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POLAND'S MARITIME INDUSTRY

An Important Factor in the Polish Economy

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Summary: Poland's present-day coastline has a length of almost 700 km (including bays), as compared with 140 km before World War II.

In addition to the prewar harbor of Gdynia, Poland now possesses two other major ports, Gdansk and Szczecin.

This is the basis on which Poland has expanded its shipbuilding industry since the war, and has developed its merchant fleet and its deep-sea fishing industry.

It is an undeniable fact that Poland has used these possibilities to good advantage and has made striking progress in all these three fields of its national economy, with the most spectacular advance being in shipbuilding.

The following is a review of the three main branches of the Polish economy connected with the sea, their development, and their current problems arising from the need generally to streamline the national economy, and the necessity to keep pace with the latest developments in world-wide shipbuilding, maritime shipping and fishing, which cannot be done without application of modern technical methods.

* * *

Shipbuilding

The first sea-going vessel built in postwar Poland was a small, rather primitive steamship, the 2,540 deadweight ton coal and ore carrier launched in the Gdansk shipbuilding yards in November, 1948. In 1950, Poland built three ships with a total deadweight tonnage of 7,600 and entered the list of world producers of ships with a share of 0.4 per cent of world-wide production. Fifteen years later, in 1965, after a period of rather spectacular development, Polish shipyards were turning out 55 ships with a total deadweight tonnage of 359,000, which represented 2.7 per cent of world production of ships and placed Poland eighth on the world-wide list of producers. In 1965, the rate of increase in Poland's ship production reached its peak, with a 21 per cent increase over the previous year, far exceeding the general rate of increase in world-wide

production of ships. The year 1966 was a turning point in the development of the Polish shipbuilding industry, with a gradual fall in the rate of production increase, in the share in world tonnage produced, and in rank among world producers. The year 1969 saw a 5 per cent decrease in production as compared with 1968, only a 2.3 per cent share in world production, and 12th place in the world-wide scale of producers.

1. Polish Shipyards -- Production and Specialization

Production of Polish Shipyards*)

	Number of Ships	1000 Deadweight Tons	Percentage Share in world-wide Production	Rank Among World Producers	Percentage Change Over Previous Years (similar period)
1950	3	7,600	0.4		
1965	55	359,000	2.7	8	+ 21
1966	51	391,600	2.7	10	+ 9
1967	60	456,500	2.4	10	+ 17
1968	61	477,600	2.3	11	+ 5
1969	59	453,900	2.3	12	- 5
1970	--	173,700	--	--	+ 5.4
first six months					

*) Source: Statistical Yearbooks 1966-1969, Small Statistical Yearbook, 1970, and the Main Statistical Office's report on plan fulfillment in the first half of 1970.

Although the results of the first six months of 1970 showed a small increase over the analogous period of 1969, the output of the Polish shipbuilding industry in the first half of 1970 was still smaller than it had been during the first half of 1968. According to plans, production in 1970 is to exceed that of 1969 by 9 per cent (the year of decreased production).

The three centers of the Polish shipbuilding industry are Gdansk, Szczecin and Gdynia, in order of precedence according to tonnage produced. From 1945 until May, 1970 their shipbuilding amounted to:

Gdansk	601 ships	2,540,700 deadweight tons		
Szczecin	158 "	1,151,700	"	"
Gdynia	241 "	792,600	"	"

Gdansk now specializes mainly in the production of large fishing vessels with facilities for processing, transport, and refrigeration of fish, but also turns out bulk carriers of over 10,000 deadweight tons and tankers of up to 19,000 deadweight tons. Szczecin concentrates on all types of general cargo vessels in the 6,000 to 33,000 deadweight ton range. Gdynia, which had specialized in low-tonnage fishing vessels and cargo ships, has installed a dry dock which has made possible construction of the largest ships built in Polish shipyards to date. On 1 April 1970, the first 55,000 deadweight ton bulk carrier, the Manifest Lipcowy (July Manifesto) was launched there.

Fishing vessels have become the field in which the Polish shipbuilding industry specializes. A considerable step forward was made in the Sixties when Poland undertook production of large factory ships for the on-board processing of fish. By 1968, Poland had overtaken Japan in the production of fishing vessels, thus advancing to the first place among the world's producers of fishing vessels, a rank it still maintained in 1969.

