

Polish Distant Water Fisheries in the Nineties: Problems and Possibilities of Overcoming Them

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Abstract: Polish distant water fisheries reached a crisis in the 90s. Thereby the present paper provides a characteristic of distant water fisheries where their main problems and possible solutions are briefly defined.

Key words: Poland, distant water fisheries, fishing grounds, economic transformation.

Introduction

Distant water fisheries has figured significantly in the sea fish economy in Poland. Since the implementation of exclusive fishing zones by coastal states regression observed in the 70s intensified in the 90s - Polish distant water fisheries faced a crisis.

The objective of this paper is to present and briefly characterise the causes of Polish distant water fishing failure, which constitutes the main problems (both internal and external) that distant water fisheries had in the 90s. and subsequently, it helps to define the conditions and possibilities of overcoming them.

1. GENERAL CHARACTERISTIC OF POLAND'S DISTANT WATER FISHERIES

For many years distant water fisheries have figured prominently in Polish sea fishing¹. Since the mid 70s distant water catches demonstrated a declining tendency, their contribution, however, used to be high: in 1976 they accounted for 74,2% (57 thousand tonnes),

in 1985 72,6% (472,3 thousand tonnes) and in 1991 74,7%.

The further regression of the deep sea catches intensified in the 90s: in 1998 the catches accounted for 111 thousand tonnes. In comparison with the year of 1992, they decreased almost three times. The following table 1 indicates that it was mainly North West Pacific area which was used for fishing.

Between 1990-1995, catches were mainly beyond the exclusive fishing zones of coastal statesⁱⁱ. Alaska pollock dominated in the catches (see: table 2).

Distant water fisheries were managed by the fishing fleet of three state corporations: Dalmor, Gryf and Odra. In the 90s the number of fishing cutters they exploited decreased from 92 in 1990 to 32 in 1998. As the Figure 1 shows, between 1977 and 1998 a number of the deep sea fishing fleet, the total capacity (GRT) and power (HP) declined exerting a positive influence on the fishing productivity growth (calculated as the size of catches and purchase by ship).

Specification	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total	319,2	307,5	359,8	259,4	292,7	275,6	164,4	157,7	111,0
North West Pacific	233,5	230,6	297,7	235,2	270,0	249,4	116,3	125,4	81,9
Arctic Atlantic	3,5	10,2	17,3	4,3	8,9	13,2	21,6	14,0	18,5
North East Atlantic	1,4	1,4	1,3	1,0	0,2	0,6	1,5	10,2	9,6
Others	^a 80,8	^a 65,3	^a 43,5	^a 18,9	13,6	12,4	^b 25,0	8,1	1,0
Within coastal zones	73,2	54,8	31,1	15,1	2,8	104,3	140,4	135,1	84,9
Beyond the zones	246,0	252,7	328,7	244,3	289,9	171,3	24,0	22,6	26,1
Catches portion in coastal zones within total catches	23%	18%	9%	6%	1%	38%	85%	86%	76%

^a including: South West Atlantic in 1990 - 86,5 thousand tonnes, in 1991 - 59,4 thousand tonnes, in 1992 - 42,5 thousand tonnes, in 1993 - 18,9 thousand tonnes

^b including: East Central Atlantic - 19,8 thousand tonnes

Table 1

Polish distant water catches between 1990 and 1998 according to fishing areas (thousand tonnes)

Source: Sea Fish Economy, MIR, Gdynia, between 1990-1992, 1992-1994, 1994-1996;
Polish Fisheries, 1997, Studies and Materials E No. 58, MIR, Gdynia 1999, table 3, p.14
Polish Sea Fisheries in 1998, Fisheries News, No. 4(101) April of 1999, table 1, p. 3

Specification	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total catches (thou. t)	319,2	307,5	359,8	259,4	292,7	275,6	64,4	157,7	111,7
Including (w %):									
Krill	0,9	3,3	4,8	1,7	3,0	4,8	13,1	8,9	16,8
Alaska pollock	70,0	75,0	82,8	90,7	92,2	90,4	70,7	79,5	73,3
Others ^a	29,1	21,7	12,4	7,6	4,8	4,8	16,2	11,6	9,9

