.0</b>	<b>2.4</b>		<b>2.4</b>		<b>0.1</b>	<b>12.6</b>	<b>47.4</b>	<b>1.7</b>	<b>2.2</b>	<b>7.3</b>	<b>5.4</b>	<b>16.6</b>	<b>64.0</b>
<b>TOTAL FOR GALICIA *</b>	<b>407.3</b>	<b>30.7</b>	<b>64.7</b>	<b>86.1</b>	<b>33.3</b>	<b>11.6</b>	<b>249.1</b>	<b>882.9</b>	<b>89.4</b>	<b>69.3</b>	<b>192.5</b>	<b>125.7</b>	<b>476.6</b>	<b>1359.4</b>
VALDES	2.4	0.5	1.1	2.0			4.6	10.6	0.4	0.6	0.6	1.5	3.1	13.7
AVILES	27.0	2.2		0.5			11.4	41.1	2.3	1.5	2.8	3.8	10.4	51.5
GIJON	8.0	1.1	1.2	9.6	0.5		7.3	27.6	0.5	1.0	1.4	2.4	5.3	32.9
<b>TOTAL FOR ASTURIAS *</b>	<b>37.4</b>	<b>3.8</b>	<b>2.3</b>	<b>12.1</b>	<b>0.5</b>		<b>23.3</b>	<b>79.3</b>	<b>3.2</b>	<b>3.1</b>	<b>4.8</b>	<b>7.7</b>	<b>18.8</b>	<b>98.1</b>
CANTABRIAN COAST	27.9	4.8	2.7	6.0		0.2	21.9	63.5	0.8	3.0	31.8	9.3	44.9	108.4
<b>TOTAL FOR CANTABRIA *</b>	<b>27.9</b>	<b>4.8</b>	<b>2.7</b>	<b>6.0</b>		<b>0.2</b>	<b>21.9</b>	<b>63.5</b>	<b>0.8</b>	<b>3.0</b>	<b>31.8</b>	<b>9.3</b>	<b>44.9</b>	<b>108.4</b>
GREATER BILBAO	0.1	0.5		2.3	42.0	3.5	3.6	52.0	2.4	0.2	1.0	1.1	4.6	56.6
BERMEO	11.5	3.7		1.1	2.3		30.6	48.6	2.1	2.5	11.4	9.7	25.7	74.3
ONDARROA	38.0	1.5		0.8			26.4	66.7	3.2	2.2	4.7	8.5	18.6	85.3
<b>VIZCAYA TOTAL *</b>	<b>49.6</b>	<b>5.7</b>		<b>4.2</b>	<b>44.3</b>	<b>3.5</b>	<b>60.0</b>	<b>167.3</b>	<b>7.7</b>	<b>4.9</b>	<b>17.1</b>	<b>19.3</b>	<b>48.9</b>	<b>216.2</b>
DONOSTIA	35.1	3.5	0.8	3.4	33.1	1.0	23.9	100.0	7.0	2.3	7.8	8.0	25.1	125.9
GUETARIA	13.9	4.7			20.6	0.7	11.3	51.2	0.3	1.1	3.3	3.7	8.4	59.6
<b>GUIPUZCOA TOTAL *</b>	<b>49.0</b>	<b>8.2</b>	<b>0.8</b>	<b>3.4</b>	<b>53.7</b>	<b>1.7</b>	<b>35.2</b>	<b>152.0</b>	<b>7.3</b>	<b>3.4</b>	<b>11.1</b>	<b>11.7</b>	<b>33.5</b>	<b>185.5</b>
<b>T. CANTABRIAN COASTLINE *</b>	<b>163.9</b>	<b>22.5</b>	<b>5.8</b>	<b>25.7</b>	<b>98.5</b>	<b>5.4</b>	<b>140.4</b>	<b>462.1</b>	<b>19.0</b>	<b>14.4</b>	<b>64.8</b>	<b>48.0</b>	<b>146.2</b>	<b>608.3</b>
<b>TOTAL ZONES REGION E.1</b>	<b>571.2</b>	<b>53.2</b>	<b>70.5</b>	<b>111.8</b>	<b>131.8</b>	<b>17.1</b>	<b>389.5</b>	<b>1345.0</b>	<b>108.4</b>	<b>83.7</b>	<b>257.3</b>	<b>173.7</b>	<b>622.8</b>	<b>1967.7</b>

SOURCES: Employment Data, (TABLE VI) Bank of Bilbao-Vizcaya, Tables Input-Output

 NOTES: Figure in millions of ECU (1 ECU = 130 pts.)  
 Fishing value added obtained from landings of Spanish vessels in the zone