As mentioned above, an important new development in Polish shipbuilding was the construction in Gdynia of a dry dock which makes it possible to build ships, bulk carriers, and tankers of up to 80,000 deadweight tons, and even up to 120,000 deadweight tons when using the method of joining sections outside the dry dock. The first 55,000 deadweight ton bulk carrier, launched last April in Gdynia for the Szczecin shipping line, Polska Zegluga Morska, was also built by the method of joining two halves outside the dry dock. It is planned to deliver two further large bulk carriers of 53,000 deadweight tons each at the beginning of 1973, and to supply the Szczecin shipping line five further ships of the same tonnage by 1975.

Another new development was the construction, in 1969, by the Gdansk shipyards of container ships of 12,000 deadweight tons. The first 10 were contracted for by Brazil. To date, 55 different types of ships are being built by the Polish shipyards.

The tentative plans for the Polish shipbuilding industry during the forthcoming five-year period (1971-1975) project:

construction of 300 ships of a total tonnage of 3.4 million tons, of which 235 are to be sold abroad.

2. Auxiliary Production -- Ship Engines and Equipment

When reviewing the Polish shipbuilding industry, mention must also be made of the auxiliary production which has developed along with the main industry itself, initially designed mainly to serve its requirements, but later developing into an important branch of industry working for export.

The main ship equipment items produced in Poland are ship engines turned out by the H. Cegielski enterprise in Poznan. In 1958, the first ship engine was built in Poznan on the basis of a license from Sulzer, followed in the Sixties by engines produced under licenses from the Danish Burmeister firm and Wain and Fiat. By now Cegielski has become the largest ship engine producer in Europe and ranks fifth among world-wide producers of main ship engines.

As the oldest producer of ship engines among the Comecon countries, Poland has been given the task of specialization in this branch of industry and has become the main supplier of ship engines for the Comecon member countries.

3. Foreign Sales of Polish Ships -- Main Importer the USSR

A year after launching its first ship at the end of 1949 Poland entered, for the first time in its history, the ranks of ship exporters. The first ship sold abroad went to the Soviet Union. Two years later, Poland started foreign sales of its fishing vessels; here, too, the first vessel sold headed for the Soviet Union.

By 1968, Polish ship exports had increased threefold over 1959, with three fourths of the tonnage produced being sold abroad. At present Poland occupies first place among the world's exporters of fishing vessels and seventh among exporters of ships in general, after Japan, West Germany, Sweden, Great Britain, Yugoslavia and Holland.

The main purchaser of Polish ships is the Soviet Union. In the years 1950-1968, Poland sold the Soviet Union 479 ships with a total tonnage of over 2,000,000 dead weight tons, that is, 78 per

cent of all cargo ships, and 96 per cent of all fishing vessels sold abroad.(1) As a result, every fifth commercial ship flying the Soviet flag was built in Poland.

Poland has also contributed heavily to the development of the merchant fleets of other Communist countries. Every sixth flying the Chinese, and every seventh flying the Cuban flag was built in Poland; one third of Czechoslovakia's fleet, and one fourth of Albania's were bought from Poland.

4. Destination of Polish Ships Sold Abroad, 1950-1969

USSR	78.8	per	cent	of	all	Polish	ships	sold	abroad
Other "socialist"									
countries	7.6	"	"	"	"	"	"	"	"
Capitalist									
countries	13.6	"	"	"	"	"	"	"	"
(mostly in the									
last decade)									

Since 1969 there has been a marked change in the destination of the ships Poland sells abroad, with increased numbers of them going to the capitalist countries. There are two main reasons for this. The first is the fact that the USSR is increasingly meeting its needs by building its own ships; the second is Poland's need of hard currency to balance trade with the capitalist countries and to earn hard currency for the modernization of its shipbuilding industry. By now the shipbuilding industry has become one of the largest Polish exporters, earning, in recent years, an annual average of over 700 million exchange zloty, an important factor in the country's balance of payments. In 1969, sales of ships abroad accounted for 6 per cent of total Polish exports and took second place among its hard currency earners.