^a blue whiting, squid, grenadier

Table 2

Polish distant water fisheries between 1990-1998 by species

Źródło: as in table 1

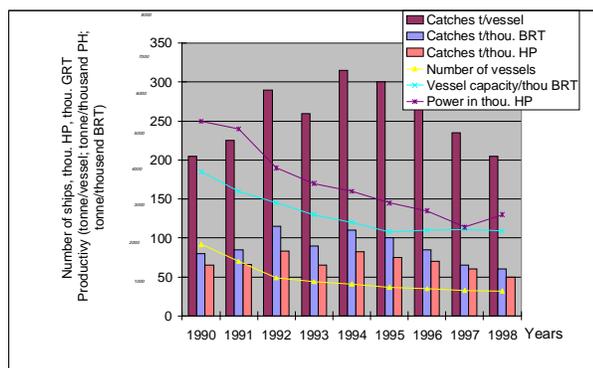


Figure 1

Changes in the quantity of deep sea fishing fleet and the average productivity of fishing ships between 1990 and 1998

Source: own calculations based on:
Sea FishEconomy, MIR - Gdynia for the period of
1990-1999

The period of 1990 and 1995 marked the country's economic transformations and a decrease in fishing productivity on deep sea regions. The fleet reduction which took place at that time resulted both from adjusting fishing potential to the limited fishing possibilities and from corporations' endeavours to raise labour productivity.

Tendencies in shaping the changes in the vessel productivity as the size of catches per engaged power unit (horse power – HP or vessel capacity (gross registered tonne - GRT) were concurrent with the shaping of productivity deducted as catch rate by ship. In accordance with the data provided in Figure 2, the rating of the average horsepower (HP) increased. This rise exerted a direct influence on the increased fuel consumption. Such consumption together with high fuel prices and their great significance as a cost-creating factor, had considerable influence on fishing costsⁱⁱⁱ. A number of other factors also exerted their influence on this occur-

rence. They comprised the increased distance to the fishing grounds, the necessity of incurring licence fees pay in foreign zones, or high rate of inflation in the country^{iv}.

In the 90s. a considerable decline in the employment in distant water companies followed. It concerned employees of both total and fishermen employed. Then, the labour productivity per one employee increased significantly. Yet, corporations debt ratio in 1998 was higher than in the period between 1990 and 1991 (see: table 3).

2. THE MAIN PROBLEMS OF DISTANT WATER FISHERIES

The main problems in the functioning of Polish fisheries in the 90s resulted from external and internal conditions of deep sea fishing corporations (see: diagram 1). The external factors included the entire range of factors beyond the state borders. Among them the most important factor was an increasing difficulty with the physical and economic access to the deep sea fishing grounds, both under the national jurisdiction of the coastal states and beyond the zones^v.

If between 1984-1991 the portion of coastal zones catches fluctuated between 20-40%., in the period of 1992-1994 it came to about 1-9%. This situation stemmed mainly from the fact that Polish distant water fleet was exploiting the Alaska pollock fishing grounds in the nonannexed international zones of the Sea of Okhotsk and Bering Sea.

The open waters (beyond 200-miles zones of the United States and Russia) in the fishing area of the North - West Pacific (the Bering Sea and the Sea of Okhotsk) were significant for the industrial exploitation by Polish deep sea fishing fleet. Polish catches in the Bering Sea fishing area in the nonannexed zone ("Donut Hole") began in 1986 and continued until 1991^{vi}.

Specification	Unit of Measure	1990	1991	1992	1993	1994	1995	1996	1997	1998	1998/1990 (%)
Total employment	people	14439	12582	9899	7770	6830	60	5364	4736	4560	32
including: fishermen	%	70	71	77	87	88	89	89	92	92	41 ^b
others	%	30	29	23	13	12	11	11	8	8	8 ^c
Labour productivity	thousand USD/1 employee	17,6	19,6	17,7	19,5	22,9	25,7	29,2	27,3	28,6	162
Debt ratio ^a	%	28,6	38,6	43,1	51,1	46,0	39,3	37,8	45,1	44,3	155

^a amount of liabilities in the value of assets/liabilities

^b 1990 - 10123 people; 1998 - 4198 people

^c 1990 - 4316 people; 1998 - 362 people

Table 3

Employment, labour productivity and debt ratio in Polish distant water fishing corporations between 1990-1998

Sources: Calculated and set on the basis:

Sea Fish Economy 1991-1999, reports Z 01 Z 07, MIR, Gdynia;

