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Directorate-General for Fisheries

Regional, Socio-Economic Study in the Fisheries Sector

DEUTSCHLAND

Mecklenburg - Vorpommern

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A B S T R A C T

Eine Übersicht über die Fischwirtschaft der ehemaligen DDR bis zur deutschen Vereinigung am 3. Oktober 1990:

- Die Fischerei war in fünf Bereiche unterteilt: Die volkseigene Hochseeflotte, die volkseigene Kutterflotte, die genossenschaftliche Kutter- und Bootflotte, die volkseigenen Betriebe der Binnenfischerei und die genossenschaftliche Binnenfischerei.
- Sämtliche Seefischereibetriebe und damit verbundene Unternehmen befanden sich unter der Kontrolle des horizontal und vertikal integrierten volkseigenen Kombinates "VEB Fischkombinat Rostock".
- Alle wichtigen Verarbeitungs- und Versorgungseinrichtungen der ehemaligen DDR waren Eigentum dieses Kombinats.
- Die Hochseeflotte befischte im Rahmen bilateraler Abkommen und internationaler Übereinkommen in erster Linie Hering und Makrele.
- In der Wirtschaftszone Mecklenburg-Vorpommerns wurden vor allem Hering und Sprotte gefangen.
- Verarbeitet wurde der Fisch vor allem zu Konserven und in geringerem Maß zu Salzfisch und Räucherfisch; Frischfisch wurde nur in Küstengebieten angeboten.

Die Entwicklung der Hochseefischerei: 1975 waren 63 Fischereifahrzeuge im Einsatz und erzielten einen Fangertrag von 193.000 t Fisch, 1990 waren es 46 Fischereifahrzeuge und 71.000 t, 1991 nur noch 8 Fischereifahrzeuge und 13.000 t Fisch.

Die Kutter- und Bootflotten bestehend aus 1.200 Fahrzeugen fingen 1975 105.000 t Fisch, 1990 noch 46.000 t und 1991 zwischen 15.000 und 19.000 t (je nach Statistik).

In den letzten Jahren waren im Fischereisektor der DDR rund 23.000 Personen beschäftigt. Aufgliederung nach Teilbereichen:

- 15.300 Personen im Fischkombinat waren unmittelbar mit dem Fischfang, der Anlandung, der Erstverarbeitung, der Distribution und dem Verkauf (in der gesamten DDR) beschäftigt, einschließlich 3.600 Personen in der Fischverarbeitung (in der gesamten DDR);
- 3.200 Personen in genossenschaftlichen Betrieben der Küstenfischerei;
- etwa 5.000 Personen in der Binnenfischerei und der Aquakultur.

Rund 18.800 Personen waren im engeren Bereich Mecklenburg-Vorpommern beschäftigt, 840 davon in der Binnenfischerei. Etwa 4.000 Personen waren als Besatzungsmitglieder auf Fischereifahrzeugen der Hochseeflotte tätig.

Im Rahmen des Wiederaufbaus der Wirtschaft wurde der größte Teil der Hochseeflotte stillgelegt. Zur Zeit betreibt das Nachfolgeunternehmen des Kombinats, die Deutsche Fischwirtschaft AG, lediglich acht Fahrzeuge. Über eine Beteiligung Islands an der verbleibenden Hochseeflotte wird zur Zeit verhandelt. Die Kutter- und Bootflotte ist auf 1.030 Fahrzeuge geschrumpft. Bis 1996 soll die Flotte weiter auf 600 Fahrzeuge reduziert werden.

Ende 1991 war die Zahl der Beschäftigten im Fischereisektor der neuen Bundesländer auf rund 7.300 Personen zurückgegangen, im Gebiet Mecklenburg-Vorpommerns auf 5.600. Zum Jahresende 1992 arbeiten in Mecklenburg-Vorpommern nur noch 3.300 Personen im Fischereisektor.

Die Boote der Küstenfischerei setzen vor allem stationäres Fanggerät ein, während die Kutterflotte vorwiegend Heringfang mit Schleppnetzen betreibt. In der Kutterfischerei kann in Zukunft realistischerweise ein Fangertrag von 23.000 t Hering erwartet werden. Diese Menge könnte ohne Markteinschränkungen von 70 Standardkuttern der 17 m-Klasse eingebracht werden. Überfischung ist nicht zu befürchten, da die Quoten nicht voll ausgeschöpft werden.

Die Küstenfischerei Mecklenburg-Vorpommerns wird von 150 Ortschaften entlang der 1.470 km langen Küste aus mit ursprünglich über 1.100 Kuttern und kleinen offenen Fischereibooten betrieben. Auf den Inseln Rügen und Usedom gibt es zahlreiche Orte, die von der Fischerei leben. In DDR-Zeiten gab es keinen privaten Fischfang, alle Fischer waren in 27 sozialistischen Genosssenschaften organisiert. Die früheren sozialistischen Genossenschaften wurden in Genossenschaften nach Bundes- und EG-Recht umgewandelt. Bisher sind sechs Erzeugerorganisationen gegründet worden.

Mecklenburg-Vorpommern verfügt über die größten Binnengewässer der ehemaligen DDR. Insgesamt werden 64.845 ha Gewässer in Mecklenburg-Vorpommern von der Binnenfischerei genutzt. Zu DDR-Zeiten waren hier zwei volkseigene Betriebe und elf Genossenschaften tätig. Die meisten davon sind in kleinste Fischerei- und Verarbeitungseinheiten zerfallen.

Die größten Hindernisse für den Aufbau der ostdeutschen Wirtschaft waren die Währungsumstellung, die den Unternehmen von einem Tag zum anderen eine Verdreifachung der Personal- und Beschaffungskosten bescherte, die Zusage der Bundesregierung, Grundbesitz an die früheren Eigentümer zurückzugeben und die Unerfahrenheit ostdeutscher Unternehmer mit dem westlichen Wirtschaftssystem. Die Fischereiunternehmen der Ostsee müssen mit niedrigen Preisen (für Hering), wachsenden Lohnkosten, leistungsschwachen und überalteten Fischereifahrzeugen und unwirtschaftlichen Fangmethoden fertig werden.

Der Anpassungsprozeß hat 1991 in den neuen Bundesländern zu einer durchschnittlichen Arbeitslosenquote von 11 % geführt. In Mecklenburg-Vorpommern ist die Arbeitslosigkeit mit rund 17 % am höchsten, auf den Inseln und im Landesteil Vorpommern beträgt sie sogar 20 %. Die offiziellen Arbeitslosenzahlen verdoppeln sich, wenn all jene berücksichtigt werden, für die Beschäftigungs- und Fortbildungsmaßnahmen durchgeführt werden.

Die Anzahl neu gegründeter Unternehmen ist zu niedrig, als daß die hohen Arbeitslosenzahlen dadurch ausgeglichen werden könnten. Deshalb muß der Prozeß der beruflichen und betrieblichen Diversifizierung unterstützt werden. In den Bereichen Verarbeitung, Distribution, Handel und Aquakultur könnten neue Arbeitsplätze in der Fischerei geschaffen werden, jedoch bei weitem nicht genug, um die Arbeitslosigkeit in den am stärksten betroffenen Gebieten, vor allem auf den Inseln Rügen und Usedom, einzudämmen.

Positive Beispiele für die Schaffung neuer Arbeitsplätze in Mecklenburg-Vorpommern sind die fünf Technologiezentren. Sie haben in den letzten zwei Jahren bewiesen, daß jeder neue Unternehmer zwei bis zehn Arbeitsplätze schafft. Vor allem das Technologiezentrum in Warnemünde stellte den Arbeitskräften des Fischereisektors neue berufliche Möglichkeiten zur Verfügung. Die Errichtung von Gründerzentren für freigestellte Arbeitskräfte der Fischerei gilt als eine der sinnvollsten Hilfsmaßnahmen.

Die EG-Kommission könnte darüber hinaus durch die Gründung eines europäischen Fischereiinstituts zur Entwicklung dieser Region und der gesamten Ostseeregion sowie zur Verbesserung der Beschäftigungslage beitragen.

Neue berufliche Möglichkeiten für die früher in der Fischerei beschäftigten Arbeitskräfte gibt es vor allem im Tourismus-Sektor. Die Küstenlinie mit einer Länge von 1.470 km und die ca. 2.000 Seen bieten Mecklenburg-Vorpommern gute Möglichkeiten zur Entwicklung des Tourismus-Sektors als alternative private und öffentliche Einkommensquelle.

Die Datenerhebung war dadurch erschwert, daß die alten Strukturen (statistische Ämter, Aufsichtsbehörden, Kombinate und Unternehmen) zerfallen sind oder aufgelöst wurden. Neue Strukturen sind noch in der Aufbauphase. Angaben zur Beschäftigungslage und ökonomische Daten wurden zu DDR-Zeiten nicht veröffentlicht. Aussagekräftige statistische Daten gibt es seit Mitte 1992, aber nur auf Länderebene. Auf Kreisebene werden solche Daten erst im Anschluß an die Strukturreform der Kreise verfügbar sein. Daher enthält diese Studie einige Widersprüchlichkeiten. Der Umstrukturierungsprozeß wird voraussichtlich bis 1993 abgeschlossen sein.

A B S T R A C T

Until the date of the German re-unification (3rd October 1990) fisheries of the former German Democratic Republic were carried out as follows:

- o fisheries were carried out by five sub-sectors: the state-owned deep sea fleet, the state-owned cutter fleet, the co-operative cutter and boat fleet, state-owned inland fisheries and co-operative inland fisheries
- o all state-owned sea fisheries and ancilliaries were horizontally and vertically integrated under the direction of the fish monopoly "VEB Fischkombinat Rostock"
- o all major processing and logistics facilities on the territory of the former GDR were owned by this combinate
- o the deep sea fleet fished within the framework of bilateral and international agreements mainly herring and mackerel
- o main species caught in the EEZ of the Region were herring and sprat
- o main methods of processing were canning and to a minor degree salting and smoking; apart from coastal areas there was no fresh fish distribution

The deep sea fleet and its catches developed like follows: 63 vessels and 193.000 t fish in 1975, 46 vessels 71,000 t in 1990, 8 vessels 13,000 t in 1991. The cutter and boat fleets comprising about 1200 vessels caught 105,000 t in 1975, 46,00 t in 1990 and between 15,000 t and 19,000 t (depending on stat. sources) in 1991.

On an average the fishery sector of the GDR had a work force of about 23,000 persons during recent years. Following the breakdown of the sub-sectors:

- o 15,300 persons in the Fischkombinat (fish combinate) directly engaged in fishing, landing, first processing, distribution, retail (all over the GDR) including 3,600 persons in the processing (all over the GDR)
- o 3,200 persons in the coastal fishery cooperatives
- o about 5,000 persons in the inland fishery and aquaculture

About 18,800 persons were engaged in the closer area of Mecklenburg-Vorpommern, 840 of which were employed in inland fisheries. About 4,000 persons out of the total labour force were crews on board of high seas fishing vessels.

With the reconstruction of the former communist economy the largest part of the distant fleet was taken out of service. At the present time only 8 vessels are being kept by the Deutsche Fischwirtschaft AG, the successor of the combinate. A participation of Icelandic interests in the remainder of the distant fleet is under discussion. The cutter and boat fleet has been reduced to 1,030 vessels, a further reduction to about 600 by 1996 is envisaged.

By the end of 1991 the labour force of the fisheries sector on all of the territory of the new Länder had been reduced to abt. 7,300 persons, on the territory of Mecklenburg-Vorpommern to 5,600 persons. By the end of 1992 about 3,300 persons remain employed in the fisheries sector of Mecklenburg-Vorpommern.

The boats are mainly engaged in inshore and static gear fisheries. Herring is mainly caught with mobile gears by the cutter fleet. 23,000 t of herring appears to be a realistic future quantity for cutter catches. This quantity could without market constrains be caught by 70 cutters (of the 17m-class). Overfishing is not to be expected as quota are not fully utilized.

The coastal fishery of Mecklenburg-Vorpommern is depicted by 150 fishery sites along the 1,740 km of coast line and originally more than 1,100 cutters and small and open boats. Important clusters of fishery and fishery sites are on the Isles of Rügen and Usedom. Private fishery did not exist during GDR-times. All of the fishermen were organized in 27 socialist co-operatives. The former socialist co-operatives have been transformed into co-operatives in accordance with federal and EC-legislation. Until now 6 producer organizations have been set up.

Mecklenburg-Vorpommern has the largest water area on the territory of the former GDR. A total of 65,000 hectares of waters are in use for inland fishery. The waters were under GDR-times operated by two state owned companies and 11 co-operatives. Most of these enterprises and co-operatives have fallen apart to smallest scale fisheries and processing undertakings.

The severest obstacles for the reconstruction of the East German economy had been the monetary reform, after which the fisheries sector had from one day to the other to calculate with three times higher prices for personnel and supply and the commitment of the Federal Government of returning property to the former proprietors and the inexperience of East German managers with the western economical system. Baltic Sea fisheries have to cope with low prices (for herring), increasing wages, underpowered and overaged vessels and uneconomical fishing procedures.

The adaption process is resulting in a mean unemployment quote of 11 % for all of the new Länder in 1991. Among the new Länder Mecklenburg-Vorpommern has the worst unemployment situation with a quote of about 17%, on the islands areas of the part-Land Vorpommern at 20%. The official unemployment quotes have to be doubled by adding all those in employment and training measures.

The numbers of new businesses established are too low to balance the high numbers of unemployed. It is therefore recommended to assist the process of job and business diversification. Processing, distribution, retail and aquaculture could provide some new jobs in fisheries, but by far not enough to effectively combat unemployment in the areas most affected, especially the island areas of Rügen and Usedom.

Positive examples for the creation of new jobs in Mecklenburg-Vorpommern are its five Technology Centres. They have in the past two years shown proof, that each new entrepreneur creates between two and ten salary earning positions. Especially the Technology Centre of Warnemünde provided job diversification opportunities for persons from the fisheries sector. The initiation of Business Incubation Centres dedicated to those made redundant from fisheries is regarded one of the most appropriate assistance.

Furthermore the CEC could contribute to the improvement of regional development, development of the larger Baltic region and to the unemplyoment situation by the initiation of an European Fishery Institute.

Job diversification opportunities for former employees in fisheries is to be seen in the touristic sector. With its 1,470 km of coast line and more than 2,000 large and small lakes Mecklenburg-Vorpommern may develop tourism as an alternative source of public and personal income.

The collection of data has been complicated through the disintegration of the old structures, i.e. statistical offices, controlling bodies, combinates and undertakings. New structures are still in the stage of organization. Staff and economical data were during GDR-times not published. Meaningful statistical data were available as from mid 1992, but on Land-level only. Data on district-level are not yet available and will not be prior to the structural reform of the districts (Kreise). This study bears therefore quite a number of inconsistancies. It is estimated that the restructuring process will find bottom by 1993.

A B S T R A C T

Avant la réunification allemande (le 3 octobre 1990), la pêche maritime de l'ex-RDA pouvait se résumer comme suit :

- le secteur de la pêche comportait cinq sous-secteurs : la flotte de haute mer, les cotres d'Etat, les cotres et embarcations diverses appartenant à des coopératives, la pêche intérieure d'Etat et la pêche intérieure pratiquée par les coopératives;
- toutes les activités de la pêche maritime d'Etat et les activités annexes étaient intégrées, horizontalement et verticalement, sous la direction d'un monopole, le "VEB Fischkombinat Rostock";
- la totalité des grandes installations logistiques et de transformation situées sur le territoire de l'ex-RDA étaient la propriété de ce combinat;
- la flotte de haute mer opérait dans le cadre d'accords bilatéraux et internationaux et pêchait principalement le hareng et le maquereau;
- les principales espèces capturées dans la ZEE de la région étudiée étaient le hareng et le sprat;
- les principaux modes de transformation étaient la conserverie et, dans une moindre mesure, le salage et le fumage; à part dans les zones littorales, il n'y avait pas de distribution de poisson frais.

L'évolution de la flotte de haute mer et de ses captures a été la suivante : 63 navires pour 193.000 t de poisson en 1975, 46 navires pour 71.000 t en 1990 et 8 navires pour 13.000 t en 1991.

Les flottilles de cotres et autres embarcations, comprenant environ 1.200 unités, ont capturé 105.000 t en 1975, 46.000 t en 1990 et de 15.000 à 19.000 t (selon les sources statistiques) en 1991.

Au cours des dernières années d'existence de la RDA, le secteur de la pêche occupait en moyenne 23.000 personnes, réparties comme suit entre les différents sous-secteurs :

- 15.300 personnes au Fischkombinat, travaillent directement dans les activités de pêche, de débarquement, de premier traitement, de distribution et de vente au détail (sur tout le territoire de la RDA) y compris 3.600 personnes travaillant dans les activités de transformation (sur tout le territoire de la RDA);
- 3.200 personnes dans les coopératives de pêche côtière;
- environ 5.000 personnes dans la pêche intérieure et l'aquaculture.

18.800 personnes travaillaient dans la zone correspondant au Mecklembourg-Poméranie occidentale, dont 840 dans la pêche intérieure. Sur ce total, 4.000 personnes environ travaillaient à bord des navires de pêche hauturière.

La reconstruction de l'ex-économie communiste a entraîné la mise hors service de la majeure partie de la flotte de haute mer. La Deutsche Fischwirtschaft AG, successeur du combinat, n'a plus actuellement que huit navires. Une participation d'intérêts islandais au reste de la flotte de haute mer est à l'examen. La flotte des cotres et autres embarcations a été ramenée à 1.030 unités. On envisage d'en réduire le nombre à 600 environ pour 1996.

A la fin de 1991, le nombre des emplois dans le secteur de la pêche n'était plus que de 7.300 personnes environ pour l'ensemble du territoire des nouveaux Länder et de 5.600 personnes pour le territoire du Mecklembourg-Poméranie occidentale. A la fin de 1992, le secteur de la pêche n'emploie plus dans ce dernier Land que 3.300 personnes environ.

Les bateaux pratiquent principalement la pêche côtière avec des engins fixes. Le hareng est capturé principalement par la flotte de cotres à l'aide d'engins mobiles. Le chiffre de 23.000 t de hareng semble pour l'avenir une estimation réaliste des captures des cotres. Cette quantité pourrait, sans les contraintes du marché, être capturée par 70 cotres (de la catégorie des 17 m). Il n'y a pas lieu de craindre une surexploitation des stocks, car les quotas ne sont pas utilisés intégralement.

La pêche côtière du Mecklembourg-Poméranie occidentale se caractérise par 150 lieux de pêche répartis le long des 1.470 km de côtes et initialement exploités par plus de 1.100 cotres et petites embarcations non pontées. D'importantes concentrations d'activités et de lieux de pêche sont présentes sur et autour des îles de Rügen et Usedom. Du temps de la RDA, la pêche privée n'existait pas. Les pêcheurs étaient organisés en 27 coopératives socialistes. Elles ont été transformées en coopératives conformes au droit fédéral et à la législation communautaire. Jusqu'à présent, six organisations de producteurs ont été créées.

L'essentiel de la superficie des eaux intérieures du territoire de l'ex-RDA se trouve dans le Mecklembourg-Poméranie occidentale, où 64.845 ha sont utilisés pour la pêche intérieure. A l'époque de la RDA, les eaux étaient exploitées par deux sociétés d'Etat et 11 coopératives, dont la plupart se sont désagrégées en très petites entreprises de pêche et de transformation.
Les principaux obstacles à la reconstruction de l'économie est-allemande ont été : la réforme monétaire, après laquelle les entreprises du secteur de la pêche se sont retrouvées du jour au lendemain avec un coût de la main-d'oeuvre et des fournitures multiplié par trois, l'engagement pris par le gouvernement fédéral de restituer les biens à leurs anciens propriétaires et l'inexpérience des gestionnaires est-allemands dans le système économique occidental. Les difficultés auxquelles les entreprises de pêche de la mer Baltique ont à faire face sont : le faible niveau des prix (pour le hareng), l'augmentation des salaires, la sous-motorisation et l'obsolescence des navires ainsi que la non-rentabilité des méthodes de pêche.
Le processus d'adaptation se traduit par un taux de chômage moyen de 11 % pour tous les nouveaux Länder en 1991. Le Mecklembourg-Poméranie occidentale est, de tous les nouveaux Länder, celui où la situation du chômage est la plus préoccupante avec un taux d'environ 17 %, voire de 20 % dans les îles. Les taux de chômage officiels doivent être multipliés par deux si l'on y ajoute les chômeurs mis au travail et les chômeurs en formation.
Le nombre des créations d'entreprises est trop faible pour compenser la montée du chômage. Il est donc recommandé de favoriser le processus de diversification des emplois et des entreprises. La transformation du poisson, la distribution, le commerce de détail et l'aquaculture pourraient procurer de nouveaux emplois dans le secteur de la pêche, mais pas assez pour combattre efficacement le chômage dans les zones les plus touchées, en particulier dans les îles de Rügen et Usedom.
Des exemples positifs de création d'emplois dans le Mecklembourg-Poméranie occidentale sont fournis par ses cinq pôles technologiques. Ils ont prouvé, au cours des deux dernières années, que toute création d'entreprise nouvelle entraînait la création de deux à dix emplois salariés. Le pôle technologique de Warnemünde en particulier a offert des possibilités de reconversion pour des actifs venus du secteur de la pêche. La création de pépinières d'entreprises ouvertes aux chômeurs du secteur de la pêche est considérée comme l'un des moyens d'assistance les plus appropriés.
En outre, la Commission a pu contribuer à l'amélioration du développement régional et du développement de la grande région baltique ainsi que de la situation de l'emploi par la création d'un Institut européen de la pêche.
Des possibilités de reconversion pour un certain nombre d'actifs venus de la pêche sont offertes par le secteur touristique. Avec 1.470 km de côtes et plus de 2.000 lacs de toutes dimensions, le Mecklembourg-Poméranie occidentale peut envisager le développement du tourisme comme source de revenus de substitution pour la collectivité et les particuliers.
La collecte de données a été compliquée par l'éclatement des anciennes structures, c'est-à-dire des offices statistiques, organes de contrôle, combinats et entreprises. Les structures nouvelles en sont encore au stade de l'organisation. A l'époque de la RDA, on ne publiait de données ni sur l'emploi ni sur l'économie. Les premières données statistiques significatives ont été disponibles à partir du milieu de l'année 1992, mais seulement au niveau du Land. Les données au niveau du canton (Kreis) ne sont pas encore disponibles et ne le seront pas avant qu'intervienne la réforme structurelle des cantons. C'est ce qui explique les incohérences de la présente étude. On estime que la phase la plus aiguë du processus de restructuration interviendra en 1993.

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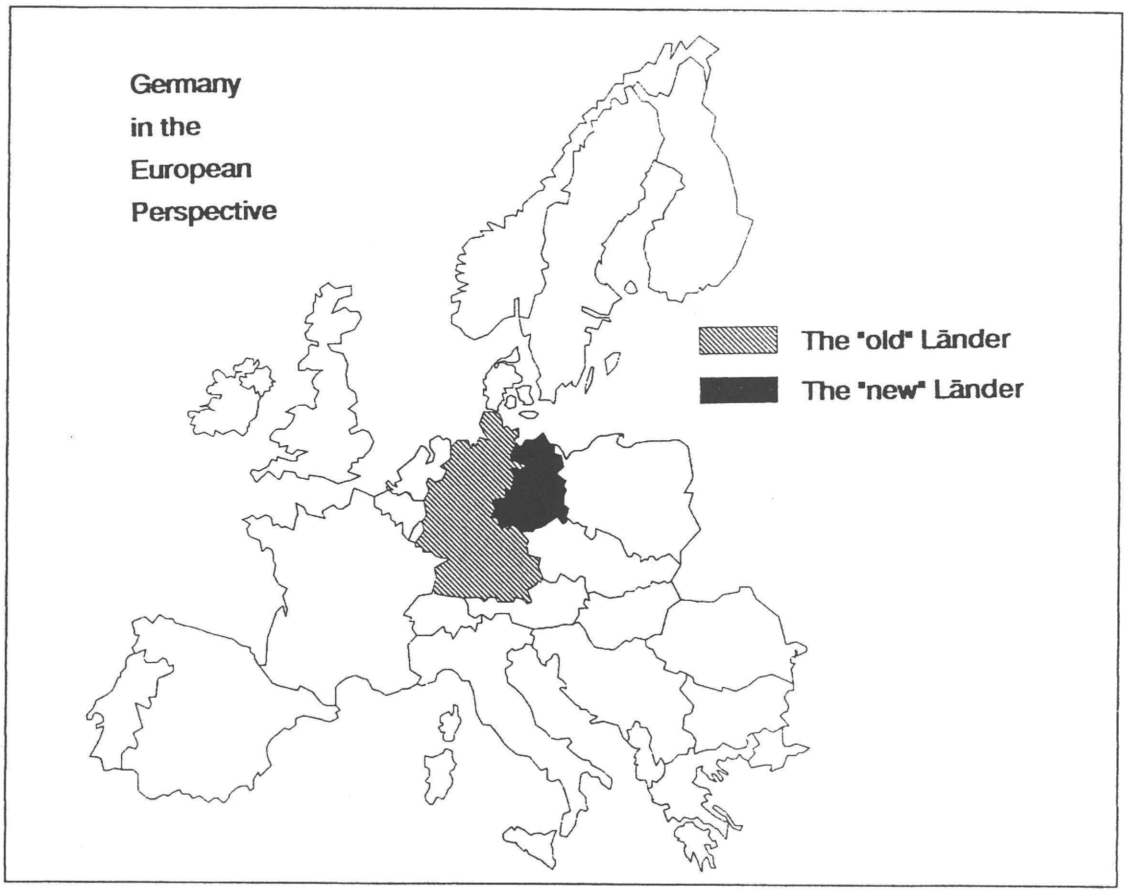
1. Mecklenburg-Vorpommern

1.1 The Land, its area, population and industry

1.1.1 Administration

Mecklenburg-Vorpommern is one of the new Länder constituted after the unification of the Federal Republic of Germany and the German Democratic Republic on the 3rd October 1990.

Figure 1.1 Germany in the European Perspective



Mecklenburg-Vorpommern comprises of the former Districts Schwerin, Rostock and Neubrandenburg of the former German Democratic Republic (GDR). However, three of the previous lower administrative units (Kreise), namely Perleburg, Templin and Prenzlau, decided not to join Mecklenburg-Vorpommern but the neigbouring new Bundesland Brandenburg. Mecklenburg-Vorpommern has therefore 2,857km ^{2} less in area and 151.869 (1989) less in population than the three former districts Schwerin, Rostock and Neubrandenburg.

Figure 1.2 The five new Länder and Eastern Berlin

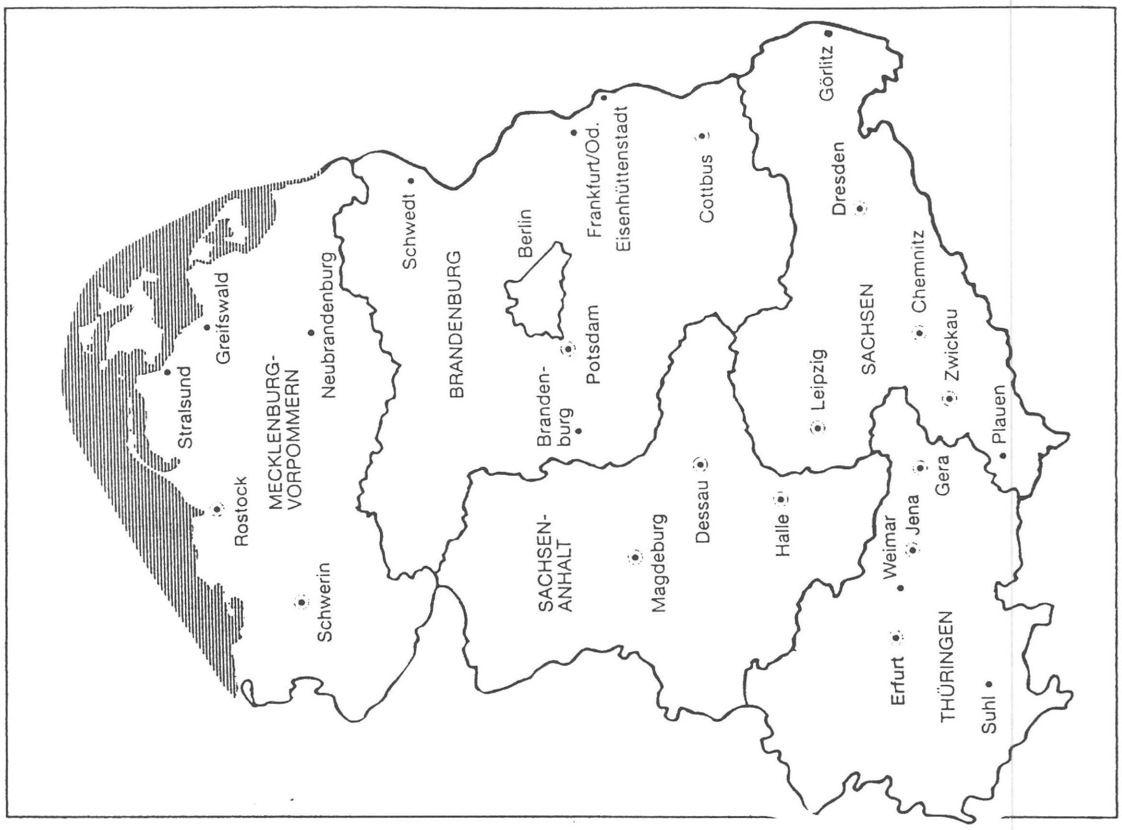


Figure 1.3 Administrative Districts of Mecklenburg-Vorpommern

1.1.2 Changes in Administration following the German Re-unification

The former 3 Northern Regions (Nordbezirke) Rostock, Schwerin and Neubrandenburg comprised a total of 34 counties (Kreise) and 6 municipalities.

With the constitution of Mecklenburg-Vorpommern 3 counties left the Land. Mecklenburg-Vorpommern is now organized in 31 counties and 6 independent municipalities.

Figure 1.4 Change of administrative Structures upon the Re-unification of Germany

1.1.3 Future Changes in Administration following the forthcoming structural Reform of Districts in Mecklenburg-Vorpommern

At the present time discussions are underway in the parliament and in the districts of Mecklenburg-Vorpommern as to a structural reform on district level. In future Mecklenburg-Vorpommern may have only 11 (larger) districts and between five and six independent municipalities, the boarders of which are, however, still under discussion.

1.1.4 Area and Population

Mecklenburg-Vorpommern has an area of 23,838 km ^{2} (6.7% of the FRG) and about 1,908,580 inhabitants (2.5% of the FRG). The population density of 82 inhabitants per km ^{2} is extremely low in comparison to the medium density of 212.6 inhabitants per km ^{2} for all of Germany.
At the time of its constitution Mecklenburg-Vorpommern consisted of 31 rural and 6 urban administrative districts. The mainland of Mecklenburg-Vorpommern extends about 200-240 km from the West to the East and 70-100 km from the North to the South. Mecklenburg-Vorpommern borders to the old Länder Schleswig-Hostein and Niedersachsen in the West to the new Länder Sachsen-Anhalt and Brandenburg in the South and to Poland in the East. Sweden and Denmark are neighboring countries north of the Baltic Sea.

The inland waters have an area of 5,860 km ^{2} ,whereas the exclusive coastal fishing zone disposes of 3,143 km ^{2}.

Table 1.I The towns (>50.000 inhabitants)

Municipality		03.10.1990	30.06.91
Rostock	port	253,000	246,630
Schwerin	capital	130,000	126,801
Neubrandenburg		91,000	88,599
Stralsund	port	74,000	72,164
Greifswald	port	68,000	65,923
Wismar	port	57,000	55,061

1.1.5 Economical and Employment Structure

The economy has largely been and is still dominated by maritime industries such as shipping, ports, shipbuilding, ancillary mechanical engineering, fishery, fish processing and by the agricultural sector including food processing and food technology.

20% of the labour force had directly been employed in agriculture, hunting, forestry and fishery, mostly in so-called co-operatives fostered by the philosophy of both the socialist (communist) party and the government of the former German Democratic Republic (GDR) in order to "socialize" all private property. The large number of small, medium and large lakes and 1,470 km coastline (225 km thereof base-line) including bays (Haffs) and brackish water lagunes (Bodden) are the essentials for the fishing sector. Industry occupied 23% of the work force.

The towns along the coasts of the Baltic Sea, Wismar, Rostock, Stralsund, Sassnitz, Greifswald were and are highly dependent on marine and fishery activities. The ports accounted for roughly 25% of the foreign trade of the former GDR.

Table 1.II **Structure of employment**

Sector	1989	1991
Industry	24,02 %	20,4 %
Agriculture, Forestry, Fishery	20,76 %	15,0 %
Construction	7,68 %	8,0 %
Handicraft, SMEs	2,21 %	10,7 %
Transport, PTT	9,89 %	9,2 %
Trade, Commerce	11,32 %	10,5 %
Non-producing sectors (administration)	24,06 %	6,1 %

Source: Statistisches Jahrbuch der DDR, 1989
Statistische Monatshefte des Landes Mecklenburg-Vorpommern 2/92

Remark: The above sector distribution is established in accordance with the systematics of the economical sectors of the GDR

Table 1.III **Structure of Employment** (census 30.11.90), Mecklenburg-Vorpommern

Economic Sectors	total	self employed	assist. family members	employees	workers including trainees	gross income (M DM) per earner
agricult/ fishery	140 916 --15%	547	207	20 694	119 468	1 272
energy/ mining	18 325	-	-	8 075	10 250	1 688
manufact.	191 910 --20%	3 811	1 160	59 101	127 838	1 260
constr.	75 631	2 990	770	16 144	55 727	1 690
trade	98 639 --11%	4 191	1 018	60 087	33 343	1 235
transp./ communic.	86 679	1 859	384	21 583	62 853	1 419
finance/ insurance	10 036	564	35	8 778	659	1 624
services	61 648	5 074	1 008	23 114	32 452	1 322
non-profit organiz.	10 666	-	-	8 588	2 078	1 047
community/ soc. serv.	245 636 --26%	-	-	200 273	45 363	1 477
totals	940 086	19 036	4 582	426 437	490 031	1 377

More than 37% of the population lives in small towns of between 2,000 and 50,000 inhabitants. About 30 % of the population lives in small villages with less than 2,000 inhabitants.

1.1.6 Industry

Table 1.IV Industrial production in Mecklenburg-Vorpommern in 1989

industrial sector	percentage of the industrial production %	percentage of the industrial workforce %
energy industries	6,6	4,3
chemical industries	7,0	3,9
metallurgical industries	0,4	0,4
construction materials	2,2	5,0
machanical engineering (incl. shipbuilding)	24,7	40,2
electric & electronics industries	4,0	6,0
lighter manufact.	10,9	15,9
textile industries	1,7	1,1
food industries	41,6	22,9
others	0,9	0,3
industry total	100	100

Source: Wirtschaftsraum MV 1990

Between 1946 and 1989 the Soviet Union ordered 3,600 vessels from the GDR. The shipbuilding combinate now converted and renamed to Deutsche Maschinen- und Schiffbau AG (DMS) delivered 40 vessels annually with a gross tonnage of bewtween 300,000 tdw and 450,000 tdw.

Lloyds Register ranked the East German shipbuilding no. 10 in general, more specifically the production of fishing vessels no. 1 and the production of general cargo vessels no. 3 among the shibuilding nations of the world in 1989.

About 22 % of the work force of Mecklenburg-Vorpommern were employed in industry. This is in comparison to the GDR a value far below average, but a high value compared to the average of the "old" FRG of 26 % and Schleswig-Holstein of 14 %.

1.1.7 Shipbuilding Industry

The shipbuilding industry on the coast of Mecklenburg-Vorpommern was mainly established after 1945. After Germany had lost World War II the Soviet Union demanded reparation payments. According to the interests of the Soviet Union to rehabilitate and to expand its fishing and cargo fleets these reparations had to be rendered in the form of ships. In consequence three new shipyards had to be set up on the coasts of the GDR, hence Mecklenburg-Vorpommern, in or after 1946.

At the end of the 1960s all of the yards, most of the supporting industries and the scientific institutions engaged in shipbuilding were forced to concentrate in the VEB Kombinat Schiffbau (state owned shipbuilding combinate).

During the course of unification of the GDR and the FRG the VEB Kombinat Schiffbau was transformed into "Deutsche Maschinen- und Schiffbau AG" (DMS AG) and subordinated to the Treuhandanstalt Berlin.

The conditions of the market economy and the recession of the economy of the USSR placed an important economical pressure onto the DMS-AG in 1990 and increasingly in 1991 resulting in a structural change of the production combined with a considerable reduction of the number of employed. On the 1st Jan. 1990 55,000 were employed with the DMS-AG. Tis working force decreased to 20,000 until the 31st Dec.1991. Further reductions have been and are being made in 1992.

1.2 Conditions of Fishing

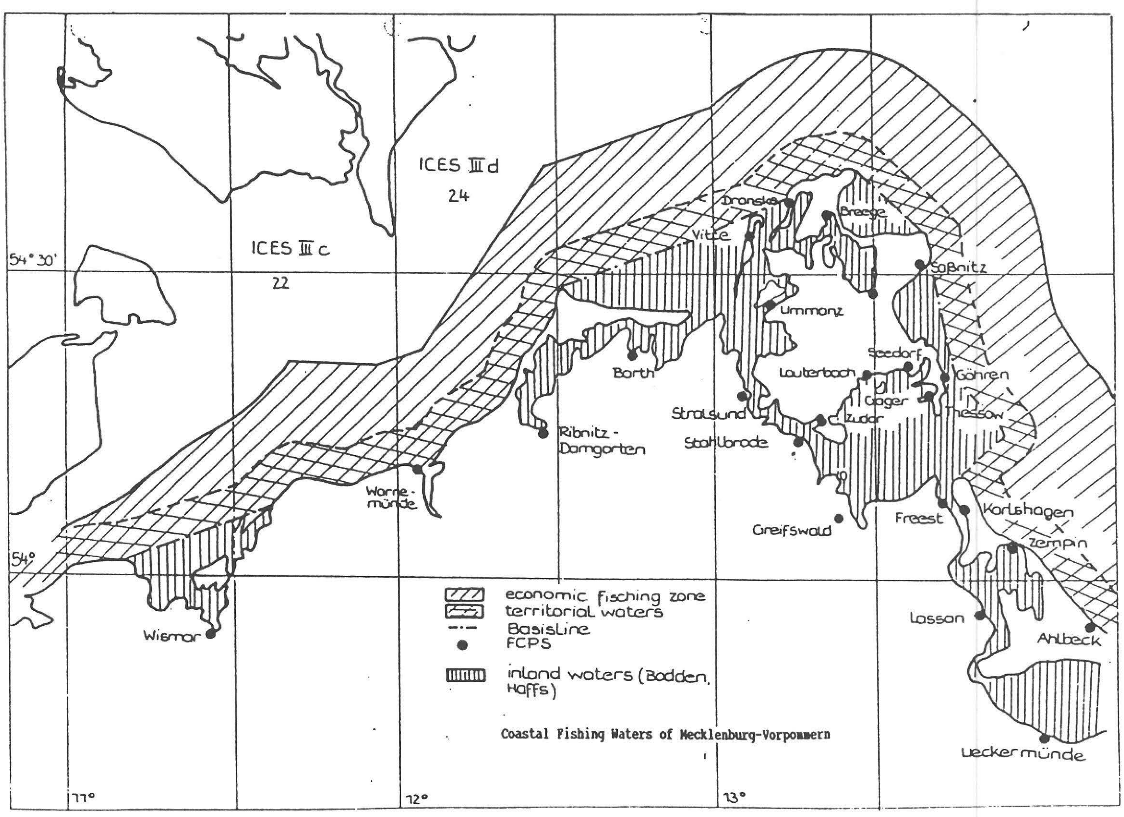
The fishing waters of Mecklenburg-Vorpommern comprise:

o	inland lakes and running waters	appr. 524 sqkm
o	Bodden and Haffs (lagoones and bays)	appr. 172 sqkm
o	territorial waters (12 nm)	appr. 5680 sqkm
o	economic fishing zone	appr. 3143 sqkm

The total area of fishing waters of Mecklenburg-Vorpommern is 9,519 sqkm. The coastal and EEZ fishing areas are shown in figure 1.10. Rostock, Saßnitz, Wismar and Stralsund are centres of deep-sea and coastal fishing. Beyond these towns smaller fishery sites developed above all in the Northeast of Mecklenburg-Vorpommern which are of great importance to the regional economy.

Fishery has in the villages and little towns along the coast a tradition of centuries. Many of the families have since generations earned their income or at least part of their income from fisheries and associated activities. Other jobs are rarely available.

Figure 1.5 Coastal Fishing Waters of Mecklenburg-Vorpommern



Coastal Fishing Waters of Mecklenburg-Vorpommern

1.3 Outline Description of the Zones or Travel-to-Work-Areas dependent on Fisheries

Fisheries are existent all over the territory of Mecklenburg-Vorpommern. This Land does not only own inshore and offshore fishery waters but also an abundance of 2000 lakes. With its natural wealth this part of the former GDR was the most important as regards saltwater but also fresh water fisheries. In fact there is no district, which does not dispose of fisheries in one or the other form.

The following zones were identified on the basis of fishery dependency but also on the basis of traditional or regional coherence. The zones include administrative districts (Kreise) in their present entity. Reference is not made to possible future administrative structures, because these are still not yet concluded.