However, as in the construction of ships, Poland is also losing its position among the world's exporters of tonnage. From fifth place in 1968, Poland dropped in 1969, to eighth place, in spite of the fact that the tonnage of Polish ships sold abroad rose by 11.3 per cent in 1969 over the previous year. Poland's 11.3 per cent increase in foreign sales of ships could not match the spectacular increase in the sales of some other countries, such as Denmark (49.1 per cent), Holland (96.2), or Yugoslavia (55.3).

(1) Trybuna Ludu, 3 December 1969 and 9 February 1970.

Main Foreign Purchasers of Polish Ships, 1950-1968*)

Country	Number of vessels sold	Deadweight tonnage
Albania	3	11,400
Brazil	16	84,000
China	27	143,140
CSSR	3	35,000
Cuba	3	38,210
Egypt	4	16,400
France	24	6,895
Great Britain	7	3,630
India	9	56,460
Indonesia	25	75,000
Iran	1	10,000
Mexico	1	25,700
Norway	8	20,555
Rumania	1	1,500
Switzerland	2	20,600
USSR	479	2,349,130

*) Source: "The 20th Year of Polish Ship Sales Abroad," Trybuna Ludu, 7 February 1970.

Poland's high rank among the world's exporters of ships (eighth in 1969) as compared to its receding position among the shipbuilders of the world (12th in 1969) is explained by the very high proportion of tonnage earmarked for sale abroad.

Construction and Foreign Sales of Ships*)

	Total Construction (deadweight tonnage)	Foreign Sales (deadweight tonnage)	Foreign Sales -- as percentage of con- struction
1950	7,900	2,600	32.6
1960	256,500	175,700	68.5
1965	359,700	259,500	72.1
1967	458,300	332,600	72.6
1968	479,000	338,700	70.7

*) Source: The Statistical Yearbook of Foreign Trade, 1968 (issued 1969).

One might ask the question whether sale of ships to the Soviet Union is profitable, and this question has reportedly been frequently asked by those Poles who view Polish-Soviet economic relations as primarily a case of Soviet exploitation of the weaker, and politically dependent, partner. That such reservations must have been fairly frequent with respect to Polish delivery of ships to the Soviet Union can be judged by the frequency of assurances in the Polish press which emphasize that, without Soviet orders from the beginning, which guaranteed Polish shipyards a full book of orders, and for years ahead at that, the Polish shipbuilding industry could not have developed at the pace it did, considering the difficulty, even now, Poland has in getting orders from the hard currency area. The profitability of particular transactions can, of course, be doubted, considering that Polish ships sold to the Soviet Union consist of a considerable number of parts (tackle and equipment) imported from the West and paid for in scarce hard currency.

While sale of ships abroad brought Poland 524,230,000 exchange zloty in 1967 and 600,004,000 in 1968, these sums have to be adjusted according to the sums spent abroad on import of equipment for the shipbuilding industry, the more so since the lion's share of these imports originates from hard currency markets.

Imports and Exports of Ship Equipment*)
(excluding ship engines)

Year	In 1,000 exchange zloty		
	Imports	Exports	Balance
1967 Total	44,500	15,216	29,284
West	36,466	1,175	35,291
1968 Total	35,131	20,091	15,040
West	28,600	1,967	26,633

*) Source: The Statistical Yearbook of Foreign Trade, 1968
(issued 1969).

This deficit is, however, offset by earnings from repairs of foreign ships which, after the deduction of the cost of having

Polish ships repaired in foreign shipyards, produced a net of 33,490,000 exchange zloty in 1967, and 40,483,000 in 1968. However, since only the totals are known, it is hard to determine the extent to which these earnings offset hard currency expenses for foreign equipment, which are known to weigh heavily on the profitability of the Polish shipbuilding industry.

As for long-range plans concerning sale of Polish ships abroad, an increase is projected to about 610,000 deadweight tons in the year 1975, and to about 781,000 deadweight tons in the year 1985.

5. Difficulties Facing Polish Shipbuilding Industry

The period when the rate of development of the Polish shipbuilding industry exceeded that of the world ended around December, 1966. By 1969, while world-wide construction of ships increased by 15 per cent over 1968, Polish shipyard production decreased by 5 per cent. There are many causes of this decline, which are the results of both internal and external factors.

The external factors are the latest developments in the world-wide shipbuilding industry, where Poland has thus far played but an insignificant role, due to the inadequate technical capacities of its shipyards and failure to develop an adequate research base.