\* Figures for survey zones only (not whole province)

TABLE X  
LANDED CATCHES & AQUACULTURE VALUE 1990 (MILLIONS OF ECU)

Z O N E S	DEEP-SEA	MIDWATER & COASTAL	AQUACULTURE	TOTAL
RIA OF VIGO	159.5	120.8	16.9	297.2
RIA OF PONTEVEDRA	13.4	18.2	6.0	37.6
RIA OF AROUSA	13.2	19.7	59.6	92.5
<b>PROVINCE OF PONTEVEDRA</b>	<b>186.1</b>	<b>158.7</b>	<b>82.5</b>	<b>427.3</b>
RIA OF AROUSA	36.8	33.8	17.6	88.2
RIA OF MUROS AND NOIA		19.1	4.4	23.5
RIA OF CORCUBION		2.6	1.0	3.6
RIA OF CAMARIÑAS		2.5		2.5
RIA OF LAXE		9.3	1.2	10.5
RIAS OF CORUÑA AND BETANZOS	62.2	150.1	4.2	216.5
ESTACA DE BARES		9.2	1.0	10.2
<b>PROVINCE OF LA CORUÑA</b>	<b>99.0</b>	<b>226.6</b>	<b>29.4</b>	<b>355.0</b>
LUGO COAST		47.5	1.0	48.5
<b>PROVINCE OF LUGO</b>		<b>47.5</b>	<b>1.0</b>	<b>48.5</b>
<b><u>TOTAL GALICIA</u></b>	<b>285.1</b>	<b>432.8</b>	<b>112.9</b>	<b>830.8</b>
VALDES		3.9	1.8	5.7
AVILES		42.8		42.8
GIJON		12.6	2.0	14.6
<b>ASTURIAS</b>		<b>59.3</b>	<b>3.8</b>	<b>63.1</b>
CANTABRIAN COAST		44.2	4.5	48.7
<b>CANTABRIA</b>		<b>44.2</b>	<b>4.5</b>	<b>48.7</b>
GREATER BILBAO		1.0	0.1	1.1
BERMEO		18.2		18.2
ONDARROA		60.2		60.2
<b>PROVINCE OF VIZCAYA</b>		<b>79.4</b>	<b>0.1</b>	<b>79.5</b>
DONOSTIA		55.7	1.4	57.1
GUETARIA		22.1		22.1
<b>PROVINCE OF GUIPUZCOA</b>		<b>77.8</b>	<b>1.4</b>	<b>79.2</b>
<b><u>TOTAL CANTABRIAN COASTLINE</u></b>		<b>260.7</b>	<b>9.8</b>	<b>270.5</b>
<b>TOTAL REGION E.1</b>	<b>285.1</b>	<b>693.5</b>	<b>122.7</b>	<b>1101.3</b>

SOURCE: MAPA, FISHING COUNCILS

NOTE: IN ECUS (1 ECU = 130 PTS.)

### 6.5.- Summary and conclusions

To conclude, zones can be grouped by the most characteristic features of the populations under survey.

- Group 1. Zones where all fishing activities are represented.  
It comprises: Rias of Vigo, Pontevedra, and Arosa (Province of Pontevedra), and Ria of Arosa (Province of La Coruña), all of them in the Autonomous Community of Galicia.  
Its most relevant features are: increasing and young population, with low educational level. Area very dependent on the fishing sector, with increasing unemployment, and a fishing sector gross value added per capita below the average for the Region E.1.
- Group 2. Zones where fishing and aquaculture activities predominate.  
It comprises: Rias of Muros-Noia, Coruña and Betanzos (both in the Province of La Coruña, Galicia), and the coast of the Autonomous Community of Cantabria.  
Its most relevant features are: almost stable (slightly increasing) population, dependent, with medium educational level. Area highly dependent on the fishing sector, with decreasing unemployment, and a variable fishing sector gross value added per capita (very low in Muros-Noya, medium on the Cantabrian coast, and high in Coruña-Betanzos).
- Group 3. Zones where fishing is the prevailing activity.  
It comprises: Rias of Corcubión, Camariñas and Laxe (all in the Province of La Coruña, Galicia), Valdés and Avilés (Principality of Asturias), and Ondarroa (Province of Biscay, Basque Country).  
Its most relevant features are: stable population, with medium-low educational level. Area very dependent on the fishing sector, with increasing unemployment (except in Avilés), and a below-average fishing sector gross value added per capita (except in Avilés).
- Group 4. Zones where fishing and the processing industry are the leading activities.  
It comprises: Estaca de Bares (Province of La Coruña), and the coast of Lugo (Province of Lugo), both in the Autonomous Community of Galicia; and Bermeo (Province of Biscay, Basque Country).  
Its most relevant features are: almost stable (slightly increasing), mature population, with low educational level. Area very dependent on the fishing sector (except the coast of Lugo), with decreasing unemployment (except Bermeo), and a below-average fishing sector gross value added per capita.
- Group 5. Zones where the main activities are shipbuilding and auxiliary naval industry.  
It comprises: Gijón, (Principality of Asturias), Greater Bilbao (Province of Biscay), Guetaria and Donostia (Province of Guipúzcoa), the latter three in the Basque Country.  
Its most relevant features are: increasing population, young in Greater Bilbao and Donostia, adult in Guetaria, and mature in Gijón, with higher than average educational level. Area scarcely dependent

