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**EDUCATION AND TRAINING OF FISHERIES PERSONNEL
FOR ASIAN, AFRICAN AND LATIN AMERICAN COUNTRIES
IN POLAND**

**KSZTAŁCENIE KADR RYBACKICH W POLSCE
DLA KRAJÓW AZJI, AFRYKI I AMERYKI ŁACIŃSKIEJ**

**The Faculty of Marine Fisheries
and Food Technology University
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INTRODUCTION

Education and training in fisheries is a subdivision of marine education preparing trained and qualified personnel to be employed in those branches of national economies which concern sea-oriented activities: merchant fleets, fisheries and fish processing, sea ports management and servicing, and shipbuilding industry.

The paper presented describes and discusses the fisheries education and training system in Poland, its contribution to and potentials of educating fisheries personnel for Asian, African, and Latin American countries being given a particular attention.

The resolutions of the Third International Conference of the Law of the Sea have finally confirmed the decisions in the effect of which shelf and adjacent waters, rich in biological resources, have come under jurisdiction of the coastal states. In most cases, economic zones thus created are ruled by countries at a relatively low technological and economic level; at the same time, those countries suffer food deficits. Technologically underdeveloped agriculture in those countries, coupled with difficulties and high investment costs necessary to advance the agriculture indicates that to develop sea and inland fisheries may be the shortest and cheapest way to obtain animal protein.

It should be assumed that any further development in the world's fisheries will proceed, based mainly on developing countries and on the resources contained in their

economic zones. The efficiency of this development will depend on knowledgeable application of advanced technologies. It is a well-known fact that, while having productive fishing grounds at their disposal, most developing countries lack adequate technological potential and qualified personnel.

International cooperation those countries are involved in will be rational only when conducted by adequately prepared cadres, which is in turn associated with the education and training system.

When considering any further development in fisheries, regardless of the resources and fish and shellfish consumption patterns in various countries concerned, technological potential has to be taken into account along with the professional background of the fishermen; the development has to be also connected with the training, education, and research system. Education and training is one of the most vital needs in fisheries: professional qualifications of fishermen have a direct bearing on the result of their work.

At present, the world's fisheries employ about 1.5 million better or worse trained fishermen having appropriate formal qualifications. They deliver about half of the world's catch landed by the deep-sea fisheries, the commercial fishing activities involving about 0.5 million fishermen.

Additionally, there are probably further 8 to 9 million small-scale fishermen, usually lacking any formal training, who contribute another half of the world's catch obtained in developing countries' coastal waters.

The efficiency of a single qualified fisherman is several times that of a small-scale coastal one. It should be added that a further development in fisheries will require voyages to distant open-ocean fishing grounds. That will in turn call for large vessels and a quantity of sophisticated equipment, the proper usage of which will depend on an appropriate body of knowledge gained through various forms of education and training. It is evident that there is an immense potential demand for various insitutionalised forms of schooling.

POLISH SYSTEM OF EDUCATION AND TRAINING IN FISHERIES

Poland is a country of highly developed marine and inland fisheries. The dynamic development of the Polish sea fisheries, in 1950 landing 66,000 t, was associated with exploration of new fishing grounds, which was accompanied by increasing catches, up to 800,000 t in 1981. Of this figure, some 200,000 t are obtained from the Baltic Sea, the remaining 600,000 t being supplied by the deep-sea fishing fleet operating on fishing grounds all over the world. The increasing catches called for the enlargement and modernisation of the fishing fleet as well as well as for a supply of qualified personnel.

The fast growing fisheries in Poland are based on the well-developed sea-oriented branches of national economy, including the shipbuilding industry manufacturing various types of most modern fishing, training, and research vessels exported to many countries as well as a well-organised, coherent system of education and training in fisheries.

The fisheries-oriented education in Poland has a long tradition and numerous achievements. This education system has been particularly dynamically developed since 1945, which is related to expanding marine fisheries and introducing new commercial fishing vessels equipped in most advanced machinery and technologies. The demand for specific, qualified personnel was growing as the fish production was increasing and specialisation developed. Schools and institutions providing vocational, secondary, and higher education were being set up and improved. The Polish system of education and training in fisheries has been favourably evaluated by visiting international experts, including those of the FAO, hence various countries engaged in fisheries have been sending their students to Poland.

The typical features of the Polish education and training in fisheries are:

- all the schools and institutions providing fisheries education at the vocational, secondary, and higher levels are directly supervised by the Office of Maritime Economy, which couples the fisheries education to the fisheries-oriented branches of the national economy;
- relevant schools are located on the premises or in the vicinity of fishing enterprises, which creates favourable conditions for the schools to cooperate with and to receive assistance from the enterprises;
- excellent conditions for practical training are created both in the fishing enterprises on land and on board commercial fishing vessels. This is very helpful in translating the theoretical knowledge gained at school into sea-going practice and in comprehending the specificity of the fisherman's work and labour regime on board. Besides sending their students out to the sea on board commercial vessels, each school possesses appropriate training craft.