The closing of the Suez Canal spurred construction of ever larger tankers, a trend which also spread to bulk carriers and to cargo ships in general, since the world market now demands larger ships, with an average size exceeding 40,000 deadweight tons. Furthermore, there is an ever increasing demand for special ships, such as container ships, express ships, and car ferries. Compared with the giants now being built in some foreign yards (a 400,000-ton tanker is on the slips in Japan), Poland's first 55,000-ton ship, launched recently, "will look like a midget among whales" as a sober article in the Polish press admitted. Neither is Poland producing express ships, since it itself recently placed an order for a series of such ships with a Danish shipyard.

The list of the difficulties and problems faced by the Polish shipbuilding industry, which prevent it from keeping pace with technical progress in world-wide shipbuilding, is long.

Although the Polish press, generally speaking, continues

on every occasion, to praise the achievements of the Polish shipbuilding industry -- which it on the whole deserves -- some sober voices have recently been raised which point out the danger that, unless some radical measures are undertaken soon, Polish shipbuilding is doomed to further regress in the face of the dynamic pace of progress in the world.

One such illuminating article by Jerzy Surdykowski appeared in the 4 May 1969 issue of Zycie Gospodarcze. Stressing the necessity for intense investment, the author maintained that, without considerable outlays, the total production capacity of Polish shipyards is bound to diminish in view of the necessity gradually to withdraw obsolete and worn out equipment. (The basic dilemma of the Polish shipbuilding industry now is: either to develop capacity further -- or else to lose the position gained in world-wide shipbuilding," said the author, adding, "despite appearances, maintaining the present state of affairs will lead, in the very near future, to regression." While foreign importers, said Surdykowski, require large tonnage ships these days, the only Polish dry dock in Gdynia capable of building such ships is already fully booked until 1975 with orders from Polish, Soviet and Norwegian shipping lines. This means that Poland will have to reject potential foreign orders, possible representing up to one million deadweight tons, simply because there are no facilities available to build them.

The author deplored the lack of adequate investments in Polish shipbuilding and reminded his readers that, while the Fifth Party Congress (November, 1968) included in its resolution the list of industrial branches which were to receive preferential treatment in order to achieve world standards of technical development, the shipbuilding industry was missing, although it should have topped the list.

Another article pointing out the problems of the Polish shipbuilding industry appeared in the 31 October 1969 issue of Zycie Warszawy (Jerzy Redlich, "The Future of the Shipbuilding Industry").

The author pointed out the lack of an infrastructure for the development of the Polish shipbuilding industry, the lack of experimental docks and laboratories -- deficiencies which could, in the end, lead to technical backwardness of production.

The second problem, according to the author, is the inadequacy of domestic supply of parts and equipment. This results in the necessity to import a considerable part of the equipment needed, and consequently to a reduction of hard currency incomes from the sale of ships abroad (since ship equipment is imported predominantly from hard currency markets).

The third problem consists in the fact that installations in the shipbuilding yards are gradually becoming obsolete. The author maintained that, unless replacements and modernization are carried out in the immediate future, the current production capacity of 700,000 deadweight tons will fall to about 500,000 deadweight tons annually.

Regarding investment plans, the author said that the Shipbuilding Industries' Association advanced an ambitious proposal for production during the next five years (1971-1975), but only on condition that the Ministry of Heavy Industry considerably increase investment outlays. These plans project a 47.5 per cent production increase, which would mean a production of 3.7 million deadweight tons in the years in question. The proposals also included plans for the introduction of a system of industrial concerns; more elasticity in the realization of production programs; measures to achieve better productivity, lower costs of production and higher profitability of exports.

Another evaluation of the critical position of the Polish shipbuilding industry was made in a Glos Pracy article (13/14 June 1970). The author warned that, in spite of undisputable successes, "there exists no basis for excessive complacency, which would only blunt self-criticism, which is indispensable for the future development of Poland's shipbuilding industry. One has to realize," went on the author, "that dynamic development of the shipbuilding industry is by no means Poland's monopoly." As a matter of fact, the pace of development of Polish shipyards' production capacity has been growing more slowly in the last few years than that of some other European countries (Spain or Yugoslavia), not to speak of the Japanese "miracle," as a result of which Poland has been unable to retain its rank among the world's producers and is gradually slipping down the list of world ship producers.