on the fishing sector (except Guetaria), with decreasing unemployment (except Guetaria), and a fishing sector gross value added per capita well above the average of the Region E.1. (except Gijón).

A noteworthy activity in the Community of Galicia which has not been included in the foregoing is shellfishing. It accounts for 12% of all jobs in the zone and is sited mainly in Ria of Vigo (26%), the Ria of Coruña and Betanzos (19%), the Ria of Arosa (15%, Province of La Coruña), the Ria of Arosa (14%, Province of Pontevedra), and the Ria of Muros and Noia (9%).

TABLE XI  
SOCIOECONOMIC FEATURES OF FISHING ZONES (EXTENDED ZONES) IN THE NORTH OF SPAIN

GEOGRAPHICAL AREA	No MUNI-CIPA.	EVOL.OVERALL POP. (1)		C.A.R. 60/91 (2)	TYPE OF ZONE A(3)B(4)	EVOLUTION IN WORKFORCE			EVOLUTION REGISTERED UNEMPLOYMENT (6)			
		1.960	1.991			1.986 (A)	1.991 (B)	(B)-(A)	1.986 (A)	1.991 (B)	(B)-(A)	(B)-(A) %
RIA OF VIGO ZONE	11	242859	413175	2.54	P J	111574	116035	4461	35741	34528	-1213	-3.39
RIA OF PONTEVEDRA ZONE	7	110259	149652	1.19	P J	40370	41985	1615	7190	9121	1931	26.86
RIA OF AROUSA ZONE	5	53669	72599	1.18	P J	21305	22157	852	5821	7186	1365	23.45
PONTEVEDRA T.E.Z.	23	406787	635426	2.06	P J	173249	180177	6928	48752	50835	2083	4.27
PROV. OF PONTEVEDRA	61	680229	879872	0.98	P J	297600	309500	11900	62267	68572	6305	10.13
RIA OF AUROUSA ZONE	5	54541	63179	0.52	E D	20653	21732	1079	3741	4387	646	17.27
Z.RIA OF MUROS Y NOIA	3	32868	33608	0.08	E D	10218	10752	534	1067	2635	1568	146.95
RIA OF CORCUBION ZONE	4	19499	19765	0.05	E D	6514	6854	340	708	1237	529	74.72
RIA OF CAMARIÑAS ZONE	2	13418	13548	0.03	E D	4919	5176	257	362	732	370	102.21
RIA OF LAXE ZONE	4	29887	26703	-0.36	R D	9469	9964	495	917	1320	403	43.95
RIAS CORUÑA/BETANZ.Z.	19	402228	512743	0.92	E D	140566	147910	7344	47045	36325	-10720	-22.79
ESTACA DE BARES ZONE	4	33350	24443	-0.89	R E	8772	9230	458	578	1395	817	141.30
CORUÑA T. EXT. Z.	41	585791	693889	0.78	E D	201111	211618	10507	54418	48031	-6387	-11.74
PROV. OF LA CORUÑA	94	991729	1089810	0.33	E D	365600	384700	19100	73535	67494	-6041	-8.22
LUGO COAST ZONE	7	51744	56987	0.34	E D	18838	17758	-1080	2643	2948	305	11.54
PROVINCE OF LUGO	66	479530	379077	-0.70	R E	160400	151200	-9200	19878	21003	1125	5.66
VALDES ZONE	6	54833	42690	-0.74	R E	14337	15199	862	1833	1993	160	8.73
AVILES ZONE	7	101158	137422	1.19	P A	37491	39746	2255	10704	9824	-880	-8.22
GIJON ZONE	6	180126	301858	2.25	P E	80377	85210	4833	23904	22598	-1306	-5.46
ASTURIAS T. EXT. Z.	19	336117	481970	1.81	P E	132205	140155	7950	36441	34415	-2026	-5.56
ASTURIAS	78	989344	1096155	0.36	E E	334200	354300	20100	75015	69547	-5468	-7.29
CANTABRIAN COAST ZONE	16	223901	347124	1.83	P J	93069	100922	7853	22261	20728	-1533	-6.89
CANTABRIA	102	432132	526866	0.73	E D	150500	163200	12700	31298	28987	-2311	-7.38
GREATER BILBAO ZONE	14	518835	765968	1.59	P J	217561	241470	23909	63082	49289	-13793	-21.87
BERMEO ZONE	17	47336	61049	0.97	P J	18580	20622	2042	3990	3460	-530	-13.28
ONDARROA ZONE	6	20410	23202	0.46	E J	7337	8143	806	1281	1407	126	9.83
VIZCAYA T. EXT. Z.	37	586581	850219	1.51	P J	243478	270235	26757	68353	54156	-14197	-20.77
PROVINCE OF VIZCAYA	109	754383	1153515	1.76	P J	338500	375700	37200	91053	74053	-17000	-18.67
DONOSTIA ZONE	5	207222	300777	1.50	P J	90320	107096	16776	26428	19691	-6737	-25.49
GUETARIA ZONE	6	56540	62243	0.34	E A	20819	24686	3867	4638	4252	-386	-8.32
GUIPUZCOA T. EXT. Z.	11	263762	363020	1.30	P J	111139	131782	20643	31066	23943	-7123	-22.93
PROVINCE GUIPUZCOA	87	478337	671743	1.35	P J	199200	236200	37000	54589	44139	-10450	-19.14
TOTAL EXTENDED ZONES REGION E.1.	154	2454683	3428735	1.32	P J	973089	1052647	79558	263934	235056	-28878	-10.94
REGION E.1. TOTAL	597	4805684	5797038	0.92	E J	1846000	1974800	128800	407635	373795	-33840	-8.30