Kuzebski E., Adjustment Processes of Polish Distant Water Fisheries to the Changing Requirements of Access to Fishing Grounds and Country's Political System Transformation, Ph D thesis (unpublished), M., R, Gdynia 2000, table 21, p. 112 and table 23, p. 115

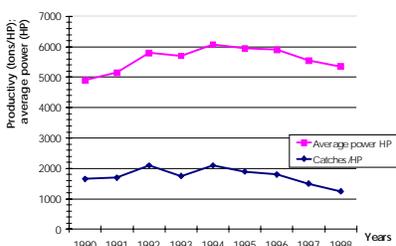


Figure 2

Changes in the fishing productivity and average power of deep sea vessels between 1990- 1998

Source: own calculations based on:

Sea Fish Economy, MIR - Gdynia for the period of 1990-1999

Distant water vessels were involved in fishing on the North Pacific, using seasonal fishing productivity taking place in the first half of a year on the open waters of the Bering Sea, whereas in the second half - in the economic zones of the United Nations and Canada. Poland's distant water vessels caught in that region from 115 to 300 thousand tonnes of Alaska pollock annually.

The open waters of the Bering Sea were the most essential region for Polish deep sea fleet between 1887-1991. providing over 60% of the total distant water catches. In 1988, there were about 30 vessels fishing on the open waters of the Bering Sea out of the number of 86 deep sea fleet units in that year.

Poland's distant water fleet seized definitely the catches on the open waters of the Bering Sea in September 1991. Thus, it was necessary to find new and more productive fishing regions.

In 1992, as a result of considerable over-fishing of resources, the countries exploiting the open waters of the Bering Sea, introduced a moratorium on the catches in that region. Since 1995, the open waters of the Bering Sea have been governed in accordance with the Convention on the Bering Sea Protection and Management, which comprised the member countries of Poland, the USA, China, Russia, Japan and Korea. On the basis of research on resources, annual catch limits are set.

In February of 1991, a number of distant water vessels (from PPDiUR "Odra") were directed experimentally to the open waters of the Sea of Okhotsk ("Peanut Hole"). achieving satisfactory, above twice higher fishing productivity, than that achieved on the Bering Sea^{vii}. Later that year, the majority of vessels were also moved to those fishing grounds from the Bering Sea region. At the end of 1991, the whole catching fleet from the Bering Sea moved to the open waters of the Sea of Okhotsk. In 1992, over 70% of distant water fishing effort, calculated on the days of catches, was oriented on exploiting the waters of the Sea of Okhotsk. Until mid-1995, that is, the moment of moving trawlers onto the waters of Russian economic zone of the Sea of Okhotsk and the Bering Sea, Polish deep sea fleet was achieving good results of 240-300 thousand tonnes of Alaska pollock annually.

Moreover, Poland is a member of four organisations managing fisheries on the open waters of: North-East Atlantic Fisheries Commission (NEAFC), North-West Atlantic Fisheries Organisation (NAFO), Central Bering Sea Pollock Convention (CBSPC), Convention for Conservation of Antarctic Marine Living Resources (CCAMLR). However, practically only the region of the Antarctic (CCAMLR) provides the potential fishing reserves (krill). Hard conditions of exploiting the Ant-

arctic resources as well as the limited market for krill products did not create any possibilities for relocating a greater number of vessels to those fishing grounds.

In 1995, considering the occurrences of conflicts with Russia as far as the exploitation of fishing grounds is concerned in nonannexed zones of the Sea of Okhotsk and the Bering Sea Russia made other coastal states resign from fishing in the both nonannexed zones in return for licensed catches in the Russian zone^{viii}.

Between 1996 and 1998, as a result of moving the majority of fleet to the economic waters of Russian Federation (the Sea of Okhotsk and the Bering Sea), as much as 76-85% of deep sea fishing took place in the Russian zone. Fishing co-operation with Russia is currently the only real possibility of maintaining the distant water fisheries. It can, however, the breach of the co-operation by Russia is possible, which may exert influence on the observed decrease of Alaska pollock resources in the Bering Sea and the Sea of Okhotsk^{ix}.

Internal conditions of Polish distant water fisheries operating were divided into two groups. The first one comprises factors independent from deep sea fishing enterprise which result from the economic and political transformations taking place in Poland after 1989. They exercised a major influence over the possibility and the efficiency of Poland's distant water fisheries' operations.

The implementation of the principles of market economy in Poland led to the reduction on donations for the state corporations as well as the increase in taxation load (e.g. a special tax on wage increase)^x. They were to contribute to the speedy restructuring of corporations.