Zone 1, Wismar

Zone 1, Wismar, comprises the districts (Kreise) Grevesmühlen, Wismar and the municipality of Wismar. In the West this zone borders the municipality of Lübeck in the "old" Federal Land Schleswig-Holstein. Wismar is the economical and industrial centre of this zone. Main employers are a ship yard, the largest in Mecklenburg-Vorpommern, a manufacturer of variable-pitch propellers, a sugar factory, the port and shipping.

Fisheries developed mainly in the eastern part of the zone, because the western part boardering the West German Land Schleswig-Holstein was for decades off-limits area during the times of the socialist regime. With the opening of the boarders traditional fisheries based on century old fishing rights were resumed.

Zone 2, Rostock

Rostock, the capital of the former Region of Rostock (Bezirk Rostock), is the largest town on the territory of Mecklenburg-Vorpommern. Rostock was the centre of all maritime business of the former GDR and of course of the three northern regions. All three maritime combinates (shipbuilding, fisheries, ports and shipping), the centralistic and monopolistic sector structures, and most of their operating divisons were based in Rostock. All of the surrounding rural districts are charcterized by agriculture and food production. Rostock was the all-dominating centre of saltwater fisheries. The Rostock-based divisions of the fish combinate employed some 12,000 persons. Coastal fisheries is more or less only of local importance.

Zone 3, Stralsund

Zone 3, Stralsund, comprising the districts Stralsund and Grimmen is centred by the municipality of Stralsund. Largest employer in this town is the shipyard Volkswerft Stralsund. During GDR-times this yard had specialized on the construction of fishing vessels mainly for the former Soviet Union but also for the national fishing fleet. Coastal fisheries is of local importance only. Head offices and processing facilities are based in Stralsund.

Zone 4, Greifswald

Zone 4, Greifswald, is composed of the districts Greifswald, Anklam, Ückermünde and the municipality of Greifswald. The district of Ückermünde boarders Poland. The centre of the zone is Greifswald. One of the most important factors for an economical turn-around and the largest employer is the medical university. A nuclear power plant of Soviet design near this city has been closed down. Fisheries is of local importance only.

Zone 5, Wolgast (Isle of Usedom)

Zone 5, Wolgast, is the third largest zone as regards fisheries, processing and ancilliary activities. Its employers are mainly fishery, agriculture, tourism and shipbuilding. The ship yard Peenewerft had under the socialist regime been a naval yard. In 1992 it has been converted to a civil yard and recently been privatized. The Isle of Usedom was during GDR-times to large an extent military off-limits area (Peenemünde). Armed forces had during the times of the socialist regime been one of the largest employers. A part of the island belongs to Poland.

Zone 6, Rügen

Zone 6, Rügen, comprises the Isle of Rügen, the largest island on German territory, the island Hiddensee and some smallest scale islands. Rügen has been and is a centre of tourism which also represents opportunities for the reconstruction of the regional economy. Like on the Isle of Usedom employers had been armed forces, agriculture and fisheries. Rügen disposes of the second largest agglomeration in fisheries and processing. The centre of fisheries is the Port of Sassnitz. Further employments on the island are provided by ferry shipping to Scandinavia and to the Baltic states.

Zone 7, Schwerin

Schwerin is the capital of the new Land Mecklenburg-Vorpommern and the centre of the defined zone 7, Schwerin. It is developing to be the administrative centre of Mecklenburg-Vorpommern. All of the districts of this zone are more or less purely rural districts. All of them dispose of lakes, hence of fisheries and processing. Schwerin accomodated the head office of a VEB Binnenfischerei (Inland Fisheries). VEBs had been regional sector monopolies in communist days. Furthermore fishery in this zone was conducted by one socialist co-operative. A fish factory had been operated in the City of Schwerin.

Zone 8, Neubrandenburg

The zone of Neubrandenburg is centred by the City of Neubrandenburg. Industries in this zone are mechanical engineering and a steel foundry which delivered products for the shipbuilding industry. An important employer were furthermore the armed forces. The zone had by far been the most important inland fishery region of the former GDR on the basis of its numerous large and small lakes. The former Region (Bezirk) had one of the most powerful but also innovative VEBs in inland fishery of the former GDR, five socialist co-operatives purely engaged in inland fisheries and one co-operative establishment. Of greatest importance as regards fisheries had and have been the districts Waren and Neustrelitz.

To be able to present a aggregate overview over Mecklenburg-Vorpommern, data of 1991 have been used for this study. It has, however, to be taken into consideration, that the economical and employment situation in Mecklenburg-Vorpommern is so dynamic that most of the 1991 data have been becoming outdated during the course of 1992. The region experienced a heavy declination of former socialist enterprises hence of employment by the end of 1991 and during 1992. A further reduction of the work forces of enterprises and administrations is to be expected by the end of 1992.

Figure 1.6 The Zones or Travel-to-Work-Areas dependent on Fisheries in Region D2, Mecklenburg-Vorpommern

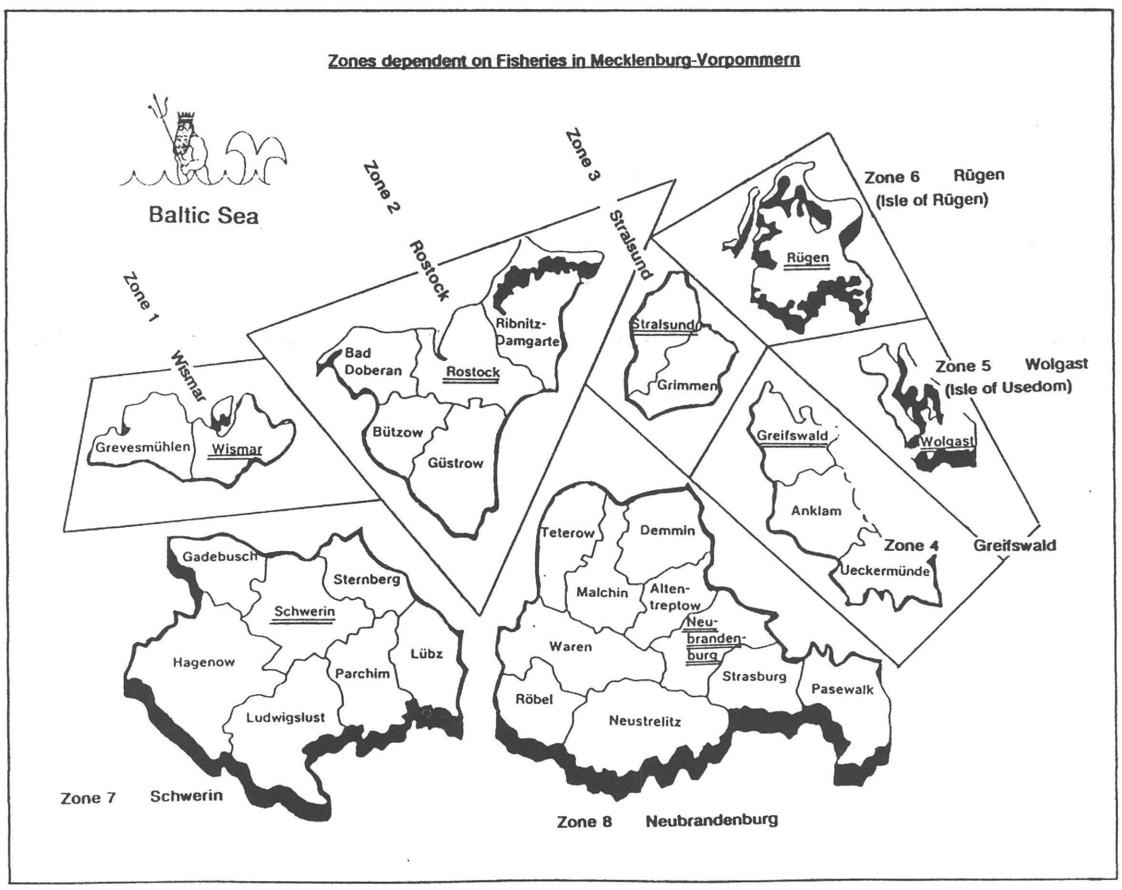


Table 1.V Population, Employment, Unemployment and Employed in Fisheries in Region D2, Mecklenburg-Vorpommern

Zones Districts (Kreise)	1 area (sqkm) 1988	2 inland waters (ha) 1988	3 popul. (1000) 1991	4 labour force (1000) 1989	5 employed (1000) 1991	6 unempl. (1000) 1991	7 un-empl. quote (%) 91	8 empl in the fisheries sector 1991
Zone 1, Wismar	1296	614	127,9	66,3	28,7	12,9	22	162
Mun. Wismar	41	15	55,1	31,1	14,6			
Wismar	588	507	32,3	15,4	6,0	8,6	20	140
Grevesmühlen	667	92	40,5	19,8	8,1	4,3	24	22
Zone 2, Rostock	4541	6247	524,7	282,1	138,1	53,1	19	2388
Mun. Rostock	181	8	246,6	146,6	79,7			
Rostock	689	121	37,6	19,0	7,3	24,8	15	1804
Bad Doberan	550	65	47,9	21,6	8,6	5,4	27	66
Bützow	502	314	28,4	13,3	5,0	2,8	23	126
Güstrow	1002	4160	69,8	35,0	17,7	7,6	20	95
Ribnitz-Damg.	942	168	63,9	31,0	13,6	8,4	29	268
Teterow	675	1411	30,5	15,6	6,2	4,1	31	29
Zone 3, Stralsund	1264	720	128,4	67,6	37,2	12,1	19	206
Mun. Stralsund	39	115	72,1	38,7	21,2			
Stralsund	593	455	23,8	12,0	8,1	8,8	18	160
Grimmen	632	150	32,5	16,9	7,9	3,3	20	46
Zone 4, Greifswald	2181	382	176,1	91,9	41,1	17,8	22	459
Mun. Greifsw	50	0	65,9	38,2	19,4			
Greifswald	587	46	24,0	12,2	4,2	7,7	16	121
Anklam	755	188	37,2	18,9	7,7	4,5	27	212
Ückermünde	789	148	49,0	22,6	9,8	5,6	25	126
Zone 5, Wolgast	542	1332	57,4	25,7	11,0	6,1	24	551
Wolgast	542	1332	57,4	25,7	11,0	6,1	24	551
Zone 6, Rügen	973	69	84,6	40,0	16,3	8,9	25	1240
Rügen	973	69	84,6	40,0	16,3	8,9	25	1240
Zones 1-6	10 797	9 364	1 099,1	573,6	272,4	98,0	22	5006

Sources:
1. Mecklenburg-Vorpommern, Statistisches Jahrbuch 1991
2. Statistische Berichte, issued 5/92
3. Verband der Kutter und Küstenfischer Mecklenburg-Vorpommern e.V.
4. Deutsche Fischwirtschaft AG
5. "private sources"

Continuation Table 1.V

Zones Districts (Kreise)	1 area (sqkm) 1988	2 inland waters (ha) 1988	3 popul. (1000) 1991	4 labour force (1000) 1989	5 employed (1000) 1991	6 unempl. (1000) 1991	7 un-empl. quote (%) 91	8 empl in the fisheries sector 1991
Zone 7, Schwerin	6103	19891	405,4	208,7	97,8	30,9	18	227
Municip. Schwerin	130	59	126,8	72,2	37,3			
Schwerin	857	8708	33,7	14,7	6,0	10,7	12	70
Gadebusch	536	375	23,4	10,9	4,8	1,9	19	30
Hagenow	1550	935	69,8	33,4	15,7	4,2	13	32
Ludwigslust	1160	319	58,2	32,4	13,8	4,8	16	15
Lübz	700	6486	33,2	15,0	7,0	2,9	19	12
Parchim	677	77	38,0	19,8	8,5	3,8	21	41
Sternberg	493	2932	22,3	10,3	4,7	2,6	25	27
Zone 8, Neubrandbg	6771	35877	404,1	210,0	103,2	44,1	23	361
Mun. Neubrdbg	86	0	88,6	50,5	30,5			
Neubrandenburg	656	2312	26,4	13,1	5,5	10,4	15	64
Altentreptow	501	42	22,6	10,7	4,9	2,4	25	14
Demmin	783	590	42,7	21,1	9,4	5,1	26	12
Malchin	651	2563	38,0	19,3	8,7	4,4	24	70
Neustrelitz	1243	9606	52,4	26,7	13,5	6,2	23	
Pasewalk	677	502	40,9	19,9	8,9	3,6	20	17
Röbel	544	562	16,9	8,8	3,4	2,2	28	62
Strasburg	621	219	23,6	12,3	6,6	2,9	22	6
Waren	1009	19481	52,0	27,6	11,8	6,9	26	83
Zones 7-8	12 874	55 768	809,5	418,7	201,0	75	20	588
Region D2	23671	65132	1908,6	992,3	473,4	185,9	17	5594

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Notes:

Column 1 Territorial area 1988 under consideration of the districts ordinated to Brandenburg

Column 2 Inland water area 1988 under consideration of the districts ordinated to Brandenburg

Column 3 Population on the 30th June 1991 with continuous allowances for migration to West Germany (Stat. Monatsheft 2/92. The total population of Region D2 is in fact 1 923 959, differences are attributable to that armed forces and others are only counted on Land level

Column 4 Labour force equals the employed in 1989. Unemployment did not exist in socialist times. Data in accord with "Systematik der Volkswirtschaftszweige der DDR, Ausgabe 1985"

Column 5 Employed in accdordance with "Systematik der Wirtschaftszweige, Ausgabe 1979, Fassung für die Arbeitsstättenzählung 1983" of the FRG (Stat. Jahrbuch MV 1991 (p. 189)

Column 6 Unemployed as of Dec. 1991 (Landesarbeitsamt Nord)

Column 7 quotes rounded

Column 8 Employed in the fisheries sector as of end 1991

Col 6,7,8 data for rural districts and municipalities of Wismar, Rostock, Stralsund, Greifswald, Neubrandenburg

2. The Sea Fisheries Sector

2.1 Deep Sea and Coastal Fisheries

The history and structure of the deep sea and coastal fisheries of Mecklenburg-Vorpommern is that of the former Deutsche Demokratische Republik (DDR) [German Democratic Republic (GDR)].
Fisheries in the former GDR and yet to a certain extent in the new federal Land Mecklenburg-Vorpommern comprised/comprises four subsectors, namely

- remote distance fisheries (große Hochseefischerei)
- near distance fisheries (kleine Hochseefischerei)
- sea and coastal fisheries (See- und Küstenfischerei)
- inland fisheries (Binnenfischerei)

All of the sea fishery activities of the former GDR were concentrated in the Region (Bezirk) of Rostock. This administrative Region occupied all of the coastline of the GDR anlong the Baltic Sea.

The headquarters for all sea fisheries of the GDR were centred in the City of Rostock, the capital of the Region (Bezirk) of Rostock

Rostock was also the centre of distant fisheries (Große Hochseefischerei).

The City of Sassnitz on the Isle of Rügen, was the centre of the near distance and coastal fisheries (Kleine Hochseefischerei, See-und Küstenfischerei) and of a considerable fish processing industry.

2.1.1 Historical Development

The history of the GDR-fisheries commenced in 1946 with the order 11 of the Soviet occupational administration to secure fish supply to the East German population and to the Soviet army.

Prior to the end of World War II the population on the territory of the GDR was supplied with fish and fish products from the landing ports along the German North Sea coasts. Own fishery capacities were only existent in the form of cutter and open boat fisheries in the Baltic and its enclosures (Bodden and Haffs). In 1938 yields in this area totalled merely 1,8% of all German landings.

90% of all fisheries and in particular distant fisheries, were concentrated on the coasts of the Northsea by that time.

Order 11 had far reaching consequences, because it lead to the development of a strong East German fishing industry. Being cut off from the supplies from the North Sea after the enforcement of a strict barrier between the two newly established German republics, the Soviet administration of East Germany and later the government of the newly established German Democratic Republic (GDR) set the objectives of establishing selfsufficiency in fish supply and reducing imports of fish and fish products.

The traditional private and co-operative cutter and open boat fleet formed the initial basis for the build-up of an own fisheries sector. The first socialist enterprise for the concentrated catch of fish inside and outside of the own coastal zone by cutter fleets was founded in 1949 with the Volkseigener Betrieb (VEB) Kutter und Küstenfischerei Saßnitz (People-owned Enterprise Cutter and Coastal Fishery Sassnitz) followed by the establishment the VEB Hochseefischerei Rostock (People-owned Enterprise Deep Sea Fishery Rostock) dedicated to distant distance fisheries in 1950. Both enterprises experienced a steady expansion until 1960 (Sassnitz) or 1966 (Rostock) respectively.

In order to centralize all fishing and associated activities they were transformed to combinates, namely the Fish Combinate Rostock (VEB Fischkombinat Rostock) and the Fish Combinate Sassnitz (VEB Fischkombinat Saßnitz). Combinates have a concern structure with horizontally and vertically subordinated companies of all relevant sector activities, i.e. fishing, processing, whole sale, retail, restaurants. Both combinates were placed under the direction of the Association of People-owned Enterprises in Deep Sea Fishery (VVB Hochseefischerei) which received its production goals and directives from the Ministry of regionally administered Industries and Food Industries (Ministerium für Bezirksgeleitete Industrie und Lebensmittelindustrie).

In coastal fisheries both the Fish Combinate Sassnitz and the private cutter fleet operated in parallel to each other. The coastal cutter owners could initially safeguard their private ownership. They were later forced, however, to join so-called Production Co-operatives of working Fishermen (PwF), in the late 1970s renamed to Fishery Production Co-operatives (FPG). The PwFs or FPGs respectively had to report to the Council of the Region Rostock.

As from 1963 55 fishing co-operatives by then had to concentrate into larger units. The number of fishing co-operatives decreased to 27 and the number of fish processing companies to 5 until 1982.
Following the general reform of the GDR-economy on the one hand and the changes in international fishing conditions with the establishment of 200 nm zones on the other hand the salt water fisheries subsector underwent a major restructuring programme as from early 1980. All of the state-owned firms were amalgamated into the VEB Fish Combinate Rostock (VEB Fischkombinat Rostock). The combinate itself received a kind of holding status.

Its directorate was responsible for the more global management of the combinate (holding) and for the controlling of the subordinated firms and the Institute of Deep Sea Fisheries (Institut für Hochseefischerei). Day to day deep sea fishing operations were from then carried out by the VEB Fishing Rostock (VEB Fischfang Rostock) and baltic fishing operations by the VEB Fishing Sassnitz (VEB Fischfang Saßnitz). Furthermore VEB Fishing Satznitz received a professional guiding function versus the cutter and coastal co-operatives via the cooperation council. Still the co-operatives (FPGs) had relative freedom of action.

The successful establishment of own fisheries and the expansion phase came to a halt in the mid 1970s with the ratification of international fishing conventions by the German Democratic Republic. The ratification of these conventions and the establishment of 200 nm fishery zones had far reaching consequences as regards the amount of catches, the structure of the fleets, the diversification of fishing grounds and the development of the coastal and inland sub-sectors. 200 nm zones were established in all traditional fishing areas used by the GDR in the North Atlantic. The GDR responded with the conclusion of bilateral agreements and with the protection of its own fishing zone as from the 1.1.1978. However the old fishing results could never again be achieved. Catches of the deep sea fishery decreased by 41,4 % from 1975 until 1978. In 1978, the first time since 1968, the catch declined to below 190.000 t

Figure 2.1 Outline Structure of the GDR Fisheries

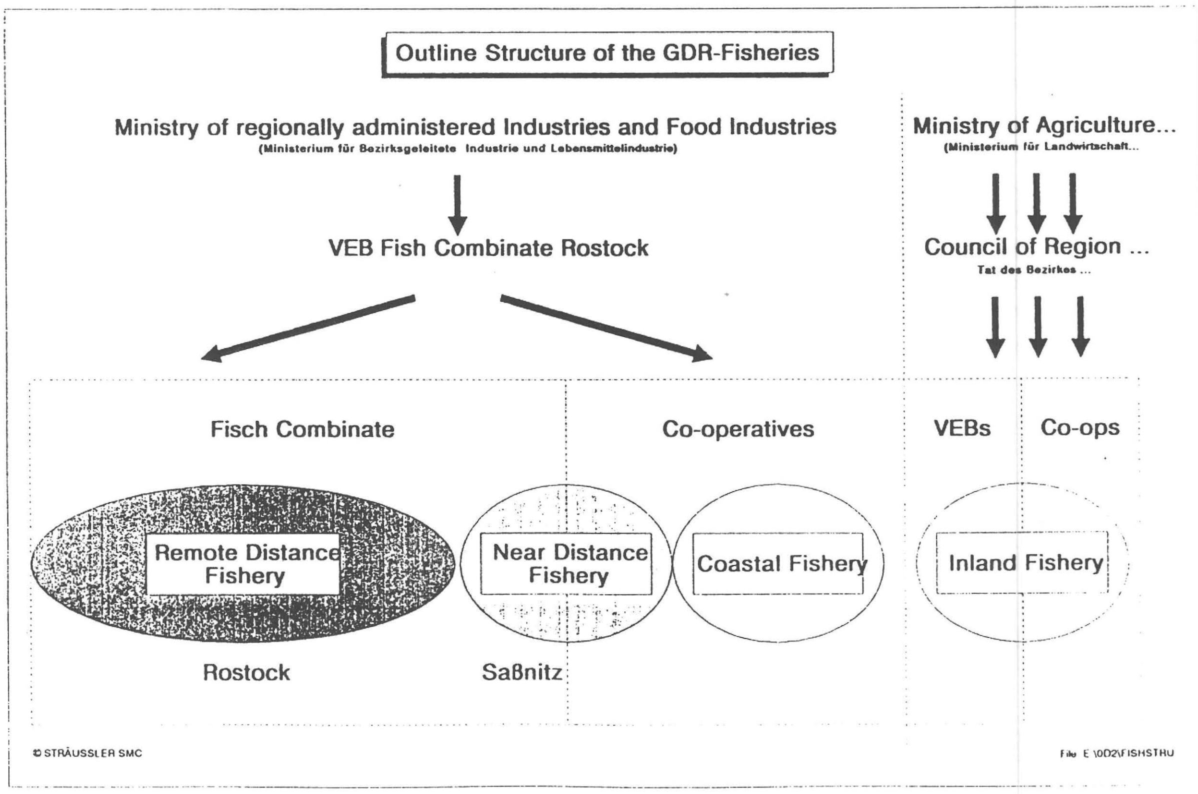
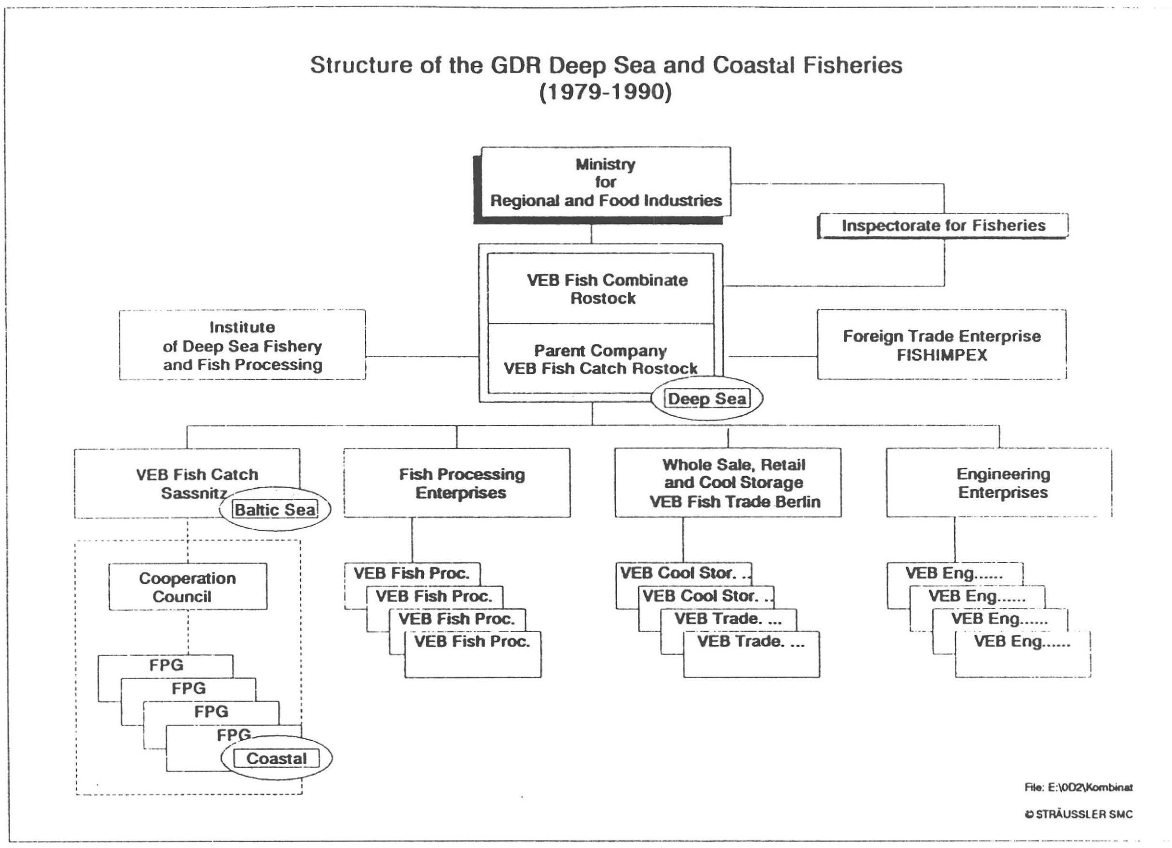


Figure 2.2 Structure of the GDR Deep Sea and Coastal Fisheries (1979-1990)



2.1.2 Structure of the Deep Sea and Coastal Fisheries Subsectors during GDR-Times (prior to the Re-unification of Germany)

The salt water sub-sector of the GDR-fisheries was prior to the German re-unifcation organized as follows:

1. The VEB Fisch Kombinat Rostock (VEB Fish Combinate Rostock) as governing body comprised the fishing enterprises VEB Fishing Rostock and the VEB Fishing Sassnitz plus all vertical integrated enterprises and institutions on all of the territory of the former GDR.

2. 27 economically and legally independent Fishery Production Co-operatives (FPG) in the coastal fishery subsector along the Baltic coast. Centres of coastal fishery were in Rostock-Warnemünde, Sassnitz on the island of Rügen and on the island Usedom.

The development of the saltwater fleet of vessels of more than 100 GRT were recorded by LLoyds List as shown in the following tables.

Table 2.II GDR, No. of Fishing Vessels >100 GRT after GRT Classes

Class (GRT)	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
100- 499	83	82	82	81	64	63	63	63	63	59	59	59
500- 999	61	61	61	59	57	56	47	47	46	29	22	22
1000-1999	2	2	2	2	2	2	1	1	1	4	9	9
2000-3999	15	17	17	17	17	20	20	20	20	17	17	17
> 4000	0	0	0	0	0	0	0	0	0	0	0	0
total nos.	161	162	162	159	140	141	131	131	130	109	107	107

Table 2.III GDR, Tonnage of Fishing Vessels >100 GRT after GRT Classes

Class (GRT)	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
100- 499	13812	13700	13700	13532	9414	9328	9328	9328	9328	8315	8315	8315
500- 999	48353	48353	48223	46922	45746	45047	38166	38166	37223	24243	18669	18669
1000-1999	2627	2362	2362	2622	2620	1270	1270	1270	1270	6955	16430	16430
2000-3999	47674	53811	53811	47342	46248	55885	55882	55882	55882	48041	48041	48041
> 4000	0	0	0	0	0	0	0	0	0	0	0	0
total GRT	112466	118226	118226	118096	110418	104028	111530	104646	104646	103703	91455	91455

Source: Lloyds Register of Shipping

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2.2 The state-owned Sector (VEB Fisch Kombinat Rostock)

The VEB Fish Combinate Rostock was the main producer of fresh and processed fish in the former GDR. The combinate was directly responsible for the plan performance to the Ministry of regionally directed Industries and Food Industries. The Combinate existed in its final structure as from the 1st January 1979.

It had the general objective of "Securing a quantitatively and qualitatively incrementing fonds of goods, fish and fish products for the supply of the population". Within the framework of this general objective the combinate had the following tasks: fishing, maritime logistics, cool and freezer storage, fish processing, fish whole sale all over the former GDR, fish retail in the Region of Rostock (Bezirk Rostock), product development.

VEB Fishing Rostock (VEB Fischfang Rostock), the main and original enterprise (Stammbetrieb) of the Combinate, was specialised in distant fisheries. This enterprise was also responsible for retail in the Region of Rostock and for part of the processing. VEB Fishing Sassnitz (VEB Fischfang Saßnitz), the second fishing enterprise of the Combinate concentrated on cutter fishery in the Northsea (until the mid 1970s) and along the Baltic coasts of the GDR.

In 1970 the Combinate had a total fleet of 143 vessels with a total gross tonnage of 129,207, a total workforce of more than 14,000 persons, whereof almost 5,000 persons belonged to the shipboard personnel.

In 1980 the fleet had decreased to 118 vessels with 104.646 GRT. Due to the takeover of processing personnel the workforce however had increased to more than 16.000 persons whereof 4.600 were employed in shipboard services.

In 1990 the combinate disposed of a fleet of 88 vessels with a gross tonnage of 125.539 and a total work force of 15,500 persons in 16 companies. 8,900 out of the above number were employed in the VEB Fishing Rostock. The sea-going staff of the Combinate, both in the VEB Fishing Rostock and in the VEB Fishing Sassnitz comprised about 4,400 persons.

Further to the two fishing enterprises in 1990 the following firms belonged to the fish combinate in Rostock in 1990: 9 fish processing enterprises, one rationalization engineering enterprise, one mechanical engineering enterprise one inland trade enterprise, one export/import enterprise and the Institute of Deep Sea Fishery and Fish Processing Rostock (Institut für Hochseefischerei und Fischverarbeitung Rostock) as scientific and technological centre of the combinate

Table 2.III Development of the Fishing Fleets of the state-owned (people-owned) Fishing Companies VEB Fishing Rostock and VEB Fishing Sassnitz

	1949	1955	1960	1965	1970	1975	1980	1985	1990	1991
State-owned Near-Distance Fleet (VEB Fishing Sassnitz)										
Cutter (17 m)	109	110	19	-	-	-	-	-	-	-
Cutter (21 m)	11	11	11	-	-	-	-	-	-	-
Cutter (24 m)	-	49	47	43	12	-	-	-	-	-
Cutter (26,5 m)	-	-	50	50	49	49	49	49	42	
Logger	9	35	34	33	9	9	-	-	-	-
Near Distance Fleet Total	129	205	161	126	70	58	49	49	42	0
State-owned distant Fleet (VEB Fishing Rostock/ Rostocker Fischfang Reederei GmbH										
Trawler Type I	-	6	6	6	4	4	-	-	-	-
Trawler Type II	-	9	13	14	14	-	-	-	-	-
Trawler Type III	-	-	-	1	5	5	5	1	1	-
FVS I/II	-	-	1	11	13	10	8	8	8	-
FVS III	-	-	-	-	-	-	8	8	8	1
FVS IV	-	-	-	-	-	-	7	7	7	7
TVS I	-	-	1	1	1	-	-	-	-	-
TVS II	-	-	-	1	2	2	2	2	2	-
TVS III	-	-	-	-	2	2	2	2	2	-
KTS I	-	-	-	-	1	1	1	1	1	-
KTS II	-	-	-	-	-	2	2	2	2	-
KTS III	-	-	-	-	-	-	1	2	2	-
KTS IV	-	-	-	1	1	1	1	1	1	-
Z-Trawler	-	-	-	1	21	21	21	16	1	-
Freezer-Trawler	-	-	-	-	9	15	15	15	7	-
Shrimp-Trawler	-	-	-	-	-	-	-	-	4	-
State-owned Distant Fleet total	0	15	21	36	73	63	73	65	46	8
Total Numbers	129	220	182	162	143	121	122	114	88	8
Total GRT	5.742	23.370	36.513	77.009	129.207	132.207	104.646	118.096	125.539	15.270

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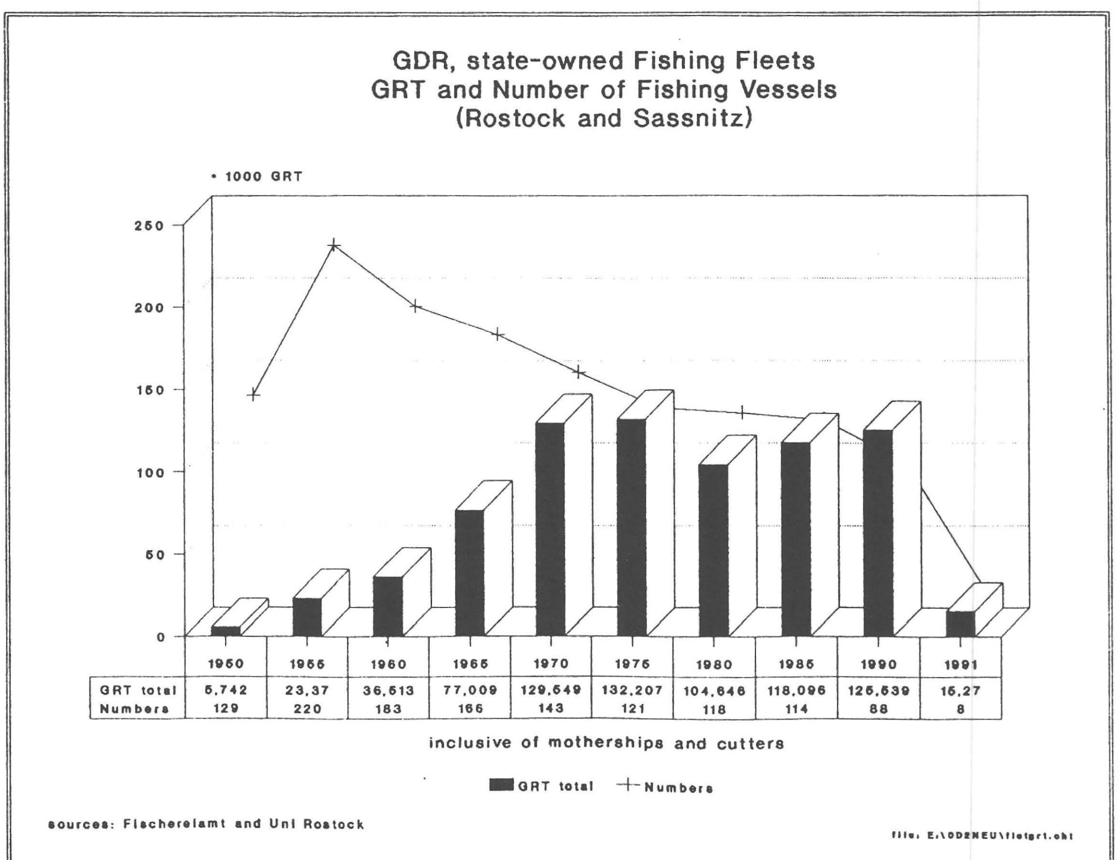
Remark: The cutters (17 m, 21 m, 24 m) had been sold to the cooperatives
Source: Fischereiamt des Landes Mecklenburg-Vorpommern

Figure 2.3 GDR, No. of Fishing Vessels and GRT of the state-owned Fishing Fleets



2.2.1 The VEB Fishing Rostock (VEB Fischfang Rostock)

Within the structure of the combinate the VEB Fishing Rostock was responsible for distant and deep sea fisheries. It yielded about 60 % of the total saltwater catches of the former GDR. In close collaboration with the fleets of the Sovietunion and other "brother" states the distant fleet executed mainly flottilla fishing.

At the peak of the expansion phase (1970) the company possessed some 73 vessels. Following the reduction in operation areas by international fishery policies the fleet was reduced and restructured to fewer but larger units as from the mid 1970s. A diversification took place as regards fishing grounds and species fished.

In 1990 46 fishing, fishery support and transport vessels were operated:

1 Side Trawler (Type III), 66,5 m, 940 GRT, 1,020 kw

1 Feeder Trawler

7 Freezer Trawlers (thereof 4 in the PIRMADA joint venture in Marocco)

4 Shrimp Trawlers (in the Solidarity Project Beira)

23 Catch and Processing Vessels (FVS I-IV), between 55 m and 91,80 m, between 1,890 and 3,930 GRT and between 1,700 and 2,800 kw

4 Transport and Processing Vessels (mainly used for takover of catches at sea over-the-side purchases)

6 Freezer and Transport Vessels (KTS I-IV), between 660 GRT and 12,300 GRT and between 644 and 6,620 kw

More than 4000 skilled persons were employed in fishing and fish processing onboard the fishing vessels of the VEB Fischfang Rostock.

As had shown proof after the fall of the communist wall, neither the ships, nor their equipment, nor the company itself could survive in an economical and competitive environment. As all of the state-owned companies of the former GDR the VEB Fischfang Rostock has been placed under the control of the German privatization authority TREUHAND. The company was subordinated to the holding Deutsche Fischwirtschaft AG, transformed into a limited partnership and renamed to Rostocker Fischfang GmbH. The number of vessels has been reduced to 8 by now (1992). Most of the personnel has been made redundant.

Table 2.IV Yield (1000 t) of the Deep-Sea Fishing Fleet of the GDR in Main Fishing Areas 1961-1989

Fishing Area	1961	1965	1975	1988
Northwest Atlantic	28.8	92.4	113.2	27.6
Northeast Atlantic	59.7	86.8	128.7	23.9
Northwest Africa	-	-	1.9	-
Pacific	-	-	12.9	-
Southwest Africa	-	-	-	24.8
Southwest Atlantic	-	-	-	9.2
Total catch	88.5	179.2	256.0	85.5

Table 2.V Technical Data of the Deep See Fishing Fleet (VEB Fischfang Rostock)

Type of vessel	FVS Ib	FVS II	FVS III	FVS IV	Z-Trawl Shr.T	FreeTrawl	SideTrawl. III
L.o.A. [m]	85,4	87,8	102,0	62,3	61,50	48,90	66,5
L.b.P. [m]	76,6	80,0	91,8	55,0	54,07	43,60	60,5
B.mld. [m]	13,5	14,2	15,2	13,8	10,6	10,0	10,3
[kw]*1000	1,7	2,2	2,8	1,8	1,3	0,74	1,02
GRT *1000	2,97	3,16	3,93	1,89	0,99	0,66	0,94
Speed [kn]	12,5	14,0	14,6	12,5	13,5	11,0	13,2
Year built	1961	1966	1975	1982	1965	1966	1961
Crew numb.	77	77	83	40	19	23	29

Legend:
FVS = Fishing and factory ship
Z-Trawler = Feeder Trawler

Table 2.VI Technical Data of the Deep Sea Fishing Support Fleet (Mother-Ship-Fleet) (VEB Fischfang Rostock)

Type of Vessel	TVS II	TVS III	KTS I	KTS II	KTS III	KTS IV
L.o.A. [m]	141,4	79,80	99,1	130,0	152,8	48,9
L.b.P. [m]	130,6	73,06	90,7	119,0	142,0	43,.6
B.mld [m]	21,2	13,4	15,4	19,8	21,2	10,3
GRT *1000	10,2	2,58	2,78	5,9	12,3	0,66
[kw]	3800	960	2390	5149	6620	644
Speed [kn]	14,0	12,0	14,0	19,0	17,2	11,0
Year built	1965	1964	1968	1971	77/85	1962
Crew numb.	164	70	40	65	76	25

Legend:
TVS = Transport and factory ship
KTS = Freezer and Transport ship

Table 2.VII Number and Type of Vessels of the VEB Fischfang Rostock (Rostocker Fischfang GmbH; temporary statements) during the redevelopment stage following the German reunification

Vessel Type	No. 01.01.89	No. 01.10.89	No. 01.10.91	No. 15.02.92	remarks
FVS I	6	6	-	-	sale;scrap
FVS II	2	2	-	-	"
FVS III	8	8	1	1	*
FVS IV	7	7	7(5)	4(2)	*
TVS II	2	2	-	-	sale;scrap
TVS III	2	2	-	-	"
KTS I	1	1	-	-	"
KTS II	2	2	2	2	#
KTS III	2	2	2	-	sale;scrap
KTS IV	1	1	-	-	"
Shrimptrawler	4	4	3(1)	-	sale;scrap
Feeder-Trawler	3	3	-	-	sale;scrap
Freezer-Trawler	3	3	-	-	"
Freezer-Trawl. (PIMARDA)**	4		-	-	"
Side-Trawler	1	1	-	-	Museum-ship
Research Vessel	3	3	?	-	open &
totals	51	47	15	7	

Legend:

* Mecklenburger Fischfangreederei GmbH (1.1.92)
\# Chartergesellschaft m.b.H (Nonfishing)
& Institut für Hochseefischerei und Fischverarbeitung
** Joint Venture

2.2.2 The VEB Fishing Sassnitz (VEB Fischfang Saßnitz)

The VEB Fishing Sassnitz (VEB Fischfang Saßnitz) was the root of state-owned and industrial fishery in the former German Democratic Republic as had been outlined in chapter 2.1.1. The company started in 1949, after World War II, with 11 21 m cutters in Sassnitz on the Isle of Rügen. Shortly later 109 17 m cutters were taken over from privates or co-operatives and joined the fleet.

During the following years the cutter fleet extended its activities to the fishing grounds of the North Sea and the Norwegian Sea. After the international establishment of national fishing zones and the resulting loss of fishing grounds the Sassnitz cutter fleet concentrated again on activities in the Baltic.

In 1970, the state-owned Sassnitz based fleet operated some 70 vessels, whereof 49 belonged to the 26,4 m class built in the 1950s. 12 of the vessels were 24 m cutters and 9 loggers. The company had at that time a total personnel of 2060, whereof 922 persons belonged to the shipboard personnel or fishermen in its orginal sense. The restructuring of the fishery sector in 1978 left this company with the fleet of 49 26,4 m cutters This number of vessels remained fairly stable until the German re-unification.