(1) National Statistical Board

(2) Compound Annual Rate (C.A.R.)

(3) Population Growth: E = stable, P = progressive, R = regressive

(4) Population age: E = aged, A = adult, D = dependant, J = young

(5) Active population survey. INE

(6) Registered unemployment statistics by municipalities. INEM

## 7.- IDENTIFICATION OF THE MEASURES THAT WILL PROVIDE FOR THE RESTRUCTURING OF THE AFFECTED ZONES

### 7.1.- Introduction

Restructuring plans applied in Spain in the second half of the eighties (RENAVAL, RESIDER) combined various activities in fields such as the development of infrastructures, creation and promotion of new enterprises, and also employment and professional training policies.

It is precisely because this report is concerned with these latter policies that we have focused special attention on them.

The groups affected by these restructuring plans were initially part of the industrial workforce.

This is not the case for most of the group that could be affected in this instance.

The analysis of the segments has obviously had to take into account the level of training for the different collectives concerned, in addition to the characteristics of every zone, in order to outline the list of indicators.

Before starting our analysis, we wish to stress that conditions at the time of the application of these plans (RENAVAL, RESIDER) were industrially less problematic than at present, consequently their chances of success were greater.

### 7.2.- Identification of the measures allowing for the restructuring of the affected zones

#### 7.2.1. Typology of collectives and zones

According to the existing statistical indicators (population, employment, unemployment, G.V.A., employment distribution, etc.) we proceeded to a zonal classification that allowed us to establish a very specific typology: dynamic, stable, or regressive zones, on the one hand; and zones with or without the inclusion of some of the groups affected, direct or indirectly, by reduction in catches in the fishing sector.

Having established this classification, we proceeded to apply a list of criteria to determine what measures, and with what content, should be adopted in each of the twenty zones.

From the spatial viewpoint the most significant difference between these

zones is the presence or absence of economic dynamism. The report understands this concept as the greater or lesser potentiality for the expansion of activities in the agricultural, fishing, industrial or services sectors. The development of programmes of professional training should be organized differently according to these trends.

Among the collectives taken into account we distinguish five different groups: 1) crew members; 2) onshore support personnel (vessel maintenance or repair, auxiliary operations, commercial activities, etc.); 3) personnel belonging to sectors supplying outputs to fishing activities (demanded by these); 4) personnel belonging to sectors demanding fishing products (wholesalers, canning industries, transportation, etc.); 5) personnel belonging to sectors producing equipment or other goods attendant to investments made in the fishing sector.

In relation to the first cluster of measures considered (support for job creation in the private sector), it was considered that two types of supports incentives should be offered to companies that contract people affected by unemployment: lump-sum subsidies and reduced Social Security contributions applied to permanent or temporary new jobs respectively.