Value Added Tax (VAT) on sale was imposed in Poland. The fish products are exempted from the tax on sale which meant that corporations were unable to subtract VAT at the purchase of the means of production. Moreover, price release, foreign trade liberalisation as well as abrupt devaluation of zloty became facts. The prices of the exploited products increased but generally the prices of the means of production purchased abroad rose as well. The charges connected with the purchase of fishing quotas, increased substantially.

The high level of inflation in Poland contributed to the considerable increase in the interest rates on bank credits. Corporations fell into a trap - they were unable to repay incurred debts.

In the 90s, the country employed the economic liberalism. There was no state policy concerning distant water fisheries. The reorganisation of state administration took several years. To a certain extent it was adjusted to political requirements, however that organisation did not facilitate restructuring and privatisation processes of deep sea fishing corporations.

Distant water fishing corporations entered the new decade of the 90s with a burden of centralised economy. It was considered necessary to bring about significant changes, including adjusting organisation structure,

employment volume as well as fixed assets to satisfy new conditions. The most essential problems of the free state corporations were: poor financial standing, including the outcomes of a high debt as well as the lack of possibilities of taking full advantage of possessed productive capacities (mainly distant water vessels), in relation to the worsening access to fishing grounds.

3. POSSIBILITIES OF OVERCOMING THE PROBLEMS OF POLAND'S DISTANT WATER FISHERIES.

The internal obstacles in the distant water fisheries development are gradually surmounted. Corporations worked out sanitations programs in the framework of privatisation programs.

As it has been already mentioned, fishery administration was reorganised, the state fishery policy is formulated (with gradual reduction in the excessive fiscalism)^{xi}. Poland craves for the membership in the European Union (E.U.). Since 1993, the adjusting processes, which are indispensable to be granted the membership, have been in progress. This is the direct cause of creating the basis of the Polish fishery policy^{xii}.

Devising the state fishery policy gives a chance of applying for the European Union funds (including pre-accession funds EU) to facilitate the reconstruction of the Polish fish economy, including fisheries.

The basic external difficulty concerning rapidly shrinking access to the fish resources of the Polish distant water fleet, has not found a satisfactory solution so far. There are various possibilities of relieving this extremely difficult situation^{xiii}:

1. continuation of autonomic catches on the open waters;
2. cooperation with the coastal states, e.g. Polish vessels charters or fish purchase at sea from the fishermen of foreign countries;
3. licence purchase (fishing quotas) in the zones under national jurisdiction of the third countries.

It is difficult to expect, that the Polish distant water fleet will find a new nonannexed by coastal states areas, where it could locate the majority of or the entire fleet, as it took place on the Bering Sea and the Sea of Okhotsk. The return of the Polish fleet to those fishing areas seems also impossible. First of all, it should provoke a fierce reaction from the countries which stake their claim to have dominion over those waters (Russia and the USA). What is more, the opposition of these states will conform with the new regulations of the exploitation on the open waters.

Since 1991, a series of international conferences were held. Their objective was to agree on the principles of fishing, among others on the open waters^{xiv}. Those conferences included: the session of FAO Fisheries Department (1991), International Conference on Responsible Fisheries (1992), United Nations Confer-

ence on Environment and Development (1992), Agreement subordinating fishing vessels activity on the open waters to the international measures of protection and management (FAO 1994), Conduct of Responsible Fisheries Code - FAO (1995), or United Nations Convention on straddling and highly migrating fish stocks (1993-1995). The resolutions of the last mentioned conference concern, among others, management principles of the open waters, surrounded by the waters under the jurisdiction of only one country. According to these resolutions, the vessels of the third countries fishing on these waters will be obliged to comply with the interests and regulations concerning the resources of that coastal state (art. 16). Coming of this convention into effect would automatically boost claims from Russia and the USA for the management of the open waters.