In 1989, prior to the establishment of the monetary and social union with the Federal Republic of Germany, the VEB Fishing Sassnitz disposed of 47 26,4 m cutters and a total personnel of 1595, thereof 485 on board. With the restructuring following the social and monetary union and the necessary adaptions to market economy all vessels were sold or scrapped.

Table 2.VIII Development of the Cutter Fleet of the state-owned (people-owned) Fishing Company VEB Fishing Sassnitz

	1949	1955	1960	1965	1970	1975	1980	1985	1990	1991
Cutter (17 m)	109	110	19	-	-	-	-	-	-	-
Cutter (21 m)	11	11	11	-	-	-	-	-	-	-
Cutter (24 m)	-	49	47	43	12	-	-	-	-	-
Cutter (26,5 m)	-	-	50	50	49	49	49	49	42	
Logger	9	35	34	33	9	9	-	-	-	-
Total Nos	129	135	161	126	70	58	49	49	42	-

Remark: The cutters (17 m, 21 m, 24 m) had been sold to the co-operatives

Source: Fischereiamt des Landes Mecklenburg-Vorpommern

2.2.3 Engineering

Both, the VEB Engineering Stralsund and the VEB Mechanical Engineering Richtenberg belonged to the sector "Rationalization Engineering" (Rationalisierungsmittelbau or in short Ratiobau). Each combinate owned such enterprises or institutions, which had the objective to contribute to the rationalization of production.

2.2.4 Ports and Port Facilities of the Fish Combinate

In accord with the socialist philosophy to integrate all horizontal and vertical sector functions in one industrial combinate the fishing companies of the fish combinate of Rostock owned two major fishing ports, Rostock-Warnemünde and Sassnitz, inclusive of all necessary infrastructure.

The fishery port of Rostock

Until 1968 the VEB Fishing Rostock disposed of port facilities in Rostock-Warnemünde, later called the old port, with

* a harbour basin
* 2 warehouses for sorting, weighing and icing, repair
* workshops for all kinds of repair works,
* 1 ice factory with a capacity of 200 t/d plate ice and 50 t/d block ice,
* a freezer storage with a capacity of 5000 t/a
* 2 fish meal fabrication units with a capacity of 100 t/d and 60 t/d respectively

With the expansion into more distant areas and the restructuring of the fleet towards larger units more and larger port facilities were needed in Rostock. The new port was constructed in the form of an open 1000 m jetty along the river Warnow. 380 m of the total quay length were destined for the discharge of fish, 420 m as repair and equipment quay and 220 m as reserve docking space. The following port facilities were also newly built with a view of optimizing the discharge and repair cycle of the fishing vessels:

* 2 freezer ware houses, 220 m x 60 m, -28 deg C working temperature plus 1 machine house
* storage for the by-catch, 100 m x 60 m
* mechanical workshops, 100 m x 60 m
* supply storage, 100 m x 60 m
* netmaker's workshop, 170 m x 60 m
* rigger's workshop, 170 m x 60 m

The Fishery Port of Sassnitz

It was the objective of the VEB Fishing Sassnitz to supply the processing industry and the trade with herring and herring-like species. The port facilities of Sassnitz were therefore constructed for the dispatch of fishery vessels of cutter size in particluar. The original design capacity was 30,000 t/a fish. The increase of landings to 60,000 t/a after the invention of pelagic fisheries with a new class of 26,5 m cutters made a major conversion programme necessary from 1968 until 1970.

After the conversion programme the fishery port of the VEB Fishing Sassnitz consisted of the following elements:

* 1 quay, 230 m
* ice factory, 100 t/d
* ice storage, 200 cu m
* deep freeze storage
    - 1 freezer room, 600 sq m, -28 deg C
    - 1 freezer room, 545 sq m, -28 deg C or -1 deg C for the storage of deep frozen or mildly salted herring respectively
    - 1 room for the weighing and palletizing of landings
* workshop for minor repairs

2.2.5 Fish Trade of the Combinate

Under the umbrella of the Fish Combinate of Rostock there was only one company, the VEB Fish Trade Berlin (VEB Fisch Handel Berlin), responsible for both whole trade and retail trade functions. This company disposed of 52 distribution centres which regularly supplied more than 43,000 retail outlets and restaurants on the territory of the former GDR.

In 1989 prior to the German unification 1618 persons belonged to the state-owned whole sale and retail sub-sector of the former fish combinate. The above staff numbers are valid however for all of the former GDR. Two thirds of the above staff have been accountable to the the territory of the former Region of Rostock or now the total territory of Mecklenburg-Vorpommern.

2.2.6 Fish Import and Export of the Combinate

The VE AHB FISHIMPEX (Volkseigener Außenhandelsbetrieb FISCHIMPEX) was the only enterprise in the GDR permitted to engage in foreign fish trade. This company was directly responsible to the directorate of the combinate. Many of the over-the-side purchases were managed by the VE AHB FISHIMPEX. For some time over-the-side purchases amounted to almost 30% of the nominal catches. A correction of the statistics has not been made accordingly. The company had a staff of about 60 persons.

2.2.7 Deep Sea and Coastal Fishery Sciences

The Institute of Deep Sea Fishery and Fish Processing (Institut für Hochseefischerei und Fischverarbeitung) was founded in 1953. Its operating expenditures have been shared by the fish combinate and by the co-operatives. In consequence the institute had to undertake scientific research on request of both the combinate and the co-operatives. Scientific research had been undertaken for Baltic fisheries and for fisheries on out of area fishing grounds.

The institute had a staff of about 400 inclusive of the crews of 3 small research vessels. The institute had the following departments:

* fish biology
* fishing technology and marine aquaculture
* fish processing
* engineering of scientificappliences
    - fishing technology
    - underwater surveillance

2.2.8 Transformation of the VEB Fisch Kombinate Rostock into the Deutsche Fischwirtschaft AG

The ratification of the economical, legal and social union with the Federal Republic of Germany made adaptions to the conditions of the market economy for all of the enterprises of the former GDR a necessity. In order to comply with the legal system of the Federal Republic the companies had to change their legal status and their corporate structure. The combinate administrations were changed to holdings in the form of share holding companies (in German Aktiengesellschaft or in short AG). All lower level companies received the legal status of a limited company (in German: Gesellschaft mit beschränkter Haftung, in short GmbH)

The VEB Fish Combinate of Rostock was transformed into the "Deutsche Fischwirtschaft A.G." a holding of the TREUHAND in Berlin. The new structure is shown in Fig. 2. . The smaller enterprises have already been transformed into private-ownership enterprises in the form of GmbHs. The former deep sea fishing company VEB Fischfang Rostock has been transformed to Fischfang Rostock GmbH.

A large fishing fleet as was needed for the goals of the centralistic and communist system is not needed any longer. In consequence most of the deep sea fishing fleet was taken out of service, sold or scrapped. The fleet has been reduced from 51 vessel operated in 1989 to 7 vessels by now. Staff was reduced by 82% to 3,062 until the end of 1991.

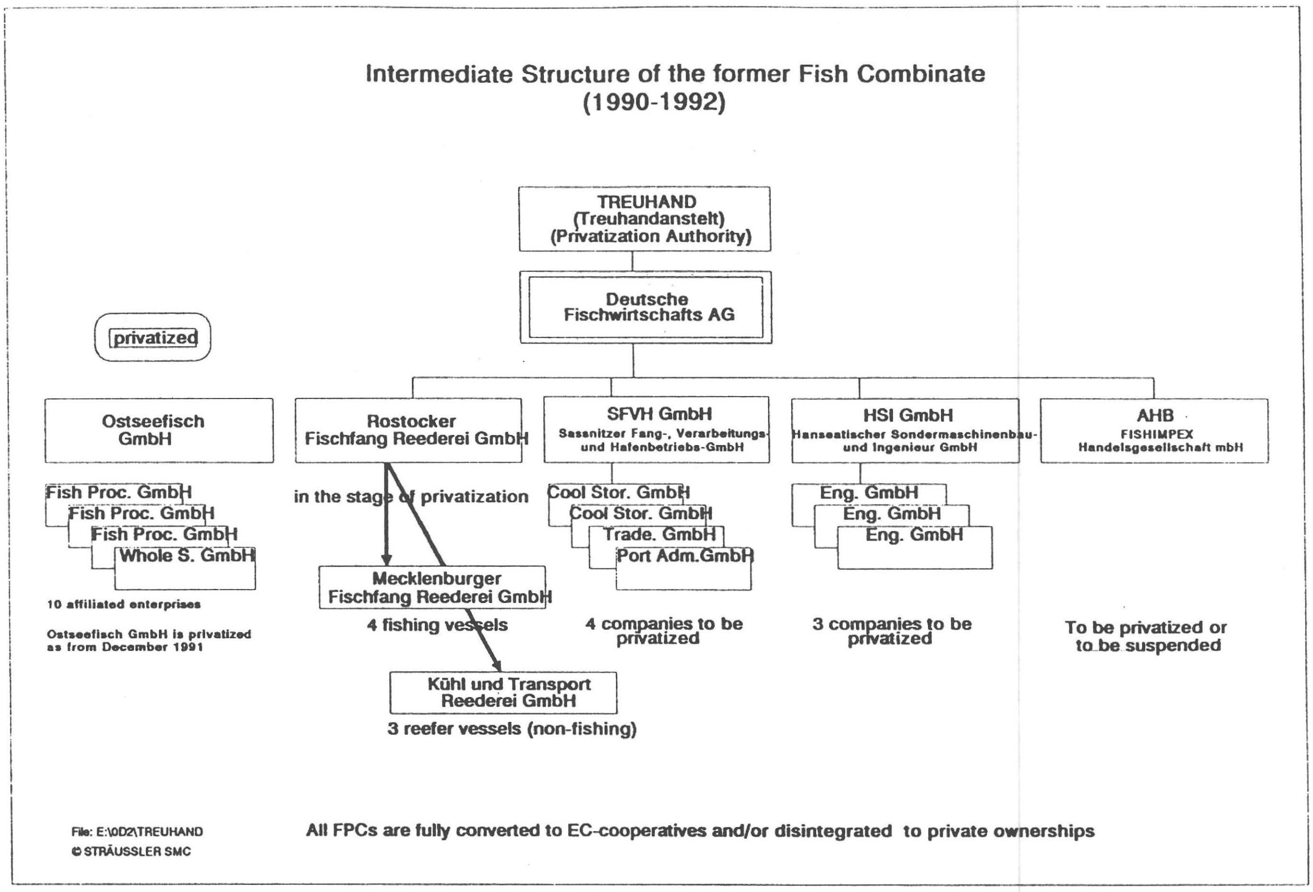
Table 2.IX Development of Staff in the Successor Organization of the Fish Combinate, the Deutsche Fischwirtschaft AG

Date	01.7.90	01.12.90	01.5.91	31.12.91
Staff	11,713	8,990	6,8619	3,062

The number of shipboard personnel of the VEB Fisching Rostock (VEB Fischfang Rostock) decreased from appr. 4046 to about 400

4 of the remaining vessels will be operated by a newly establishing company under the name Mecklenburger Fischfang Reederei GmbH. Shareholders of this company will primarily be the Land Mecklenburg-Vorpommern, the TREUHAND and a private investor. 4 reefer vessels will probably be operated in non-fishing service by an also newly establishing company named Kühl- und Transport Reederei GmbH.

Figure 2.4 Intermediate Structure of the former Fish Combinate



The VEB Fischfang Sassnitz has discharged of all of its 42 cutters remaining in 1990. They have been sold to regional co-operatives or abroad. All of the crews have been made redundant. 14 out of the 42 cutters were sold to a newly established co-operative under the name of Saßnitzer Seefischer on the Isle of Rügen, which also took over some of the staff of the VEB Fischfang Sassnitz. More than 300 of the shipboard personnel have lost their jobs. The company itself has been transformed into a mini-holding under the name Sassnitzer Fang-, Verarbeitungs- und Hafenbetriebs GmbH. It possesses 4 subordinated companies in the fields of cool storage, trading and port administration which are due to be sold to private interests.

The engineering subsector has been placed under the umbrella of HSI GmbH (Hanseatischer Sondermaschinenbau und Ingenieur GmbH). This company and three subordinated firms are for sale.

The fish processing and whole sale subsector has been fully privatized under the name of Ostseefisch GmbH as from December 1991. 10 companies in the field of fish processing are concentrated under the umbrella of Ostseefisch GmbH. This company furthermore possesses 4 whole sale outlets, 7 fish retail shops, 1 fish restaurant at the end of 1991.

At this date Ostseefish had a total staff of 1,014 on the territory of the new Länder, 777 of which belonged to Mecklenburg-Vorpommern. Rügenfisch GmbH has as from the 1st January 1992 been adjoined to the Ostseefisch group of companies with a staff of 350 persons. By mid 1992 the total labour force on the territory of Mecklenburg-Vorpommern inclusive of Rügenfisch had been down to 481 persons .

The Institute of Deep Sea Fishery and Fish Processing Rostock has been renamed to Instute of Baltic Fishery (Institut für Ostseefischerei). It operates, however, on a much lower level. Most of its original staff has been made redundant.

2.3 The co-operative Cutter and coastal Fishery Sector

2.3.1 The co-operative Cutter and coastal Fishery Sector during GDR-Times

Fishery co-operatives have a long tradition in the coastal fishery of Mecklenburg-Vorpommern . They have their origin in trap net fishing co-operatives established as early as 1823. Cutter fishery had during GDR-times been undertaken both by the VEB Fischfang Sassnitz and by fishing co-operatives. Coastal and lagoon fishing with open boats and static gears was purely the business of fishery co-operatives.

The development of structures and institutions in offshore and coastal fisheries paralleled the development in the agricultural sector. Over the years more and more production means were nationionalized and socialized, i.e. fishermen were forced to join co-operatives. In 1945/46, by order of the Soviet Military Command, lower level co-operatives resumed operation. In fisheries these were in particular coastal fishing communities on the isle of Rügen (Kommünen). Membership became compulsory. As from 1952 those first-level co-operatives were reformed to Production Co-operatives of working Fishermen in Sea and Coastal Fisheries (Produktionsgenossenschaften werktätiger Fischer in See- und Küstenfischerei = PwF).

In 1960, 55 fishery co-operatives were registered in the Northern Region (Region of Rostock). In the years to follow all of the second generation co-operatives were transformed into third generation co-operatives, now named Fishery Production Co-operatives (Fischereiproduktionsgenossenschaften = FPG). In order to make this process irrevocable the co-operative sector in fisheries underwent a concentration process. In 1965 51 FPGs were registered. This number decreased to 28 FPGs in 1974. In 1989, prior to the opening of the wall, 27 FPGs were still in existance.

The distribution of fishery co-operatives and their vessels is shown on table 2.X. The majority of fishery sites is situated on the north-eastern coasts of Mecklenburg-Vorpommern. 23 of the 27 co-operatives remaining in 1989 disposed of own processing facilities, whereof four were of rather small capacity. Fishery production exceeded in general the own processing capacities of the co-operatives.

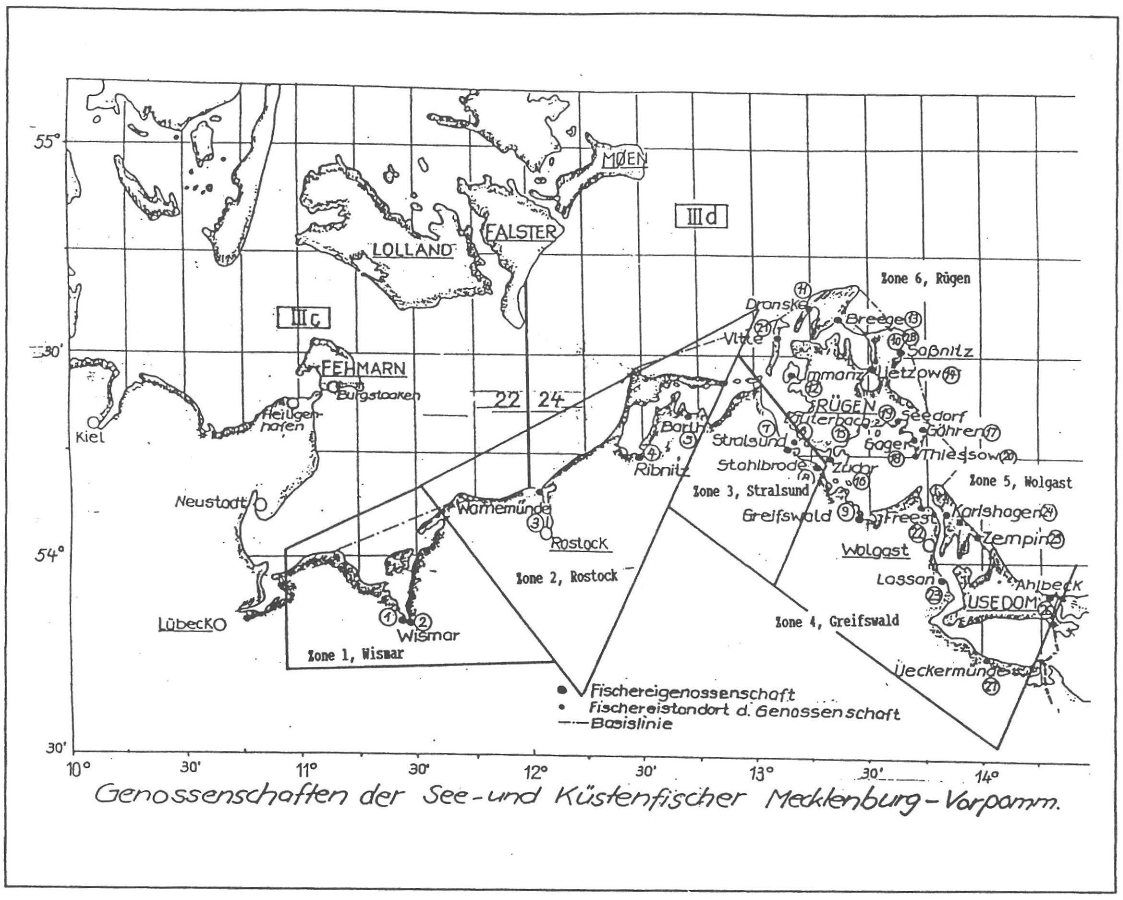
Table 2.X 31.12.1990, Type and Number of Fishing Vessels of the Coastal and Cutter Co-operatives

Type of Vessel	B 403	HZ 400	26.5 [m]	24 [m]	21 [m]	18 [m]	17 [m]	15 [m]	12 [m]	11 [m]	10 [m]	Boats <10 m
Zone 1, Wismar	2	2	-	3	-	-	4	-	3	-	6	68
Wismar	2	2	-	3	-	-	4	-	-	-	-	-
Wismarfisch	-		-	-	-	-	-	-	3	-	6	68
Zone 2, Rostock	2	-	-	-	-	1	19	-	6	1	1	104
Warnemünde	2	-	-	-	-	1	19	-	6	-	-	10
Fischland	-	-	-	-	-	-	-	-	-	-	-	29
Barther Bodden	-	-	-	-	-	-	-	-	-	1	1	65
Zone 3 Stralsund	-	4	-	2	2	-	4	-	-	7	2	26
Std.Stralsund	-	4	-	2	2	-	4	-		-	-	-
Strelasund	-	-	-	-	-	-	-	-	-	-	-	26
Am Sund	-	-	-	-	-	-	-	-	-	7	2	-
Zone 4, Greifsw.	-	-	-	-	-	-	-	-	4	-	-	183
Greifswalder Bo.	-	-	-	-	-	-	-	-	4	-	-	46
Peenestrom	-	-	-	-	-	-	-	-	-	-	-	63
Haffküste Ückerm.	-	-	-	-	-	-	-	-	-	-	-	74
Zone 5, Wolgast	1	-	-	-	1	4	17	4	17	2	4	172
Peenemündung	-	-	-	-	-	-	-	3	17	-	-	6
Inselfisch	1	-	-	-	1	4	17	1	-	2	4	61
Zempiner Fischfg.	-	-	-	-	-	-	-	-	-	-	-	42
Ostseestrand	-	-	-	-	-	-	-	-	-	-	-	63
Zone 6, Rügen	-	-	14	-		-	15	21	10	2	6	416
Saßnitz-	-	-	-	-	-	-	14	17	3	-	1	-
Dranske	-	-	-	-	-	-	-	-	-	1	1	10
Ummanz	-	-	-	-	-	-	-	-	-	-	-	13
Wittow	-	-	-	-	-	-	-	-	-	-	-	35
Jasmund	-	-	-	-	-	-	-	-	-	-	-	33
Insel Vilm	-	-	-	-	-	-	-	-	-	1	4	43
E.-M.-Arndt	-	-	-	-	-	-	-	-	-	-	-	5
Nordpert	-	-	-	-	-	-	-	-	-	-	-	21
Mönchgut	-	-	-	-	-	-	-	-	-	-	-	121
Seedorf	-	-	-	-	-	-	-	-	-	-	-	68
Leuchtfeuer	-	-	-	-	-	-	-	-	-	-	-	50
Hiddensee	-	-	-	-	-	-	1	4	7	-	-	17
Saßnitzer Seef.	-	-	14	-	-	-	-	-	-	-	-	-
totals	5	6	14	5	3	5	59	25	40	12	19	969

total cutters	193	total boats	969
Grand total			1162 units

Source: Landesverband der Kutter- und Küstenfischer Mecklenburg-Vorpommern

Figure 2.5 Administrative Seats of the Co-operatives (FPGs) on the Coasts of Mecklenburg-Vorpommern



2.3.2 Port and Landing Locations

Large port facilities are scarce along the coasts of Mecklenburg-Vorpommern. Its typically flat sandy and stony beaches permitted the establishment of open landing locations only. There are about 150 fishery sites along the Baltic Sea coast of Mecklenburg-Vorpommern with own berths and own registration numbers. Generally the fishery sites are also landing sites. As regards their equipment three categories of landing locations have to be differentiated:

a. Sheltered ports with complete range of support facilities (Wismar, Warnemünde, Rostock, Stralsund, Sassnitz, Karlshagen). The fishery ports of Rostock and Sassnitz have in detail been described in chapter 2.2.4.

b. Protected landing locations:

c. Unprotected landing locations

Generally the ports are owned by the Communes. Their technical equipment is presently rapidly changing. Cold storage is not any more needed, because the fish is now directly discharged into reefer vans.

An auction market has never been established yet on the coast of Mecklenburg-Vorpommern, because in pre-war times all fish was marketed through the port of Hamburg and during GDR-times all fish was centrally distributed.

Table 2.XI Different Types of Harbours and Landing Sites by Zones

	harbours & landing sites				
Zone	fully dvlpd	low dvlpd	un-dvlpd	total	with quota control
Zone 1, Wismar	2	5	0	7	4
Zone 2, Rostock	3	11	8	22	13
Zone 3, Stralsund	3	0	0	3	2
Zone 4, Greifswald	2	0	6	8	6
Zone 5, Wolgast	4	1	7	12	13
Zone 6, Rügen	10	17	4	31	16
Total	24	34	25	83	54

2.3.3 Structural Changes of the Co-Operative Cutter and Coastal Fishery following the Re-unification of Germany

The most severe alteration the co-operatives were subjected to after the German re-unification was the change into co-operatives as to the understanding of the western world. In contrary to the development in agriculture however, the coherence of most of the former socialist co-operatives in saltwater fisheries (FPGs) could be kept by their members. Insofar most of the "new" co-operatives have their origin in the "old" FPGs.

Some of the members of those FPGs, however, had after 40 years of socialism the desire to work entirely on their own and requested return or pay-out of their property. Some of those payed out try their luck as single re-establishers, others retired from business. In some instances this lead to the liquidation of some of the former FPGs. On the other hand a number of former captains of the state-owned VEB Fischfang Saßnitz established a new co-operative and purchased 14 cutters of the former state-owned near distance fleet.

The process of re-registration is still ongoing. Most of the former FPGs have adopted new names, e.g. "Wismar Bucht e.G." instead of "V. Parteitag" ("5th Party Conference"). The ending e.G. means registered co-operative (eingetragene Genossenschaft). The most dominant difference between a FPG and a co-operative in conformance with West German law is that kind of shares for the common property are issued to its members. Furthermore the members are free to leave the co-operative at any time and to sell their shares.

This legal and organizational adaption process was certainly an obstacle in itself. Further difficulties arose from the sudden adjustment to the conditions of the market economy:

- o state subsidies are no longer granted
- o prices are no longer fixed
- o prices for fish are in some instances drastically lower than during GDR-times (herring pays DM 0.43 per kg versus between M 1.20 and 1.80 before)
- o doubling of costs by the sudden currency reform
- o rapid increase of wages and incidental costs
- o familiarization with laws and regulations of the FRG and with the Common Fishery Policy
- o work with hopelessly overaged, underpowered and technologically outdated vessels
- o overstaffed organizations and vessels
- o inadequate, outdated and out-of-standard processing facilities
- o dispension of non-generic business facilities and departments adopted for the survival under socialist conditions, i.e. duck raising, reed farming, mink farming, mechanical engineering, repair shops, construction brigades, etc.

Structural changes in the cutter and coastal fishery of Mecklenburg-Vorpommern gained considerable momentum as from the middle of 1990 with the formation of two different types of co-operatives:

- Fishing co-operatives

- Sales co-operatives (producer organizations)

Both types are simultaneously in existance. In 1990 10 former FPGs of the island of Rügen formed the "Zentrale Absatzorganisation Rügenfang e.G." (Rügen Central Marketing Organisation). Meanwhile a total of 6 producer marketing organizations have been established, namely:

- o "Rügenfang" Isle of Rügen
- o "Saßnitzer Seefischer" Isle of Rügen
- o "Wismar Bucht" Wismar
- o "Stralsund und Umgebung" Stralsund
- o "Usedom Fisch" Isle of Usedom
- o "Pommersche Küstenfischer" Wolgast

The main economical bottle neck of these sales organizations is however, that they are suppliers of raw materials (fresh fish) only. Added value is not produced. Insofar the standing of these organizations will very much depend on the development of own processing and marketing initiatives.

All of the different forms of fisheries in Mecklenburg-Vorpommern are like in pre-war times entirely dependant on processing and marketing facilities and organizations in the western part of the new and larger Federal Republic of Germany. There is even no market place existent in East Germany in general and in Mecklenburg-Vorpommern in particular. The main and nearest market for fresh and frozen fish is the fish market in Hamburg.

Table 2.XII Inventory of Fishing Vessels in Mecklenburg-Vorpommern (31.07.92)

Category	Operational Area	No	Gross Tonnage GRT	Gross Power KW
Cat 1	Distant Fisheries	7	13.501	12.348
Cat 2	Distant Fisheries (pelagic)			
Cat 3	Larger Cutters for Seas and Coastal Fisheries	1	117	470
Cat 4	Small Cutters and Boats for Seas and Coastal Fisheries	617	6.460	21.665
Cat 6.1	Boats for Near-Coast and Lagoon Fisheries	383	990	2.263
Totals		1008	21.068	36.746

Source: Fischereiamt des Landes Mecklenburg-Vorpommern

Remarks:

1. Different stat. sources count different numbers of vessels.
2. A bottom line as to the total number of vessels has not been found yet. At the present time there are quite some registrations and deregistrations of vessels.
3. The fleet is extremely old. The year of building of some of the cutters is as far back as 1947. Quite some of the open boats are even older.
4. Most of the vessels are in comparison with competitive fleets from Schleswig-Holstein and Denmark drastically underpowered.
5. Due to their age most vessels are technologically outdated and insofar not competitive. None has a one-man-bridge.

Table 2.XIIIII Vessels in Mecklenburg-Vorpommern by Characteristics and Zones (24.02.92)

Zone	vessels											vessels	GRT	kW
	L.o.a. < 6m	L.o.a. 6-9,99m	act.	pass.	L.o.a. 10-11,99m	act.	pass.	L.o.a. > 12m	act.	pass.	var.	tot.	tot.	tot.
Wismar	55	64		64	11		11	9	3	4	2	140	392	1488
Rostock														
coastal	66	45		45	6		6	7	7	-	-	124	185	573
distant		1	1	-	7	7	-	-	-	-	-	8	16723	15204
		(FVS III) (102m)			(FVS IV) (62m)									
Stralsund	16	19		19	13	-	13	8	8	-	-	56	517	1414
Greifswald	7	77		77	5	-	5	2	-	-	2	91	40	118
Wolgast	51	174		174	19	-	19	25	11	-	14	269	712	2569
Rügen	143	128		128	29		29	42	37	2	3	342	3551	5008
coast. Fleet	339	507	1	507	83		83	93	66	6	21	1022	4297	11270
dist. Fleet												8	16723	15204
Grand Total												1030	21120	26474

Remarks

1. The vessels of the distant fleet dot not fit in the size classes above, they must therfore be seen separate
2. Differences in about 5 vessels are attributable to different times of registration and to the fact that a view vessels could until now not been classified

File: E:\D2NEU.CUTTCLASS.TXT

Table 2.XIV Employment, Catch & Process. in co-operative Fisheries during and after the German Re-unification

	Employed (total and fishermen thereof)										Catches			Processing		
	1.1.89		1.1.90		1.1.91		1.7.91		1.1.92		1989	1990	1991	1989	1990	1991
Co-operative	tot	fish	tot	fish	tot	fish	tot	fish	tot	fish	t	t	t	t	t	t
Zone 1, Wismar	397	167	376	167	186	100	85	81	85	30	5063	2739	714	1192	699	0
Wismar	165	74	170	74	32	20	0	0	0	0	3195	1626	0	262	180	0
Wismarbucht	232	93	206	93	154	80	85	81	85	30	1868	1113	714	930	519	0
Zone 2, Rostock	407	153	408	153	363	154	276	105	79	59	5354	3953	285	2814	1712	54
Warnemünde	303	83	303	83	287	100	200	50	15	15	3869	2613	0	2162	1365	0
Fischland	34	28	30	28	34	29	34	30	31	24	481	462	119	0	0	0
Barther Bodden	70	42	75	42	42	25	42	25	33	20	1004	878	166	652	347	54
Zone 3, Stralsund	311	115	311	115	182	72	162	70	39	39	4820	2713	621	2833	1087	471
Stadt Stralsund	157	68	154	68	79	38	69	38	0	0	3051	1424	0	1491	360	0
Strelasund	122	21	126	21	82	17	73	16	62	15	784	783	227	1342	727	467
Am Sund	32	26	31	26	21	17	20	16	18	16	985	506	394	0	0	4
Stralsunder Fischereibetrieb GmbH (new)									9	8						
Zone 4, Greifswald	399	179	405	179	249	131	214	135	206	113	4358	3439	1876	1953	1140	274
Greifswalder Bodden	71	56	87	56	46	37	44	32	36	28	1726	1441	962	82	29	0
Peenestrom	223	57	213	57	135	36	95	41	98	23	1080	717	187	1871	1111	274
Haffküste	105	66	105	66	68	58	75	62	72	62	1552	1281	727	0	0	0
Zone 5, Wolgast	785	303	790	303	419	176	369	170	258	169	11255	8823	1884	4648	2987	1627
Peenemündung	155	66	155	66	87	45	80	42	75	39	2853	3060	1667	1014	336	459
Inselfisch	422	145	422	145	216	61	188	65	91	55	6254	4233	0	2752	2135	950
Zempiner Fischfang	75	38	80	38	40	20	39	18	0	0	1057	712	0	511	270	0
Ostseestrand	133	54	133	54	76	50	62	45	55	38	1091	818	217	371	246	218
Vorpommersche Küstenfischer (new)									37	37						
Zone 6, Rügen	901	468	887	473	551	315	466	319	370	291	14908	9652	13517	5178	2670	186
Saßnitz	224	118	223	118	103	33	58	51	65	54	4436	2647	1421	1401	691	0
Dranske	48	9	49	9	36	3	31	3	3	3	238	217	0	1253	621	0
Ummanz	43	18	42	18	33	13	13	12	0	0	383	281	0	855	442	0
Wittow	80	36	80	36	50	24	50	24	45	23	786	649	134	544	214	19
Jasmund	43	22	44	22	19	2	19	0	7	0	515	295	0	218	143	64
Insel Vilm	50	31	51	31	26	21	25	19	30	21	902	647	484	0	0	0
E.M. Arndt	32	17	27	17	22	9	22	9	6	6	460	293	153	72	79	0
Nordperd	51	18	56	18	21	10	22	11	10	10	579	370	4888	213	140	0
Mönchgut	85	69	86	74	69	62	68	61	62	57	2952	2117	2208	34	0	0
Seedorf	121	43	123	43	48	26	40	18	28	9	1273	858	399	325	303	103
Leuchtfeuer	42	25	44	25	19	18	22	20	21	19	965	840	928	21	0	0
Hiddensee	82	62	62	62	47	39	37	35	34	33	1419	438	394	242	37	0
Saßnitzer Seefischer (new)					58	55	59	56	59	56	0	0	2508	0	0	0
totals	3200	1385	3177	1390	1950	948	1572	880	1087	751	45758	31319	18897	18618	10295	2612

Source: Verband der Kutter- und Küstenfischer Mecklenburg-Vorpommern

Remarks:
1. The co-operatives "Wismar" and "Stadt Stralsund" are in liquidation
2. The co-operatives "Warnemünde", "Jasmund" and "E.M. Arndt" are in the process of new registration
3. It is to be expected that some of the existing co-operatives will fall apart
4. Formation of new co-operatives and single enterprises is also to be expected
5. The co-operatives concentrate now on the generic business
6. Divisions like mech. engineering, repairs, duck hatching but alos fish processing have been suspended
7. Catches have been drastically reduced due to the unfavourable price regime in comparison to GDR-times
8. Processing has been reduced due to unfavour. econ. sit. & direct deliveries to West Germany

2.4 Perspectives of Saltwater Fisheries in Mecklenburg-Vorpommern

2.4.1 Perspectives of distant Fisheries

The fleet is down to 8 vessels, 16,723 GRT, 15,204 KW. Staff size will be 385 crewmembers and 35 persons in adminstration by the end of 1992.

2.4.2 Perspectives of Cutter and Boat Fisheries

The development from 1989 until June 1992 (vessels) or end 1991 (staff, catches, processing) respectively is outlined in table 2.XV.

An addition of 7 newbuildings, 70 GRT, 700 KW, is likely in 1992. The cutter and boat fleet will until 1996 develop as presented in table 2.XVI, i.e. to 99 cutters of between 12 m and 26.5 m and down to 506 boats of below 12 m Especially in the category of boats this represents a reduction of 52% versus the 1989 number and 45% versus the 1992 number. The number of cutters will be higher by 4 versus the number of 93 in 1992.

Table 2.XV Development in Cutter and Coastal Fisheries 1989-1991/1992 (1989 inclusive of the state-owned Near-Distance Fleet)

Dimensions	1989	1991/1992	Diff.(No)	Diff.(%)
Cutters 18-26,5 m	69	24	- 45	65%
Cutters 12-18 m	128	69	- 59	46%
Cutters & Boats <12 m	1040	937	- 103	9%
Power (KW)	36,810	25,728	- 11,082	30%
Tonnage (GRT)	8,840	6,488	- 1,992	24%
Catches (t)	65,674	18,897	46,777	71%
Total Staff	4,794	1,407	- 3,387	71%
Crews	1,870	751	- 1,119	60%
non-fishing Staff	2,924	656	- 2,268	78%

Remarks

1. The number of cutter for 1989/1990 differs considerably between 190 and 218 depending on source (administration)
2. Differences result from non-registration of some of the vessels or missing vessel documents and from different classification prior to and after the "Wende"

Table 2.XVI Development of the Cutter and Boat Fleet until 1996 according to the MAGP (1993-1996) of the Fishery Association of Mecklenburg-Vorpommern

	Category 1	Category 2	Category 3
Type Length	Cutters 18-26.5 m	Cutters 12-<18 m	Boats 6-<12 m
Power Tonnage Area of Operation Fishing Method	200-600 KW 50-150 GRT Baltic & Northsea predom. active	70-200 KW 10-50 GRT Baltic & Northsea (coastal) active & passive	30-70 KW 1-10 GRT Baltic coastal & inshore predom. passive
Number thereof Newbuildings	24 (17)	75 (3)	506 (41)
Total	99 Cutters (12-26,5 m) and 506 Boats (<12 m)		

A catch of 22,700 t herring, cod and flatfish could be achieved by the 93 cutters existent in Mecklenburg-Vorpommern on an average of 220 working days per year. This is the conclusion of a modell of the Institute of Fishing and Environmental Technology of the University of Rostock, Faculty of Nautical Sciences.

The economic minimum is regarded to lie at 1,11 t/d in trawling or about 17,000 t per year, which can be realized by 70 out of the total of 93 cutters on the basis of 1991 costs and market prices for herring (80%), cod (10%) and flatfish (10%). The conclusion drawn therefrom is that from an economical point of view either too many fishing vessels are operating in the EEZ of Mecklenburg-Vorpommern or that the surplus of 23 vessels, predominantly the 14 24 m-cutters, will have to seek fishing opportunities outside of the fishing zone concerned.

2.5 Marine Aquaculture on the Coast of Mecklenburg-Vorpommern

2.5.1 Marine Aquaculture during GDR-Times

Investigations regarding the possibilities of trout production in brackish waters and pilot productions started in 1968/1969. With the background of drastically reducing deep sea fishery aquacultural production in bays and lagoones (Bodden) gained considerable momentum as from the mid 1970s. The philosophy of **total fishery water management** was adopted to both inland waters all over the territory of the former GDR and in **sheltered waters along the coasts** of the Region of Rostock.

Table 2.XVII Results of Trout Production on the Sites Wismar, Dranske and Rankwitz

Location	1978	1979	1980	1981	1982	1983	1984	1986	1987	1988	1989
Wismar	28,3	76,6	159,2	177,4	192,9	273,0	218,0				
Dranske	25,0	73,6	121,7	88,9	58,7	95,4	120,7				
Rankwitz	25,4	48,7	115,3	143,4	217,8	85,0	98,0				
others	12,3	-	-	6,3	38,6	37,6	140,3				
Coast total	91,0	199,0	396,0	416,0	508,0	491,0	577,0	703,5	786,5	813,0	
Plan							1050,0				920

Source: Institute of Deep Sea Fishery and Fish Processing
Remark: The production facilities were regarded pilot facililities. Statistical data were therefore not always published

The state-owned company VEB Fish Management (VEB Fischwirtschaft) in Rostock-Warnemünde was the operating body for the total management of the internal sea and coastal waters of the former district of Rostock until the end of 1984. In 1985 this task was handed over to a newly established Intercompany Facility for industrial Fish Production (Kooperationsgemeinschaft industrielle Fischerzeugung).

The statistical series above is incomplete because as from 1986/1987 some of the aquaculture facilities were closed due to environmental problems and in consequence interest in this form of fish production decreased. The latest available production plan data could be obtained for 1986. In 1986 the KOE Wismar planned to produce 400 t of trout, Rankwitz 300 t and Warnemünde 350 t.

Apart from the obvious production success the aquaculture production of trout in the more or less enclosed bays caused considerable ecological problems and damage.

2.5.2 Developments in Marine Aquaculture after the Re-unification

Public disconsent with the ecological damage and the financial pull-out of the co-operatives led to the discontinuation of most of the coastal aquaculture production after the German re-unification. Only an offhore production facility off Warnemünde resumed operation.

2.5.3 Fish Breeding

The breeding- and re-production centre for rainbow at Born, which belonged to the Institute of Deep-Sea Fishery and Fish Processing Rostock, executed intensive studies in the breeding of rainbow trout in brackish waters. For this purpose two breed spawnings in spring and one breed spawning in autumn were available in this plant.

2.5.4 Perspectives of Marine Aquaculture

Trout production under market economy conditions will have to comply with the following preconditions:

- no mass production, but production of high quality products using the favourable natural conditions without applying medicaments
- ecological compatibility of production
- high improvement of raw goods and direct marketing through the co-operatives
- co-operation between scientific institutions and private enterprises

Besides trout production there are good conditions for mussel production as well as for the breeding of domestic precious fish species (Pike, Pike-Perch, Adelfish) in brackish water areas. Trout production offshore and inshore will however only be feasible if proof of profitability can be shown. This is quite doubtful under consideration of the results after the "Wende". Production costs (DM 7,00/kg) had been higher than market gain (DM 6,50/kg). Chances would be given to part-time hatcheries which are able to calculate with lower wages or to hatecheries producing high-value species. Trials are underway at the fish breeding station Born to raise sturgeon. This could insofar be successful as the market awareness for sturgeon is being developed.

2.6 Catching Methods and Gears

2.6.1 Scientific Development of Catching Methods and Gears

Catching methods and gears used in the fishery of Mecklenburg-Vorpommern were said to be on high level. A great number of technological and scientific innovations and catching methods have been developed in recent years. There were several reasons for this high level of professionalism:

- Generous promotion of fisheries research and training by the government and fishing enterprises;
- Concerted efforts of the research bodies by the fisheries sector and by sea and coastal fisheries as regards innovations in fishing techniques and technologies;

2.6.2 Catching Gears in Deep-Sea Fishery

The dominating catching method in the deep-sea fishery of the former GDR was catching with bottom and pelagic trawl nets. During the first years after the foundation of the Fishing Enterprises Rostock and Saßnitz fishing was also common with gill nets and since 1965 until the early seventies also by using purse seines (until the general breakdown of purse seining in the Northeast Atlantic).