Provided the objective was to maximize the redeployment into the labour market of all the affected personnel (as much from the fishing sector as from others) it was thought that these measure should be applied to all sectors under consideration.

In relation to the second cluster of measures (temporary jobs in the public sector), only those activities related to public works or services were considered. Given the difficulties for job creation in the private sector, it was reckoned that the temporary incorporation of people affected by unemployment into some public activities could be a help to their later reintegration in the labour market of this zone.

To this aim, a preliminary inventory of activities carried out by public entities or organizations was used (whose figures are listed in the text of this report). Every group considered was "assigned" the activities that best matched their professional qualifications; this assignment will obviously be adjusted as soon as the various measures are implemented in the different zones.

The third cluster of measures -professional retraining- is the one of most complex implementation because the selection and assignment of courses will demand the organization of a specific programme in every zone or for neighbouring zones.

As a general criterion it was considered necessary for crew members to undergo a pre-professional training course.

For the majority of this group, whose familiarity with technical tasks is meagre, it is be advisable to provide them with training that enables flexibility in their capability. The same criterion was applied to some of those working onshore (manual operations), and also for some groups of other sectors indirectly related to fishing.

Courses in "basic professional training" are assigned to every group. Nonetheless, as happens in "specialized training" courses, their content will be determined according to the function of the characteristics and potentialities of the zones.

Thus, in an "industrial" zone, it seems sensible to develop specialities oriented to occupations of an industrial or similar character in the affected zone or neighbouring areas. In a zone with more touristic potentialities, courses oriented to training for occupations more appropriate to these services should be preferred.

About "early retirements" it has been considered convenient to support those groups with an older age structure (who also display more resistance to retraining). For this reason the group of crew members is potentially the most appropriate for the application of this measure (early retirement from the age of 55). All other groups more directly affected by a reduction in catches (onshore personnel and personnel dependent on fishing products) are included as potential beneficiaries though only from the age of 60.

Failure to consider some type of courses in certain zones (for instance: mechanics in less industrialized areas) does not mean an absolute absence of a course of that kind in that zone. Eventually some courses will be included according to specific needs and programmes.

In relation to "unemployment benefits" it has been considered that all groups should be protected in a form complementary to the ordinary subsidies contemplated by Spanish legislation. For this reason a complementary allowance has been suggested for those aged 55 -or 50 if they support a family-. In the case of the crew members, this measure is obviously connected with the early retirement age referred to above.

Finally, on "incentives for self-employment" it has been similarly considered necessary to facilitate the development of independent labour. With this aim various measures of support have been contemplated, which are more substantial in the case of crew members and of onshore personnel. In both cases, in addition to immediate payment of the whole amount of the unemployment benefit to which the worker has legal right according to the time she/he has been contributing to Social Security, she/he will receive a lump sum according to the characteristics and amount of the investment to be made in order to establish him/herself independently.

In all cases, the opportunity should also exist for selecting projects, according not only to their economic viability but also according to the characteristics and training of the beneficiary. Accordingly, this measure should be combined with Facilities for appropriate basic training or professional retraining.

#### 7.2.2.- List of occupations under consideration

The list of occupations to which the above training courses for each group should be addressed have been established according to the possibilities that the economy of the zones and regions of this inquiry offer now and in the future. That is, the assessment of occupations on the increase or showing a higher demand structure, compared with scarcity of personnel in the labour market.

Also taken into account are the real possibilities of retraining the different collectives according to the sector and trade from which they come.

According to these criteria, we have proceeded to draw up a list of target occupations for which both levels of professional training considered -basic and specialized- should be developed.

These contents are included in the CATALOG developed by the INEM (National Bureau of Employment) in Spain, not only directly by it, but also through Employment Centres spread throughout the different districts and Autonomous Communities of the country.

This means that, once the group has been established for inclusion in a certain course and level, the services of the INEM will participate in its subsequent education or retraining. To that end coordinated actions would be organized by those services, which, for the sake of efficiency, might at times necessitate the redeployment of some people from these groups to specific geographical points where they would be taught and trained accordingly.

#### 7.3.- Description of the potentialities for job creation, professional training and redeployment to other sectors

The following tables summarise the measures to boost employment in the most affected groups.