This reminds one of the warnings made by First Secretary Wladyslaw Gomulka and Premier Jozef Cyrankiewicz in their speeches during the last July 22 celebrations when they referred to the

necessity of keeping pace with world-wide technological progress. While praising Poland's progress in the past 26 years, Gomulka reminded his audience that "there are other nations of the world together with us on this road of progress." Cyrankiewicz warned against complacency, saying: "... time is not a neutral factor. In the cutthroat competition for a better place in the world, it is becoming ever more difficult to make up for every delay, for every erroneous decision."

The conclusion is that the Polish shipbuilding industry urgently requires considerable investments to stop the process of recession; it must modernize and expand in order to regain its rank among the world's producers of ships.

One might expect that, in its requests for more investment funds, the Polish shipbuilding industry might find an advocate in the recently appointed (June 30) new Vice-Premier, Politburo member Stanislaw Kociolek, formerly Party First Secretary in Gdansk. Of the seven spheres of economic problems allotted to individual vice-premiers, Kociolek (judging by his activities since his appointment) has been given supervision of the machine, heavy and chemical industries and of industrial building and investments. Thus, shipbuilding, as part of heavy industry, falls within Kociolek's bailiwick, as do investments in shipbuilding. Before his appointment as vice-premier last June, Kociolek had spent two and a half years as Party First Secretary in Gdansk, the center of Polish shipbuilding, where he must have gotten a clear idea of all the problems besetting this branch of industry. However, it will take more than a vice-premier to find the capital needed for the huge job of modernizing the shipbuilding industry.

Shipping

The rapid development of the Polish shipbuilding industry decisively influenced the development of the Polish merchant fleet, 75 per cent of which is Polish built. In the years 1948-1969, domestic shipyards supplied Polish shipping lines with 336 ships of 1,103,100 deadweight tons, enabling the Polish merchant fleet to increase 18-fold since the end of the war.

The rate of development of the Polish merchant fleet is twice the growth rate of the world-wide merchant fleet. While the tonnage of the Polish merchant fleet has more than doubled since 1960, the increase in the world-wide merchant fleet was 50 per cent.

After adding 13 new ships in 1969, the Polish merchant fleet now has 250 ships with a total of 1.8 million deadweight tons and holds 18th place in the world (as compared to 20th in 1967).

The coming five-year plan is likely to double the fleet's size, to 3.5 million deadweight tons, by 1975 and the long-range plans project an increase to 7.0 million deadweight tons by 1985, which is to secure Poland's rank among the world's major maritime nations.

1. The Polish Merchant Fleet

The Development of the Polish Merchant Navy*)

(On 31 December)	Number of ships	Deadweight tons
1949	45	206,832
1960	138	824,060
1965	196	1,269,662
1967	227	1,607,995
1968	237	1,722,837
1969	250	1,843,173
1970 (planned)	261	(about) 2,000,000

*) Source: Statistical Yearbook, 1969; Small Statistical Yearbook, 1970.

Tonnage of Polish Merchant Navy Compared with World-wide Tonnage*)

	In gross tons		
	World-wide tonnage	Polish tonnage	Percentage of world-wide tonnage
1950	84,583,000	199,000	about 0.2
1960	129,770,000	619,000	" 0.5
1965	160,392,000	1,040,000	" 0.6 (20th place)
1967	182,100,000	1,210,000	" 0.7
1968	194,152,000	1,342,000	" 0.7
1969	211,661,000	1,536,000	" 0.7 (18th place)

*) Source: Statistical Yearbook, 1969.

The Polish merchant fleet is divided between two companies: the Polish Ocean Lines (PLO -- Polskie Linie Oceaniczne) based on Gdynia, and the Polish Steamship Company (PZM -- Polska Zegluga Morska) with Szczecin as the home port.

Up to 1965, the main effort was to establish efficient, regular lines mainly serving the needs of Polish foreign trade. In the course of the last few years, attention has at least in part shifted to developing a fleet of tramp steamers which by 1968 carried over 71 per cent of the cargoes transported by the entire Polish merchant fleet.

In order to streamline the operation of the two companies and to eliminate duplication of work by Poland's 500 shipping agents in ports all over the world, a reorganization of the Polish merchant fleet was decided upon late in 1969, effective 1 January 1970.