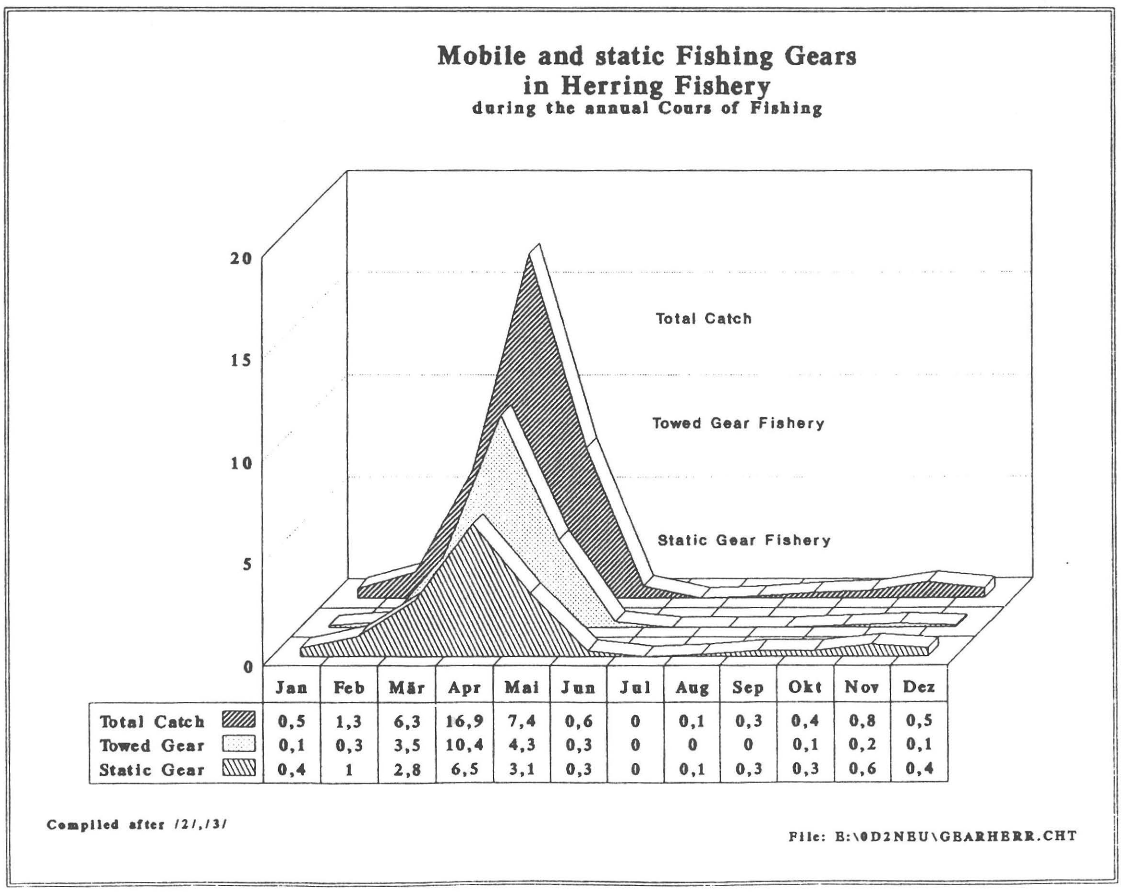
2.6.3 Catching Methods and Gears in offshore and coastal Fisheries

A speciality of fisheries in Mecklenburg-Vorpommern is the high share of fisheries with static or passive gears. This high proportion is caused by the fragmented geomorphological conditions particulary of the north-eastern coast of this Land with islands, inland seas and brackish water lagoones. Static gear catches accounted for a mean of 37% during the years from 1983 until June 1990. Catches with static gears were mainly realized by the 22 co-operatives more or less engaged purely in coastal fisheries with about 1000 open and semi closed traditional boats.

A mean of 63% of the total catches in the EEZ of the former GDR or now of Mecklenburg-Vorpommern was attributable to fisheries with mobile gears (pelagic and bottom trawl). This form of fishery was mainly carried out by the former VEB Fischfang Sassnitz and by the 5 cutter co-operatives.

The restructuring of the salt water fishery sector following the German re-unification makes it likely, that most of the fishery along the coasts of Mecklenburg-Vorpommern will -like in pre-war times- be carried out with static gears

Figure 2.6 Mobile and static Gears in Herring Fisheries during the annual Course of Fishing



	Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
Total Catch	0,5	1,3	6,3	16,9	7,4	0,6	0	0,1	0,3	0,4	0,8	0,5
Towed Gear	0,1	0,3	3,5	10,4	4,3	0,3	0	0	0	0,1	0,2	0,1
Static Gear	0,4	1	2,8	6,5	3,1	0,3	0	0,1	0,3	0,3	0,6	0,4

3. The Inland Water Fisheries Subsector on the Territory of the new Länder or the former GDR respectively

3.1 The Role of Inland Water Fisheries and Aquaculture in the former GDR

The expansion of deep sea fishery came to a halt, when access to international fishing grounds was shut off by the establishment of national EEZ (Exclusive Economical Zones). As a consequence and in order to secure selfsuffiency the government of **the** GDR **fostered** the cutter and coastal fisheries and **the inland fisheries and aquaculture**. Yields of the inland fisheries & aquaculture rose from 13,600 t in 1970 to 27,600 t in 1989.

Carp and trout contributed with 86% or 19,000 t the largest share of the total inland production of 22,000 t (1990). More than two thirds of the carps were produced in the ponds of the region of the new federal Land Sachsen.

Inland fisheries and aquaculture of the GDR employed a total of 3,700 professionals and some 1,300 non- and semi-professionals.

3.1.1 Natural Pre-Conditions of Inland Fisheries on the Territory of the new Länder or the former GDR respectively

Inland fishing and aquaculture are extending over all of the area of the former GDR. Inland waters cover an area of about 213,500 ha. Fishery and aquaculture waters account for about 130,000 ha, 115,300 of which are natural lakes and running waters and 14,000 ha ponds. Additional 38,000 ha are used by the 490,000 members of the east German Angler Association (Deutscher Anglerverband, DAV). The largest coherent areas of natural waters are in Mecklenburg-Vorpommern and Brandenburg.

Table 3.I Production facilities of Inland Water Fishing and Aquaculture in the new Federal Länder (31st Dec. 1990)

Category		Meckl Vorp	Brand. burg	Sachs	Sachs. Anhalt	Thür.	Berlin (Ost)	totals
Carp-ponds	ha	975	3.473	7.077	246	1.313	-	13.084
Warm Water-Raceways	m3	8	1.532	5.660	-	180	-	7.020
ponds	m3	-	91.000	1.700	-	-	-	92.700
cages	m3	-	1.680	-	-	-	-	1.680
Cages in Lakes	m3	2.050	74.322	4.590	3.672	550	-	85.184

Continuation Table 3.I

Category		Meckl Vorp	Brand. burg	Sachs	Sachs. Anhalt	Thür.	Berlin (Ost)	totals
Trout-								
ponds	ha	2,2	3,6	78,7	4,1	41,4	-	130,0
raceways	m3	2.456	12.883	10.481	3.489	12.204	550	42.063
cages	m3	70.760	51.641	21.330	36.876	21.400	400	202.407
basins	m3	820	2.602	1.210	230	139	-	5.001
Lakes/Running waters	ha	61.151	45.223	331	3.362	53	2.880	113.000
including carp-Lakes	ha	335	3.953	50	27	-	40	4.325
Dams/Artifical Lakes	ha	-	240	1.001	487	659	-	2.387

Remarks: Differences with other tables or sources are attributable to the changeover of 3 districts to the Land Brandenburg and to the different administrative subordination especially in the former region of Rostock

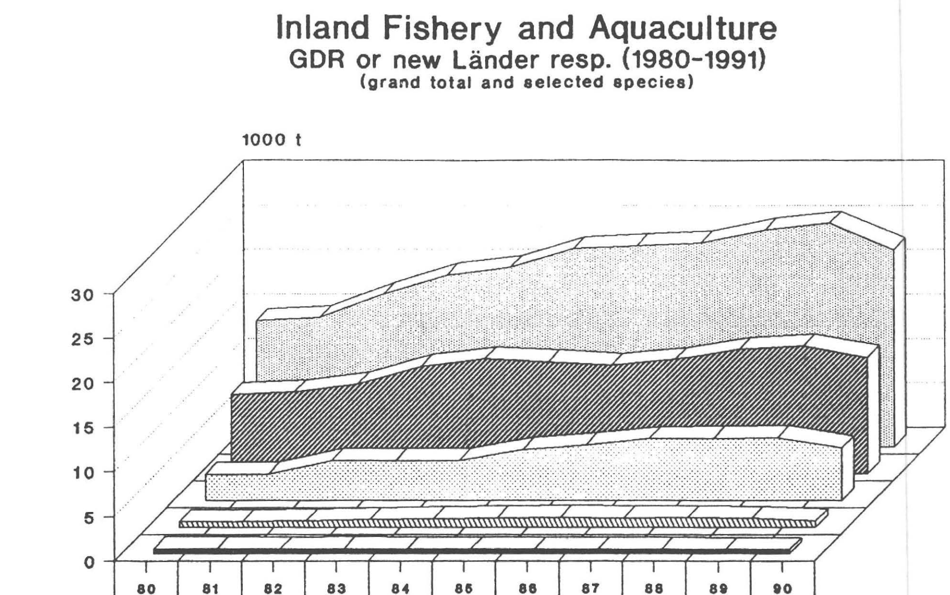
3.1.2 Production Technologies

Besides the traditional fish production in ponds and lakes modern aquaculture technologies have been developed like raceways, basins, silos, sand basins employing suspended cloth, and cages. The latter have considerably been reduced by reasons of environmental concern. Modern technologies have to great an extent been developed in collaboration between the Institute for Inland Fisheries (Institut für Binnenfischerei) in Berlin and fishing enterprises. Raceways have to great an extent contributed to the considerable increase in the production of trout from 3,000 t in 1980 to 7,000 t in 1989. 3,540 t (2,900 t edible fish and 640 t fry) were recorded to have been produced in a total of 42,063 cu m raceways in 1989.

3.1.3 Production of Inland Fisheries in the former GDR

Self-sufficiency in the supply of fish for its 16,7 millions inhabitants was the objective of the government of the former GDR. Inland water fishing and aquaculture were therefore promoted to a high degree. Carp and trout production were of economic importance including the production of fry. For preventing or restricting vegetation in ponds and running waters seston eating Cyprinides have been employed since 1966.

Figure 3.1 Inland Fishing Yields in the GDR or the new Länder repectively (1980-1990)



	80	81	82	83	84	85	86	87	88	89	90
Grand Total	14,166	14,641	17,161	19,322	20,153	22,297	22,619	22,986	24,428	25,206	22,174
Carp	8,856	9,153	10,022	12,041	12,867	12,639	12,121	12,811	13,96	14,331	13,041
Trout	2,916	2,916	4,438	4,438	4,44	5,698	6,196	6,875	6,927	7,007	5,866
Bream	0,614	0,634	0,689	0,836	0,952	1,034	1,11	1,036	1,047	0,988	0,707
Eel	0,596	0,603	0,578	0,61	0,558	0,574	0,542	0,517	0,521	0,483	0,466

Eel Bream Trout Carp Grand Total

source: Inst. f. Binnenfischerei, Berlin

file: binnfish

3.1.4 Organizational Structure

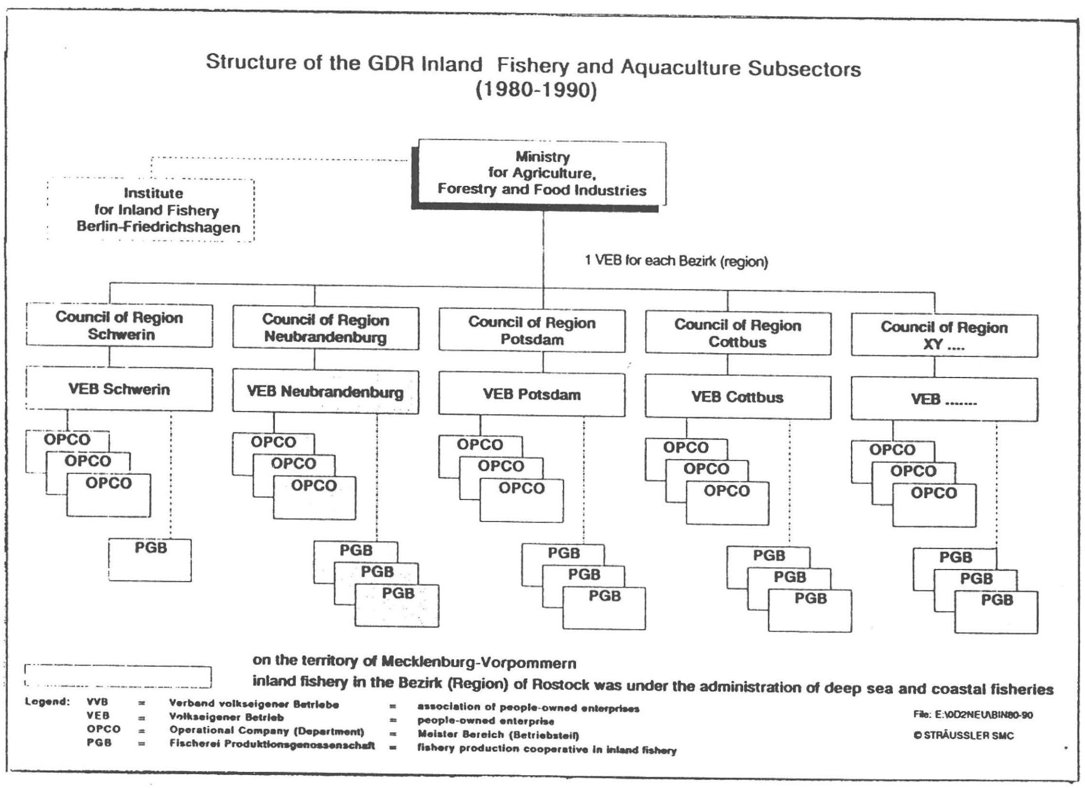
Inland fisheries and saltwater fisheries were always under the direction of seperate ministries. Inland fisheries were directed and controlled by the Ministry of Agriculture, Forestry and Food Supply (Ministerium für Landwirtschaft, Forstwirtschaft und Nahrungsgüterwirtschaft), whereas sea fisheries were under control of the Ministry for regionally directed Industries and Food Industries (Ministerium für bezirksgeleitete Industrie und Lebensmittelindustrie).

Each region (Bezirk) of the former GDR had one state-(people-) owned company for the tasks of inland fishery and aquaculture (VEB Binnenfischerei), 15 in total. These state-owned enterprises were aggregated in the Association of people-owned Enterprises in Inland Fishery (VVB, Vereinigung volkseigener Betriebe der Binnenfischerei), which was also the intermediary between the government and the regional enterprises. Furthermore there were 31 co-operatives of the socialist type, whose members were forced to join in the 1950s and to hand over their property. The regional VEBs had guiding functions towards these co-operatives.

The inland fishery subsector underwent the same changes as the sea fisheries subsectors. In 1980 the VVB was eliminated. From now on the VEBs were put under the direction of the Council of the Region (Bezirk des Rates) because it was felt that the business could be better administered and controlled at regional level.

The region of Rostock, however, made an exception to the rule, because both its salt water and inland fisheries were under the control of the Fish Combinate and under the direction of the Ministry responsible for salt water fisheries (Ministry of regionally directed Industries and Food Industries)

Figure 3.2 Structure of the GDR Inland Fishery and Aquaculture Subsectors (1980-1990)



3.1.5 Forms of Property

By the 3rd Oct.1990 inland water fishing was carried out by undertakings of the following legal forms:

Table 3.II Number of Enterprises in the former GDR and their legal Forms

Legal Form of Enterprise	No.
Volkseigene Betriebe Binnenfischerei (VEB Binnenfischerei) (People-owned Enterprises in Inland Fischery)	15
Produktionsgenossenschaften Binnenfischerei (PGB) (Production Co-operatives in Inland Fisheries)	31

Continuation Table 3.II

Legal Form of Enterprise	No.
Kooperative Betriebe Binnenfischerei (KOB) (Co-operative Establishments in Inland Fishery)	4
Andere sozialistisch geführte Einrichtungen (Other socialist Establishments)	10
Privat geführte und kircheneigene Unternnehmen (ohne Freizeitbetriebe) (Privately operated and Church-owned enterprises) (without non-professional Establishments)	12
Total	72

3.2 Inland Water Fisheries in Mecklenburg Vorpommern

The inland waters in the 3 northern Regions Schwerin, Neubrandenburg, Rostock, now the federal Land Mecklenburg-Vorpommern, were operated and managed by the 2 state-(people-) owned enterprises, VEB Binnenfischerei Neubrandenburg (head offices in Prenzlau, now in the Land Brandenburg) for the Region (Bezirk) of Neubrandenburg and VEB Binnenfischerei Schwerin for the Region (Bezirk) of Schwerin, by 6 inland fishery co-operatives (PGBs) and 5 coastal co-operatives of the socialist type and 1 private smallest scale enterprise.

Table 3.III Number of Enterprises in the Inland Fisheries of the 3 northern Regions (3 Nordbezirke), now the Land Mecklenburg-Vorpommern and their legal form

Legal Form of Enterprise	No.
Volkseigene Betriebe Binnenfischerei (VEB Binnenfischerei) (People-owned Enterprises in Inland Fischery)	2
Produktionsgenossenschaften Binnenfischerei (PGB) und Küstenfischerei (FPG) (Production Co-operatives in Inland and coastal Fisheries)	11
Kooperative Einrichtungen der Binnenfischerei (KOE) (Co-operative Establishments in Inland Fishery)	1
Andere sozialistisch geführte Einrichtungen (Other socialist Establishments)	0
Privat geführte und kircheneigene Unternnehmen (ohne Freizeitbetriebe) (Privately operated and Church-owned enterprises) (without non-professional Establishments)	1
Total	15

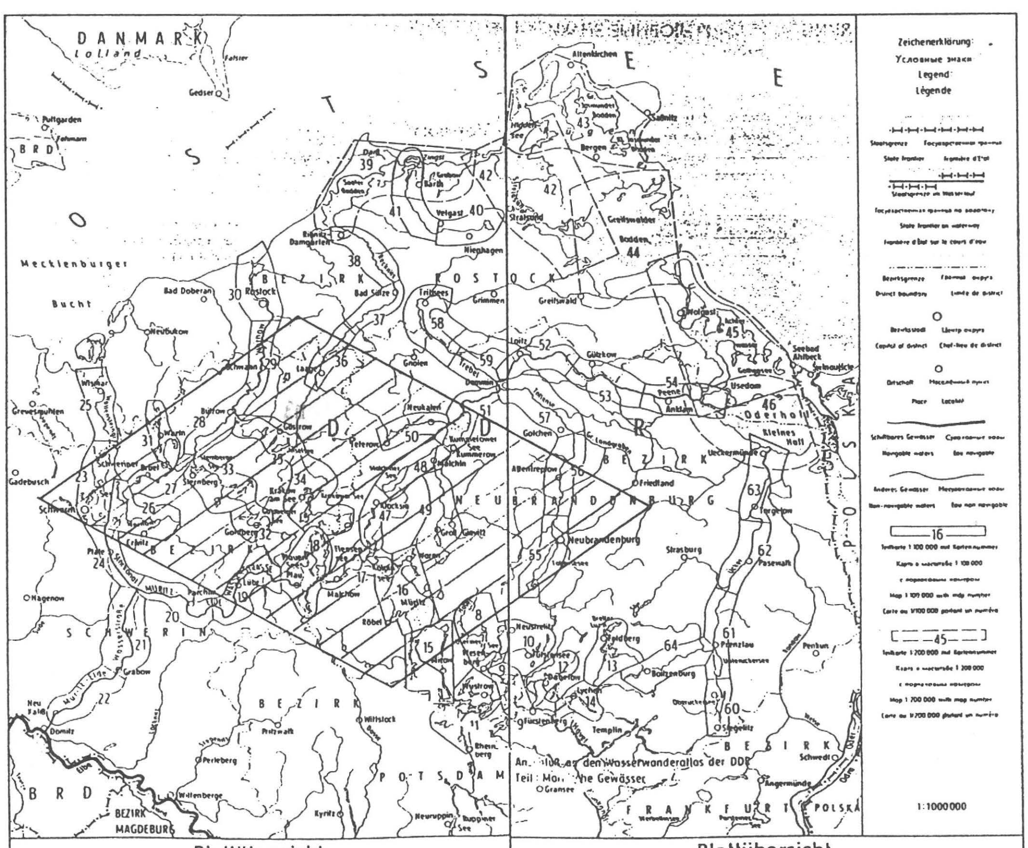
3.2.1 Mecklenburg-Vorpommern and its natural Inland Waters

Mecklenburg-Vorpommern is characterized by its long coastlines, bays and lagoones on the one hand and by an abundance of more than 2000 inland water lakes on the other hand. The lake district of Mecklenburg-Vorpommern is known as "Mecklenburger-Seenplatte". Its largest lake is the "Müritz", with 110,3 sq km the second largest expanse of water in Germany.

Table 3.IV The largest Inland Lakes of Mecklenburg-Vorpommern (> 10 sq km)

Lake	Area (sq km)	mean Depth (m)	greatest Depth (m)	Volume (mill. cu m)	Districts
Müritz	110,3	6,3	31,0	715,18	Waren, Röbel
Schweriner See	60,6	13,0	51,0	807,69	Schwerin, Wismar
Plauer See	38,0	8,0	23,8	308,80	Lübz, Waren
Kummerower See	32,2	7,9	25,5	260,15	Malchin
Kölpinsee	19,9	4,0	27,8	82,40	Waren, Röbel
Tollensee	17,8	17,3	33,2	300,16	Neubrandenburg
Krakower See	15,3	8,0	29,0	125,60	Güstrow
Malchiner See	13,7	3,0	10,6	43,32	Malchin, Teterow
Fleesensee	10,1	6,9	25,5	83,14	Waren, Röbel

Figure 3.3 Mecklenburg-Vorpommern and its lakes



3.2.2 Fishing Waters in Mecklenburg-Vorpommern

Table 3.V Professionally managed Fishing Waters in Mecklenburg-Vorpommern (1989)

Zone	District (Kreis)	Area [ha]	% of M-V
Zone 1,	Wismar	599	0,92
Zone 2,	Rostock	5950	9,18
Zone 3,	Stralsund	605	0,93
Zone 4,	Greifswald	336	0,52
Zone 5,	Wolgast	1333	2,06
Zone 6,	Rügen	69	0,11
Zone 7,	Schwerin	19755	30,46
Zone 7,	Neubrandenburg	35897	55,82
Total Fishing Waters in M-V		64544	100,00

3.2.3 Fishery and Aquaculture Facilities in Mecklenburg-Vorpommern

The total number of inland fishery facilities in Mecklenburg-Vorpommern is given in the following table with the status quo at the end of 1990. To which extent these facilities will still be used in the future will be depending on the new structure of the business, i.e. if and how those companies emerging from old socialist structures will take over fishing waters, facilities and personnel.

Table 3.VI Production facilities of Inland Water Fishing and Aquaculture in Mecklenburg-Vorpommern (31st Dec. 1990)

Category	Unit	Size
Carp Ponds	ha	975
Warm Water		
Raceways	m3	8
Ponds	m3	-
Cages	m3	-
Cages in Lakes	m3	2.050
Trout		
Ponds	ha	2,2
Raceways	m3	2.456
Cages	m3	70.760
Basins	m3	820
Natural Lakes and Running Waters	ha	64.314
incl. Carp Lakes	ha	335
Dams/Artificial Lakes	ha	240

Source: Institut für Binnenfischerei, Berlin-Friedrichshagen

3.2.4 Production and Productivitiy of Inland Water Fisheries in Mecklenburg-Vorpommern

Table 3.VII Production of edible Fish on the territory of the former 2 Regions Schwerin and Neubrandenburg (1989)

	Carp [t]	Trout [t]	Eel [t]	Others [t]	Total [t]
Regions Schwerin & Neubrandenburg	784,7	1005,7	148,2	911,3	2849,9

Table 3.VIII Production of edible Fish and Feed Fish in Mecklenburg-Vorpommern (1990)

		Fish Production (in t)	
No.	Species	total	thereof from Lakes
1.	Carp (Karpfen)	632,2	135,8
2.	Trout (Forelle)	801,7	0
3.	Eel (Aal)	102,5	102,5
4.	Cyprinides	94,1	94,1
5.	Tench (Schlei)	4,9	4,9
6.	Pike (Hecht)	87,2	87,2
7.	Pike-perch (Zander)	34,8	34,.8
8.	Whitefish (Maräne)	35,8	35,8
9.	Perch (Barsch)	55,2	55,2
10.	(Blei)	264,0	264,0
11.	Roach (Plötze)	112,8	112,8
12.	other species	10,2	10,2
13.	edible fish total	2.235,4	937,4
14.	fodder fish total	520,0	520,0
15.	grand total	2.755,4	1.457,4

Source: Institut für Binnenfischerei (4.11.91)
Remarks: Data are adjusted to administrative changes following the constitution of the new Länder

The main species of inland fishery on the territory of Mecklenburg-Vorpommern had in 1990 (1989 data for the 2 regions Schwerin and Neubrandenburg in brackets) been trout with 801,7 t (1005,7 t) followed by 632,2 t (784,7 t) of carp and 102,5 t (148,2 t) of eel. All other species contributed with 699,0 t (911,3 t) to the total fishery results of edible fish. Data on productivity can only be given for the past and as results of the former socialist enterprises. The main production method has been the production in natural lakes and running waters. Production trout and carp, however, has with its largest proportion been achieved in ponds and raceways.

Table 3.IX Productivity of Inland Fishery in Mecklenburg-Vorpommern (Methods)

Type of Production	former Region Neubrandenburg	former Region Schwerin
Lakes and running waters	41,6 kg/ha	35,7 kg/ha
carp-ponds	2.981,7 kg/ha	1.136,9 kg/ha
-cages	22,7 kg/m^3	-
-lakes	739,0 kg/ha	-
Rainbow trout		
-cages	13,0 kg/m^3	17,0 kg/m3
-basins	72,0 kg/m^3	50,0 kg/m3

Source: Institut für Binnenfischerei, Berlin Friedrichshagen

Table 3.X Productivity of Inland Lake Fishery in Mecklenburg-Vorpommern (Species) (1990)

Species	former Region Neubrandenburg [kg/ha]	former Region Schwerin [kg/ha]
Carp	10,9	0,5
Eel	4,5	2,7
Pike	3,2	1,9
Pike-Perch	1,2	0,7
Tench	0,7	0,2
White Fish	1,2	1,7
Cyprinides	5,4	3,2
Others	19,0	6,7
Feed Fish	5,3	17,5

Source: Institut für Binnenfischerei, Berlin-Friedrichshagen

Remarks: The disproportinate difference in carp production is attributable to the fact, that in the Region of Schwerin Carp was raised in Ponds

3.2.5 The Structure of the Inland Fishery Business of the 3 northern Regions of the former GDR

Formerly independent fishermen and enterprises in inland fisheries had until the mid 1970s been forced to join socialist co-operatives in inland fishery (PGBs) or to hand over their property and fishing rights to people-owned enterprises in inland fishery (VEBs). Furthermore other enterprises, e.g. state-owned farms, which also were to some extent engaged in inland fishery and aquaculture had to hand over operation to the VEBs and/or to the PGBs following the general reformation of the economy of the German Democratic Republic as from the mid 1970s.

On the territory of Mecklenburg-Vorpommern 2 VEBs, 6 PGBs (co-operatives purely engaged in inland fisheries) and 5 FPGs (co-operatives in coastal fisheries) were left over from this concentration process. The overall structure of those organizations engaged in inland fisheries is with differentiations as to their districtual subordination, lake area and number of lakes managed portrayed in table 3.XI.

Table 3.XI Structure of natural Waters Inland Fishery in the former Regions Schwerin, Neubrandenburg and Rostock (1989)

Region/Company	District Kreis	Lake Area (hectare)	No. of Lakes
Region Schwerin			
VEB Binnenfischerei Schwerin		17179,4	166
PGBs 1936,0	1		
PGB Warin	Sternberg	1936,0	1
other socialist and private enterprises		none	none
Region Schwerin totals		19115,4	167
Region Neubrandenburg			
VEB Binnenfischerei Neubrandenburg		19.359	366
PGBs	31.651,5	169	
PGB Waren-Plau	Waren	24.547	95
PGB "Tollense"	Neubrandenburg	2.911,5	54
PGB "Kummerower See"	Malchin	2.446	5
PGB "Teterower Hecht"	Teterow	1.397	12
PGB "Peene"	Demmin	350,0	3
other socialist enterprises		590,4	22
Region Neubrandenburg totals		51.600,9	557
Region Rostock			
state-owned inland fishery		none	none
FPGs	1.536,0	23	
FPG "10.Parteitag", Ahlbek	Usedom	877,0	7
FPG " 5.Parteitag", Wismar	Wismar	436,0	11
FPG "Peenestrom", Anklam	Anklam	223,0	5
other socialist and private enterprises	Wismar	67	1
Region Rostock totals		1.603,0	24

Continuation Table 3.XI

Grand Totals		72.319,3	915

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Sources: Documentation and verbal reports of former officials of the former VEBs Schwerin and Neubrandenburg

Remarks:

1. Companies and their lake areas are assigned to the seat of the headoffice, the department office or the fishery master's office.
2. The VEB Schwerin was until 1989/1990 still organized in Fishery Master's Domains, whereas the VEB Neubrandenburg had concentrated its domains in larger departments
3. A further differentiation of the VEB Neubrandenburg as to domains, districts, lakes and lake areas is not any more available (see therefore the old structure in table 3.XV).
4. Inland Fisheries in the former Region of Rostock were carried out by coastal co-operatives (FPGs).

3.2.6 Structural Changes in Inland Fisheries after the German Re-unification and the Constitution of the Land Mecklenburg-Vorpommern

Developments in the inland fisheries sector following the re-unification of Germany and the constitution of the land Mecklenburg-Vorpommern are even more difficult than in the saltwater sector. Whereas is saltwater fisheries the majority of the fishermen are fairly tightly associated with the pre-socialist, socialist and post-socialist co-operative structures in the inland fishery sector have been falling to great an extent apart into small and smallest scale enterprises.

At the present time it is therefore extremely difficult to establish a sound statistical basis and to track the companies, its spin-offs and employees. Difficulties are not only the disintegration of the old enterprises and co-operatives but also the detachment of administrative districts following the constitution of the new Länder, the liquidation of old administrative structures, e.g. the statistical offices of the former Regions, the establishment of new statistical offices and professional organizations.

The state-owned companies (VEBs), those large organizations having managed the regional sector economy, have been put under the administration of the German privatization authority TREUHAND. As a first step these companies were disintegrated into smaller scale units in the form of limited liability companies (GmbH) in accordance with the laws of the Federal Republic of Germany. During the first phase of their operation under market economical conditions they were managed by their former managers. The second phase encompasses the privatization in the form of Management-Buy-Outs (MBOs) or in the form of sale to private investors. Many of the former fishery master's domains are independent companies by now. Many of the fishermen, however, were a second time after the socialist expropriation discriminated, because due to lack of financial security they were not given the opportunity to buy or to lease their business places and fishery waters.

The buy-out in the co-operative sector proved to be a much easier task and is to our knowledge brought to an end. Co-operatives like in the saltwater sector do not exist anymore, if at all they are continuing operation in the form of limited liability or other partnerships.
The restructuring of the inland fishery sector is characterized by the following:

- former by-productions like duck and mink farms were separated out or liquidated;
- considerable staff reductions due to drastically increased incidental wage costs upon the currency reform;
  - elder members of the work force went into early pension;
  - 50 % of the remaining workforce were dismissed and are now unemployed;
  - many of those dismissed are said to be highly qualified;
- the number of pond aquaculture facilities is being drastically reduced;
- production per hectare is being drastically reduced for environmental and quality reasons;
- lake fish farming is being drastically reduced in environmentally sensitive areas and in particular in newly established nature reserves along the former boarder with the "old" federal Länder; an orderly management of waters there is said to be no longer possible;

The status of the restructuring is presented on table 3.XII. 9 sector companies (fishery + 2 support companies) are still owned by the TREUHAND. The workforce of the inland fishery sector on the territory of Mecklenburg-Vorpommern has decreased from more than 800 to about 300. Ten out of this number are engaged in support services like boat fabrication.

Table 3.XII Intermediate Status of the Restructuring of state-owned Companies (VEBs) and scoicalist Co-operatives (PGBs) in Inland Fisheries after the Re-unification of Germany

No.	Company	Staff
former Affiliation to VEB Binnenfischerei Schwerin		
1	Mecklenburg-Schweriner Fischerei GmbH	42
2	Schweriner Seenfischerei	16
3	Fischereibetrieb Geibrasch, Lohmen	1
4	Fischereibetrieb Priehn, Goldberg	2
5	Fischereibetrieb Schwarz + Buchholz, Klocksdorf	2
6	Schaalseefischerei Lassahn	2
7	Zarrentiner Schaalseefischerei	2
8	Pietzak + Schingen GbR, Bützow	3
9	Frischke & Sohn GbR, Sternberg	2

Continuation Table 3.XII

No.	Company	Staff
10	Seenfischer Sternberg GbR	3
11	Düse & Siekierkowski Seenfischerei Raden GbR	2
12	Fischereiunternehmen Schulz, Güstrow	1
13	Brietzke & Sohn GbR, Barnin	2
14	Fischereibetrieb Schmidt, Neukloster	1
15	Fischereiunternehmen Alisch, Güstrow	2
Total former VEB Binnenfischerei Schwerin		83
Former Affiliation to VEB Binnenfischerei Neubrandenburg		
16	Fischereibetrieb Reimer, Rödlin	3
17	Forellen und Handels GmbH, Alt Schwerin	3
18	Fischereibetrieb Crüger, Carwitz	2
19	Fischereibetrieb Crempig, Beenz	1
20	GbR Havel-Nationalpark-Fischerei Knizia & Schade GbR	2
21	"Öko-Fisch Uckermark" GbR, Boitzenburg	13
22	Uckermärkischer Fischereibetrieb, Prenzlau	17
23	Seefischerei "Obere Havel" e.G. Wesenberg	19
24	Fischerei GbR Berkholz, Kratzeburg	2
25	Fischerei GmbH Neustrelitz	7
26	Teichwirtschaft Canow	1
27	Teichwirtschaft Boek	2
28	Satzfischanlage Eldenburg	2
29	Forellenzucht u. Handels GbR	2
30	Fischereiunternehmen Frankiv - Feldberg	2
31	Fischereiunternehmen Grünberg - Penkun	1
32	Fischereiunternehmen Lossow -Rothenklempow	1
Total former VEB Binnenfischerei Neubrandenburg		80
Former Affiliation to PGB Warin, District of Sternberg		
33	Fa. Dehmel & Draempaehl GbR, Dabel	3
34	Fischereibetrieb Marx, Rothen	1
35	Fischereibetrieb Möller, Hohen Pritz	1
36	Fischereibetrieb Anton, Dabel	1
37	Fischereibetrieb Bab, Kl. Labenz	1
38	Fischereiunternehmen Seiler, Warin	1
39	Fischereiunternehmen Molter, Warin	1
Former Affiliation to FPG "V.Parteitag", Wismar		
40	Fa. Prignitz GbR, Hohen Viecheln	2
41	Fischereibetrieb Kleinert, Babst	1
42	Fischereibetrieb Jürß, Dassow	1
43	Fischereibetrieb Woest, Neuburg	1
44	Fischereibetrieb Lossow, Rothenklempenow	1

Continuation Table 3.XII

No.	Company	Former Affiliation to	Staff
Former Affiliation to PGB "Teterower Hecht", District Teterow			
45	Heyer & Kacan GbR, Dahmen		2
46	Monegel & Gutschner GbR,Teterow		2
47	Glasow & Schlender GbR, Wendischhagen		2
Former Affiliation to other PGBs and FPGs			
	Company	Former Affiliation to	
48	Fischerei Müritz/Plau GmbH	PGB Waren/Plau	77
49	Fischereiunternehmen Labahn, Neu Sallentin	FPG "10. Jahrestag" Ahlbeck	2
50	Fischereiunternehmen Handtke Korswandt		3
51	Salemer Fischerei & Handels gesellschaft mbH	PGB Kumerower See	6
52	Fischereiunternehmen Schulz Anklam	FPG Peenestrom, Anklam	1
53	Tollense Fischerei e.G. Neubrandenburg	PGB Tollense	12
Former Privates and new Establishments			
54	Fischereibetrieb Schliemann, Faulenrost	the only former private entrepreneur in MV	1
55	Fischerei Detlefsen, Rostock	new establishment	1
56	Fischereibetrieb Rösing, Röbel	new establishment	1
		Employment Grand Total	288

Source: Ministry of Agriculture of Mecklenburg-Vorpommern (7/92)

Table 3.XIII Employment Size Distribution of Inland Fishery Enterprises (31.07.92)

Emplyoment Size	Number
1	21
2 - 5	26
6 - 20	7
21 - 50	1
> 50	1
total	56

Source: Ministry of Agriculture of Mecklenburg-Vorpommern (7/92)

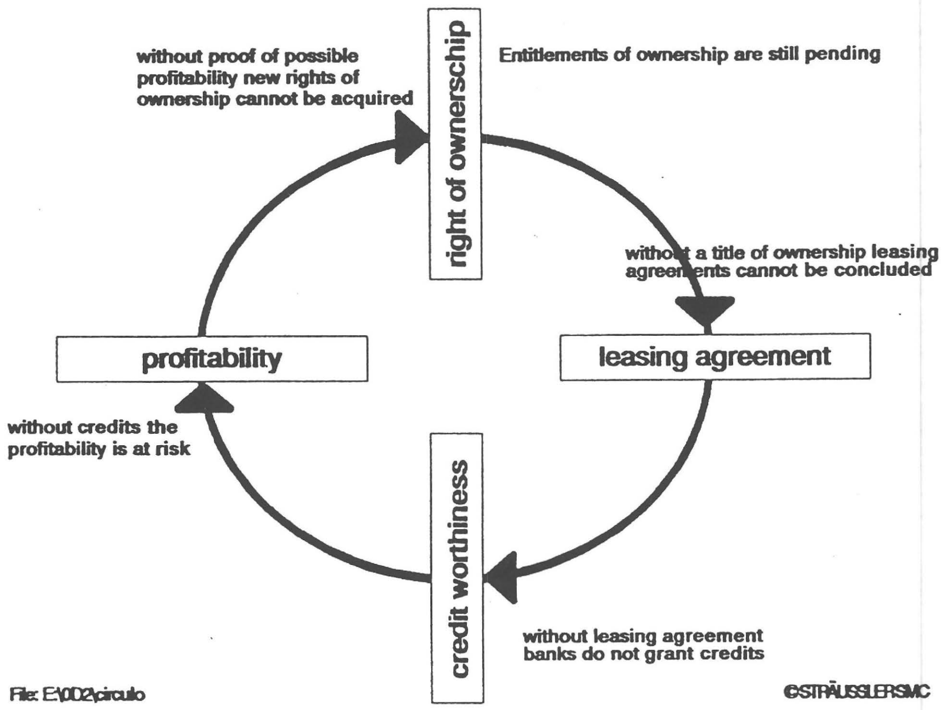
3.2.7 Problems of Companies in Inland Fisheries after their Privatization

General problems on company level are desribed as follows:

- o adjustment to an entirely different market price and incidental cost system;
- o managing the companies with drastically reduced staff;
- o adjustment to quality instead of mass production;
- o familiarization with marketing requirements;
- o companies are in many instances too small;
- o financial aids are tending to be awared to larger agglomerations, insofar small companies do not benefit;

The most severe obstacle for the successful performance of business is the property question. Ownership or leasing rights are in many if not most cases pending the settlement of rights of pre-expropriation owners. Without rights of ownership or at least garanteed leasing rights the propietors and managers of the companies are not being granted credits from banks. Without credits they cannot buy necessary equipment for modernization.

Figure 3.4 The vicious Cicle of Problems of East German Companies in Inland Fisheries



The near future will see a shake out of quite some of the privatized and newly established companies like it is in general the case in other sectors of the economy of the former GDR at the present time. Many of the SMEs do not have the critical mass for continuing business success. Furthermore many of the certainly good experts in fishery and aquaculture do not dispose of the necessary management skills. More than 40 years of communism cannot be overcome within a period as little as two years

4. Construction, Maintenance and Repair of Fishing Vessels and of their Equipment

4.1 Construction, Maintenance and Repair of Fishing Vessels and of their Equipment during GDR-Times

4.1.1 Maintenance and Repair of Fishing Vessels

State-owned enterprises (VEBs) and also co-operatives (FPGs) were self-efficient as regards maintenance and repair. The two fishing companies belonging to the Fish Combinate had repair and maintenance facilities integrated in their dock facilities. All of the larger co-operatives had own repair and maintenance facilities at their operation sites

4.1.2 Construction of Fishing Vessels

The ship-building and supporting industries of the former German Democratic Republic were laterally and vertically integrated and to an extremely high degree specialized and industrialized. After World-War-II all shipyards were involved in the construction of fishing vessels. As from the early 1950s the Volkswerft Stralsund had been made responsible for the production of fishing vessels. Nontheless we are hesitating to count this yard an integral part of the fishery sector. It concentrated on mass series, which went to their greatest part to the fishing combinates of the Soviet Union. After the fall of the Soviet Empire this market is not any more existent.