The remaining sea regions, potentially accessible for Polish distant water vessels (situated beyond 200-miles zones), are controlled by international fishing and state conventions, of economic zones to which they adhere (e.g. the area of the open waters on the Barents Sea is controlled by Norway and Russia). Poland is a member of four organizations managing the fisheries on the open waters. These organizations include: North East Atlantic Fisheries Commission (NEAFC), North-West Atlantic Fisheries Organization (NAFO), Central Bering Sea Protection Convention (CBSPC), as well as Convention on Conservation of the Antarctic Marine Live Resources (CCAMLR). However, in practice potential resources reserves (krill) can only be caught in the Antarctic region. The world krill catches substantially exceed the annual fishing quotas (in the season of 1995/96 120 thousand tonnes were caught within the total quotas of 4,1 million tonnes). Fishing quotas set for Poland on the remaining fishing areas (North-West Atlantic - NAFO and North-East Atlantic - NEAFC) are too low to ensure employment and economic profits of catches even by one deep sea vessel^{xv}.

The majority of attempts to find the possibilities of locating at least part of vessels in other fishing regions, on the co-operation terms with coastal states have not so far brought intended effects, e.g. concerning restriction requirements established on foreign vessels by coastal states (e.g. specifying a maximum vessel size, its age, employment of foreign crew, the necessity of changing the flag^{xvi}). Less attractive fishing species offered by coastal states to foreign fleets, as well as heavy competition of well-developed countries (e.g. Japan or Korea) place limits as well.

Co-operations, which were successfully established in the 90s, were frequently impermanent and quickly closed because of unprofitable catches (e.g. the fishing grounds of Mauretania and Senegal)^{xvii}. More durable, though limited by volume, operating possibilities alternative for cooperation with Russia deep sea vessels found on the waters of New Zealand, in terms of con-

tract (charters) requirements with New Zealand partners. In the initiated cooperation with New Zealand companies in 1992, the plan to employ more than 4-5 vessels annually failed.

When considering the possibilities of the Polish deep sea fleet activity the most essential is lasting since 1995 co-operation with Russia. Fishing co-operation with Russia is based on catches in terms of granted governmental licence and commercially purchased fishing quotas (by means of commercial agreements between Poland's distant water corporations and Russian corporations) as well as fish purchase from Russian fishermen.

The maximum size of catches in the Russian zone is dependent on limit volume set on Poland annually as government fishing quotas as well as additional quotas (commercial quotas) negotiated by particular Polish deep sea corporation with their Russian partner. At the same time, distant water fishing corporations replenish these quotas by buying fish from Russian kolkhozes.

The question of accessibility to fish resources to certain extent or totally independent from distant water fishing companies plays and will play the key role in further deep sea fishing fleet operations. Particularly, the fishing activities based on speedy relocation both of the means of production (fishing vessels) and of capital to a new activity sphere after having exhausted hitherto production abilities (resources), set limits on deep sea fishing corporations development.

Poland's distant water fisheries will be made to impose further limits on their fishing potential (fleet) and the catches volume, adjusting them to decreasing fish resources on the world fishing grounds. It is estimated that the reduction ranging from 25 to 53% on fishing industrial fleet potential is essential in the world fisheries. Efforts made by the management of Polish distant water fishing corporations aiming at discovering alternative access to hitherto existing fishing grounds, did not generally produce the desired effects.

There isn't much hope for Polish distant water fleet to increase the access to fishing grounds as a result of integration with European Union. European Union member states have themselves a fishing vessels surplus, compared with available fish resources. As a considerable advantage for the Polish distant water fleet can be regarded the ability of withdrawal (scrapping) vessels in return for financial compensation after integrating with the EU^{xviii}. Between 1987-1993 the EU allowed 600 million ECU, and between 1994-1999 - 700 million ECU to pay damages for scrapping fishing vessels. Received compensation for withdrawal of Polish distant water vessels from exploitation (3 million EURO per vessel) would allow to invest the capital in more perspective activity, for instance, fish processing or fish trade.

Conclusions

1. Polish distant water fisheries reached a crisis in the 90s, which caused drastic decrease in catches, employment, fishing fleet reduction, and maintaining of high debt ratio in corporations.

2. Distant water fisheries crisis was caused both by internal and external situation, including enterprise independent factors.

3. The most serious and difficult external problem to overcome was the worsening requirements for Polish fishing fleet access to deep sea fishing grounds.

4. Economic difficulties of distant water fishing corporations resulted also from transforming the conditions and rules of Poland's economy (for free market economy rules)

5. Distant water fishing corporations with their drawbacks of being big state companies accustomed to centralised economy, undertook reconstructing activities.

6. It's, however, impossible to resolve the crisis of Poland's distant water fisheries (distant water fishing corporations) without external support. It is indispensable to prepare the foundations of state policy as well as its implementation in order to manage best the existing potential of Polish deep sea fishing companies, including deep sea vessels as well as qualified personnel.