JOBS LOSSES  
AMONG CREW  
MEMBERS

<p>M.1. INCENTIVES TO JOB CREATION</p>	<p>M.1.1.- Lump-sum subsidies to companies for permanent contracts M.1.2.- Reduction of Social Security contributions (80% reduction)</p>
<p>M.2. JOB CREATION IN THE PUBLIC SECTOR</p>	<p>A.1.- Fishing and allied A.2.- Forestry A.3.- Farming &amp; Stockbreeding A.10.- Craftwork A.13.- Community services A.14.- Tourism and leisure</p>
<p>M.3. PROFESSIONAL RETRAINING</p> <p>C.1. Pre-professional C.2. Professional C.3. Specialised</p>	<p>01.- Saltwater aquaculture, fish farms, assistants in oceanographic institutes 02.- Field sanitation, reforestation, industrial breeding grounds 03.- Intensive cultivation, farming farm cooperatives 04.- Cannery, food handling, food processing and treatment 09.- General building work, plank moulding, ironwork, Kilning, dry dealing 011.- Sailors in cargo vessels, sailors in passenger vessels, helmsmen 013.- Street cleaning, Maintenance of roads and ways, beach cleaning, maintenance of installation, maintenance of parks and gardens 014.- Water sports, pleasure sailing, lifeguards 015.- Gardening, building cleaning, surveillance and security, catering, hotel service</p>
<p>M.4. EARLY RETIREMENTS</p>	<p>M.4.2. People aged between over 55</p>
<p>M.5. UNEMPLOYMENT BENEFITS</p>	<p>M.5.2. People aged 50 and 55 years old</p>
<p>M.6. SELF-EMPLOYMENT INCENTIVES</p>	<p>M.6.1. Lump-sum benefit payments M.6.2. Incentives for self-employed workers</p>

DIRECT ONSHORE  
FISHING SECTOR  
EMPLOYMENT

M.1. INCENTIVES TO JOB CREATION

- M.1.1.- Lump-sum subsidies to companies for permanent contracts
- M.1.2.- Reduction of Social Security contributions (80% reduction)

M.2. JOB CREATION IN THE  
PUBLIC SECTOR

- A.1.- Fishing and allied
- A.10.- Craftwork
- A.13.- Community services
- A.14.- Tourism and leisure

M.3. PROFESSIONAL RETRAINING

- C.1. Pre-professional
- C.2. Professional
- C.3. Specialised

- 01.- Saltwater aquaculture, fish farms, assistants for oceanographic institutes
- 02.- Field sanitation, reforestation, industrial breeding grounds
- 03.- Intensive cultivation, farming, farm cooperatives
- 04.- Canners, food handling, food processing and treatment
- 06.- Tyslaring, Boxing and storing
- 012.- Commodities handling, consignee of exportation
- 016.- Home electric appliances, plumbing, installations, electricity

M.4. EARLY RETIREMENTS

- M.4.1. People over 60

M.5. UNEMPLOYMENT BENEFITS

- M.5.1. People over 55

M.6. SELF-EMPLOYMENT INCENTIVES

- M.6.1. Lump-sum benefit payments
- M.6.2. Incentives for self-employed workers

INDIRECT ONSHORE  
FISHING SECTOR  
EMPLOYMENT

M.1. INCENTIVES TO JOB CREATION

- M.1.1.- Lump-sum subsidies to companies for permanent contrasts
- M.1.2.- Reduction of Social Security contributions (80% reduction)

M.2. JOB CREATION IN THE  
PUBLIC SECTOR

- A. 1.- Fishing and allied
- A.10.- Craftwork
- A.13.- Community services
- A.14.- Tourism and leisure

M.3. PROFESSIONAL RETRAINING

- C.2. Professional
- C.3. Specialised

- 04.- Canners, food handling, food processing and treatment
- 010.- Wood carving, preservation
- 012.- Commodities handling, consignee of exportation
- 015.- Gardening, building cleaning, surveillance and security, catering, hotel service
- 016.- Home electric appliances, plumbing, installations, electricity

M.5. EMPLOYMENT BENEFITS

- M.5.1. For people over 55

M.6. SELF-EMPLOYMENT INCENTIVES

- M.6.1. Lump-sum benefit payments

EMPLOYMENT OF  
DEPENDANTS ON  
FISHING SECTOR

M.1. INCENTIVES TO JOB CREATION

M.1.1.- Lump-sum subsidies for companies  
for permanent contrastsM.1.2.- Reduction of Social Security  
contributions (80% reduction)M.2. JOB CREATION IN THE  
PUBLIC SECTOR

A.10.- Craftwork

A.13.- Community services

A.14.- Tourism and leisure

M.3. PROFESSIONAL RETRAINING

C.2. Professional

C.3. Specialised

04.- Cannery, food handling, food processing  
and treatment011.- Sailors in cargo vessels, sailors in  
passenger vessels, helmsmen012.- Commodities handling, consignee  
of exportation015.- Gardening, building cleaning, surveillance  
and security, catering, hotel service