Figure 4.1 Development of the most important fishery vessel series of the Volskwerft Stralsund (1947-1973)

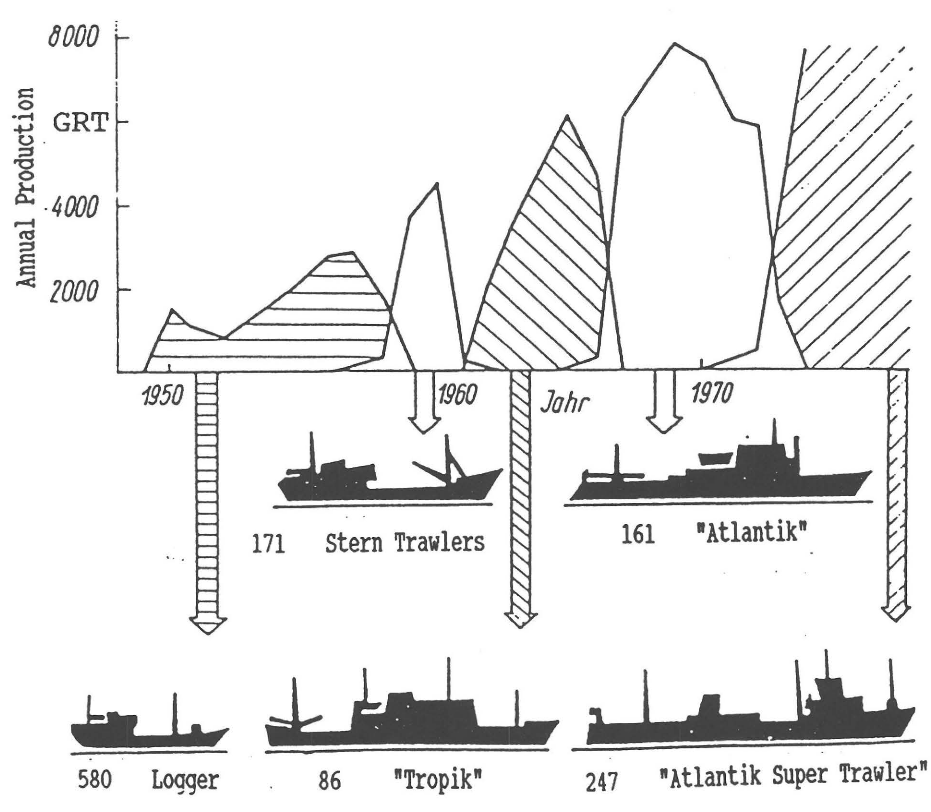


Table 4.I Production Profile of the "Volkswerft Stralsund" 1947-1990

Type	Year of build	LoA [m]	B mould. [m]	engine [kw]	speed [kn]	crew	number built	thereof GDR	thereof USSR
17 m Cutter	1946-49	17,6	5,0	40	8,0	6	38	20	18
Side-Logger	1949-58	39,15	7,3	220-290	10,5	23	580	17	563
Side-Trawler I+II	1952-55	57,62	9,0	670	11,5	32/34	10	10	0
26,5 m Cutter	1957-58	26,5	6,7	180	9,2	8	22	22	0
MTS (Crew Trp.V) (based on Logger)	1957	39,15	7,3	220	10,5	13	6	0	6
Stern-Trawler "Okean"	1957-60	50,8	8,8	400	11,0	26	171	0	171
Iceland-Cutter	1958-59	38,65	7,3	580	12,0	21	12	0	0
GTS (Freez.Trawl) "Bratsk"	1958-61	82,40	13,0	950	10,7	91	10	0	10
"Tropik"	1960-66	79,80	13,2	950	11,7	76	86	0	86
KTS (Cool.Trp.V.)	1964	79,80	13,2	950	11,7	56	2	2	0
"Atlantik"	1965-72	82,0	13,6	1680	13,3	81	161	13	148
"Atlantik Super-Trawler"	1972-83	102,0	15,2	2800	14,6	91	201	8	178
"Atlantik 333-Seiner"	1981-85	62,2	13,8	1889	13,5	40	84	0	84
"Atlantik 333"	1987-87	62,2	13,8	1890	13,5	40	50	8	42
Scient. Res.V. "Type 833"	1987	62,2	19,0	1890	13,5	40	12	0	12
"Atlantik 488"	1987-91	120,7	19,0	5200	15,0	115	37	0	37
Total							1482	100	1355

Source: Volkswerft Stralsund 5/92

Remarks: 15 "Atlantik Supertrwalers" were built for account of Romania
12 Cutters were sold to Iceland

4.1.2.1 Vessels built for the fishing fleet of the former GDR

Only 100 vessels out of a total of 1482 fishing vessels had been built for the national fishing fleet of the former GDR by the "Volkswerft Stralsund", whereas 1355 fishing vessels had been built for the account of Soviet fleets. Those vessels purely built for the GDR are tabled below:

Table 4.II Fishing Vessels built for the Fishing Fleet of the GDR

Year of build	Type of Fishing Vessel	No.
1947-1949	17 m Cutter (Timber)	20
1950-1958	Logger	17
1952-1955	Side Trawler I + II	10
1957-1958	26,5 m Cutter (Steel)	22
1964	Cooler Transport Vessels	2
1965-1972	Trawler "Atlanik "	13
1972-1983	"Atlantik Super Trawler"	8
1985-1987	Trawler "Atlantik 333	8
Total		100

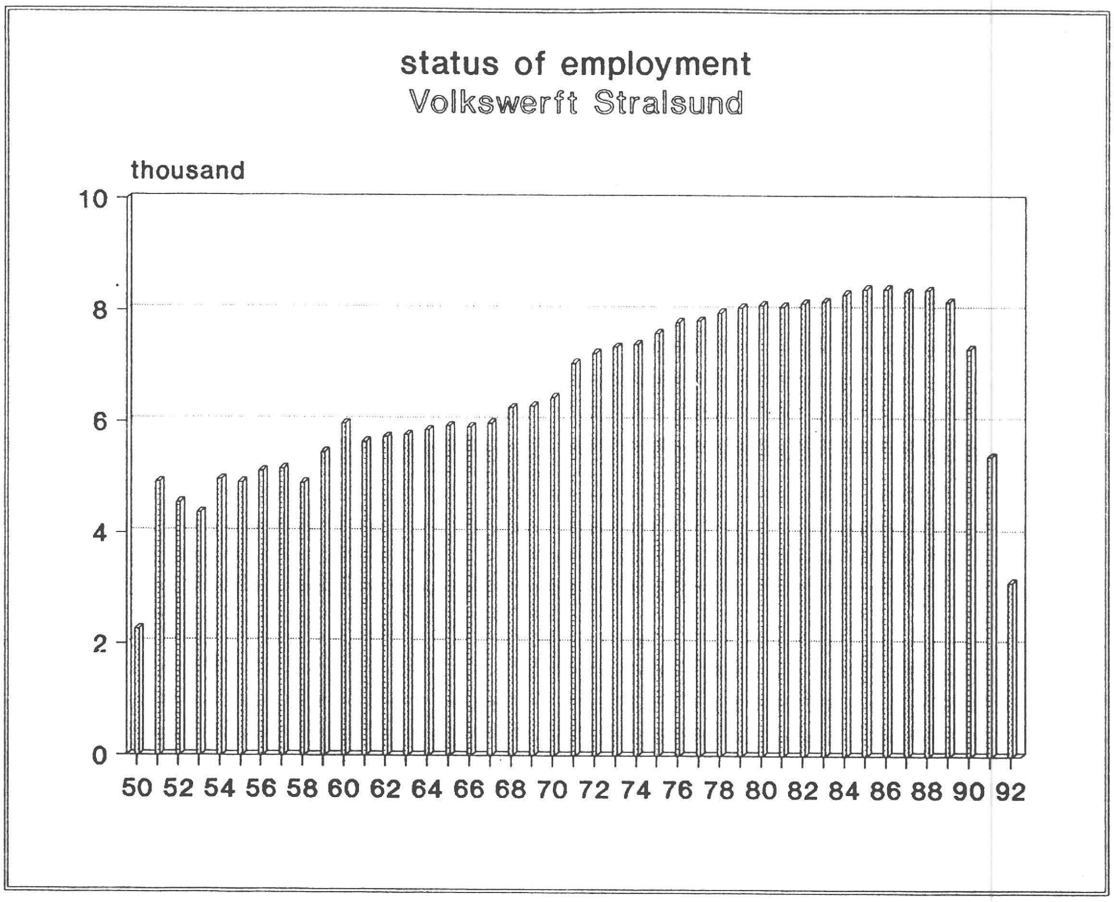
4.1.3 Shipbuilding Labour Force

The "Volskwerft Stralsund" has never been a small yard. It started in 1949 with a labour force of 2260, which increased gradually to a maximum of more than 8400 in 1984. With this labour force the "Volkswerft Stralsund" was the all dominating power in a small city like Stralsund with a total population of less than 75.000 inhabitants.

4.2 Construction, Maintenance and Repair of Fishing Vessels and of their Equipment after the Re-unification of Germany and the Constitution of the Land Mecklenburg-Vorpommern

After the re-unification "Volskwerft Stralsund" continued construction of vessels from ongoing contracts with the Soviet Union. The Soviet Union, however, due to political and economic changes, quickly ran into serious financial problems. Ships ordered could not payed any more. In comparison with yards in Western Europe the "Volkswerft Stralsund" had too large a work force. The workforce therefore decreased from 8173 in 1989 over 5391 in 6/91 to 3125 in 1992. Smaller yards and former rationalization offices are reviving in boat and yacht building.

Figure 4.2 Development of Staff of the Volkswerft Stralsund



5. Fishery Production in the former GDR or Mecklenburg-Vorpommern respectively

In order to fulfill the overall objective of self-sufficiency the fishery sector of the Soviet Occupation Zone later of the GDR experienced a sharp expansion as from the early 1950s. The fishery output developed from about 33.000 t in 1950 to a peak of 330.000 t in 1973.

With the worldwide establishment of national EEZs most of the traditional fishing grounds were lost to the fishing fleets of the GDR. As a consequence catches reduced from 330.000 t in 1973 to below 82.000 t in 1989. The former GDR emerged as a looser state from the process of the establishment of EEZs.

This bottle neck situation resulted in the conclusion of bilateral fishery agreements for distant fleet on the one hand and in a concentration towards the resources of the own territorial waters. Both the coastal and inland fishery subsectores gained importance expressed in the form of subsidies and research & develoment efforts.

In the 1980s, the landings of the former GDR originated

* 1/3 from waters inside the GDR-EEZ
* 1/3 from international waters outside the 200 nm zones
* 1/3 from catches on the basis of bilateral fishery agreements with other countries.

After the re-unification of Germany and along with the deregulation, privatization and adaption process most of the distant fisheries of the former VEB Fischfang Rostock and all of the near distance and cutter fisheries of the former VEB Fischfang Sassnitz were suspended. The existence of a future East German deep sea fishing fleet of any significance will largely depend on the entry of a private investor into a newly established named Mecklenburger Fischfang GmbH. 14 cutters of the former VEB Fischfang Sassnitz fleet were sold to a newly established co-operative, all others mainly overaged vessels were sold or converted to non-fishing operations. Future saltwater fishing operations in the fishing waters of Mecklenburg-Vorpommern will predominantly concentrate on the Baltic EEZ and be executed by cutters and open boats of traditional co-operatives and a few single independent privates.

There are quite some discrepancies in different statistical bases, e.g. the Annual Statistical Yearbook of the GDR, FAO and the fisheries control authority of the former Region of Rostock. These discrepancies have several reasons, e.g. different counting methods, furthermore considerable "over-the-side-purchases" from British (Mackerel and Herring) and American (Mackerel) vessels. Above all it can be assumed that planfulfillment was in part achieved by the manipulation of statistics. The latter may have played a role in the 1980s when actual catches considerably decreased.

Table 5.I **Fisheries Production of the former GDR and Mecklenburg-Vorpommern respectively, 1950-1988, (in t)**

Year	inland water acreage (ha)	catch deep sea & coastal (t)	results inland fisheries (t)	total results (GDR stat.) (t)	total results (FAO stat.) (t)
1950	220 660	26 600	6 373	32 973	......
1955	200 947	62 168	6 430	68 598	68 600
1956	203 690	68 983	5 875	74 858	74 900
1957	198 264	89 797	66 792	96 589	96 500
1958	209 063	86 350	7 000	93 350	93 200
1959	204 419	97 572	8 241	105 813	105 600
1960	204 398	106 771	7 843	114 614	114 400
1961	204 611	122 859	7 425	130 284	130 100
1962	205 705	142 215	8 143	150 358	150 100
1963	205 592	177 203	7 766	184 969	189 400
1964	205 768	208 964	9 307	218 271	224 900
1965	206 887	219 900	9 581	229 481	231 100
1966	207 371	211 150	11 178	222 328	223 100
1967	209 011	279 688	10 515	290 203	289 200
1968	207 680	290 766	12 359	203 129	302 000
1969	210 468	296 364	13 885	310 249	315 800
1970	210 647	306 140	13 620	319 760	321 800
1971	213 496	317 683	14 163	331 846	338 200
1972	214 469	311 170	14 219	325 389	338 200
1973	214 721	319 851	15 039	334 890	364 600
1974	214 786	311 895	15 846	327 741	363 198
1975	215 180	312 274	17 432	329 706	376 186
1976	215 545	266 166	16 178	282 344	279 302
1977	217 352	191 348	18 775	210 123	211 540
1978	220 653	183 014	17 619	200 633	198 401
1979	222 190	211 832	14 936	226 768	221 866
1980	224 850	229 745	14 492	244 237	235 302
1981	227 129	260 914	17 948	278 862	244 635
1982	228 733	249 896	19 971	269 867	236 270
1983	234 712	242 705	22 310	265 015	237 352
1984	245 306	276 200	23 263	299 463	226 025
1985	260 790	240 400	24 538	264 938	200 515
1986	291 505	247 700	24 821	272 251	211 938
1987	308 680	237 800	25 052	262 852	196 467
1988	311 478	218 400	26 542	244 924	179 234
1989	....	220 770	22 700	243 470	....
1990	....	116 729*			

Source: Bundesforschungsanstalt für Fischerei, Hamburg,
* Stat. Landesamt Mecklenburg-Vorpommern

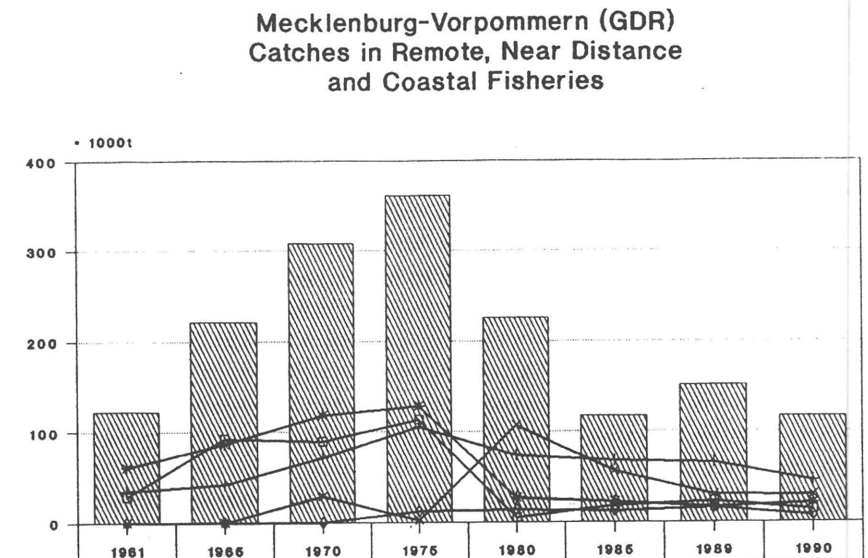
Legend: ___ maximum

Table 5.II Catches of the Deep Sea, Near Distance and Coastal Fisheries of the former GDR by Species, 1961-1990 [t]

Species	1960	1970	1975	1980	1985	1989	1990	1991
Cod	20 884	42 989	47 812	8 581	7 681	2 506	1 798	
Hadock	445	851	490	-	-	-	-	
Coalfish	1 782	41 901	34 916	925	-	-	-	
Whiting	445	-	-	-	-	-	-	
Silverhake	-	-	-	3 215	2 580	6 025	1 278	
Bluewhiting	-	-	-	14 512	8 529	4 565	230	
Rattail	-	2 247	3 643	925	4 137	2 397	-	
Notothenia(Broad-headed)	-	-	-	4 138	-	-	-	
Icefish	-	-	-	8 754	261	-	-	
Redfish	16 304	15 295	34 965	11 215	9 472	9 513	18 065	
Herring	52 569	79 942	107 310	95 187	51 607	54 834	45 038	
Sprat	8 832	7 973	16 702	151	1 950	1 166	518	
Sardinella	-	239	-	5 992	7 507	248	7 275	
Horse Mackerels	-	4 727	118	85 506	42 878	22 719	19 235	
Mackerel	3 814	6 914	58 178	-	11 024	20 318	8 696	
Pilchard	-	2 112	5 858	10 448	634	-	325	
Spanish mackerel	-	19 777	-	1 844	512	402	1 015	
Salewife	-	212	2 122	-	-	-	-	
Flounder	-	2 133	2 039	2 913	3 499	3 742	1 681	
Plaice	-	87	100	308	661	-	-	
Poleflounder	-	751	456	-	-	-	-	
Sand-dab	-	141	397	-	-	-	-	
Fladfish n.n.	3 852	-	152	-	206	-	110	
Greenland halibut	182	45 889	27 541	2 400	5 991	2 316	920	
Wolffishes	-	735	213	-	-	-	-	
Needlefish	-	414	172	406	-	-	-	
Brace n.n.	-	227	-	-	433	-	-	
Hairtail	-	385	223	-	-	-	-	
Hake	-	-	10 573	-	-	-	-	
Redfish (Pazifik)	-	-	101	-	-	-	-	
Herring(Pazifik)	-	-	1 538	-	-	-	-	
Krill	-	-	-	-	-	396	-	
Kalmar (Illex)	-	-	295	-	11 766	15 521	6 819	
Kalmar (Loligo)	-	-	620	-	140	-	-	
Shrimp	-	-	-	475	882	829	884	
Other	10 468	28 322	1 217	784	1 846	664	1 259	
Freshwaterfishes n. n.	3 172	3 932	3.877	3 209	3 195	3.614	1 583	
Total	122 756	308 175	361 405	226 111	177 391	151 765	116 729	12 852

Source: Statistisches Jahrbuch Mecklenburg-Vorpommern 1991 [Fischereiamt des Landes Mecklenburg-Vorpommern]

Figure 5.1 Seawater Catches of the former GDR by Areas, 1961-1990



	1961	1965	1970	1975	1980	1985	1989	1990
Total	122,756	221,416	308,175	361,405	226,112	117,392	151,765	116,729
Baltic	34,362	42,159	71,426	105,356	73,646	67,688	65,674	45,705
NE Atlantic	60,48	86,814	118,232	128,727	26,38	22,325	16,775	20,306
NW Atlantic	27,914	92,443	89,378	113,186	4,898	18,154	23,034	13,523
EC & SE Atlantic	0	0	29,139	1,913	107,18	56,596	30,287	29,744
Other Areas	0	0	0	12,223	14,007	12,626	15,995	6,951

source: Fischereiamt MV
file: E:\OD2NEU\catchareas.cht

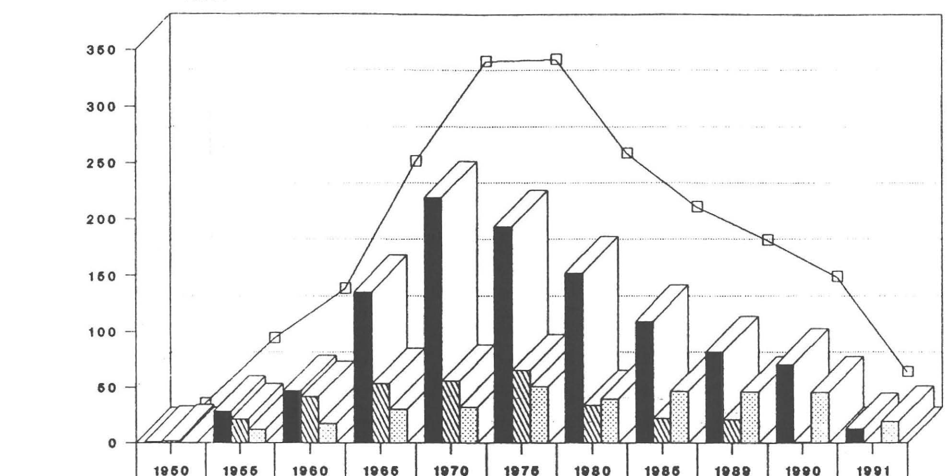
Figure 5.2 portrays the catches of the distincly different fleets of the former GDR and of Mecklenburg-Vorpommern (1990/1991) respectively. The fleets were

- o the distant fleet operating from the Port of Rostock
- o the near distance fleet operating in the Northsea (until the mid 1970s) and in the Baltic from the Port of Sassnitz
- o the cutter and boat fleet operating from small harbours and open landing areas along the coasts, especially along the East coast

Figure 5.4 outlines especially the gain of importance of the coastal fleets after the drastic decline of catches of the distant fleet after 1975.

On page 61 it had been said, that the catches of the coastal fishery increased from 32.100 t in 1970 to 67.100 t in 1989. This development is not clearly reflected by figure 5.4. The 1970 catch of 32.100 t was purely achieved by the co-operative fleet. As from the mid 1970s the Sassnitz fleet concentrated successively more and more on Baltic fisheries. The 1989-1991 yields of both the Sassnitz and the co-operative fleets were Baltic landings only, and totalled 67.000 t all together.

Figure 5.2 Saltwater Catches of Mecklenburg-Vorpommern (GDR) by Fleets, 1950-1991



	1950	1955	1960	1965	1970	1975	1980	1985	1989	1990	1991
Rostock	1,12	28,64	47,05	136,02	219,32	193,58	152,46	109,7	81,9	71,02	12.85
Sassnitz	1,98	21,66	41,72	53,56	56,26	65,74	33,79	22,13	21,22	0,49	0
Co-Operatives	0	12	17,8	30,5	32,2	50,5	39,86	46,56	45,79	45,63	19.3
total	3,1	62,3	106,57	219,63	307,78	309,82	226,11	178,39	148,91	117,14	32,15

5.1 Catches of the distant Fleet (VEB Fischfang Rostock)

The VEB Fishing Rostock (VEB Fischfang Rostock) was the largest German fishing enterprise. In 1989 51 fishing and transport vessels were operated. More than 4000 persons were employed in fishing and fish processing aboard the fishing vessels of this enterprise. The specific development of catches of the VEB Fishfang Rostock or the distant fleet respectively in different fishing areas is portrayed in the following table.

Table 5.III Catches of the Deep-Sea-Fleet of the VEB Fischfang Rostock, 1961-1989 by main Fishing Areas (1000 t)

Fishing Area	1961	1965	1975	1988	1989	1990
Northwest Atlantic	28.8	92.4	113.2	27.6	23.0	13,5
Northeast Atlantic	59.7	86.8	128.7	23.9	16.8	20.8
Northwest Africa	-	-	1.9	-	-	-
Pacific	-	-	12.9	-	-	-
Southwest Africa	-	-	-	24.8	16.0	6.9
Southeast Atlantic	-	-	-	9.2	30.3	29.7
Total catch	88.5	179.2	256.0	85.5	86.1	71.0

The VEB Fischfang Rostock yielded about 60 % of the total saltwater fishing results in the former GDR or Mecklenburg-Vorpommern respectively.

5.1.1 Value of the Distant Fishery Production

Table 5.IV Value of the Fishery Production of the VEB Fischfang Rostock/ Fischfang Reederei GmbH Rostock

Year	Price US $/t	Quantities(FAO) Tt	total Value TUS $
1985	367	132	48,616
1986	348	136	47,419
1987	428	131	56,250
1988	429	122	56,536
1989	489	122	59,528
1990	489 *	58	28,540
1991	1426 **	13	18,330

Source: Prices FAO, quantities table 5.I

Remarks:

* quantity calculated with 1989 price

** the high price difference demonstrates the change from mass products to quality products.

1991 quantity and value from the fishing authority of MV

5.2 Fishery Resources and Management in the EEZ of the former GDR or now Mecklenburg-Vorpommern

GDR institutions have spent considerable efforts into the research of the fishery resources of the EEZ of the former GDR. This proved to be essential after the worldwide introduction of 200 nm fishing zones in 1977. After a initial successful period of intensive fishing in the EEZ following the caesura of 1977 catches reduced drastically in the years thereafter. In order to examine the relation between the size of stocks, the catch and environmental conditions the Institute of Deep-Sea Fishery and Fish Processing in Rostock established a new data basis in 1980. Under the conditions of plan fulfillment it also established a basis for the employment of boats and human resources. The latter, however seems to be not any more valid under the conditions of a market orientated economy. The findings are contained in the main study. A summary is presented in the table 5.V below.

Table 5.V Catches of the Cutter and Coastal Fisheries in the EEZ of the former GDR or Mecklenburg-Vorpommern respectively

Species	1960	1970	1975	1980	1985	1989	1990	1991
Herring	6249	38025	71726	59187	51607	54827	39409	9342
Cod	10269	18099	14740	7406	6593	2148	1562	1760
Sprat	8573	7973	11840	151	1950	1166	457	57

Continuation Table 5.V

Flatfish	2860	2256	2172	3286	4290	3822	1723	1956
thereof:								
Plaice	459	87	78	308	661	7	5	2
Flounder	1829	2113	2039	2913	3499	3742	1681	1896
Freshw. Fish	3556	3876	3877	3209	3195	3614	2294	2162
thereof								
Eel	859	373	369	126	73	38	46	113
Pike	238	224	159	130	137	220	187	223
Pike-Perch	269	440	638	291	239	331	440	590
Perch	458	636	302	382	881	686	437	903
Roach		1038	692	975	1058	911	149	238
Bream		593	180	572	491	921	53	95
nei Saltw. Fish	6669	1197	1001	407	66	137	80	-
Totals	**38176**	**71426**	**105356**	**73646**	**67688**	**65674**	**45705**	**15489**

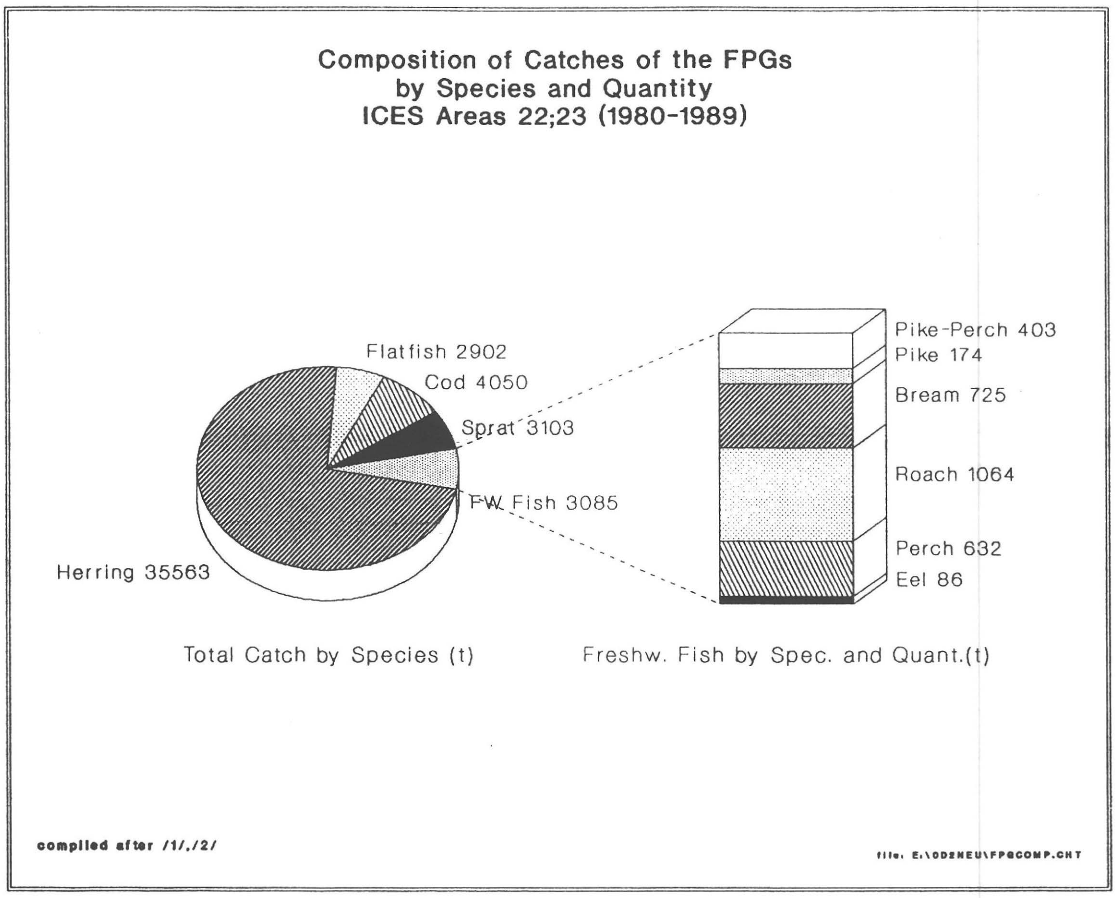
Source: Stat. Landesamt Mecklenburg-Vorpommern [Fischereiamt des Landes Mecklenburg-Vorpommern]

5.2.1 Co-operative (FPG) Catches, Analysis of Catches by Species

The co-operative subsector is deliberately described in detail by figures and tables in the main study because the remnants of the former GDR fishing fleet are existing in the form of private and co-operative small cutter and boat fisheries only. In order to evaluate opportunities and risks of a future fishery sector it is the more important to possess knowledge about past and present catches of those species regarded important for the SME (small and medium firms) fishery fleet.

Herring is the main species which is caught by cutters and with pelagic fishery methods but also with static fishing gears, where the abundance of open boats is used for transport and outlaying of the gears. The cutter fleet of the former VEB Fischfang Sassnitz was almost purely engaged in pelagic fisheries in the open Baltic but not in the brackish water bays and lagoones. This company thus thus did not play a role in the catch of demersal and fresh water fish.

Figure 5.3 Composition of Catches of the Co-operatives (FPGs) by Species and Quantity, ICES Areas 22;23, 1980-1989



Herring is the most important fish in Mecklenburg-Vorpommern. A production of 52,000 t annually is held feasible. 40 % of the yield is gained by static gear. Herring fishing is of extreme seanonal character. Season is from April to June. Cod represents the second largest share of production. Whereas the herring has a relatively stable stock the cod stock shows features of over-fishing. The months December to February characterize the cod season. Among Flatfish flounder is with a share of 90% the most important species. Its stock also shows signs of overfishing. Turbot and dab form relatively stable and typical by-catch assortments. Similar to herring fishing sprat catches are dominated by a strong seasonal character. Sprat fishing is carried out with towed gear only. An annual extraction of 2.6 -2.7 kt might be possible.

The Bodden (laggons) and Haffs (bays) along the coasts of Mecklenburg-Vorpommern represent a considerable potential for the catch of fresh water fish. Main species are Bass, Roach and Bream. Catch and sale are determined by the processing capacities. Fresh water fish is mainly caught with static gear. For the profitability of smaller fishing enterprises the yield of fresh water-precious-fish species (Perch- Pike, Pike, Eel) is of special importance.

Table 5.VI Landings of Fresh Fish by the Cutter and Coastal Fisheries of Mecklenburg-Vorpommern 1991

	November			December			Continued Accounting 01.01.91-31.12.91		
Species	(t)	TDM	ϕ-Price (DM/kg)	(t)	(TDM)	ϕ-Price (DM/kg)	(t)	(TDM)	ϕ-Price (DM/kg)
Atl. Cod	44,6	150,4	3,37	25,2	75,0	2,97	1.419,1	3.990,9	2,81
Herring	117,1	81,5	0,70	71,2	51,4	0,72	9.341,4	3.779,8	0,40
Sprat	6,7	6,7	1,00	5,7	4,6	0,80	57,3	49,8	0,87
Flounder	122,7	125,3	1,02	104,6	98,8	0,94	1.896,4	1.996,5	1,05
Dab	0,7	0,4	0,57	4,4	4,8	1,09	11,7	14,5	1,24
Plaice	0,5	1,0	2,07		0,1	1,82	2,2	5,5	2,50
Turbot	5,2	25,7	4,86	11,9	9,3	4,81	45,9	279,6	6,09
Salmon	4,1	31,7	7,65	1,4	10,4	7,34	37,1	225,0	6,06
Eel	1,2	20,9	17,10	0,1	1,5	20,51	113,2	1.747,5	15,44
Eelpout	1,0	1,3	1,22	1,1	1,1	1,08	14,6	31,4	2,15
Pike-Perch	31,5	211,6	6,72	29,9	209,9	7,02	590,3	3.889,1	6,59
Pike	72,4	287,6	3,97	25,8	103,7	4,02	903,7	3.051,0	3,38
Perch	18,0	60,8	3,38	13,8	47,8	3,47	223,3	674,7	3,02
Bream	20,1	6,0	0,30	11,3	5,7	0,50	95,4	32,7	0,38
Roach	49,1	14,0	0,28	22,9	5,9	0,26	238,6	78,3	0,33
Garfish							69,7	86,8	1,25
N.E.I.	11,5	19,6	1,70	7,3	15,4	2,11	59,2	110,2	1,86
Fish Liver/Roe			1,21	0,1	0,1	1,51	16,0	25,3	1,58
Total	506,4	1.044,5	2,06	326,7	645,5	1,98	15.135,1	20.068,6	1,33
Feed Fish							93,6	9,8	0,10

Source: Bundesforschungsanstalt für Fischerei, Hamburg

MECU 10.0

Addendum Landings abroad: 643 t, MDM 1,7 = MECU 0,85

Table 5.VI is a fairly new compilation of data by the Hamburg based Federal Fishery Institute. It shows that in particular herring the bread and butter fish of the coastal fishing fleet of Mecklenburg-Vorpommern is extremely low priced with an average of DM 0,40 per kg over the year 1991. It can with certainty be assumed that such low prices are not economical for many fishing enterprises under the precondition of high wages (wages in East Germany are being raised to the West German level). The Federal Institute of Fishery nontheless forcasts considerably higher landings of herring in the 1992 season.

Landings in Region D2 total -according to this source- 15,135 t and are valued with MECU 10,0, landings abraod account 643 t and value MECU 0,85.

5.2.3 Landings by Zones

Table 5.VII **Landings of the Cutter and coastal Fisheries by coastal Zones**

	Landings (t)		Landings (t)	Value of Landings (TECU)
Zone	1989	1990	1991	1991
Zone 1, Wismar	5063	2739	714	475
Zone 2, Rostock	5384	3953	285	190
Zone 3, Stralsund	4820	2713	621	413
Zone 4, Greifswald	3278	2722	1689	1,123
Zone 5, Wolgast	12335	9540	2071	1,377
Zone 6, Rügen (incl. VEB Fischfang Sassnitz)	36128	10137	13917	9,255
totals	67008	31804	19297	12,833

File: E:\OD2\KREISFG.TXT

Sources:

12. Data on catches or landings repsectively from Verband der Kutter- und Küstenfischer e.V. Mecklenburg-Vorpommern
13. Price coordination from Bundesanstalt für Fischerei, Hamburg

Remarks:

14. Landings are attributed to the legal seat of the co-operatives; some of the co-operatives have their landing sites distributed over 2 or more districts
15. The catches of the former VEB Fischfang Sassnitz (Rügen) have been included in order to give a true picture of the catches per district (1989). VEB Fischfang Sassnitz has been liquidated in 1990/1991. A new co-operative "Sassnitzer Seefischer" has been formed by captains of the VEB FFS fleet, which took over 14 of the formerly state-owned cutters.
16. Due to lack of meaningful socio-economic data (statistical bases will be available at the end of 1992) a mean price of DM 0,665 per kg has been multiplied with the catch weight, disregarding different results by species and district

In 1989 almost all of the coastal zones had substantial shares in coastal and EEZ catches. Two zones, however, Rügen (Isle of Rügen) and Wolgast (Isle of Usedom) had and have the largest proportion due to the massive occurrance of herring swarms around the islands during the months of April, May and June.

After the political, economical and structural changes upon the German unification those co-operatives and enterprises continued operation, which have their origin in pre-war organizations, mainly on the archipelago off the east coast of Mecklenburg-Vorpommern or on the mainland of the part-region Vorpommern. In 1991 some of the zones (Wismar, Rostock) ceased to be major contributors to the overall results of Mecklenburg-Vorpommern. Again the two island districts of Rügen and Wolgast had the largest share of catches, though on a drastically lower level.

Catches of the distant fleet have not been included in table 5.VII, because they entirely originate from outside the EEZ. Catches of the distant fleet dropped from 81.900 t in 1989 to 12.852 t in 1991. Zone 2, Rostock, is the only one accountable for distant fishery catches and landings. Economical data are not released. The fleet is still under TREUHAND administration, whose policy it is not to publish vital economical and socio-economical data.

Table 5.VIII **Catches of the distant Fleet of Mecklenburg-Vorpommern**

	Landings (t)		Landings (t)	Value TECU
Location of Landing	1989	1990	1991	1991
City of Rostock	81900	71020	10051	12,742
abroad			2801	1005
total	81900	71020	12852	13,747
ϕ				ECU 1.07

Source: Deutsche Fischwirtschaft AG, Rostock
Landesamt für Fischerei MV (data as of 1991)

5.3 Production of Inland Fisheries and Aquaculture in Mecklenburg-Vorpommern

It is extremely difficult to follow-up on the development of inland fisheries. There is no continuation in the maintenance of statistical data. Until 1991 this had been carried out by the Institute of Inland Fisheries in Berlin-Friedrichshagen. This Institute has been liquidated. The Land Mecklenburg-Vorpommern had been newly constituted in October 1990. Fishery administration and statistical office had to be newly established. Neither 1991 data are available nor data of privatized, re-established or newly established fisheries nor data on district (Kreis) level. Inland fishery results are presented on table 3.VIII on page 49.

5.4 Imports and Exports of Fish and Fish Products of the former GDR

Like all statistical information of the former GDR data of imports and exports of fish and fish products differ considerably with those collected by exterritorial sources, e.g. FAO FISCHDAB. This report therefore bases on FAO information.

After its constitution the German Democratic Republic fostered the build-up of an own fishing fleet. Imports of fish and fish products peaked with 151.000 t in 1955. As a result of the establishment of the own fleet imports decreased continuously to as low as 4.500 t in 1978. The loss of fishing grounds after the institution of 200 nm zones resulted again in an increase of imports, which varied between 27.000 t in 1979 and a maximum of 54.000 t in 1983. Lack of herring forced the processing industry to substitute herring by other species, e.g. mackerel. As a consequence mackerel made up the largest share of fish imports in the 1980s.

Table 5.IX GDR Iport of selected Fish Species and Fish Products

Species/Product	1980	1985	1987	1988
fresh & frozen fish	30.671	38.772	43.449	29.090
thereof mackerel	24.110	24.752	26.303	14.890
canned fish	1.300	811	813	551
fish meal	39.000	40.000	38.000	73.000

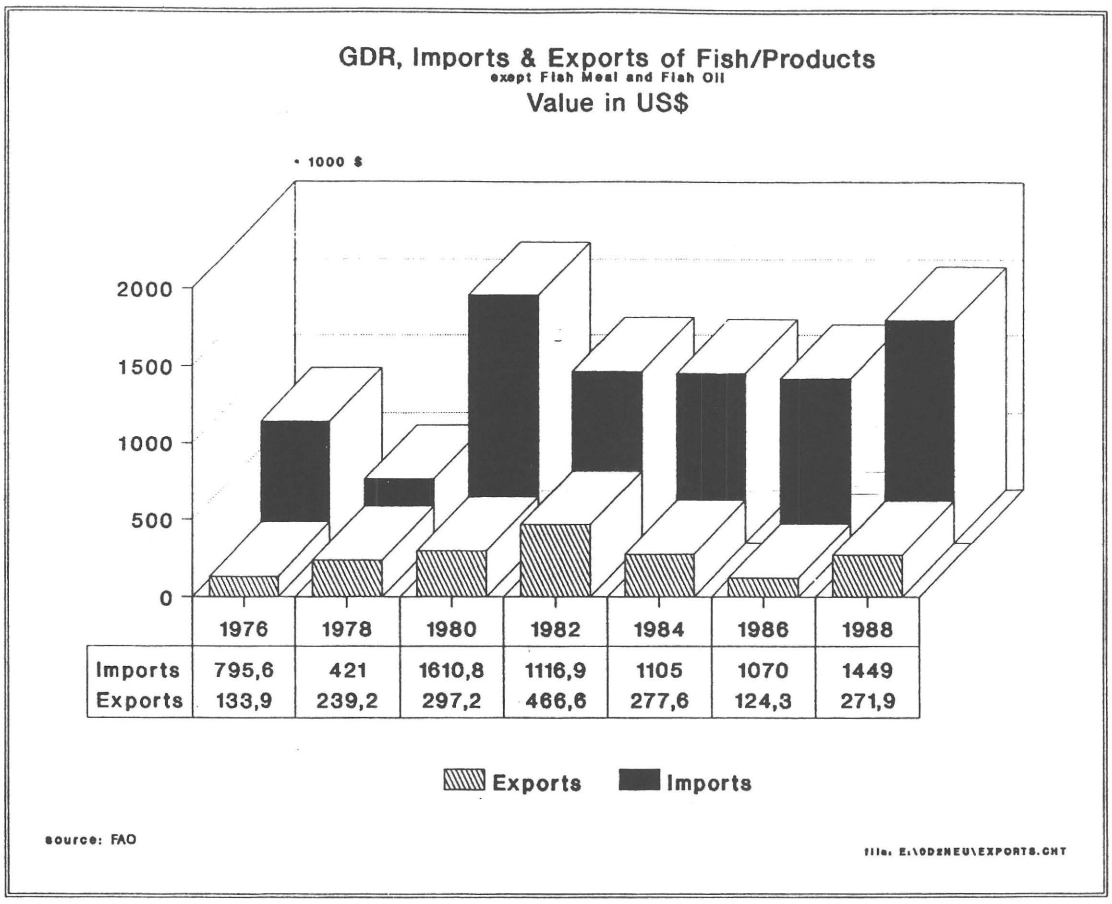
Source: INFA 1990 1/2 [FAO FISHDAB 1990]

Main suppliers of herring and mackerel had been the UK and Ireland. The UK delivered as much as 46.000 t mackerel in 1983. **Over the side purchases** were common but not registered as imports.