From that date on, Polish shipping was reorganized into two new companies: the Polish Ocean Lines in Gdynia, operating regular liner services on the American, Asian and African runs, as well as passenger services, and the Polish Steamship Company in Szczecin, operating short-distance and ocean-going tramp steamers from Szczecin, and tankers from its base in Gdansk.

Since the reorganization, the Polish Ocean Lines operate 150 ships on 30 regular runs, while the Polish Steamship Company handles the remaining 100. In addition to the existing regular lines, the POL plans to commence new runs to the Red Sea and Australia and to develop an express service by container ships (built in Denmark) to Japan.

The POL also operates Poland's sole transatlantic liner, the Stefan Batory (7,170 deadweight tons), plying between Gdynia and Canada via Southampton.

The POL also operates, jointly with the East German Deutsche Seereederei (DSR), regular lines to Africa: Uniafrika to West Africa, and Baltafrika to the East African ports. The POL, the DSR and a Leningrad shipping line jointly operate, under the name Baltamerika, a service to the east coast of South America.

The oldest joint venture in shipping is the Chinese-Polish Shipbrokers' Association called the Chipolbrok, set up in 1951 at the initiative of the POL (or allegedly of the Soviet

Union). It has 18 to 20 ships on charter from the POL on the Poland-China run.

2. Volume of Polish Maritime Transport

From a rather insignificant 1.6 million metric tons of cargo transported by the Polish merchant fleet in 1948, Poland's maritime transport has increased to over 16.6 million tons in 1969 (an increase in 1969 of 5.9 per cent over 1968) and it is estimated that this year (1970) it will reach 18 million tons.

Tonnage of Goods Transported*)

(in metric tons)

1948	1,650,000
1960	5,776,000
1965	10,627,000
1967	13,227,000
1968	14,838,000
1969	16,634,000 (including chartered vessels)
1970 (estimated)	18,000,000
1975 (planned)	29,000,000+

*) Sources: Statistical Yearbook, 1969, Small Statistical Yearbook, 1970.

The importance of maritime transport continually increases in Poland's foreign trade, and it is estimated that, in 1970, about 53 per cent of Polish foreign trade (in tons) will be transported by the Polish merchant fleet.

During the first four years of the current five-year period (1965-1970), the Polish merchant marine transported over seven million tons of goods between foreign harbors, thus greatly contributing to the improvement of the Polish balance of payments.

The share of the Polish Merchant Marine in the transport of goods in Polish foreign trade turnover was as follows for selected years in the period from 1948 to 1970.*)

1948	11.3	per cent
1966	44.	" "
1969	46.4	" "
1970	53	" "

*) Source: Trybuna Ludu, 14 May 1967.

The Ministry of Shipping has emphasized that, with the beginning of the next five-year plan (1971-1975), Poland will insist that it have a "paying fleet," which means that it will strive for a larger currency inflow from foreign trading partners and to carry more cargo between foreign ports.

3. Long-Range Development Plans

Long-range plans for the development of the Polish merchant fleet project an ever increasing number of special cargo ships (for coal, fertilizers, sulfur) and also container ships. The development of a tanker fleet is also under consideration. On regular lines, the classical bulk carrier is to continue.

In his article in Trybuna Ludu (20 June 1970), Minister of Shipping Jerzy Szopa stated that the merchant fleet has been earmarked as one of the developing branches of the Polish economy. It is planned, he said, that, by 1975, the tonnage of the Polish merchant fleet is to increase 79 per cent over 1970 and to reach 3.3 million deadweight tons, while the transport of cargo in 1975 is to reach over 29 million tons.

4. Problems of Polish Shipping

Notwithstanding Poland's considerable success in the field of shipping, further development here depends on a number of conditions stemming both from various shortcomings within this particular branch of the economy, as well as from those besetting the Polish economy as a whole.

An article in Zycie Gospodarcze (2 August 1970) stressed that further development of the Polish merchant fleet has to be matched by an adequate development of the transloading capacity of Polish harbors and the capacity of Polish repair yards. For, in 1969 as much as 54 per cent of the total operating time of the Polish fleet was spent in berth in various harbors, mainly Polish. Polish shipyards can satisfy only 75 per cent of the repair needs of the Polish merchant fleet. The equipment in Polish harbors and repair yards is outdated and badly needs replacement.