7. Only the state level position (through signing international agreements, or initiating a system of supplements for the fishing licence fees) can allow for at least partial relief of problems related to the access of Polish distant water fleet to fishing grounds.

8. However, adjusting processes taking place in Polish fish economy, related to the country's application for the European Union membership, creates a chance for Poland to utilise the European Union funds for fisheries restructuring.

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ⁱ See: Zieziula J., Transformations in the World Fish Economy after the Introduction of Exclusive Fishing Zones, Dissertations No.168, Szczecin, AR 1995, table 1, p.3

ⁱⁱ Kuncewicz P., Distant Water Fisheries in the Defensive, Fisheries News, No. 2 (75) February 1997, p. 2

ⁱⁱⁱ Polański Z., and team, Economic Analysis of Sea Fisheries for the Year of 1989, MIR, Gdynia, 1990, p. 10

^{iv} Economic Assessment of Sea and Ocean Exploitation with Regard to Fishing Grounds, Vessel Types and Fishing Methods, MIR, Gdynia, 1989

^v Present Difficulties of Distant Water Fisheries, Fisheries News 4(101) April of 1999, p.8

^{vi} Assessment of the Present State and Development Directions of Distant Water Fisheries, see: MTiGM-MIR, Gdynia, 1996, p. 95

^{vii} see above, p. 64

^{viii} Kuciewicz P., Distant Water Fisheries... , op. cit. , p. 2

^{ix} Janusz J., What about Alaska pollock from the Bering Sea, Fisheries News 4(77) April of 1997, p. 7-8

^x Zieziula J., State Function in Solving Problems of Polish Sea Fisheries, Sea as an Element of Polish Reason of State, STN - WSM, Szczecin 1999, p. 238

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^{xii} Michalski S., VAT Changes Project for Fisheries, Fisheries News No. 2(99), February 1999, p. 4

^{xiii} Polański Z., Maintaining Distant Water Fisheries, Fisheries News No. 3(100) February 1999, p. 1-3

^{xiv} Janusz J., Draganik B., Polish Distant Fisheries against World Fisheries - Present State and Problems, Gdynia 1999

^{xv} Present State Assessment and Directions of Distant Water Fishing Development, see: MTiGM-MIR, Gdynia

^{xvi} see above: p. 50 and following

^{xvii} Three vessels, which took part in the catches on terms of international agreement of 1995, were withdrawn after a year because of

financial losses. Somewhat less than a year lasted licenced catches of two ships on the fishing grounds of Nambia (1995-1996). They were discontinued because of their low fishing efficiency. Among other countries which Poland failed to co-operate in the 90s were: Argentina (1990, 1994-96), Falkland Islands (1994), Chile (1994-95), North Korea (international agreement-1997), Maroko (1994), Norway (1994), Pakistan (1997), Peru (1994, 1997), the USA (1995-96), Senegal (1996), Viet-Nam (1995-96), Present State Assessment..., op. cit., p. 61 and following

^{xviii} Kuciewicz., In Order to Join the Union, Fisheries News, No.2(99), February 1999, p. 3

Polish Fisheries before Integration with the European Union (these for environmental discussion), Fisheries News No. 2(87) February 1998, p. 4;

Fishing Organizations Stand Concerning Negotiations with the European Union on Fishery, Fisheries News No. 1(87) January 1999, pp. 4-5

^{xv} Present State Assessment and Directions of Distant Water Fishing Development, see: MTiGM-MIR, Gdynia

^{xvi} see above: p. 50 and following

^{xvii} Three vessels, which took part in the catches on terms of international agreement of 1995, were withdrawn after a year because of financial losses. Somewhat less than a year lasted licenced catches of two ships on the fishing grounds of Nambia (1995-1996). They were discontinued because of their low fishing efficiency. Among other countries which Poland failed to co-operate in the 90s were: Argentina (1990, 1994-96), Falkland Islands (1994), Chile (1994-95), North Korea (international agreement-1997), Maroko (1994), Norway (1994), Pakistan (1997), Peru (1994, 1997), the USA (1995-96), Senegal (1996), Viet-Nam (1995-96), Present State Assessment..., op. cit., p. 61 and following

^{xviii} Kuciewicz., In Order to Join the Union, Fisheries News, No.2(99), February 1999, p. 3