It is reported, but not confirmed, that they **reached a level of 63.000 t** in the years prior to the political turn (1989), which represents a **share of 3/4 of the landings of the distant fleet** (81.900 t in 1989). Up to one third of the purchases from british vessels were processed and resold to the UK in order to secure self-financing of the purchases. Income from landings in African states was used for the payment of royalites

In view of the critical supply with fish and fish products exports were limited to extremely low quantities. Again exports increased from 1.100 t (1965) to 17.300 t (1974) after the build-up of the fishing fleet, but decreased continuously after 1977 to 1.500 t (1988). The largest share of the fresh fish exports of 1.507 t in 1988 were contributed, however, by freshwater fish, 676 t of which were trout, followed by carp with 423 t and bream with 121 t. Exports of canned fish varied between 230 t and 430 in the years 1979-1980

Figure 5.4 GDR, Imports and Exports of Fish and Fish Products, Value in US $



	1976	1978	1980	1982	1984	1986	1988
Imports	795,6	421	1610,8	1116,9	1105	1070	1449
Exports	133,9	239,2	297,2	466,6	277,6	124,3	271,9

After the re-unification 7.300 t of FW fish were with the authorization of the CEC and funds of the FRG exported into the USSR in order to ease the burden on the market and to prevent the market from collapsing at the cost of those concerned (i.a. more than 8.000 private fish farms in West Germany.

This intervention developed to be a financial desaster for many of the participants. The funds were paid out for the financing of project overheads, i.e. collection from the different companies and PGBs, transport to and cool storage in Rostock. The Soviet side, however, failed to secure transport to the USSR. So the fish never arrived at its destination. In consequence the Soviet Union refused payment. Some of the companies are still struggling to make good substancial losses.

5.5 Consumption

Supply of the population of the former GDR with fish and fish products averaged 224.000 t in the period 1984-86 under consideration of allowances for imports and exports. This results in an annual per head consumption of 13,4 kg (calculated by live weight of fish).

6. Fish Processing and Distribution

Statistical data of this subsector were not collected in detail and in accordance with international standards by the statistical bodies of the former GDR. The changes in this subsector through privatizations, new establishments, divisions, liquidations are so dynamic at the present time, that it is hardly possible to outline a reliable picture.

6.1 Fish Processing during GDR-Times

6.1.1 Fish Processing on the Territory of the former GDR

Almost all of the pre-war fish processing industry was concentrated in the ports along the Northsea. Apart from smallest scale outlets there was no fish processing industry in the GDR after World War II. In consequence a fish processing had like an own fishery to be built up from zero.

The largest fish processing capacities were concentrated near the combinate-owned landing facilities of Rostock and Saßnitz. Further smaller scale state-owned processing plants existed for the processing of Baltic and coastal landings. Furthermore almost all of the co-operatives had processing facilities and staff. Processing in the co-operative sector was mainly dedicated to smoking and to little extent the production of marinades. Processed products of the co-operatives were sold regionally.

The fish processing industry of the GDR totalled 58 firms without divisions but including the "larger" processing departments of the co-operatives (FPGs) with more than 10 permanent employees. Two (combinate-owned) companies accounted for a share of 34000 t (1988), almost 41% of the total processing production.

The workforce of these firms comprised some 4.400 persons on the territory of the former GDR in 1981 and 2.850 in 1989.

Whole sale and retail accounted for a maximum staff of 5.700 persons in 1981 and 1.618 persons in 1989.

Fish processing firms did not only exist on the coast but all over the territory of the former GDR. Figure 6.1 shows their distribution over the territory of the former GDR (each point before a town stands for a processing company or processing plant, i.e. the City of Stralsund disposed of three enterprises or plants). The inland enterprises, however, processed also fish from inland fisheries and aquaculture, especially carp and trout.

Figure 6.1 Distribution of the Processing Industry in the former GDR (1989)

Remark: With a view to the privatization as from 1990 the above chart shows not only the legal entities but all of the principal companies, divisions and departments

The main producers were under direct management of the Fish Combinate or subordinated to the operator of the distant fishing fleet, VEB Fischfang Rostock. The structure of the public sector fish processing industry is detail presented in table 6.V on page 81.

6.1.1.1 Supply of Raw Material

The suppply of raw material to the fish processing firms was mainly ensured by own catches. About 30.000 t of regionally caught herring were processed to canned fish, smoked fish and marinades.

All in all the former GDR processed a total of 110.000 t annually. 26.000 t were directly delivered as frozen fillets from the fishing fleet. About 84.000 t underwent secondary processing. Main forms of secondary processed fish were canned fish (26.000 t), preserves (33.000 t) and smoked fish (28.000 t)

Table 6.I Fish Processing in the former GDR, 1950-1988

Year	frozen Fillet [kt]	Canned Fish [kt]	Preserves [kt]	Smoked Fish [kt]	Total [kt]	therof 2nd proc. [kt]
1950		1,3	11,5	n.a.		
1960	5,5	10,9	32,5	n.a.		
1965	23,2	16,8	34,9	n.a.		
1970	43,4	18,4	30,9	n.a.		
1973	56,1	22,2	35,8	n.a.		
1975	51,9	20,1	32,3	n.a.		
1980	25,3	16,9	35,0	30,2	107,4	82,1
1981	28,4	18,3	34,3	28,4	109,4	81,0
1982	24,4	18,4	35,4	29,1	107,3	82,9
1983	28,4	19,9	34,3	29,8	112,4	84,0
1984	28,2	20,9	33,9	30,1	113,1	84,9
1985	26,0*	21,6	33,5*	29,0	110,1	84,1
1986	27,0*	22,4	34,0*	30,0*	113,4	86,4
1987	26,0*	22,6	33,0*	28,0*	109,6	83,6
1988	26,0*	22,8	33,0*	28,5*	110,3	84,3

Sources: INFA 1/2 1990 [Stat. Jahrbuch der DDR 1977, 1988, 1989; FAO FISH DAB 1990]

Remarks:
1. * = FAO estimates
2. a differention between the state-owned sector and the co-operative sector is not any more available
3. Preserves are kinds of processed fish, e.g. marinades, fish salad, except canned and smoked fish

The limited assortment of processed fish is to be seen from the figure 6.I and table 6.IV to follow. More than this limited choice had in fact - owing to the monopolistic and production orientated structures - not been available on the market. Most of the processed products had been based on herring and to a lesser extent on other species, e.g. fresh water fish like carp and trout.

Table 6.IV exhibits the assortment of process fresh water fish by example of the results of the former major producer of fresh water fish VEB Binnenfisherei Neubrandeburg (VEB Inland Fisheries Neubrandeburg).

6.1.2 Fish Processing on the Territory of the "3 Northern Regions"

Most of the processing industry of the former GDR was concentrated in the territory of the 3 Northern Regions (3 Nordbezirke) which constitute now the Land Mecklenburg-Vorpommmern. The largest conglomerations had been in and around the City of Rostock and on the Isle of Rügen on the East coast of this territory, to a lesser extent on the Isle of Usedom. Some of the processing industry existed also in the City of Schwerin, which however, is now liquidated. Almost all of the co-operatives processed fish, mainly in the form of smoked herring.

Table 6.II Fish Processing Enterprises/ Divisions/ Departments in the former "3 Northern Regions" /18/, 1988

Sector Companies	Production (t)(1988)	Labour Force
17 Public Sector Fish Processing Companies and Departments	45608	2934
19 Co-operative (FPGs) Sector Fish Processing Units and/or Departments	13910	647
8 Private Sector Fish Processing Enterprises	318	27
44 Units	59836	3608

6.2 Fish Processing in East Germany after the German Re-unification

6.2.1 Developments in the former Public Sector (now Deutsche Fischwirtschaft AG/ Ostseefisch GmbH) on the Territory of Mecklenburg-Vorpommern

Like all of the other vertically integrated units of the Fish Combinate the processing units, i.e. companies, divisions, departments, had been transformed into private limited companies, (GmbHs), gathered under the umbrella of company named Ostseefisch GmbH and subordinated to the holding Deutsche Fischwirtschaft AG, Rostock.

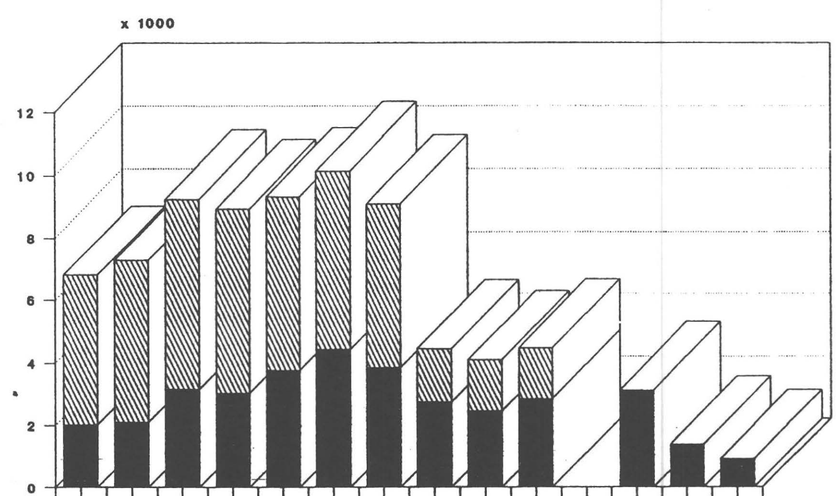
Ostseefisch GmbH inclusive of companies of the distribution sector had been sold en bloc to a meat processing group by the TREUHAND at the end of 1991. It has been reported, that according to the concept agreed upon by the buyer and the TREUHAND a staff of 930 persons will continuously be employed, thereof 800 in Mecklenburg-Vorpommern.

Ostseefisch GmbH owns a total of 10 companies engaged in processing, whole sale and retail. 6 of these companies are on the territory of Mecklenburg-Vorpommern, 4 (whole sale) in others of the new Länder. Furthermore Ostseefisch GmbH has taken over 7 retail shops and 1 fish restaurant of the former combinate in the former Region of Rostock.

The development of staff of the former public sector and the TREUHAND administered processing enterprises all over of the territory of the former GDR or the new Länder is outlined in figure 6.2. The total decline of the work force in retail services is declared by the fact that most of the fish shops have been sold to privates. One of the fish distribution outlets (Wolgaster Fischgroßvertrieb GmbH) though belonging to the new constellation under Ostseefisch GmbH has been closed, because preserved fish is like in Western Germany delivered to retail chains which have their own distribution systems.

Figure 6.2 Development of Processing Staff in the (former) Public Fisheries Sector of the GDR or on the Territory of the new Länder

Staff Development
Processing and Whole Sale/Retail
of Combinate/Deutsche Fischwirtschaft AG



	1971	1973	1975	1977	1979	1981	1983	1985	1987	1989		1990	1991	1992
Whole Sale/Retail	4,804	5,188	6,095	5,891	5,561	5,706	5,233	1,71	1,632	1,618				
Processing	2,018	2,096	3,156	3,049	3,762	4,436	3,857	2,74	2,46	2,85		3,114	1,371	0,93
Total	6,822	7,284	9,251	8,94	9,323	10,142	9,09	4,45	4,092	4,468		3,114	1,371	0,93

Processing   Whole Sale/Retail

source: DFW AG, Ostseefisch GmbH

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Remarks: Developments after 1989

1. The retail sector has been outsourced and privatized
2. The whole sale sector has drastically been reduced, the remaining staff is included in the processing sector
3. Many of the fish factories have been closed down due to lack in economical efficiency

Table 6.III Development of Staff in the Ostseefisch Group of Companies, Successor of the former state-owned Fish Processing Sector, after 1989 (on the Territory of Mecklenburg-Vorpommern)

Company	status 1.7.90	status 31.12.90	status 31.7.91	status 31.12.91	status 31.7.92
Ostseefisch GmbH	1327	1247	956	577	92
Warnow Fischwaren GmbH	262	194	168	100	80
Barther Fischwaren GmbH	212	140	114	51	30
Sundfisch GmbH	252	203	87	49	25
Wolgaster Fischgroßvertrieb GmbH	109	68	0	0	0
Rügen Fisch GmbH	936	720	454	350	254
Total	3098	2572	1779	1127	481

Source: Ostseefisch GmbH

Remarks:

1. all of the above companies belong to the Ostseefisch GmbH group of companies
2. production will be concentrated in Rügen Fisch GmbH, Sassnitz
3. production in Barth has already been closed down

Table 6.IV Production of the Ostseefisch GmbH Group of Companies on the Terrotory of Mecklenburg-Vorpommern (status 18.9.92)

new company name	Ostsee Fisch GmbH	Ostsee Fisch GmbH	Sund Fisch GmbH	Rügen Fisch GmbH	Barther Fischwaren GmbH	Warnow Fischwaren GmbH
old name	FFR/BT Marienehe	FFR/BT FR	FFR/BT Stralsund	Fischwerk Sassnitz	Fischverarb. Barth	Fischverarb. Schwaan
Total Production, Forcast 1992	500	655	320	8620	0	3960
therof:						
canned fish	500	0	0	8620	0	3960
perserves	0	135	320	0	0	0
smoked fish	0	520	0	0	0	0

Source: Ostseefisch GmbH

Remarks:

1. data relate to Mecklenburg-Vorpommern only
2. there are further companies belonging to the group in others of the new Länder
3. further concentration is most likely
4. FFR = VEB Fischfang Rostock
5. BT = Betriebsteil = Division or Department or Operating Company

Ostseefisch GmbH plans to concentrate the production of canned fish within two companies near Rostock and on Rügen.

The drastic decline of landings in Mecklenburg-Vorpommern, the lack of first-processing facilities and lower costs for imported semi-processed fish forced all of the processing companies here to purchase their raw material from Denmark, UK and Ireland. The East German processing industry accordingly takes now the same route as the West German industry, i.e. it relies increasingly on imports. It is to be hoped, however, that in this part of Germany where unemployment is highest and employment opportunities are rare some of the fish processing industry can be maintained.

All of the remaining factories and processing facilities need to be reconstructed in order to adapt to modern technological standards and legislation especially as regards hygienic conditions and to change energy sources. Projects are underway to investigate alternative employment opportunities for the staff made redundant by those companies recently shut down.

6.2.2 Developments in the former Co-operative and Private Sectors

8 private fish processing companies with a work force of 23 persons existed in 1989/1990 on the territory of Mecklenburg-Vorpommern. These companies are reported to be still in existence. New establishments originating mainly from outsourced co-operative divisions are in the stage of registration.

The co-operatives transformed according to the laws of the Federal Republic of Germany. Staff and processing production development between 1989 and 1992 are portrayed in table 6.V. Processing of the co-operative sector has dropped from more than 18.600 t in 1989 to 2.600 t in 1991. This is a reduction by 86 % !!!

The number of staff employed in processing was disguised in the number of non-fishermen, which included processing personnel but also administration, duck, chicken and mink farming, work shops and building brigades. In 1989 the total staff had been recorded with 3.200 persons, whereof 1.385 were fishermen and 1.815 belonged to non-fishing employments.

From 1990 until now the non-fishing work force has been cleared, so that by the end of 1991 it counted merely 336 persons mainly engaged in processing. This represents a reduction of more than 81 % !!! Nontheless, neither the processing production nor the numbers of employed in processing have bottomed out until now. Distintegration of co-operatives, which is presently carrying on, will lead to a further shake out of personnel.

Table 6.V Co-operative Processing and Processing Staff, Changes between 1.1.89 and 1.1.92

	Staff				Processing	
	28.		1.1.92		1989	1991
Co-operative	fisher	process & others	fisher	process & others	t	t
Wismar	74	91	0	0	262	0
Wismarbucht	93	139	80	5	930	0
Warnemünde	83	220	15	0	2.162	0
Fischland	28	6			0	0
Barther Bodden	42	28	20	13	652	54
Stadt Stralsund	68	89	0	0	1.491	0
Strelasund	21	101	15	47	1.342	467
Am Sund	26	6	16	2	0	4
Greifswalder Bodden	56	15	28	6	82	0
Sassnitz	118	106	54	11	1.401	0
Dranske	9	39	3	3	1.253	0
Ummanz	18	25	0	0	855	0
Wittow	36	44	23	22	544	19
Jasmund	22	21	0	7	218	64
Insel Vilm	31	19	21	9	0	0
E.M. Arndt	17	15	6	6	72	0
Nordperd	18	33	10	10	213	0
Mönchgut	69	16	57	5	34	0
Seedorf	43	78	9	19	325	103
Leuchtenfeuer	25	17	19	2	21	0
Hiddensee	62	20	33	1	242	0
Peenemündung	66	89	39	36	1.014	459
Peenestrom	57	166	23	75	1.871	274
Inselfisch	145	277	55	36	2.752	950
Zempiner Fischfang	38	37	0	0	511	0
Ostseestrand	54	79	38	17	371	218
Haffküste	66	39	62	10	0	0
Sassnitzer Seefischer	0	0	56	3	0	0
Vorpommersche Küstenfischer	0	0	37	0	0	0
Stralsunder Fishereibetrieb	0	0	0	0	0	0
Sub Total	1.385	1.815	751	336		
Grand Total	3200		1087		18.618	2.612

Source: Verband der Kutter und Küstenfischer Mecklenburg-Vorpommern

Remarks:

1. The 1989 numbers include processing, administration, support and non-generic business staff
2. The 1992 numbers reflect the shake-outs of non-generic business and the adaptions of staff sizes to the new economical conditions

7. Analysis of sociological Structures

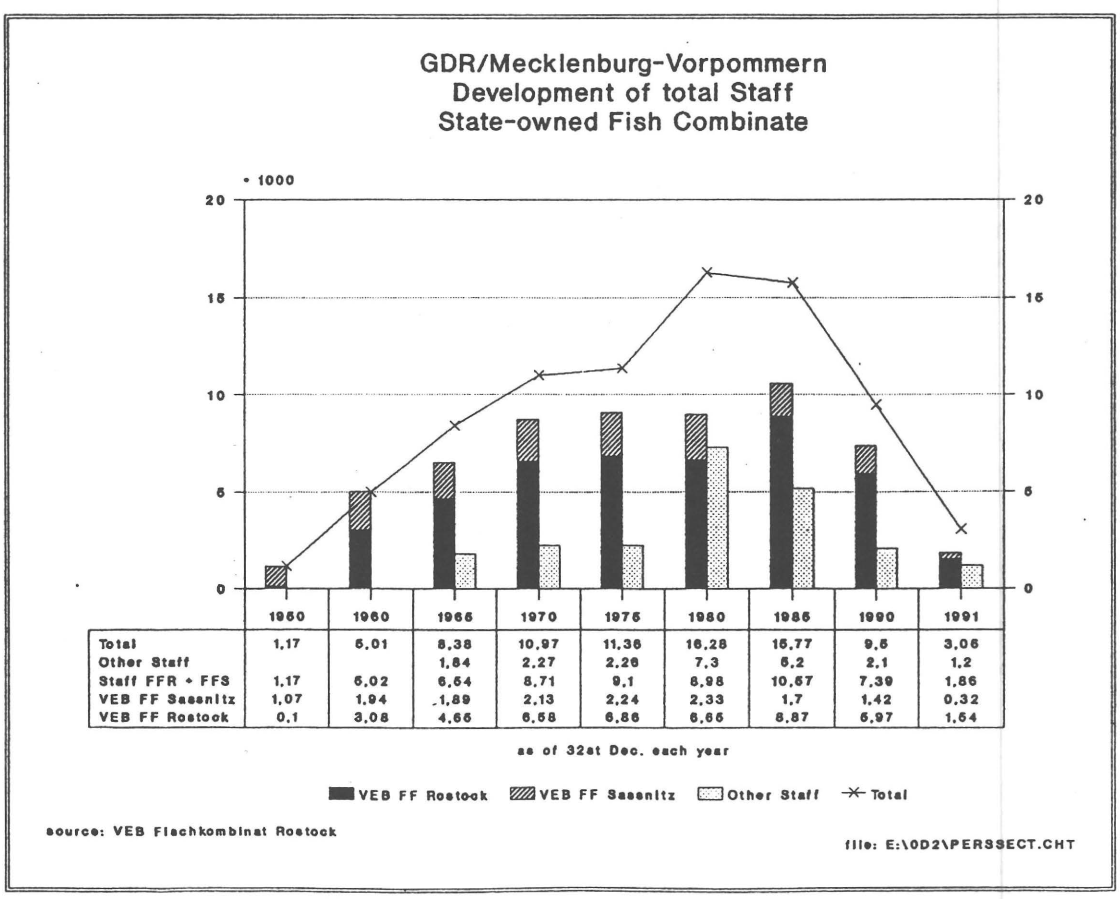
7.1 Historical Developments in the former GDR

The labour force of the GDR fishery sector reached a size of more than 23.000 persons by 1980, about 16.300 of which belonged to the state-owned saltwater sector, managed by the VEB Fish Combinate Rostock, 3.200 to the co-operative saltwater sector and 3.700 to the state-owned and co-operative inland fisheries sectors. Most of the staff of the former central structure in saltwater fisheries was based in and around the City of Rostock and in Sassnitz on the Isle of Rügen.

7.1.1 Development of Staff of the state-owned Saltwater Fisheries Sector

State-owned or people-owned fisheries started operation with the formation of the near distance fishing fleet of Sassnitz (Isle of Rügen) in 1949 and the establishment of the distant fleet of Rostock in 1950. The build-up and staff expansion phase of these enterprises continued until 1960 in the case of the fishing fleet and company of Sassnitz (VEB Fischfang Saßnitz) and until 1966 as regards the distant fleet in Rostock (VEB Fischfang Rostock).

Figure 7.1 GDR, Mecklenburg-Vorpommern, Development of total Staff, state-owned Fish Combinate



	1950	1960	1965	1970	1975	1980	1985	1990	1991
Total	1,17	5,01	8,38	10,97	11,36	16,28	15,77	9,5	3,06
Other Staff			1,84	2,27	2,26	7,3	5,2	2,1	1,2
Staff FFR + FFS	1,17	5,02	6,54	8,71	9,1	8,98	10,57	7,39	1,86
VEB FF Sassnitz	1,07	1,94	1,89	2,13	2,24	2,33	1,7	1,42	0,32
VEB FF Rostock	0,1	3,08	4,65	6,58	6,86	6,65	8,87	5,97	1,54

In 1950 these two companies disposed of a work force of 1.170 (Sassnitz 1.070, Rostock 100), which increased to over 6.540 (Sassnitz 1.890, Rostock 4.650) in 1960 to almost 9.000 in 1980. A further increase to nearly 10.600 persons in 1985 was attributable to re-organizations.

From 1988 until 2nd October 1989, the day the Berlin Wall was opened, the VEB Fish Combinate had a staff of about 15.300 all over the former GDR, 11.700 of which were employed onboard of the fishing vessels and on the territory of what now constitutes Mecklenburg-Vorpommern.

All of the personnel directly engaged in fishing and most of the staff of about 5.200 (1985) engaged outside of the principal fishing companies of Rostock and Sassnitz were registered in the 3 Northern Regions of the GDR, now Mecklenburg-Vorpommern.

A staff of 3.600 persons worked in processing, distribution and retail beyond the area of Mecklenburg-Vorpommern.

The crews of the Rostock-based fleet increased to an intermediate peak of 3.950 persons in 1970. With the need for catches on the more distant fishing grounds of the South Atlantic after 1977 the freezer trawlers belonging to the Sassnitz-based fleet were transferred to Rostock. This resulted in a further increase of crews to 4.130 in 1985.

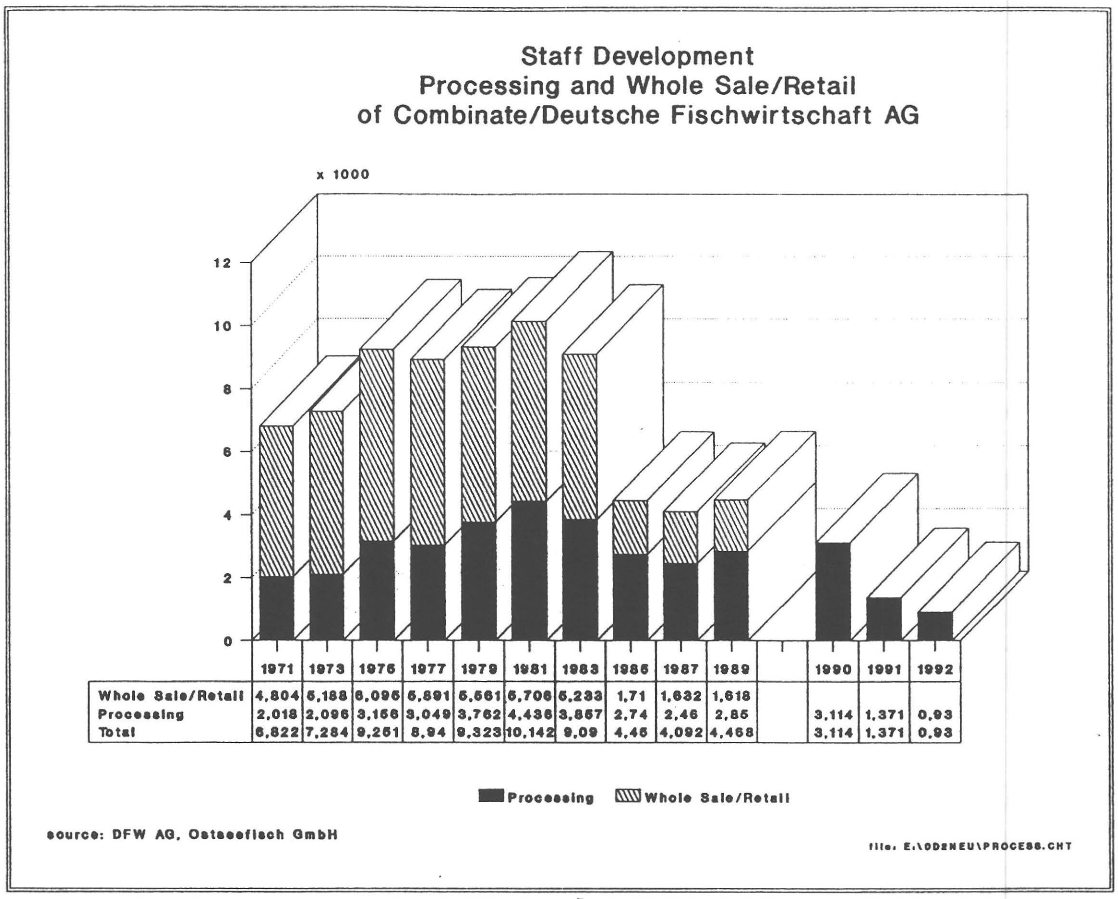
After its build-up phase ending in 1960 the shipboard labour force of the VEB Fishing Sassnitz remained relatively stable between 870 (1960) and 1.120 (1980). The switch of freezer trawlers to Rostock (1983) resulted in a decrease to 490 (1985).

7.1.2 Development of Staff in Processing and Whole Sale/Retail

Employment data of Combinate-staff engaged in processing and whole sale/retail/export are available as from 1971. The total workforce belonging to this sector accounted 6.822 persons in 1971, 10.142 in 1981, all over the former GDR. The caesura in personnel development in 1985 is attributed to the fact that some of the processing staff was subordinated to the fishing company of Rostock. In 1989 the Combinate-administered processing/whole sale/retail sector disposed of a staff of 4.468 persons, 2.850 of which were engaged in processing and 1.618 in whole/sale retail.

Figure 7.2 depicts the employment situation in the public saltwater processing sector on the territory of Mecklenburg-Vorpommern in 1988. At that time 5 companies/departments with a work force of 1.163 were directly subordinated to the central administration of the Combinate, whereas 11 companies/departments with a labour fource of 1724 persons belonged to the fishing company of Rostock. This totals 2.887 persons in processing/whole sale/retail in Mecklenburg-Vorpommern.

Figure 7.2 Development of Processing Staff in the (former) Public Fisheries Sector of the GDR or on the Territory of the new Länder (Repetition of Figure 6.5)



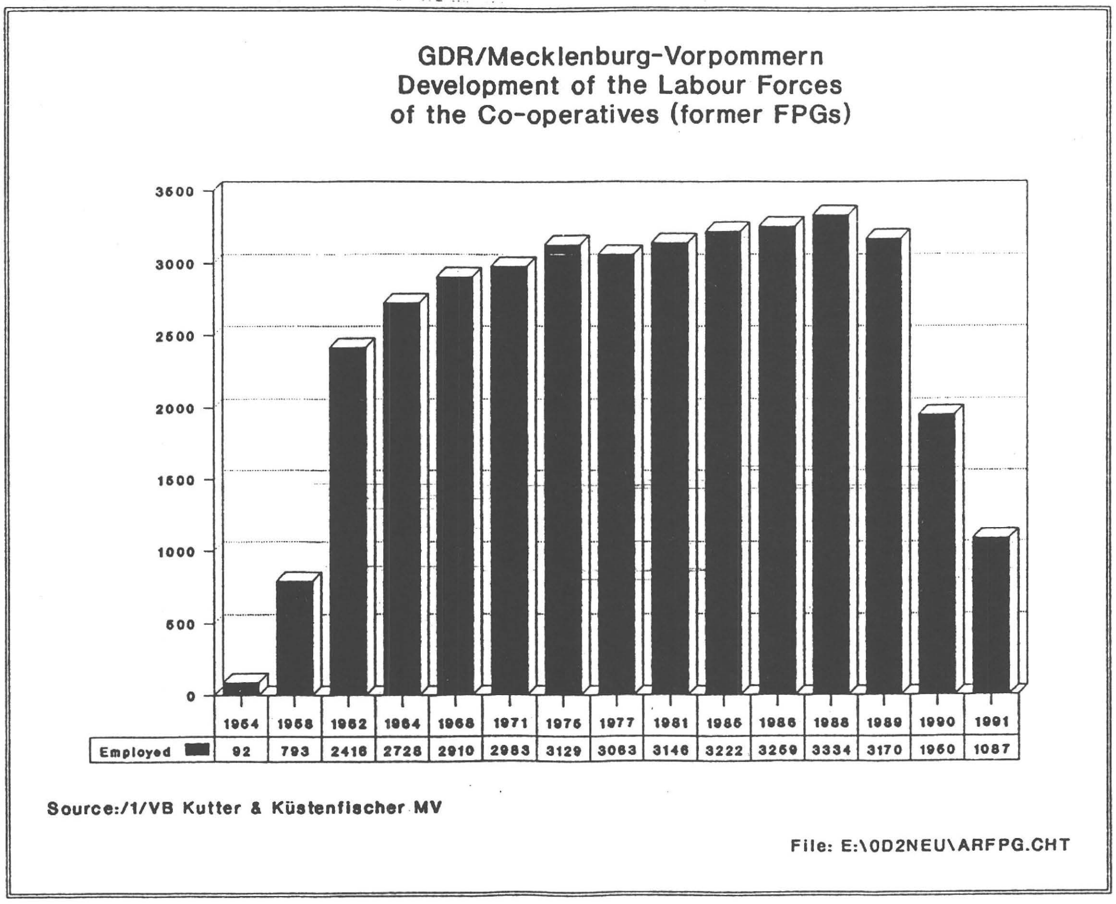
	1971	1973	1975	1977	1979	1981	1983	1985	1987	1989		1990	1991	1992
Whole Sale/Retail	4,804	5,188	6,095	5,891	5,561	5,706	5,233	1,71	1,632	1,618				
Processing	2,018	2,096	3,156	3,049	3,762	4,436	3,857	2,74	2,46	2,85		3,114	1,371	0,93
Total	6,822	7,284	9,251	8,94	9,323	10,142	9,09	4,45	4,092	4,468		3,114	1,371	0,93

7.1.3 Development of the Staff of the Co-operatives (FPGs)

After World War II only 4 cutters were left over. Only 4 fishing co-operatives were established until 1953. This low interest in fisheries caused i.a. considerable lack in the supply of the population with fish. In order to level out the lack of fishing capacity the Soviet military administration and later the GDR-government promoted the establishment of state-owned lending stations for fishing gear and vessels. This resulted in sudden interest by fishermen, who under normal circumstances had no adequate financial funds, to buy vessels or equipment of their own, to form co-operatives.

The set-up of the new co-operatives (FPGs) generated also a sudden increase of staff as from 1956. Since 1960 the development of the number of employees has remained relatively steady (Figure 7.3).

Figure 7.3 GDR/Mecklenburg-Vorpommern, Development of the Labour Forces of the Co-operatives (former FPGs)



As any co-operative in the former GDR the co-operatives in offshore and inshore fisheries (FPGs = Fischereiproduktionsgenossenschaften) were vertically integrated organizations, which were relatively selfsufficient as regards the processing of catches, repair and maintenance of their vessels, netmaking, cool storage, landing facilities. Furthermore almost all of the co-operatives owned integrated duck, chicken and mink farms, holiday hostels etc. This makes it understandable why they disposed of large non-fishing staff.

Figure 7.3 shows the growth of the socialist co-operatives by staff and the increasing collectivization of former independent fishermen. Prior to the war around 1.500 independent fishermen were registered on the territory of Mecklenburg-Vorpommern. The staff of 92 persons in 1950 and of 793 persons in 1958 outlines that not all fishermen were collectivized in the early years of the GDR.

Of special interest may be the fact, that the number of people directly employed in the catch of fish has until recently (1.385 fishermen, 1989) not been higher than at pre-war level (1.409, 1938)

The relation in number of employees and in catch in coastal fisheries had been quite well balanced under socialist conditions. The sudden change of the economy to market-economical conditions in 1990 and 1991 and the desintegration of the centralized fisheries structure has caused considerable imbalance as regards employment and unemeployment.

Table 7.I Enterprises, Staff and Boats on the Territory of Mecklenburg-Vorpommern

			Fishing boats			
Year	Enterprises	Staff	total	with engine	without engine	catch [t]
1925	1199	1644	1283	80	1203	16140
1933	1127	1584	1480	168	1312	16870
1938	-	1409	1422	283	1139	21640

7.1.4 Development of Staff in Inland Fisheries

Staff statistics of inland fisheries of the former GDR are not available. A total number of **3.779 persons** has, however, been reported on the 1986 Party Convention of Inland Fisheries. This number is split into different ownerships as follows:

- 31 co-operatives with a staff of **1.592 persons** (1988)
- 22 **public sector enterprises**, 4 inter-cooperative establishments and 22 "other socialist" and private enterprises with a work force of **2.187 persons**.

Table 7.II Staff in Inland Fishery Co-operatives by former GDR-Regions (Bezirke)

Region	Staff	Women
Schwerin	14	3
Rostock	0	0
Neubrandenburg	252	47
3 Northern Regions	266	50
Berlin	16	3
Cottbus	33	3
Dresden	50	16
Erfurt	0	0
Frankfurt	145	38
Gera	29	8
Halle	199	58
Karl-Marx-Stadt	179	44
Leipzig	27	11
Magdeburg	97	32
Potsdam	539	175
Suhl	12	1
Other Regions	1326	389
Grand Total GDR	1592	439

On the territory of **Mecklenburg-Vorpommern** a total of about 840 persons engaged in inland fisheries has been reported for the years prior to the "Wende" in 1989.

7.2 Developments after the German Re-unification

As a result of the re-unification the former GDR was ipso jure integrated into the legal system of the European Community. In other words all of the common jurisdiction is automatically applied on the territory of the former GDR. However, taking account of the socio-economic and legal particularities in the former GDR a number of exceptions and phasing allowances have been permitted.

Council Regulation No. 3575/90 concerning the activities of the structural Funds in the territory of the former German Democratic Republic provided the basis for the establishment of a Community Support Framework (CSF). In consequence of the adoption of Council Regulation No. 3575/90 the new Federal Länder were made elegible for Community structural assistance.

As regards the fishery sector the actions and measures implemented under this CSF must be in conformity with the common fisheries policy. Actions and measures are coordinated with Community financial tools for restructuring fisheries in order to facilitate economic activity. The coordinating body for fisheries on the territory of the new Land Mecklenburg-Vorpommern is its Ministry of Agriculture.
The common financial instruments implemented in all of the member states of the EC are also applicable to the new Länder, specifically for the coastal Land Mecklenburg-Vorpommern. The specific financial instruments are:

Regulation (EEC) No 4028/86 (restructuring and renewal of the fishing fleet, modernization of the fishing fleet, development of aquaculture, facilities as fishing ports);

Regulation (EEC) No 4024/89 (improvement of the conditions under which fishery and aquaculture products are processed and merketed).

With regard to the integration of the Ex-GDR-fleet, within the framework of R. 4028/86 and with a view of safeguarding relative stability of the common fishery under the principles of R. 170/83 the German government provided an amendment to its Multiannual Guidance Programme. This transitionanl MGP had its main focus on a drastic reduction of the GDR fishing fleet to a size of 27.950 GRT/44.500 kW by 31.12.91 (by 3.10.90 the fleet had a size of 72.700 GRT/89.600 kW).

The distant fleet had been particularly affected by this programme, but a reduction of the Baltic cutter fleet of 30% had also been envisaged.

7.2.1 Development of the Labour Forces in the former Public Saltwater Fisheries Sector

As from 3rd October 1990 all of the combinate enterprises were transformed to private limited companies concentrated under the direction and ownership of the TREUHAND under the umbrella of the holding Deutsche Fischwirtschaft AG. All of the smaller processing and retail outlets all over the territory of the new Länder have been privatized, i.e. sold to its former owners or to new proprietors. All of the "bulk" processing, whole sale and retail sector companies had been outsourced and concentrated in the sub-holding Ostseefisch GmbH, which has been privatized as from the beginning of 1992.

The distant fleet has been reduced from 51 vessels in 1989 to 7 in early 1992, whereof only 4 are actually engaged in fishing. The near distance fleet of Sassnitz with 42 cutters in 1989 has been liquidated. 14 cutters were sold to a new cooperative. Hence the labour force of the former combinate decreased from a total of 15.770 persons in 1989 to 3.060 at the end of 1991.

The labour force of the former VEB Fischfang Rostock, now Rostocker Fischfang Reederei GmbH, was reduced from 8.870 in 1989 to 1.540 at the end of 1991. Quite some of the reduction of the total staff is attributable to the outsourcing of the processing sector owned by this company to Ostseefisch GmbH and the outsourcing of the port facilities in Rostock and of the former repair, maintenance and engineering sector. **The shipboard staff of the distant fleet reduced by 91%** from 4253 at the 2nd October 1989 to 385 at the end of 1991.

The port and warehousing operations of the VEB Fischfang Rostock were concentrated under the roof of the company Rostocker Fischereihafen GmbH, who now administeres all of the land based facilities and is being more and more engaged in non-fishery related activities. The company disposed of a staff 496 at the end of 1991. Further disintegration and staff reduction is likely.

All of the fishing and aquaculture operations of the former VEB Fischfang Sassnitz have been liqidated. The successor company Sassnitzer Fang, Verarbeitungs- und Hafenbetriebsgesellschaft administeres like its sister in Rostock all of the land based facilities. The processing part has been outsorced, renamed to Rügenfisch GmbH and sold to Ostseefisch GmbH. At the end of 1991 the company had a remaining personnel of 433. Under consideration of the staff employed by Rügenfisch GmbH the non-fishing work force has been reduced by 43% versus 1989.

The repair, maintenance and engineering sector has been transformed to Hanseatische Sondermaschinenbau- und Ingenieur GmbH, based in Rostock. Staff accounted 134 persons at the end of 1991. The former VEB FISHIMPEX, now Fisch-Import-Export Handelsgesellschaft mbH, with a staff of 5 at the end of 1991 did not go over to Ostseefisch GmbH and will be liquidated.

All of the above companies are awaiting privatization or liquidation.

7.2.2 Development of the Labour Forces in the former Public Saltwater Processing Sector

The processing sector of the former combinate has been concentrated within the new holding structure Ostseefisch. This sector on the territory of Mecklenburg-Vorpommern disposed of a staff of 3098 by the 1st July 1990. The work force decreased to 1127 at the end of 1991 and to 481 by mid 1992. The labour force developments in the processing sector represent a reduction of more than 71 % by the end of 1991 and almost 88 % by mid 1992. (See table 6.III on page 79).

7.2.3 Development of the Labour Forces of the former Co-operative Sector

Most of the former socialist co-operatives were able to keep together and to continue operation though on a drastically lower level. However, most discharged of their non-generic departments. Total staff in the co-operatives has reduced from 3200 in 1989 to 1087 at the end of 1991 (Reduction by 66 %).

The **number of fishermen** has decreased from 1385 to 751 despite the entrance of fishermen originating from the former VEB Fischfang Sassnitz (**Reduction of 46 %**). A further reduction to about 500 by the end of 1992 is likely. By **adding the fishermen** (490) of the **former Sassnitz fleet** to the numbers before (490 + 1385 = 1875) the reduction reaches **60 %**. The **non-fishing staff** has been reduced from 1815 in 1989 to 336 in 1991, which represents a reduction of **81%**. Until now it is not clear to which extent this personnel could be re-employed by newly established spin-offs or MBOs.