The article also complained about the inadequate technical level of the Polish fleet, and called for better organization and more control and supervision of Polish shipping.

The difficulties in catching up with world-wide trends in modern transport were discussed in an article in Zycie Warszawy (25 June 1970). The article stressed the urgent need for the Polish merchant fleet to adapt to the increasingly popular method of container transport. However, the primary difficulty here is that Polish railways and trucking are not yet adapted to this method of transport, and switching over to it would also require an over-all reform of domestic transport means. Only half measures are being applied now. Some goods are being put into containers (bought abroad) in the home port of loading, instead of at the factory; some goods are transported as far as the foreign port of destination, where they are put into the containers of foreign firms. The paper called this method complicated and costly, and the whole problem needs urgent solution.

The urgency of the problem has been known for some time. Thus, in an article in Kurier Polski (17 November 1969), the author claimed that, since neither Polish ships nor harbors are capable of handling container cargoes, an increasing number of transit goods are being directed to non-Polish harbors.

The author sounded the alarm in stating that, in 1970, about 75 per cent of general cargo on the North Atlantic routes will be transported in container ships, while in Poland it is planned that, by 1975, ships adapted to transport of container cargo will constitute hardly 4 per cent of the entire tonnage handled by the Polish merchant fleet.

Thus Polish shipping, as is also the case with Polish shipbuilding, is faced with the urgent necessity of catching up with the rapid pace of technological progress in the world of modern transport.

Deep-Sea Fishing

The speedy development of the Polish shipbuilding industry since the war has also spurred development of the Polish fishing fleet, which consists almost entirely of vessels constructed in Polish shipyards.

From an insignificant 124 fishing vessels in 1946, the Polish fishing fleet had grown, by 1969, to 704 vessels with a total tonnage of 237,000 gross tons.

1. The Development of the Polish Fishing Fleet

Year	Number of vessels	1,000 gross tons
1946	124	
1950	365	18.2
1955	462	43.2
1960	652	87.6
1965	672	163.7
1968	707	232.0
1969	704	237.2

Source: Small Statistical Yearbook, 1970, and Trybuna Ludu, 27 July 1970.

Eight fishing enterprises exist in Poland. The most important are the Dalmor of Gdynia, the Odra of Swinoujscie, and the Gryf of Szczecin. There are, in addition, 19 deep-sea fishing co-operatives in various ports.

Originally restricted almost entirely to the Baltic, the Polish fishing fleet has in recent years been going ever further afield in search of the herring and the cod, into the North Sea, along the Scottish coast, into the North Atlantic, and into the South Atlantic along the West African coast. While in 1960 the Baltic catches about equaled the catches in the far-off fishing grounds, by 1969 catches outside the Baltic had grown to 70 per cent of the total catch of the entire Polish fishing fleet.

2. Sea Catches of the Polish Fishing Fleet

Year	In 1,000 metric tons		
	Total	Baltic Sea	High Seas
1950	66.2	58.5	7.7
1955	107.1	65.4	41.7
1960	168.0	82.5	85.5
1965	280.1	84.6	195.5
1968	385.5	127.8	257.7
1969	386.6	126.3	260.3
1970	430.0 (planned)		

Source: Small Statistical Yearbook, 1970.

While the fish catch in the world was growing, over the last 20 years, by an average of 5.7 per cent annually, in Poland the annual growth was 11 per cent.

According to plans, the Polish fishing fleet catch is to reach about 500,000 to 600,000 tons by 1975, with the catch in the Baltic remaining stabilized at the present level, and the main emphasis being on the Atlantic catch, which is to increase further.

The Polish fishing fleet's catch is directed almost exclusively to the domestic market. Out of a total of 386,600 tons of sea fish caught in 1969, only 39,100 tons went for export, that is, about 10 per cent. (2)

Thus, the main problems of the Polish fishing industry are those related to the size of fish consumption at home and to the facilities for distribution and storage.

Fish is not a popular item in the Polish diet. In 1969, the average Pole consumed only six kilograms of fish in general, of which 4.9 kilograms were salt water fish. The six kilograms per capita consumption of fish in Poland compares unfavorably with such high fish consuming nations as Denmark or Sweden (21 and 20 kilograms per capita respectively in 1967-1968), or even the Soviet Union (14 kilograms), but does equal that of West Germany.