M.4. EARLY RETIREMENTS

M.4.1. For people over 60

M.5. UNEMPLOYMENT BENEFITS

M.5.1. For people over 55

M.6. SELF-EMPLOYMENT INCENTIVES

M.6.1. Lump-sum benefit payments

JOBS LOSSES  
IN THE  
INVESTMENT  
SECTOR

M.1. INCENTIVES TO JOB CREATION

M.1.1.- Lump-sum subsidies to companies  
for permanent contrastsM.1.2.- Reduction of Social Security  
contributions (80% reduction)M.2. JOB CREATION IN THE  
PUBLIC SECTOR

A.10.- Craftwork

A.13.- Community services

A.14.- Tourism and leisure

M.3. PROFESSIONAL RETRAINING

C.1. Pre-professional

C.2. Professional

C.3. Specialised

05.- Mechanics, maintenance, boiler craft

07.- Processing materials

08.- Boiler craft, assembly, shipwrighting

09.- Building, plank moulding, ironwork,  
kilning, dry dealing012.- Commodities handling, consignee  
agent of exportation014.- Water sports, pleasure sailing,  
lifeguards015.- Gardening, building cleaning, surveillance  
and security, catering, hotel service016.- Home appliances, plumbing  
installations, electricity

M.5. UNEMPLOYMENT BENEFITS

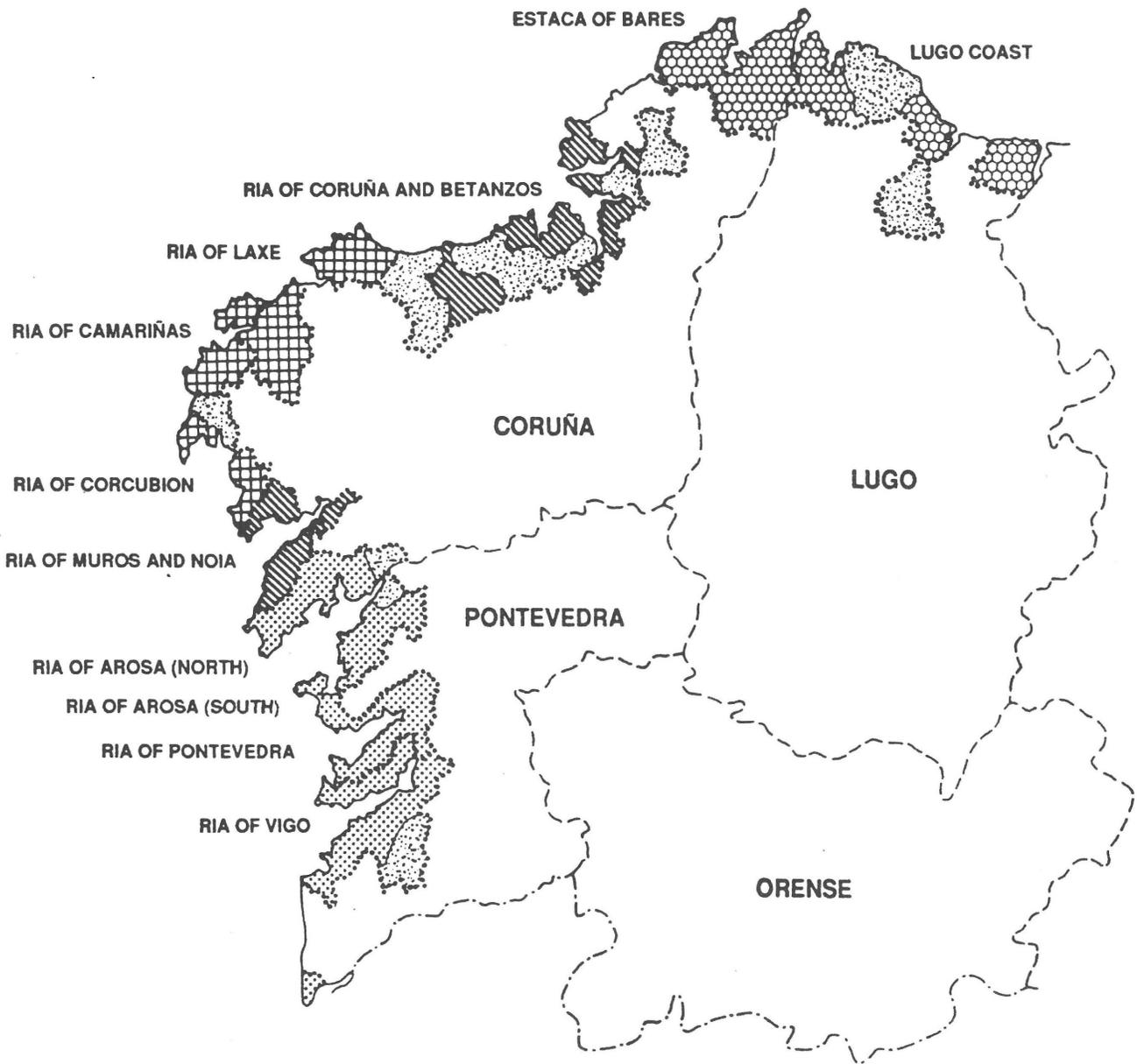
M.5.1. For people over 55

M.6. SELF-EMPLOYMENT INCENTIVES

M.6.1. Lump-sum benefit payments