Table 7.III Development of Employment in co-operative Fisheries between 1989 and 1991, Zones and Co-operatives

Employed (total and fishermen thereof)										
	1.1.89		1.1.90		1.1.91		1.7.91		1.1.92	
Zones	tot	fish	tot	fish	tot	fish	tot	fish	tot	fish
Zone 1, Wismar	397	167	376	167	186	100	85	81	85	80
Zone 2, Rostock	407	153	408	153	363	154	276	105	79	59
Zone 3, Stralsund	311	115	311	115	182	72	162	70	89	39
Zone 4, Greifswald	399	179	405	179	249	131	214	135	206	113
Zone 5, Wolgast	785	303	790	303	419	176	369	170	258	169
Zone 6, Rügen (Isle of Rügen)	901	468	887	473	551	315	466	319	370	291
Totals	3200	1385	3177	1390	1950	948	1572	880	1087	751

Source: Verband der Kutter- und Küstenfischer Mecklenburg-Vorpommern

Table 7.IV Reduction of Employment in Co-operative Fisheries following the German Re-unification and Adaption to Market Economy between 1st Jan. 1989 and 31st Dec. 1991, by coastal Zones

	total		crews		non-fishing staff	
Zone	No.	%	No.	%	No.	%
Zone 1, Wismar	312	79%	87	52%	225	98%
Zone 2, Rostock	328	80%	94	61%	234	92%
Zone 3, Stralsund	222	71%	76	66%	146	74%
Zone 4 Greifswald	193	48%	66	37%	127	58%
Zone 5 Wolgast	527	67%	134	44%	393	81%
Zone 6, Rügen	531	59%	177	38%	354	82%
Totals	2,113	66%	634	46%	1,479	81%
Remaining Work Force	1,087	34%	751	54%	336	19%

7.2.4 Development of the Labour Force in the Inland Fishery Sector

Prior to the "Wende" the inland fisheries sector of Mecklenburg-Vorpommern had a labour force about 840 persons. It is estimated that the remaining labour force has since reduced to about 360 persons. Until mid 1992 298 persons in 56 fishery and 2 support enterprises were registered with the Ministry of Economic Affairs of Mecklenburg-Vorpommern. Further registrations are due with the settling of property queries.

7.3 Synopses of Employment in the Fisheries Sectors

7.3.1 Synopsis of the overall Development of the Fishery Labour Forces on the Territory of the new Länder

Table 7.V 1989 Synopsis, Labour Fources on the Territory of the former GDR

Sector	crews	non-fishing/ processing	trade	others	subtotal	total
Combinate						15528
Distant Fleet	3963	4050			8013	
Near Dist. Fleet	485	1109			1594	
Processing & Trade		4530			4530	
Institute + Engineering			1171		1171	
Administration				220	220	
Co-operatives	1385	1815				3200
Professional Inland Fisheries						3779
Total GDR						22507

Table 7.VI 1991 Synopsis, Labour Forces on the Territory of the new Länder

Sector	fishing	process	trade	others	subtotal	total
Deutsche Fischwirtschaft AG						3062
Distant Fleet	385			226	611	
Former near Distance Fleet		320			320	
Other Sectors				760	760	
Ostseefisch		828	426	117	1371	
Privates and Co-operatives	1109	583	338			2030
Saltwater non-fishing Sectors				158		158
Inland Fisheries (estimated 40% of former labour forces inclusive of processing)	1510					1510
Inland non-fishing Sectors (estimated)				500		500
Saltwater						5006
Inland (inclusive of Inland Divisions of Ostseefisch)						2254
Total						7260

7.3.2 Synopsis of the overall Development of the Fishery Labour Forces on the Territory of Mecklenburg-Vorpommern

Table 7.VII 1989 Synopsis, Labour Forces on the Territory of the 3 Northern Regions

Sector	crews	non-fishing			subtotal	total
Combinate						13990
distant fleet	3963	4050			8013	
near dist. fleet	485	1109			1594	
processing & trade					2992	
institute + engineering					1171	
administration					220	
Cooperatives	1385	1815				3200
Professional Inland Fisheries						840
Total 3 Northern Regions						18030

Table 7.VIII 1991 Synopsis, Labour Forces on the Territory of Mecklenburg-Vorpommern

Sectors	fishing	process	trade	others	subtotal	total
Deutsche Fischwirtschaft AG						2818
distant fleet	385			226	611	
former near dist. fleet		320			320	
other sectors				760	760	
Ostseefisch		584	426	117	1127	
Privates and Cooperatives	1109	583	338			2030
Non-Fishing Sectors				158		158
Inland Fisheries	300	157	100			557
Inland Non-Fishing Sectors				31		31
Saltwater	1494	1487	764	1261		5006
Inland	300	157	100	31		588
Total	1794	1644	864	1292		5594

7.3.3 Synopsis of the Development of Fishery Labour Force by Zones

Table 7.IX exhibits the labour forces on the territory of Mecklenburg-Vorpommern by Zones and Districts (Kreise). In Mecklenburg-Vorpommern only one area is worth mentioning as Travel-to-Work-Area, the City of Rostock and the surrounding districts (Kreise). Rostock had been the all dominating centre of marine industries, hence also of fisheries. Furthermore the largest part of the processing industry was centered in Rostock and in the districts nearby.

The second largest agglomeration has been and is the island of Rügen, which is, however, traditionally and by nature a closed area in itself. Most of the fishery and landing sites, the co-operatives and enterprises are scattered around the island(s), distances are small, migration of personnel does not occur. What has been said for the island of Rügen, holds also true for the island of Usedom (district Wolgast).

All of the other Travel-to-Work-Areas and districts are characterized by small fisheries along the mainland, the inland lagoones and around the islands. Only the existance of co-operatives under the socialist regime made believe, that there are larger agglomerations. As the development in recent months has shown, not all of the fishermen felt tied to their co-operatives, when they had the freedom to go. Their homes and landing sites are scattered along the coast, their boats are small, both of which allows cooperation only on a smaller and very regional scale. Common and traditional are cooperations in passive fisheries with fixed trap-nets and weir-bascets.

The fishery sites in inland fishery are scattered around the 2000 lakes of the lake district. A true Travel-to-Work-Area with a meaningful large agglomeration of personnel is not existent. Medium sized agglomerations are to be found in the centre of the Mecklenburg Lake District (Mecklenburger Seenplatte).

Table 7.IX Zones dependent on Fisheries on the Coasts and inland of Mecklenburg-Vorpommern (31.12.91)

Districts (Kreise)	Fishermen	Processing	Wh.Sale/Ret.	Others	Totals
Zone 1, Wismar	92	29	32	9	162
Zone 2, Rostock	499	635	331	923	2388
Zone 3, Stralsund	48	70	23	65	206
Zone 4, Greifswal	236	137	32	54	459
Zone 5, Usedom	217	174	126	34	551
Zone 6, Rügen	402	442	220	176	1240
Coast total	1494	1487	764	1261	5006

Continuation Table 7.IX (Inland Zones)

Districts (Kreise)	Fishermen	Processing	Wh.Sale/Ret.	Others	Totals
Zone 7, Schwerin	94	73	42	18	227
Zone 8, Neubrandenburg	206	84	58	13	361
Inland total	300	157	100	31	588
MV total	1794	1644	864	1292	5594

Sources:
1. Deutsche Fischwirtschaft AG
2. Ostseefisch GmbH
3. TREUHAND
4. PGB Neubrandenburg
5. Ministry of Economic Affairs of Mecklenburg-Vorpommern
6. Verband der Kutter- und Küstenfischer
7. Own Estimations

7.4 Perspectives of Fisheries and Work Forces

Table 7.X Perspective 1992, Labour Forces on the Territory of Mecklenburg-Vorpommern

Sectors	fishing	process	trade	others	total
distant fleet	385			35	420
former near dist. fleet (Sassnitz)				40	40
Ostseefisch		300	100	80	480
Privates and Cooperatives	800	500	300		1600
Non-Fishing Sectors				200	200
Inland Fisheries	300	100	100		500
Inland Non-Fishing Sectors				30	30
Saltwater	1185	800	400	355	2740
Inland	300	100	100	30	530
Total	1485	900	500	385	3270

Assumptions:
1. The holding Deutsche Fischwirtschaft AG will be liquidated
2. The landbased staff of the distant fleet (Rostocker Fischfang Reederei GmbH) will drastically be reduced
3. The processing arm of Sassnitzer Fang-, Verarbeitungs- und Hafen GmbH will be liquidated, the company will concentrate on port administration
4. Processing of the Ostseefisch GmbH will be concentrated on two locations (Schwaan, Sassnitz) and modernized, the staff stabilizes on the level of mid 1992 (480 persons)
5. Private and co-operative fisheries will further concentrate
6. The non-fishing sector may have a tendency to recover and to slightly increase staff
7. Inland fisheries will stabilize except in processing
8. Inland non-fishing will stabilize at about 30 persons

With the integration into the Community and the adaption to the rules of its markets, hence the possibility of drawing like the "old" Federal Republic of Germany mainly on imports, the fishery sector of Mecklenburg-Vorpommern as large as under the socialist regime has to great an extent been made obsolete.

The distant fleet and its supporting functions have with the exception of a rudimentary fleet been liquidated. Processing has due to lack of adequate technology, hence competitiveness, been drastically reduced. Future fisheries in Mecklenburg-Vorpommern will mainly be traditional offshore and inshore fisheries with cutters and an abundance of open boats. However, also this sector has been drastically reduced, hence its work force.

Survival of the remnants of the fleet under the conditions of a market economy will depend on the ability to establish competitiveness in the catch of herring, which is with prices as low as DM 0,40/kg not an easy task. The reduction of herring catches is prove of the difficulties. Due to biological and ecological constraints catches of other species cannot make good the loss of income in herring landings.

Mecklenburg-Vorpommern has traditionally been an area dominated by agriculture. Industries were prior to World War II virtually not existant. The development of marine industries like shipbuilding, shipping, marine logistics, fisheries and shipbuilding related mechanical engineering under the socialist regime were not only measures to make the GDR independant from hard currency imports but also interventions to foster the development of the non-industrialized northern regions.

The City of Rostock was beneficiary of most of the development of the marine sectors which is demonstrated by the fact, that it had a population of 90.000 prior to the war which increased to about 250.000 in 1990.

All of the marine industries have as from 1990 decreased capacities and work force by 60 to 70%. The restructuring of all economical and administrative sectors resulted in an overall unemployment quote stabilizing at about 16% (Sept. 1992) for Mecklenburg-Vorpommern. Some of the more rural districts have an "official" unemployment quote of more than 22%. The island districts of Rügen and Wolgast register an unemployment quote of about 20%. These quotes are insofar unrealistic as the numbers of unemployed can at least be doubled with the numbers of persons assisted by intervention measures like job creation and retraining.

Stabilizing the fisheries sector plus diversification measures would have to play an important role in coastal areas, with special emphasis on the island districts of Rügen and Usedom, where 60% of the population is in one or the other way unemployed or without job.

7.4.1 The Flow of Labour Forces after the German Re-unification

The work force has insofar been restructured as many of the formerly employed were retired, went back - in the case of shipboard staff - to their district or community of origin or back into their original profession. Many of the qualified persons were absorbed by West German or Dutch fishing companies.

68,5% of the orginal shipboard labour force had their homes on the territory of Mecklenburg-Vorpommern, only 31,5% were originating from other regions of the former GDR. The inland regions of the former GDR had contribution of between 2 and 3% each to the labour force of the distant fleet.

More narrowly the former Region of Rostock (Bezirk Rostock) contributed 57% of the shipboard labour force, whereas 43% had their place of origin outside of this region. The table below is based on 2622 out of 3148 seamen of the distant fleet registered in 1990. The discrepancy in numbers is explained by the dynamics of changes as from 1989.

The percentages have not changed very much following the shake out of labour forces with the reduction of the distant fleet. Out of a number of 335 seamen registered at the 15th February 1992 72,5% originated from the Land of Mecklenburg-Vorpommern and almost 60% from the former Region of Rostock.

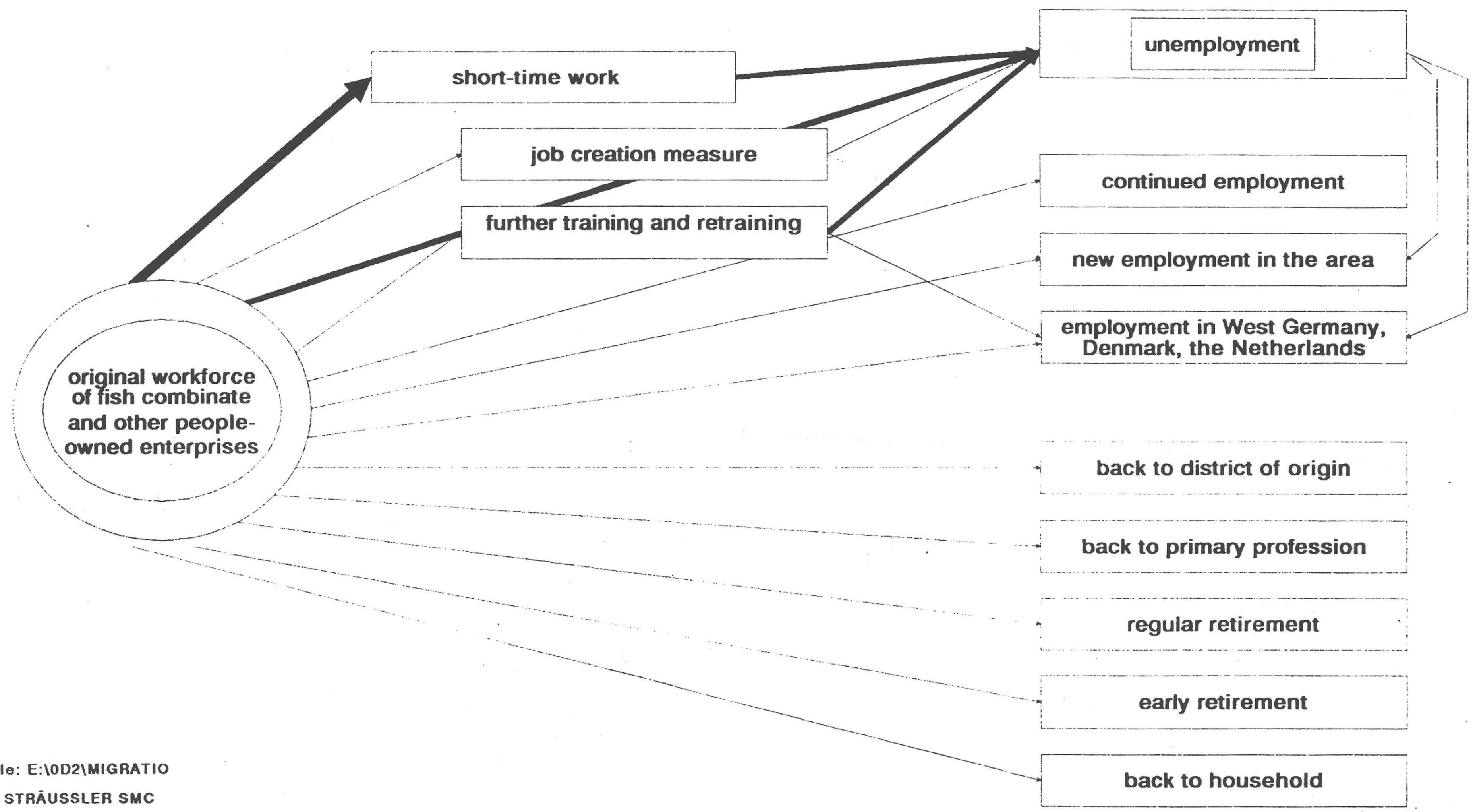
Table 7.XI Regions of Origin of Fishery Staff made redundant upon the Restructuring of the Distant Fleet

	31.12.1990		15.02.1992	
Region (Bezirk)	No.	%	No.	%
Neubrandenburg	160	6,10%	25	7,46%
Rostock	1495	57,02%	197	58,81%
Schwerin	141	5,38%	21	6,27%
Total MV	1796	68,50%	243	72,54%
Berlin	77	2,94%	8	2,39%
Frankfurt/Oder	84	3,20%	10	2,99%
Potsdam	84	3,20%	9	2,69%
Magdeburg	87	3,32%	11	3,28%
Halle	130	4,96%	10	2,99%
Erfurt	55	2,10%	8	2,39%
Jena	38	1,45%	3	0,90%
Leipzig	69	2,63%	12	3,58%
Cottbus	54	2,06%	5	1,49%
Dresden	73	2,78%	8	2,39%
Chemnitz	75	2,86%	8	2,39%
Total outside MV	826	31,50%	92	27,46%
Region Rostock	1495	57,02%	197	58,81%
Tot.outs.Reg.Rostock	1127	42,98%	138	41,19%
Totals	2622	100,00%	335	100,00%

Source: Seamens'Register at Rostock

Figure 7.4

Flow of Workforce upon the Reconstruction of the East German Economy (Fisheries Sector)



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8. Analysis of the socio-economic impact of the Common Fishery Policy with a particular emphasis on the concerned zones

Unemployment is the predominant issue in the new Länder of the Federal Republic of Germany. Official unemployment statistics indicate an overall unemployment quote of 11,1 % as at the end of 1991. The quote detoriated to 17 % by the end of January 1992 due to mass dismissals at the end of 1991. End of August 1992 a quote of 14,8 % was registered.

The official unemployment rate is only one half of the coin. It reflects only those registered as unemployed. In addition to the great number of unemployed there are, however, millions of people presently engaged in so-called employment measures, e.g. in job creation companies, as short-time workers with 70% of work until virtually no work (zero work) plus quite a number of people in vocational training. In fact the official unemployment rate must be doubled to receive a fairly true picture of actual unemployment. There are regions, in particular in Mecklenburg-Vorpommern, where the actual unemployment quote is in fact 50% or higher.

The creation of new jobs does in no way hold pace with the massive destruction of jobs in primary and secondary sectors, hitherto regarded important for export to the former USSR and for maintaining self-sufficiency in the GDR. Concepts for the active endogenous generation of jobs are not (yet) available.

8.1 Unemployment in Mecklenburg Vorpommern

8.1.1 Summary 1991

Mecklenburg-Vorpommern had a population of 1,932,580 on the 3rd October 1990, when the German Democratic Republic joined the Federal Republic of Germany. A labour force census carried out on the 30th November 1990 registered a working population of 940,086.

During the course of 1991 a mean number of 209,573 were registered unemployed, another 81,270 were in search of jobs, because the loss of their jobs appeared imminent.

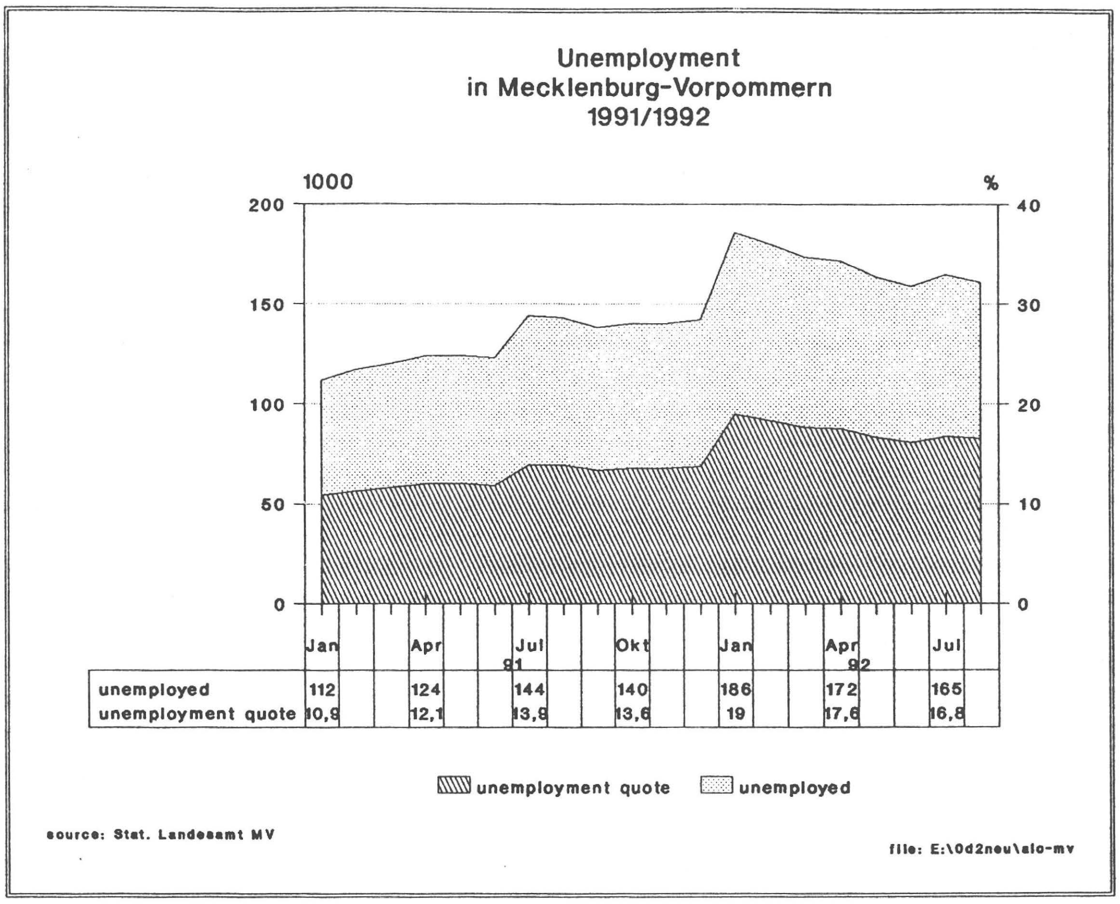
The mean 1991 unemployment quote was 12,5 %. The average quote for men was 11,2%, for women 13,8% respectively.

A mean number of 3,827 new positions was offered during the same time.

An average of 27,420 were employed in job creation measures, another 181,845 in short-time-labour positions, which to great an extent were eliminated at the end of the year.

A mean number of 36,500 persons were attending vocational trainings.

Figure 8.1 Unemployment in Mecklenburg-Vorpommern, 1991/1992



Source: Landesarbeitsamt Nord

8.1.2 Development until August 1992

Unemployment has stabilized on a high level with a quote of around 17 % leaving 165,000 persons unemployed. Detoriation tendencies are to be seen with the general decline of the economy. Short-time-work is down to 20,000 positions.

28,000 persons have been placed into new jobs since 1st January, thereof 50%, however, into job creation measures.

8.1.3 Instruments of the employment policy

The instruments of the employment policy are contributing to great an extent to the avoidance and reduction of unemployment. Without the employment policy measures between 262,000 (January 92) and 223,000 (August 92) persons would additionally have to be registered as unemployed.

55,000 persons were employed in job-creaton measures at the end of January 1992, 43,000 end of August 1992 . Transitional pay and early pensions were paid to a total of 99,000 persons. There are more than 2,600 vocational training programmes with a capacity of 62,000 participants in Mecklenburg-Vorpommern. As from January 1992 85,000 persons have been entering qualification programmes.

8.2 Unemployment in different regions of Mecklenburg-Vorpommern and in the Fishery Sector

Unemployment in Mecklenburg-Vorpommern is lowest in the western part of this land and in the cities. Highest unemployment is experienced in the south-eastern part and in agricultural areas. In some of the administrative districts (Kreise) unemployment had been higher than 28% in January 1992. In August 1992 quotes are reported to be highest at 24.6%.

Among those districts most seriously affected by unemployment are the island districts Rügen (isle of Rügen) and Wolgast (isle of Usedom). Fishery and fishprocessing were for centuries in both districts the dominating sources of income.

More serious than the high numbers of unemployed is the extremely low availability of new positions. New positions are registered for merely 2% of the unemployed in Mecklenburg-Vorpommern . This ratio of new positions versus unemployed goes that far, that 2 positions are on offer for a total of 4.464 unemployed in the district of Anklam. Early pensions have as from January 1992 developed to be the most promising instruments to reduce unemployment and the unemployment quote.

It is obvious, that this situation is unbearable and that active measures will have to be taken to encourage endogenous entrepreneurship. The instruments of the employment administration do certainly help to qualify people. But if there are no companies and no jobs to offer, where does qualification lead?

Table 8.I Unemployment by Zones and Districts, January 1992 and August 1992

	Jan 1992			Aug 1992		
	unempl (1000)	quote %	open pos	unempl (1000)	quote %	vacancies
Zone 1, Wismar	12,9	21.8	329	10,9	18.0	266
Grevesmühlen	4,3	23.9	28	3,3	18.5	43
Wismar	8,6	19.7	301	7,6	17.5	223
Zone 2, Rostock	53,1	18.6	922	44,7	15.7	1,084
Rostock	24,8	14.5	415	20,8	12.1	711
Bad Doberan	5,4	26.6	147	4,3	12.1	113
Buetzow	2,8	22.8	137	2,7	22.0	46
Guestrow	7,6	20.0	55	6,9	18.2	104
Ribnitz-Damgarten	8,4	28.8	95	6,7	22.8	66
Teterow	4,1	30.7	73	3,3	24.4	44
Zone 3, Stralsund	12,1	18.8	415	11,0	17.6	543
Stralsund	8,8	17.5	359	7,7	15.2	459
Grimmen	3,3	20.0	56	3,3	19.9	84
Zone 4, Greifswald	17,8	22.4	179	17,0	21.0	242
Greifswald	7,7	15.5	156	7,8	15.7	180
Anklam	4,5	26.8	2	3,9	23.6	49
Ückermünde	5,6	24.9	21	5,3	23.8	13
Zone 5, Wolgast	6,1	24.3	107	5,0	19.7	83
Wolgast	6,1	24.3	107	5,0	19.7	83

Continuation Table 8.I

	Jan 1992			Aug 1992		
	unempl (1000)	quote %	open pos	unempl (1000)	quote %	vacancies
Zone 6, Rügen	8,9	24.8	131	7,4	20.5	76
Bergen auf Rügen	8,9	24.8	131	7,4	20.5	76
Zone 7, Schwerin	30,9	17.8	1050	27,1	15.5	652
Schwerin	10,7	12.3	547	9,6	11.1	449
Gadebusch	1,9	19.3	61	1,3	13.6	39
Hagenow	4,2	12.9	212	3,7	11.4	54
Ludwigslust	4,8	15.9	43	4,1	14.6	30
Luebz	2,9	19.3	19	3,0	19.5	32
Parchim	3,8	20.5	138	3,2	17.0	31
Sternberg	2,6	24.6	30	2,2	21.0	17
Zone 8, Neubrandenbg.	44,1	23.0	589	38,1	20.4	358
Neubrandenburg	10,4	14.8	202	9,1	12.9	128
Altentreptow	2,4	24.5	37	2,4	24.6	19
Demmin	5,1	25.6	18	4,7	23.6	10
Malchin	4,4	23.7	31	3,9	20.9	41
Neustrelitz	6,2	22.7	114	4,6	17.0	65
Pasewalk	3,6	19.6	11	3,9	22.9	29
Röbel	2,2	28.4	47	1,7	21.8	22
Strasburg	2,9	21.7	61	2,0	18.1	13
Waren	6,9	25.8	68	5,8	21.9	31
Mecklenburg-Vorpommern	185,9	19.0	3,722	161,0	16.6	3,30

Attention!!: The above table is based on Zones dependent on Fisheries instead of Administration Employment Districts
underlined = districts with high unemployment (> 18%) and dependence on fisheries

Unemployment in Zone 1 has been recorded with 10,900 persons or 18% in August 1992 (12,900 persons or 21.8% in January 1992). Unemployed from the fisheries sector in zone 1 are appraised with about 160 persons in August 1992.

In Zone 2, Rostock, which equals also the employment administration district Rostock, some 44,700 persons or 15,7% (53,100 or 18,6%) are registered unemployed. The zone accomodated the largest agglomerations of fisheries and ancillaries in socialist times . Unemployed from fisheries are nontheless hardly tracable, because many are not filed as originating from the fisheries sector, others are registered in their district of origin and quite a few have found new employment in West Germany or in other Community countries.

Zone 3, Stralsund, has never and is not dependent on fisheries. Even the unemployment quote does not reflect any former dependency. The municipality of Stralsund is however still to large an extent depending on shipbuilding. Its shipyard had been responsible for exports of fishing vessels to the USSR.

Zone 4, Greifwald has with 17,000 persons or 21% (17,600 or 22.4%) the highest unemployment of all defined zones. Both the district and municipality of Greifswald are, however, not dependent on fisheries. Unemployed from the fisheries sector contribute with about 100 persons to an extremely small extent to overall unemployment.

Zone 5, Wolgast, mainly consisting of the Isle of Usedom is traditional fisheries territory. Overall unemployment is registered with 5,000 persons or a quote of 19.7% (6,100 or 24.3%). Contributors to the unemployment quote are fisheries, agriculture, former union hostellery, armed forces and former shipbuilding. Unemployed of the fisheries sector are estimated with 240 persons (210) which represent a share of below 5% (3.4%) of total unemployment. Unemployment in fisheries, however, has an unfavourable psychological effect, because this sector has always been regarded a primary one and a strength of the zone.

This is the more the case for the islands of zone 6, Rügen. Rügen had the second largest concentration of fisheries, processing and ancilleries in socialist times. The destruction of the fisheries sector in the zone of Rostock makes Rügen now the most important zone. Total unemployment is recorded with 7,400 persons or 20.5% in August 1992 (8,900, 24.8%). It is estimated that the share of unemployed from the fisheries sector is about 1,500 persons or 20% (1,300, or 15%). The increasing numbers reflect the ongoing loss of jobs in the processing sector.

Unemployed of the inland fisheries sector in zones 7, Schwerin, and 8, Neubrandenburg do with about 180-200 persons not at all influence overall employment.

The following table is inconsistant in that repect that it registeres only newly filed unemployed originating from the fisheries sector. Many of this sector, however, are filed in other segments of the unemployed register.

Table 8.II Additions of new Unemployed and new Vacancies of the Fisheries Sector during the Course of 1991

Employment Adm. District	new Unemployed			new Vacancies
Fishery Zone	Total	Men	Women	open Pos.
Schwerin includes Zones Wismar & Schwerin	202	119	83	9
Rostock equals Zone Rostock	988	797	221	25
Stralsund includes Zones Stralsund, Rügen, Wolgast and part of Zone Greifswald	948	716	232	101
Neubrandenburg includes Zone Neubrandenburg & part of Zone Greifswald	107	89	18	62
Mecklenburg-Vorpommern	2,275	1,721	554	197

Source: Arbeitsamt Nord

Notes:

1. Only additions of newly unemployed originating from fisheries are being registered by the Employment Administration
2. For stock keeping purposes, however, they are classified and registered either under agriculture, forestry, fisheries or under their primary or secondary profession
3. Furthermore the unemployed are only allocated to economical sectors if and when they immediately prior to their new registration have been in work. In case they have been on vocational training or in job creation measures they are being recorded in other segments of the register
4. All in all the unemployment statistics neither give a true picture of the mass loss of jobs in 1990/1991 nor does it give an estimate of true unemployment in the fisheries sector.
5. Many of those made redundant are being placed on early pensions, in vocational trainings or in job creation measures
6. It can be assumed that those being rendered unemployed during the course of 1991 are still without job

8.3 Socio-economic impact of the Common Fishery Policy on Mecklenburg-Vorpommern

Table 8.III Synopsis of Staff Development in the Fisheries Sector of Region D2, 1989-1992

Sector	Dimension	1989	1991	1992 Perspective
Distant Fleet	Vessels	46	8	8
Offshore and inshore Fleet	Vessels	1237	937	900
Total Staff in Fisheries (inclusive of Inland and Process)	**Persons**	**18030**	**5594**	**3270**
Crews of distant Fleet	Persons	3963	385	385
Shore Staff of dist. Fl.	Persons	4050	226	35
Process & other Staff adjoined to distant fleet	Persons	4383	1887	480
Fishermen & Crews in Baltic Fisheries	Persons	1870	1109	800
Process & Others in Baltic Fisheries	Persons	2924	1399	1040
Fishermen, Proc. & Others in Inland Fisheries	Persons	840	588	530
Saltwater	Persons	17190	5006	2740
Inland	Persons	840	588	530

The distant fleet has almost been terminated. Its number of vessels has been reduced from 46 to 8 in 1992. Its labour force has dwindled acordingly: crews were trimmed from almost 4,000 persons in 1989 to 385 in 1992. Shore staff, which, however, included also processing and port operations personnel, was downgraded from a total of 4,050 persons to 226. A fleet of 8 or possibly 7 vessels does not need as many administration personnel. It is therefore to be expected that shore staff will further be reduced to a maximum of 35 persons by the end of 1992.

In addition to the above numbers the former fish combinate disposed of a processing, engineering, administration and scientific staff of more than 4,000 persons in 1989. This has been reduced to 1,900 persons by the end of 1991. The processing sector had been sold to a private holding as from early 1992. Further drastic reductions are underway. General engineering and mechanical engineering will also be outsourced and at the end of the day not any more be connected to the fisheries sector. The remnants of this staff will at end of 1992 only be employed in processing and amount to 480 persons.

The same tendencies are being experienced in coastal fisheries. In 1989 a number of almost 4,800 persons was employed in co-operative and state-owned Baltic fisheries, processing and associated activities. The state-owned Baltic fishing fleet has been dissolved. 14 cutters of this fleet and its crews have joined the co-operative sector. The co-operatives have transformed into co-operatives in accordance with EC-rules and discharged of ancilliary activities. The process of desintegration to single ownerships is carrying on. All in all the work force of this sector has dwindled down to 2,500 persons by the end of 1991. By the end of 1992 a total staff of about 1,800, thereof 800 persons regarded as fishermen, may be realistic.

There, where fishery has in the past been the most important economic factor, especially in the island areas of Rügen and Usedom, there the reduction of the fishing fleets and ancilliary activities are having a devasting effect on the local economy and on employment. Longer unemployment will cause demotivation with all its negative effects on a positive development.

While revising this study in August/September 1992 we can add some more facts on the negative effects of unemployment in Region D2. Mecklenburg-Vorpommern is the one of the new Länder with the highest unemployment quote, with the lowest development of new enterprises and industries, with the highest and fastest developing rate of criminality and wright wing radicalism. The suburb of Rostock-Lichtenhagen is to great an extent populated by unemployed originating from the marine sectors of the former GDR, i.a. fisheries.

8.3.1 Impact of further Reductions of the Fishing Fleet within the framework of the MAGP

The fleet of open boats in coastal and inshore fisheries is to almost 100% dedicated to passive fishing methods, which in fact means that the boats are only transport means for the nets and the fish caught. The 1993-1996-programme of the Association of Cutter and Coastal Fisheries of Mecklenburg-Vorpommern anticipates a further reduction of this fleet from presently 937 units to 506 units by the end of 1996. Under the assumption that each boat is manned with 1 skipper this would mean a further reduction of about 300 persons. This implies on the other hand that deliveries to small scale processing units cannot not be maintained. Diversification opportunities would thus also disappear.

Reductions are from an economical point of view unavoidable. But it is given at consideration that the majority of boat and passive fishing is mostly directed to non-quota and above all high value species. Boat fishing is to a certain extent more profitable than cutter fishing, because investments or depreciations are lower but the gross revenue at less quantity and higher prices more attractive. In 1991 600 t of pike-perch and 900 t of perch gained with 1.950 and 1.500 TECU the same as 10,000 t of herring. Fry measures could reduce the risk of overfishing.

The production of fry could provide be alternative business.

The problems of cutter fishing are more of an economical nature than that of overfishing. The possible size of the cutter fleet based on a theoretical economical minimum based on fishing power and dedicated to the area has been proposed. According to these considerations the cutter fleet should have a size of 70 vessels with the theoretical fishing power of a 17 m cutter.

Reducing the number of vessels would result in a reduction of crews by about 60 persons (2.5 crew per vessel). Any effect on processing is at the present time not to be seen, because the remainder of the processing industry is hardly depending on regional landings any more. On the other hand possibilities for the production of added value, which is wanted and need, would be at risk.

All in all the future size of the cutter and coastal fleet will largely be dependent on the ability to produce economical results, which is with the German wage level and manning and safety requirements not an easy task.

8.3.2 Measures to counter Unemployment in Fisheries

Dedicated Community actions for the improvement of processing, marketing, distribution and retail for socio-economic actions with a view to job diversification are strongly recommeded. Surviving activities in the fisheries sector need to be stabilized by modernization and adaption to EC hygienic rules. The island zones Rügen (Isle of Rügen and others) and Wolgast (Isle of Usedom) require the highest attention, because here fishery is traditionally at home and employment opportunities are lowest.

Furthermore with regard to the increase of consumption of higher value species some smaller scale economic potential in the development of aquaculture both in coastal and inland waters (Pike-Perch, Sturgeon) as well as in the production of fry is to be seen. Above all the further development of offshore hatcheries is held viable under consideration of environmental concern and economical results.

Specific measures to combat unemployment in the fisheries sector are not planned for. According to officials from different authorities single actions for specific sectors of the economy are not regarded helpful, because to their oppinion every individual has its own educational and professional background, abilities and chances to migrate into other sectors. Any sectoral programme would therefor conserve either old or create new subsidized structures.

This is certainly true, but especially coastal fishermen and their families are tightly bound to their region, professional and living mobility is restricted. On the other hand new job opportunities will not be available in great numbers for the years to come. In order to relief the tight unemployment situation especially in the island regions and to produce alternative employment possibilities it is therefore emphasized to intervent regarding the conduct of alternative business development and training programmes for the fisheries sector.
Furthermore it is felt, that for the group of persons in question it would be useful <u>to have them trained in professions important for the regional development</u>, i.e. tourism, hotellery, recreation, rather than to have them passing general courses in economics or informatics. The touristic sector is regarded extremely important for Mecklenburg-Vorpommern and specifically for the part region of Vorpommern, which borders Poland and faces a dramatic unemployment. Re-employment courses for persons from the fishery sector could very well be conducted within a framework for the development of touristic activities in Mecklenburg-Vorpommern, the touristic infrastructure of which is fairly underdeveloped until now

9. Identification of the Zones highly dependent on Fisheries

Mecklenburg-Vorpommern is as regards fisheries characterized by its long coastline, inshore waters and about 2000 lakes. Fishery is to a greater or lesser extent at home in every district. Districts which do not dispose of wealth of natural waters developed pond aquaculture. Most of the fishery resources like fishermen, processing staff, vessels, harbours, fish factories and the like are to be found in the coastal districts

Table 9.I Summary of the Characteristics of the Zones of Region D2

	Zone 1 Wismar	Zone 2 Rostock	Zone 3 Strals.	Zone 4 Greifsw.	Zone 5 Wolgast	Zone 6 Rügen	Zone 7 Schwerin	Zone 8 Neubrdbg	Total
Popul. (6/91)	127.9	524.7	128.4	176.1	57.4	84.6	405.4	404.1	1,908.6
Lab. Force (89)	66.3	282.1	67.6	91.9	25.7	40.0	208.7	210.0	992.3
Employed 11/90	55,3	248,3	62,2	82,6	22,7	32,7	186,7	209,1	940,1
Employed 11/91	28.7	138.1	37.2	41.1	11.0	16.3	97.8	103.2	473.4
Unempl. 1/92	12.9	53.1	12.1	17.8	6.1	8.9	30.9	44.1	185.9
Unempl. 6/92	10.9	44.7	11.0	17.0	5.0	7.4	27.8	38.1	161.0
U.Quote 1/92	22%	19%	19%	22%	24%	25%	18%	23%	17%
U.Quote 6/92	18%	16%	18%	21%	20%	21%	21%	21%	17%
Fishermen	92	499	48	236	217	402	94	206	1,794
Others	70	1,889	158	223	334	838	133	155	3,800
Total Fisheries	162	2,388	206	459	551	1,240	227	361	5,594
Fishery Enterprises & Cooperatives	7	5	4	4	6	13	23	25	87
Landings (t)	714	285	621	1,689	2,071	13,917	630	1,470	21,397
Value of Landings(TECU)	475	12,932	413	1,274	1,253	8,989	997	2,326	28,632
Processing (t)	0	6,284	785	274	1,627	11,262	136	323	20,691
Value of Process.(TECU)	0	11,605	1,839	1,249	2,660	23,946	439	1,023	42,761
Fully dvlpd. Harbours	2	3	3	2	4	10			24
Low dvlpd. Harbours	5	11	0	01	17	17			34
Landing Sites	0	8	0	6	7	4			25
L.S. w. Quota Contr.	4	13	2	6	13	16			54
Prof. Fishing W.	0.6	6.0	0.6	0.3	1.3	0.1	19.8	35.9	64.5
Trawlers		8							8
Cutters > 12m	9	7	8	2	25	42			93
Boats 10-12m	11	6	13	5	19	29			83
Boats 6-10m	64	45	19	77	174	128			507
Boats < 6m	55	66	16	7	51	143			339
Vessels total	140.	132	56	91	269	342			1,030
GRT	392	16,908	517	40	712	3,551			21,120
KW	1,488	15,777	1,414	118	2,569	5,008			26,474

Remarks:

1. Population, Labour Force etc. in 1000
2. Fishing Waters in 1000 hectares (ha)

Zone 2, Rostock, with the only distant fishery port and all of the infrastructure required for the operation of the distant fleet, the central production of fish products and its distribution had in the past been the zone most dependent on fisheries. With the reduction of the fleet and the desintegration of the former fish combinate this dominance has been cut back to that extent that only 0,36% of the labour force of Zone 2 are belonging to the group of fishermen and crews. Inclusive of processing and ancillary activities this job dependency ranks at 1,73%. Apart from the remaining 385 crews of the distant fleet there were at the end of 1991 another 100 fishermen employed in small scale fisheries along the coasts of the Baltic Sea and of inshore waters. With further staff reductions especially in the processing sector the dominance of the zone of Rostock will further diminish. Any importance of distant fisheries and fish processing industries will depend on the expectations and plans of the new private owners.