The government's policy in the last few years has been to try to switch consumers' tastes to fish and away from red meat, which is constantly in short supply. However, as statistics show, while the consumption of salt water fish between 1960 and 1969 increased by less than one kilogram per capita, that of meat rose by over 10 kilograms.

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- (2) Export of fish is mainly done directly from the ships in ports near the fishing grounds (especially in the case of fishing grounds near the African and North American coasts).

3. Per Capita Consumption of Meat and Salt-Water Fish

Year	In kilograms	
	Fish	Meat
1950	1.4	36.5
1955	2.3	37.7
1960	4.0	42.5
1965	4.4	49.2
1968	4.8	52.2
1969	4.9	52.8

Source: Small Statistical Yearbook, 1970.

Eating habits are not the sole reason for the comparatively low consumption of fish in Poland. The inadequate distribution system fails to bring fish to the consumer. There is lack of adequate rail and road transport equipment for conveying this kind of highly perishable foodstuff. Above all, there is an acute shortage of refrigerated storage space, both in the ports and inland. As a result, cooling rooms in the harbors are overloaded and incoming fishing vessels often find no place to unload their catches. That is as far as the Polish press has cared to go in admitting indirectly that there must be considerable spoilage. In the light of these admissions, the suppositions that, at times, the fishing vessels are allegedly compelled to turn back and throw the rotting catch back into the sea sound quite probable.

This disparity between the amount of fish caught and the ability to process and distribute it throughout the country is the result of faulty planning, which for years favored the development of the fishing fleet without taking into consideration the fact that, unless special means of transportation, adequate storage and processing plants were provided, the development of the fishing fleet serves no purpose. As early as 1966, it was officially admitted (Trybuna Ludu, 28 August 1966) that investments in the fishing fleet had been increasing more rapidly than on the facilities on land, and as a result, fish deliveries outpaced processing and transport capacities.

The shortcomings of the land facilities could have been

alleviated if there had been enough auxiliary vessels for storing, refrigerating and processing the catches. The auxiliary fleet is, however, inadequate. Out of the entire fishing fleet of 704 vessels, there were in 1969 only four fishing-bases (in 1970 there were only three) and 25 trawlers for processing fish.

The technical standard of vessels and fishing equipment also leaves much to be desired and urgently requires modernization. It has been admitted (Slowo Powszechne, 15 December 1969) that the inadequate technical standards of fishing vessels lead to considerable losses and higher costs. Thus, it was said, losses in 1968 caused by damages resulting from technical defects amounted to as much as 167 million zloty. To gauge the extent of these avoidable losses, it is sufficient to say that they amounted to almost 5 per cent of the value of fish supplies (including processed fish) to the domestic market, which in 1968 were worth 3,718 million zloty.

However, the capacity of the Polish repair yards is inadequate and Polish-produced spare parts are in short supply. This, in turn, is the result of the all-out drive to increase the export of services (possibly against hard currency) through repair of foreign vessels and also export of spare parts -- both to the great disadvantage of the technical standards of the country's domestic fleet.

The development plans of the Polish fishing industry for the next five-year period (1971-1975) have been worked out in two versions. The "minimal" version projects yearly catches of only 478,000 tons by 1975, accompanied by investment outlays of 5.5 thousand million zloty (out of which almost 3.5 thousand million were on the extension and modernization of the fishing fleet). The second, "basic," version projects investment in the 1971-1975 period of 6.8 thousand million zloty and a catch reaching an annual total of 529,000 tons by 1975.

Conclusion

A review of the development of all the three branches of Poland's maritime industry, indicates that its problems and difficulties are naturally closely related to those facing Poland's national economy as a whole. The shipbuilding industry must modernize its yards to keep up the level of production, to compete on the world market, and to supply the Polish merchant and fishing

fleets with modern vessels. Polish shipping depends on the Polish shipbuilding industry for its supply of modern ships and on the harbors for an adequate transloading capacity. The Polish fishing fleet depends, not only on the shipbuilding industry, but for ultimate efficiency, on the transloading and storage capacity of the country's harbors and the efficiency of the domestic transport and distribution system. After years of rapid expansion, not matched by an adequate progress in technology and organization, the Polish maritime industry, especially the shipbuilding industry, has come to a point where -- unless adequate investments and reorganization of working methods are applied -- it might suffer serious setbacks.

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