# ZONES OF APPLICATION

## REGION E.1: GALICIA



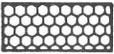
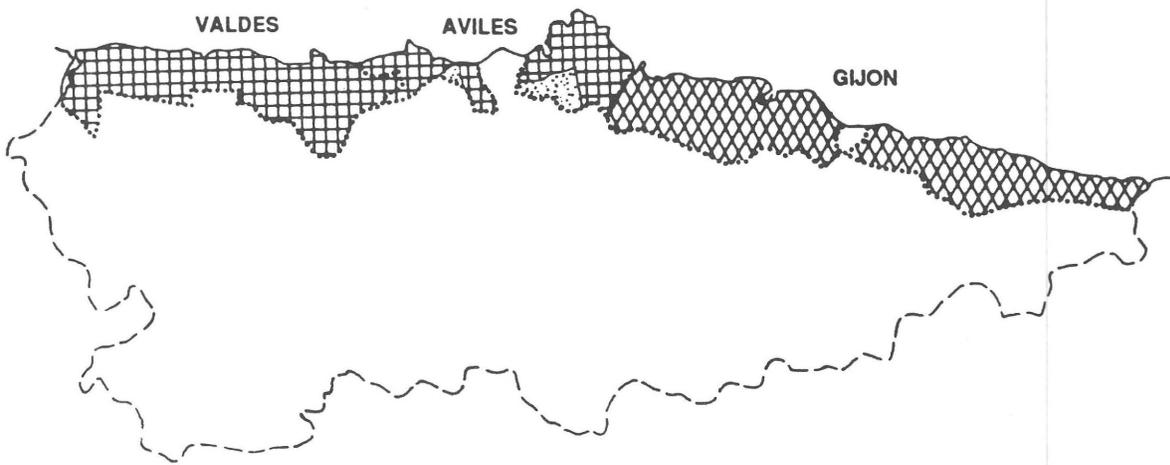
-  ZONES WHERE ALL SURVEY SECTORS ARE INCLUDED
-  ZONES WHOSE PRINCIPAL ACTIVITIES ARE FISHING AND AQUACULTURE
-  ZONES WHOSE PRINCIPAL ACTIVITIES ARE FISHING AND PROCESSING INDUSTRIES
-  ZONES PRIMARILY ENGAGED IN FISHING
-  AREA EXTENDED FOR EMPLOYMENT POLICY CONSIDERATIONS

FIGURE 10

**ZONES OF APPLICATION**  
**REGION E.1: ASTURIAS**



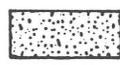
-  ZONES PRIMARILY ENGAGED IN FISHING
-  ENGAGED IN SHIPBUILDING AND AUXILIARY INDUSTRIES
-  AREA EXTENDED FOR EMPLOYMENT POLICY CONSIDERATIONS

FIGURE 11

**ZONES OF APPLICATION**

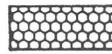
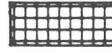
**REGION E.1: CANTABRIA**



-  ZONES WHOSE PRINCIPAL ACTIVITIES ARE FISHING AND AQUACULTURE
-  AREA EXTENDED FOR EMPLOYMENT POLICY CONSIDERATIONS

**ZONES OF APPLICATION  
REGION E.1: BASQUE COUNTRY**



-  ZONES WHOSE PRINCIPAL ACTIVITIES ARE FISHING AND PROCESSING INDUSTRIES
-  ZONES PRIMARELY ENGAGED IN FISHING
-  ENGAGED IN SHIPBUILDING AND AUXILIARY INDUSTRIES
-  AREA EXTENDED FOR EMPLOYMENT POLICY CONSIDERATIONS

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