With the reductions reached and due the dependency on fisheries and related activities is rather low. Especially in the City and Zone of Rostock the dependency is still drastically decreasing. There will only be some 650 jobs left in fisheries and ancilleries in Zone 2, Rostock, at the end of 1992.

Zone 1, Wismar, is also loosing importance in the fisheries sector. In 1991, the fisheries work force counted about 162 persons (1989: 400). Processing is only available on smallest scale in the form of by-production. The dependence on fisheries is well below 1% by any means.

Zones 3, Stralsund, 4, Greifswald, 5, Wolgast and 6, Rügen all belong to the part-Land Vorpommern. Vorpommern had in socialist times been the poor back-yard of the GDR. This region had in pre-war times been part of Pommern (Pommerania) which extended far into the area of what constitutes Poland today. Agriculture, fisheries, shipbuilding, armed forces, a nuclear plant, one university and state-directed tourism had been the main employers.

Future dependency will be largest in the eastern island zones Rügen and Wolgast, whereas the dependency in the mainland zones has/will have reached an extremely low level.

Zone 4, Greifswald, bordering Poland, is dominated by passive and boat fisheries. The vessels in use are mainly boats with less than 10 m length. The job dependence lies at 0,57% as regards fishermen and 1,12% as regards all fisheries sectors.

Zone 5 Wolgast. Its main part is the Isle of Usedom . The isle of Usedom belongs to the administrative district of Wolgast with the capital Wolgast. The island itself has a size of 373 sqkm. Some 57,400 inhabitants were registered in the district of Wolgast by June 1991, about 2,000 less than in 1990. The labour force accounted 25,700 persons in 1989, about 11,000 out of which are in still in the possession of a job. The unemployment quote had been 24% early 1992 and 20% in mid 1992. The fisheries work force in this district accounted about 1,100 persons dependent from fishing in 1989. This number was down to 550 persons by the end of 1991.

The relative dependence in terms of jobs was almost 2% as regards the fishermen and about 5% as regards all fisheries sectors by the end of 1991. In economical terms this dependence rests at about 0,4% and 1,26% respectively.

Further to 5 fishing enterprises and co-operatives there are 6 fish retail outlets with associated processing and 1 fish whole company plus 5 boat yards and/or fish suppliers in the zone. The fleet of the zone accounted 269 vessels, 25 of which belonged to the class of cutters with a length of more than 23 m.

Zone 6, Rügen, is mainly constituted of the islands Rügen (930 sqkm) , Ummanz (20 sqkm) and Hiddensee (17 sqkm). Its capital is the small town Bergen auf Rügen. On the 3rd Dec. Rügen had a polpulation of 87,000 inhabitants, mid 1991 84,600. 40,000 persons were in the employable age in 1989. 16,300 persons are still employed. Early 1992 the unemployment quote had been 25% and 21% by mid 1992. The reduction is not attributable to new jobs but mainly to job-creation measures, early pension schemes and vocational training. In 1989 about 4,800 persons in the zone were directly dependent from fisheries and ancilliary activities. Their number has decreased to about 1240 by the end of 1991. A continued reduction to about 600 persons in 1992 is likely due to the shut down of the processing of the former VEB Sassnitz and the further adaption of the processing staff of Rügenfisch.

There are some 14 harbours and landing sites on the isle of Rügen. Fishery is carried out by 13 co-operatives and companies (GmbH). Furthermore there are 30 other enterprises closely related to fishing. The classified directory of Mecklenburg-Vorpommern lists 22 fish retail outlets, 2 net producers and 6 boat yards/ship's suppliers.
In Mecklenburg-Vorpommern overall job dependence of fisheries ranks highest with 5,01%, total job dependence in fisheries and ancilleries 7,61%. The latter will decrease to below 6% by the end of 1992 caused by the reduction of processing personnel.

Table 9.II

Structural Data as to the Zones highly dependent on Fisheries and ancilliary Activities

Zone (1)	General Features of the Zones					Number of Jobs in Fisheries and related Activities			Added Value of Fisheries and related Activities			Relative Dependence				Quota Dependency	
	Total Populat. (1000)	Labour Force (1000) (2)	Total Number of Jobs (1000) (3)	GDP (4) Total MECU	GDP (4) Per Capita ECU	Fishermen only (5)	others (6)	Total	Landing & first Process. (7) ** TECU	other Activities (6) TECU	Total TECU	In Terms of Jobs %		in economic terms %		ratio	
	a		b	c	d=c/a	e	f	g=e+f	h	i	J=h+i	e/b	g/b	h/c	j/c	by quant.	by value
1. Wismar	127.9	66.3	28.7	690	5397	92	70	162	475	0	475	0.32 %	0.56 %	0.07 %	0,07 %	0,64	0,63
2. Rostock	524.7	282.1	138.1	2,832	5397	499	1,889	2,388	12,932	11,605	20,341	0.36 %	1.73 %	0,46 %	0,87 %	0,65	0,34
3. Stralsund	128.4	67.6	37.2	693	5397	48	158	206	413	1,839	2,252	0.13 %	0.55 %	0,06 %	0,32 %	0,88	0,34
4. Greifswald	176.1	91.9	41.1	950	5397	236	223	459	1,247	1,249	1,877	0.57 %	1.12 %	0.13 %	0.26 %	0.05	0.02
5. Wolgast	57.4	25.7	11.0	310	5397	217	334	551	1,253	2,660	4,521	1.97 %	5.01 %	0.40 %	1.26 %	0.66	0.22
6. Rügen	84.6	40.0	16.3	457	5397	402	838	1,240	8,989	23,946	32,935	2.47 %	7.61 %	1.97 %	7.21 %	0.82	0.56
7. Schwerin	405.4	208.7	97.8	2,188	5397	94	133	227	997	439	1,436	0.10 %	0.23 %	0.05 %	0.07 %	0.05	0.07
8. Neubrdbg	404.1	210.0	103.2	2,181	5397	206	155	361	2,326	1,023	3,349	0.20 %	0.35 %	0.11 %	0.15 %	0.11	0.15
Zones 1-6	1,099.1	573.6	272.4	5,932	5397	1,494	3,512	5,006	25,309	41,299	66,608	0.55 %	1.84 %	0.43 %	1.12 %	0.72	0.42
Zones 7-8	809.5	418,7	201.0	4,369	5397	300	288	588	3,323	1,462	4,785	0.15 %	0.29 %	0.08 %	0.11 %	0.0	0.0
Zones 1-8 (Total M.-V.)	1,908,6	992,3	473.4	10,300	5397	1,794	3,800	5,594	28,632	42,761	71,393	0.38%	1.18 %	0.28 %	0.69%	0.72	0.42

Legend

MECU = million ECU
TECU = thousand ECU

Remarks as to table 9.2

Column a	Data as of the census late 1990. The process of depopulation has due to lack of newer data not been taken taken in account.
Column b	Data as of end 1991 (Statistische Monatshefte Mecklenburg-Vorpommern 2/92)
Column c	GDP is until now only available on "Land" level but not on district level; per capita GDP on "Land" level has therefore been multiplied with total population
Column d	See c; GDP is only available on "Land" level
Column e	Data as of end 1991. Further reductions to a total of 1,185 until the end of 1992 are being underway, especially in the Zone Rostock, but also in coastal fisheries of the other Zones
Column f	Data as of end 1991; mainly personnel in processing; other activities are yet to develop. Further reductions to a total of about 1,555 are being initiated; mechanical engineering and engineering divisons of the former combinate will entirely leave the sector by the end of 1992, which has an effect of reducing the staff by 700 persons alone; further reductions are due in the adminstration part of the former combinate or of the Deutsche Fischwirtschaft AG and especially in the processing sector; uncertainties are likely
Column g	Staff in saltwater fisheries will decrease to a total of about 2,740 persons by the end of 1992.
Column h	Due to the lack of official data landings (catches) are multiplied with an average price of ECU 0,665 per kilo
Column i	Due to the lack of official data processed fish products have been multiplied with a factor of ECU 1,975 per kg, an average derived from Ostseefisch data; variations are likely
Column j	The largest values are attributable to the zones of Rostock, Wolgast and Rügen; as regards Rostock the situation is entirely unclear and depending on the development of the Rostocker Fischfang Reederei GmbH; as regards the other zones the catches and landings may have bottomed out; for 1992 and 1993 higher values may be expected
Column e/b	The total number of fishermen in the zone of Rostock is of only low relevance with a decreasing tendency upon the expected recovery in other sectors; the shake-out of fishermen though with a reduced tendency will continue
Column g/b	the picture is somewhat different if total employment in the fisheries sector is taken into consideration, however, also with a decreasing tendency because processing will mainly be concentrated on the isle of Rügen; the shake out of personnel in the other zones, especially on the Isle of Rügen, has not yet come to a halt
Column h/c	In economical terms the dependency on fisheris and ancillary activities is largest on the islands of Rügen (zone Rügen) and Usedom (zone Wolgast)

10. Assessment of reconversion actions already carried out at community level and which could show analogies with the reconversion in the fisheries sector.

Specific sectoral or regional community actions have to our knowlegde not been carried out in Region D2, Mecklenburg-Vorpommern until now.

Instead of executing single action programmes as practiced in recent years and in all of the member states of the EC ECU 3.000 million of Community Structural Funds (CSF) aids were allocated to the new Länder in accordance with Council Regulation No. 3575/90.

The breakdown of expenditure by priority, by instrument, by region and by year is presented in the following tables. Allocations between the Länder were determined by a range of factors, e.g. population, employment in the industrial, service, agricultural and fisheries sectors, as well as by acreage. In most cases the EC contribution is 50% of the public expenditure (ERDF intervention, ESF intervention, EAGGF guidance intervention). However, measures under technical assistance to be provided by the three Funds are being supported with 75% of total costs, in specific cases with 100%.

Even though specific interventions in single economical sectors, e.g. the shipbuilding sector, or in particular regions, have not been carried the current restructuring and privatization process on the territory of the former GDR is a reconversion exercise unparalleled in history and in other regions. It may well serve as an example both negative and positive for the restructuring of the Baltic states and of the states of the Commonwealth of Independent States (CIS).

10.1 Allocation of Community and Federal financial Resources to the Fisheries Sector of Mecklenburg-Vorpommern

MECU 8.2 have been applied for the newbuilding, modernization, temporary lay-up and final cessation within the framework of the CSF 1991-1993 and with reference to regulation (EEC) no. 4028/86 (restructuring and renewal of the fishing fleet, development of aquaculture, facilities at fishing ports).

Another 7.7 MECU have been applied for under objective 5b for Community Structural Funds Assistance and within the framework of the CSF for the years 1991-1993. 7.3 MECU out of this sum are attributable to investments for improving the processing and marketing of fish and fish products. This assistance is requested in accordance with regulation (EEC) no. 4042/89 (improvement of the conditions under which fishery and aquaculture products are processed and marketed) and financed by the EAGGF.

The annual allocation of the assistance requested is/will be as follows:

1991	MECU 1.90
1992	MECU 4.85
1993	MECU 0.95

The following Community and Federal Assistance has until now been payed out to the cutter and coastal fisheries of Mecklenburg-Vorpommern:

1990	adjustment, temporary lay-up, final cessation	MECU 11.00
	thereof the following has been granted to the cutter and coastal fisheries of Region D2	
	adjustment & modernization	MECU 4.31
	temporary lay-up	MECU 2.07
	final cessation	MECU 2.48
	total (distribution to zones on table 10.I)	MECU 8.86
	final cessation of cutters of the VEB Fischfang Sassnitz	MECU 2.13
1991	temporary lay-up	MECU 2.82
	final cessation	MECU 2.00
	modernization	MECU 1.00
	total	MECU 5.82
1992	at the time of reporting no grants forwarded yet	

Table 10.I Allocation of Federal and Community Funds to the Cutter and Coastal Fisheries of Mecklenburg-Vorpommern, 1990

Zone	adjustment & modern. grants	temp. lay-up grants	final cessation grants	total
Zone 1, Wismar	485.1	253.8	559.2	1,298.1
Zone 2, Rostock	698.5	295.2	511.4	1,505.0
Zone 3, Stralsund	547.4	152.9	489.0	1,189.2
Zone 4, Greifswald	724.5	276.0	26.6	1,027.0
Zone 5, Wolgast	697.2	418.0	522.0	1,673.3
Zone 6, RÜgen	1,154.7	675.5	377.6	2,207.8
Totals	4,307.4	2,071.4	2,485.8	8,864.4

Source: Verband der Kutter- und Küstenfischer Mecklenburg-Vorpommern

Table 10.II Community Support Framework (CSF) 1991-93, five new Bundesländer and Eastern Berlin, Financial Plan by Priority and Länder, Summary by Priorities

Financial plan by priority and *Länder*
Summary by priorities

Five new *Bundesländer* and Eastern Berlin

(million ECU)

Priority	Total cost	Public expenditure											Private funds	Loans	
		Total	Community grants					National administrations						EIB[5]	ECSC[6]
			Total	ERDF	ESF	EAGGF	Other	Total	Federal *Länder*	Local authorities	Other				
	1 = 2 + 12	2 = 3 + 8	3 = 4 + 5 + 6 + 7	4	5	6	7	8 = 9 + 10 + 11	9	10	11	12	13	14
1. Infrastructure	1 877	1 877	685	590	95	—	—	1 192	685	507	—	—	p.m.	p.m.
2. Productive investments	6 575	1 400	690	640	35	15	—	710	710	—	—	5 175	p.m.	p.m.
3. Human resources	1 072	1 072	470	110	360	—	—	602	507	95	—	—	—	—
4. Long-term unemployment	180[1]	180	90	—	90	—	—	90	90	—	—	—	—	—
5. Young people unemployment	450[1]	450	225	—	225	—	—	225	225	—	—	—	—	—
6. Agriculture & fisheries	2 407	1 157	354	—	—	354	—	803	803	—	—	1 250	—	—
7. Improvement of rural areas	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8. Agriculture, forestry, environment	1 255	1 125	396	115	50	231	—	729	630	99	—	130	—	—
9. Technical assistance	119	119	90	45[2]	45	—[3]	—	29	29	—	—	—	—	—
Total	13 935	7 380	3 000	1 500	900[4]	600	—	4 380	3 679	701	—	6 555	p.m.	p.m.

[1] According to need, the amounts indicated under Priorities 4 and 5 may be adjusted in a flexible way.
[2] Of which MECU 10 not yet distributed.
[3] Up to 2.5% under Priorities 2, 6, 7 and 8.
[4] MECU 225 to be administered horizontally.
[5] EIB-loan commitments in the five new *Länder* and Eastern Berlin are estimated to be MECU 500 per year, essentially for large industrial and infrastructural projects.
[6] The volume of loans in the ECSC employment zones under Articles 54 and 56 of the ECSC Treaty is estimated to be MECU 1 100 for the three-year implementation period.

Table 10.III Community Support Framework (CSF) 1991-93, five new Bundesländer and Eastern Berlin, Financial Plan by Priority and Länder, Summary by Länder

Financial plan by priority and *Länder*
Summary by *Länder*

Five new *Bundesländer* and Eastern Berlin

(million ECU)

Priority	Total cost	Public expenditure											Private funds	Loans	
		Total	Community grants					National administrations						EIB[2]	ECSC[3]
			Total	ERDF	ESF	EAGGF	Other	Total	Federal *Länder*	Local authorities	Other				
	1 = 2 + 12	2 = 3 + 8	3 = 4 + 5 + 6 + 7	4	5	6	7	8 = 9 + 10 + 11	9	10	11	12	13	14
Total	13 935	7 380	3 000	1 500	900	600	—	4 380	3 679	701	—	6 555	p.m.	p.m.
Mecklenburg-Vorpommern	2 015.2	1 085.2	409.2	177.3	80.1	151.8	—	676.0	586.5	89.5	—	930.0	p.m.	p.m.
Brandenburg	2 321.1	1 217.9	475.8	239.9	103.7	132.2	—	742.1	625.8	116.3	—	1 103.2	—	—
Sachsen-Anhalt	2 473.7	1 277.7	505.4	268.2	114.9	122.3	—	772.3	644.8	127.5	—	1 196.0	—	—
Sachsen	3 618.0	1 784.0	732.7	444.0	182.8	105.9	—	1 051.3	848.8	202.5	—	1 834.0	—	—
Thüringen	2 127.9	1 076.9	432.7	244.4	102.3	86.0	—	644.2	529.6	114.6	—	1 051.0	—	—
Eastern Berlin	819.1	378.3	164.2	116.2	46.2	1.8	—	214.1	163.5	50.6	—	440.8	—	—
Not regional	450.0	450.0	225.0	—	225.0	—	—	225.0	225.0	—	—	—	—	—
Technical assistance	110.0	110.0	55.0	10.0	45.0	—[1]	55.0	55.0	55.0	—	—	—	p.m.	p.m.

[1] Up to 2.5% under Priorities 2, 6, 7 and 8.
[2] EIB-loan commitments in the five new *Länder* and Eastern Berlin are estimated to be MECU 500 per year, essentially for large industrial and infrastructural projects.
[3] The volume of loans in the ECSC employment zones under Articles 54 and 56 of the ECSC Treaty is estimated to be MECU 1 100 for the three-year implementation period.

Table 10.IV Community Support Framework (CSF) 1991-93, Mecklenburg-Vorpommern, Financial Plan by Priority and Länder, Summary by Priorities

Financial plan by priority and *Länder*
Summary by priorities

Mecklenburg-Vorpommern *(million ECU)*

Priority	Total cost	Public expenditure										Private funds	Loans	
		Total	Community grants					National administrations						
			Total	ERDF	ESF	EAGGF	Other	Total	Federal *Länder*	Local authorities	Other		EIB	ECSC
	1 = 2 + 12	2 = 3 + 8	3 = 4 + 5 + 6 + 7	4	5	6	7	8 = 9 + 10 + 11	9	10	11	12	13	14
1. Infrastructure	204.0	204.0	74.5	63.9	10.6	—	—	129.5	74.5	55.0	—	—	p.m.	p.m.
2. Productive investments	802.8	195.8	87.9	69.0	3.9	15.0	—	107.9	107.9	—	—	607.0	p.m.	p.m
3. Human resources	95.3	95.3	42.0	13.2	28.8	—	—	53.3	42.0	11.3	—	—	—	—
4. Long-term unemployment	14.4[1]	14.4	7.2	—	7.2	—	—	7.2	7.2	—	—	—	—	—
5. Young people unemployment	35.8[1]	35.8	17.9	—	17.9	—	—	17.9	17.9	—	—	—	—	—
6. Agriculture & fisheries	563.8	270.8	82.8	—	—	82.8	—	188.0	188.0	—	—	293.0	—	—
7. Improvement of rural areas	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8. Environment & forestry	293.6	263.6	92.7	27.0	11.7	54.0	—	170.9	147.7	23.2	—	30.0	—	—
9. Technical assistance	5.5	5.5	4.2	4.2	—	—[2]	—	1.3	1.3	—	—	—	—	—
Total	2015.2	1085.2	409.2	177.3[3]	80.1[4]	151.8	—	676.0	586.5	89.5	—	930.0	p.m.	p.m.

[1] According to need, the amounts indicated under Priorities 4 and 5 may be adjusted in a flexible way.
[2] Up to 2.5% under Priorities 2, 6, 7, and 8.
[3] Plus an amount arising from technical assistance (up to MECU 10) not yet distributed.
[4] Plus an amount arising from technical assistance (up to MECU 45) not yet distributed and horizontal ESF measures (MECU 225) not yet distributed.

Table 10.V Community Support Framework (CSF) 1991-93, five new Bundesländer and Eastern Berlin, Financial Allocation by Year 1991-1993, Summary

Financial allocations by year 1991-93
Summary

Five new *Bundesländer* and Eastern Berlin

	Total cost (TC)	Public expenditure													Private expenditure		Loans	
		Total public expenditure (TPE)		Community							National							
				Total			ERDF	ESF	EAGGF	Other	Total		Federal *Länder*	Local authorities	Other			EIB[1]	ECSC[2]
	MECU	MECU	% TC	MECU	% TC	% TPE	MECU	MECU	MECU	MECU	MECU	% TC	MECU	MECU	MECU	MECU	% TC	MECU	MECU
Total 1991	4 238	2 272	53.6	900	21.2	39.6	500	270	130	—	1 372	32.4	1 162	210	—	1 966	46.4	p.m.	p.m.
Total 1992	4 709	2 524	53.6	1 000	21.2	39.6	500	300	200	—	1 524	32.4	1 290	234	—	2 185	46.4	p.m.	p.m.
Total 1993	4 988	2 584	51.8	1 100	22.0	42.5	500	330	270	—	1 484	29.8	1 227	257	—	2 404	48.2	p.m.	p.m.
Total 1991-93	13 935	7 380	53.0	3 000	21.5	40.6	1 500	900	600	—	4 380	31.5	3 679	701	—	6 555	47.0	p.m.	p.m.

[1] EIB Loan commitments in the five new Länder and Eastern Berlin are estimated to be MECU 500 per year, essentially for large industrial and infrastructural projects.
[2] The volume of loans in the ECSC employment zones under Articles 54 and 56 of the ECSC Treaty is estimated to be MECU 1 100 for the three-year implementation period.

Table 10.VI **Community Support Framework (CSF) 1991-93, Mecklenburg-Vorpommern, Financial Allocation by Year 1991-1993.**

Mecklenburg-Vorpommern

Financial allocations by year 1991-93

	Total cost (TC)	Public expenditure														Private expenditure		Loans	
		Total public expenditure (TPE)		Community							National								
				Total			ERDF	ESF	EAGGF	Other	Total		Federal *Länder*	Local authorities	Other			EIB	ECSC
	MECU	MECU	%TC	MECU	%TC	%TPE	MECU	MECU	MECU	MECU	MECU	%TC	MECU	MECU	MECU	MECU	%TC	MECU	MECU
Total 1991	618.1	339.1	54.9	122.8	19.9	36.2	59.1	24.0	39.7	—	216.3	35.0	189.5	26.8	—	279.0	45.1	p.m.	p.m.
Total 1992	686.9	376.8	54.9	136.4	19.9	36.2	59,1	26.7	50.6	—	240.4	35.0	210.5	29.9	—	310.1	45.1	p.m.	p.m.
Total 1993	710.2	369.3	52.0	150.0	21.2	40.6	59.1	29.4	61.5	—	219.3	30.8	186.5	32.8	—	340.9	48.0	p.m.	p.m.
Total 1991-93	2015.2	1085.2	53.8	409.2	20.3	37.7	177.3	80.1	151.8	—	676.0	33.5	586.5	89.5	—	930.0	46.2	p.m.	p.m.

10.2 Criticism and recommendations

The funding of projects by the EC is in most cases not perceived by the public. The creation of the single market is largely recognized by the public, but to great an extent it is not known, that single projects are funded or part-funded by the EC.

In the former GDR only few persons were self-employed but almost 100% wage earners. Extensive and active measures as to the generation of entrepreneurs and small and medium business will have therefore to be taken. Normal vocational trainings provided by the employment administration have the objective to get people into wage earning positions. Such positions will for years to come not be available in masses for all those made redundant especially in the fisheries and ancilliaries sector.

The above would be of necessity in those areas traditionally dependent from fisheries, particularly in the part-Land Vorpommern and with a special focus on zones 5 and 6, Rügen (Isles Rügen, Ummanz, Hiddensee) and Wolgast (Isle of Usedom).

11. Opportunities to create Jobs with a Priority to the concerned Zones; Support Measures

The economical development of the new Bundesländer will take about 20 years. This is the result of the latest study issued by DIW, Deutsches Institut für Wirtschaftsforschung (German Institute for Economical Research).

The massive decrease of employment, the low number of open positions, the slow pace of development and the reluctance of potential investors to engage in the new Bundesländer, furthermore the even more drastic situation in Mecklenburg-Vorpommern and specifically of the fisheries sector, which had been portrayed in the predeeding chapters, all lead to the recommendation to support endogenous forces with an intervention towards the active generation of independent business.

11.1 Development of independent Business

11.1.1 Programmes for the active Generation of independent Business

In view of the negative employment balance, i.e. loss of jobs against creation of jobs in new establishing companies it appears necessary to activate the endogenous development by programmes for the active generation of independent business. Until now there is in fact no programme in existence supporting the active endogenous development and generation of self-employment, independent business and partnerships with the appropriate qualification for running a successful business.

In those regions mostly affected by unemployment in the fisheries sector such programmes would have to concentrate onto the generation of new business opportunities in the touristic and environmental protection sectors. Especially the island regions have been and will be areas of touristic interest. The marine and land environment of these areas will have to be restored, preserved and protected.

11.1.2 Development of Franchise Systems

Another tool for the promotion of independent small and medium business and for making successful entrepreneurs is the establishment of franchise outlets and possibly the generation of franchise systems until now not covered by present franchise offers.

Franchise systems may be i.a. ideal tools for the generation of new business in the fish processing, distribution, marketing, retail and sea food restaurant sub sectors. One of the main European trusts in the sea food industry has shown proof that franchise systems are viable in this industry.

11.1.3 Efforts of the existing Technology Centres

There are extremely few initiatives for the development of the endogenous potential. The establishment of five technology centres in Mecklenburg-Vorpommern may serve as a positive example and until now as an rare exception. The technology centres had rapidly been put into operation shortly after the opening of the frontiers. Especially the TC Warnemünde may provide a good example for job diversification away from fisheries and ancilleries. All of its initial business founders have their roots in fisheries and in the Nautical Academy of Warnemünde.

11.1.4 Establishment of general BICs

Market know-how and especially know-how how to successfully run an own enterprise is rare in the new Länder. Training and qualification of future entrepreneurs is not provided for under the present support regime. It is therefore strongly recommended to establish general Business Incubation Centres, not necessarily Technology Centres, but possibly with a focus on certain business sectors, i.e. fishery, agriculture, food technology, services, tourism etc., all over the country.

11.2 Development of the Processing, Distribution and Marketing Sub-Sectors

Consumption in the "old" Länder of the Federal Republic has considerably increased during recent years to a level of 15,2 kg per capita in 1991. Still there are expectations that further increases could be made possible by enhancing the awareness towards the value of fish as a dietary food.

The per capita consumption in the new Länder is reported to be about 10 kg/a. Historically processed fish is preferred (there was no fresh fish distribution system in the GDR) and delivered, in particular smoked fish.

The severest obstacles as regards the increase in consumption are the lack of logistics, cool stores and retail shops and of course managerial skills.

11.2.1 Marketing

Few of the new established or privatized marketing cooperatives, eg. Wismar-Fisch and Rügenfang have established fairly well, however more on the West German, than on the East German market. This is contributáble to the fact, that these companies have closed contracts with marketing agents in West Germany, who distribute East German fish products into West German distribution channels. The East German fish may re-appear in deep-freezers of newly established super markets in East Germany. Other species than herring, e.g. Cod, Pike, Perch, Pike-Perch, find increasingly consumer awareness.

In order to make East German fishery sector companies successful and independent from established West German or West European monopolies it is strongly recommended to support intitiatives towards own marketing systems in the widest sense. Franchise systems are regarded ideal tools for the economical development of small and medium business, because such systems would relief new established entrepreneurs of many of the obstacles they have, when they establish a business entirely on their own.

11.2.2 Processing, Distribution

The main obstacles in the development of a value-added-income-chain are the lack of adequate processing facilities and of an own distribution system. The Fishery Association of Mecklenburg-Vorpommern is therefore in collaboration with the cooperatives of Rügen in the stage of establishing a regional fish processing centre including cold storage. In case this initiative succeeds, it will definitively have a pilot and motivating function for other fishery cooperatives.

In order to promote independent business and employment in Mecklenburg-Vorpommern it is strongly recommended to further support the activities towards the establishment of fish processing facilities and distribution systems for both fresh and processed fish.

As the market in the new Bundesländer is not entirely allocated yet to West German monopolists it appears, that there are good opportunities in establishing distribution chains including retail outlets, sea food restaurants and sea food stands in malls and other shopping centres.

Prior to promote single actions and in order to verify these opportunities it is recommended to launch, in close liaison with the fishery association of Mecklenburg-Vorpommern, a market study and a marketing plan towards the penetration of the new Bundesländer.

11.2.2.1 Revitalization of the Processing Industry on the Isle of Rügen

Up to 52,000 t of herring can annually be caught on the East coast of Rügen and in the Greifswalder Bodden. Here the focus should be placed on the formation of a suitable processing industry having the processing of herring in its centre. At present only 11,029 t fish on Rügen and 9,540 t on Usedom can be processed. The decrease of herring yield observed in 1990 and 1991 has not been caused by biological influences but by a lack of processing facilities. Present facilities do not correspond to EC standards.

11.3 Fishing in the Fishing Zones of Sweden and Denmark (around the Isle of Bornholm)

With the formation of the European Economical Zone under the inclusion of the EFTA states for fishermen of Mecklenburg-Vorpommern it will be possible to catch also in the fishing zones of Sweden.

The herring caught in the waters around Rügen during April and May normally lives in Swedish waters. Extending the seasonal catch of herring would have an enormous advantage for fishermen of Mecklenburg-Vorpommern, especially from Rügen, because this would put them into the position to deliver fresh fish year-round to the market, not just smoked fish or marinades (Rollmops). Furthermore it would give more fishermen and those engaged in processing and distribution a more stable basis of their economic activities.

11.4 Development of RTD and Professional Training the Fishery Sector

Fishery science and professional training had been excellently developed in the GDR. Fishery science was dedicated to serve the fishery in order to secure self-sufficency in fish supply. The fishery science and training sector, as any other sector in the former GDR, employed too many people. The present adaption process, however, is going that far, that at the end of the day there will be no more fishery science on the territory of the former GDR.

11.4.1 Establishment of an European Fishery Institute

From the viewpoint of taking an European Dimension into this country for decades closed off from international development and thinking it is suggested to establish an European Fisheries Institute in Rostock. Such an European Fishery Institute would also contribute to a positive change in the public awareness of the EC and it's institutions.

Although everybody is aware that structural changes are necessary and that almost all institutions and companies in the former GDR had excessive personnel capacity the EC and the CEC are perceived as driving forces behind present unemployment in particular in the agriculture, fisheries and shipbuilding sectors.

The establishment of an European Fisheries Institute could demonstrate an positive engagement of the EC and it's administration towards structural changes. Moreover it would secure the know-how yet available for the whole of the European Community.

Furthermore such an institute would contribute to securing employment in Mecklenburg-Vorpommern, particularly in Rostock, a city with almost 100.000 unemployed, to the development of business in the region and last but not least to the development of the Baltic Sea as an Nordic economical and cultural centre equivalent to the Mediterranean.

11.4.2 Establishment of dedicated Fishery BICs

In addition to the EFI (European Fishery Institute) one or more fishery and aquaculture dedicated BICs (Business Development Centres) would have to be established. The five technology centres existing in Mecklenburg-Vorpommern are excellent examples for the work of such institutions. They show proof of modern business development, creation of new jobs and positive intellectual changes towards modern technologies, internationality and cooperation. In fact BICs would be ideal media for the transformation from a society orientated in large organizations towards an economical structure of SMEs (Small and Medium Enterprises.

11.5 Development of the Aquaculture Sector

11.5.1 Historical Background

In the past, the main species had been trout. In carp aquaculture the GDR had been one of the most successful countries ranking no. 7 on the international scale. The breeding and hatching of fish in brackishwater and lake areas, however, caused considerable environmental problems. Lakes and inshore areas had been heavily polluted, so that many of the hatcheries had to be closed down after the unification in order to comply with EC environmental regulations. Aquaculture research had been quite developed during the time of the communist regime

11.5.2 Future Prospects

In view of the fact, that the main species is herring, whose main catch season is in May, it would be ideal to harmonize the catch frequency and consequently the income of the fishermen during the course of the year. This adjustment could to a certain extent be provided by aquaculture, in particular by the breeding of trout, whose harvesting season starts in May with the end of the herring catch season. The main species for aquaculture in coastal waters would be trout. There are also fairly good opportunities for hatching high value species like Perch, Pike-Perch, Pike, Eel and Esturgeon. The development of coastal aquaculture could be enhanced by additional hatching of fry. Quality fry is needed for fry measures in lakes and inshore waters.

11.5.3 In the brackishwater Lagoons (Bodden) of Mecklenburg-Vorpommern

The brackish inshore waters (Bodden) are principally good breeding and nursing areas for freshwater species like eel, trout. Officials of the association of fishermen indicate that with a view to environmental considerations a maximum of 800 t of trout could be hatched in cages along the coast of Mecklenburg-Vorpommern. In accordance with experiences made earlier it is said that, under strict control, it would be possible to raise 15kg/m^3.

11.5.4 In the Lakes of the Lake District of Mecklenburg-Vorpommern

Many of the fish production facilities were closed down after the unification for several reasons, i.e. uneconomical production, lack of sales and sales channels, collapse of state directed cooperatives, re-establishment of private business, non-conformity with EC-regulations. The lake district of Mecklenburg-Vorpommern is supposed to be one of the centres of touristic development. Officials of the districts administrations are interested to keep fisheries and fishfarming as support for the present and future touristic development. Fisherman have always contributed to and they will play a role in the development of the touristic sector. With the supply of fresh fish on the one hand and the provision of accommodation typical for the landscape on the other hand they are and will be important identification factors within a future touristic strategy. In addition they will have to play an active role in the rehabilitation and protection of the waters and their shores.

11.5.5 Development of Aquaculture RTD and Professional Training

There is no senseful aquaculture, where there is no aquaculture science and training. Furthermore there is no aquaculture technology where there is no home market. In order to establish the right direction of this logical chain it appears absolutely necessary to intervene towards maintaining and extending aquaculture in this Land. Ecological, genetic, medical and nutritional problems encountered during the communist regime and in other countries will have to be avoided right from the outset.

11.6 Development of the touristic sector

Mecklenburg-Vorpommern disposes of a similar landscape as Schleswig-Holstein, the neighbouring "old" Bundesland in the West and of a similar industrial structure. Schleswig-Holstein, however, has in recent years undergone those structural changes Mecklenburg-Vorpommern will still have to be objected to.

In Schleswig-Holstein, a sector with quite some development potential during recent years had been the touristic sector. Changes in the consumer habit to spend at least part of the holdiday time budget in the home country and trends towards nature oriented holidays made tourism in Schleswig-Holstein a success story. This success received a further momentum by a soft tourism strategy of the government of this Land.

As a particular asset Mecklenburg-Vorpommern disposes of a larger hinterland than Schleswig-Holstein, longer coastlines, more and larger lakes and rivers. Moreover in Mecklenburg-Vorpommern there are 260 nature reserve areas and national parks. Whereas the West German holiday maker still tends to spend his main holiday abroad, e.g. in the countries around the Mediterranean, the typical East German remains in his own territory.

11.6.1 Lodging

Mecklenburg-Vorpommern had as of the end of the year 1990 291 officially registered lodging undertakings (hotels, hostels, pensions) with 17.319 beds versus 4.137 lodging enterprises with 156.048 beds in Schleswig-Holstein. Moreover two third of the lodging capacity in Schleswig-Holstein is provided by private and small undertakings and in privately owned apartments. In order to expand the demand a lot of efforts will have to be undertaken in improving the touristic infrastructure, e.g. rehabilitation of towns, villages, waste water treatment facilities, provision of clean energy and of course provision of hotels and private lodgings. Furthermore the recognition of the population including those engaged in the fisheries sector for the needs of modern yet tradition minded and environmentally oriented tourism will have to be distinctly promoted.

11.6.2 Food

As had been said earlier, the visitor of a coastal country expects fish on the menu. In comparison to West Germany on the one hand and the more to Mediterranean countries on the other hand the preparation of fish and seafood needs much to be improved in Mecklenburg-Vorpommern.

11.6.3 Pleasure Shipping

Pleasure shipping including angling trips is one of those businesses established as an alternative to fishing right from the outset. The more the tourism sector grows in Mecklenburg-Vorpommern, the more touristic attractions such as pleasure trips on former fishing vessels will be needed.

11.6.4 Support industries and services

Tourism needs numerous services not all to be named. It is believed, however, that many of those made unemployed, will have the opportunity to investigate touristic demands and their own ideas within the framework of the business generation programmes recommended earlier.

- almost all of the interviewed companies were founded in 1990
- most of the companies are orientated towards the home market only
- 85 % of the products were produced for domestic demand
- the main distributors orginate from the region
- all companies intend to increase investments
- more than 50 % of the companies face extraordinary environmental problems
- more than 50 % of the companies are not sure that they will remain on the same location, 30 % fear that they will not survive in the future
- every second company has marketing and sales problems
- 85 % of the companies have distribution problems
- the number of employed is drastically decreasing
- on third of all companies will not employ trainees in 1991
- the most serious obstacle is the deficient infrastructure, especially in the part Land Vorpommern

12.1.4 Objectives for an economic Recovery

The establishment of consultancy institutions would have to have prime concern with a view towards cooperation, marketing, managerial know-how, technology transfer and know-how transfer.

Special obejctives would have to be:

- to minimize bankruptcies
- to assist in the establishment of new companies
- to assist in the start-up phase
- to improve infrastructure
- to assist the companies in preparations for the single Market (quality assurance) in 1993

12.2 Foundation of Technology Centres (TCs)

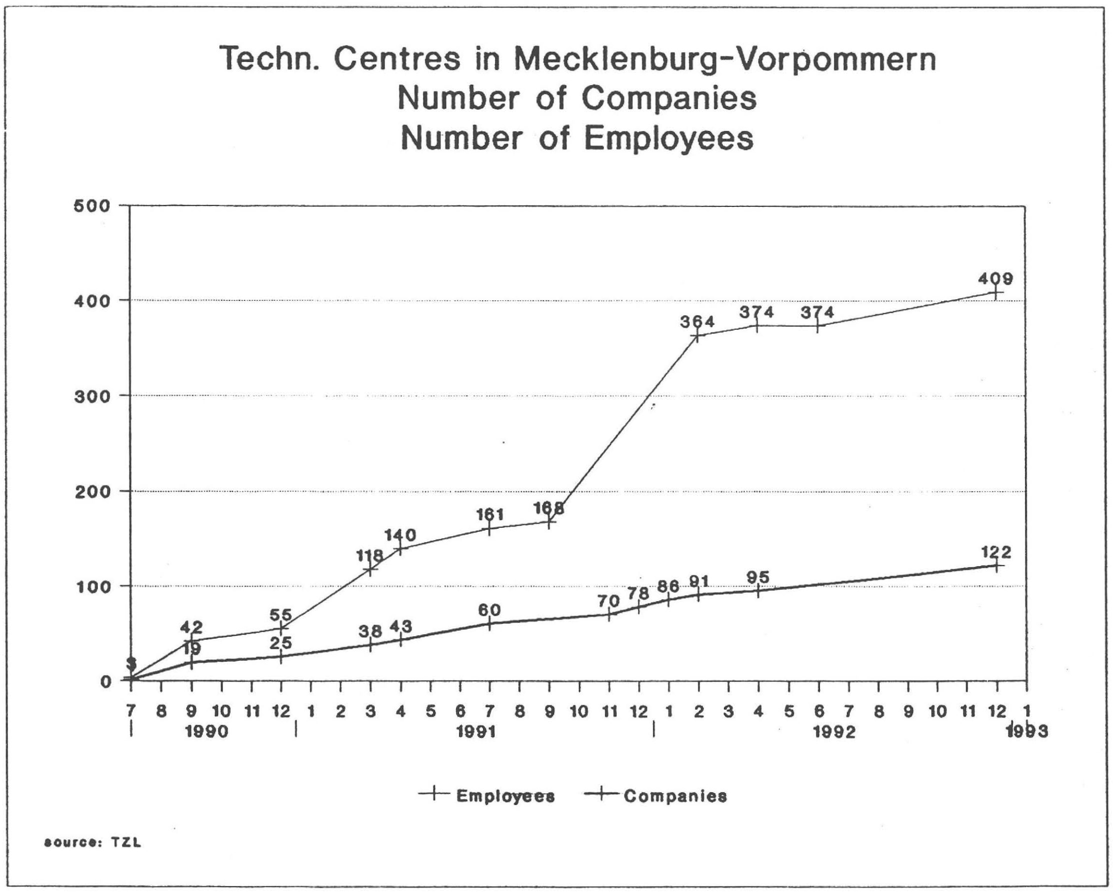
The establishment of technology centres was one of the strategic alternatives for the solution of several of the problems encountered after the collapse of the former GDR. When fully operational the technology centres will for new businesses be important mediators as regards contacts, information and professional advise. The objectives of the newly established TCs in Mecklenburg-Vorpommern are directed towards technologically orientated business founders as follows and towards improving the employment situation :

- to decelerate the movement of employees to the West
- to reduce the number of unemployed
- to create innovative productions and services
- to foster a creative environment for spin-offs
- to improve the attractivity of the region
- to improve technology and know-how transfer
- to secure an open atmosphere for international business and R & D cooperations

12.2.1 Present Situation of the TCs

Presently all TCs are fully booked. A number of companies requesting business space are on the waiting list. New buildings are in the planning stage.
The development of technology centres in Mecklenburg-Vorpommern in numbers of companies and in numbers of employed is shown on the following graph.

Figure 12.1 Techn. Centres in Mecklenburg-Vorpommern; Number of Companies, Number of Employees



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