The most valuable component of our fisheries education and training system is the teaching staff, highly qualified, motivated, and experienced.

Education and training at the vocational and secondary levels

is carried out for 3 and 5 years, respectively, at schools associated with fishing companies in Świnoujście, Kołobrzeg, Darłowo, and Gdynia. The schools produce graduates in the following categories:

- fisherman of deep-sea fishery
- fisherman of coastal and boat fisheries
- navigation and fisheries technician
- mechanic
- electrician
- radiocommunication technician
- fish processing technician
- refrigeration technician.

Primary school leavers are eligible. The schooling is carried out in modern, well equipped laboratories and workshops of fishing and processing enterprises. The curricula

involve internships on board commercial and training fishing vessels. The students are entitled to modern and well-equipped dormitories, canteens, and sports facilities as well as to free medical aid and treatment. Foreigners are admitted. In the years 1975–1983, more than 100 students from developing countries were being educated in fishing navigation, engineering, and radio communication.

MARITIME ACADEMY IN SZCZECIN

provides higher (university level) education; graduates become fishing fleet officers. Full time curricula are offered to secondary school graduates. After 5 years of courses, students graduate as M.Sc. in the following fields: navigation, engineering, and fishing port administration. Classes meet in advanced laboratories of the highest standard, on board training vessels and on board a modern commercial trawler.

Additionally, post-graduate courses are offered to navigation officers, engineers, electric engineers, radio officers as well as to fishing economists and maritime economy administrators. Students are entitled to dormitories, full board, uniforms, medical aid, and other social security and cultural services.

The Academy has been admitting many foreigners; several Vietnamese students have graduated with honours from full-time courses in marine fisheries. In 1982, 5 Nigerians, university graduates in biology and economy as well as fisheries administrators, completed a 1-yr post-graduate course in marine fisheries organisation and management, conducted in English.

FACULTY OF SEA FISHERIES AND FOOD TECHNOLOGY, ACADEMY OF AGRICULTURE, SZCZECIN

provides university-level education in the following fields:

- fisheries oceanography
- ichthyology
- fishing gear and techniques
- fish processing technology
- marine environmental protection
- fisheries administration.

Courses are full-time; they are offered to secondary school graduates. The aim is to educate fisheries managers, administrators, and research workers.

To those completing 4 years of courses, a B.Sc. equivalent in relevant fields is granted, while the 5-yr programme is concluded with an M.Sc. Students showing a particular interest in any field may follow individual curricula, directly tutored by a professor.

The Faculty offers also 3-yr doctoral programmes for foreigners; the courses are conducted in English or Spanish and include (the total of 350 hours):

- Polish language conversation
- lectures on Polish history, economy, and people

- research methods
- statistical treatment and interpretation of data
- fisheries oceanography
- fishing techniques and resources exploitation
- ichthyology and aquaculture
- research methods in sea food technology
- international cooperation in fisheries
- seminars on selected topics
- visits to fishing and other sea-oriented enterprises
- visits to cultural centres and historical monuments.

A doctoral thesis may be submitted and defended either in Polish or in any of the congress languages.

Additionally, post-graduate courses in:

- aquaculture
- hydrolocation and resources assessment
- fishing gear and techniques
- preservation and processing of sea foods
- fishery management and planning

are offered to university graduates in natural sciences and/or technology.

Students and doctoral candidates are entitled to dormitories, free medical aid, canteen meals, library facilities, cultural and sports facilities.

Table 1

Nationality of the foreign students

Nationality	No. Graduated up to 1984	No. studying at present at the Faculty
Bulgaria	3	–
Brasil	–	2
Cyprus	–	1
Egypt	3	–
Greece	1	1
Iraq	1	1
Yugoslavia	17	1
Columbia	–	1
PDR of Korea	14	–
Costarica	–	1
Cuba	2	–
Nicaragua	1	2
Panama	–	4
Peru	16	2
Vietnam	15	–
Hungary	2	–
Venezuela	–	1

Table 2

Nationality of the foreign Ph. D. students

Nationality	Completed dissertation up to 1984	Dissertations in preparation
Argentina	2	1
Chile	1	—
Egypt	7	2
Yugoslavia	1	—
Mexico	—	2
GDR	1	1
Peru	4	3
Vietnam	13	1
Venezuela	—	1

Tables No. 1 and No. 2 show nationality of the foreign students, and nationality of the foreign Ph.D. students, who graduated whether are continuing their study nowadays at the Faculty of Marine Fisheries and Food Technology.

**FACULTY OF INLAND FISHERIES AND WATER PROTECTION, ACADEMY
OF AGRICULTURE AND TECHNOLOGY, OLSZTYN**

offers 5-yr full-time programmes for secondary school graduates, leading to M.Sc. in the following fields:

- inland fisheries
- water protection.

The inland fisheries graduates leave equipped in comprehensive knowledge of aquatic environments, with a particular emphasis on biology and exploitation of aquatic organisms as well as commercial production of various fish species.

The water protection graduates may specialise in:

- water purification and treatment
- industrial and municipal sewage treatment
- pollution assessment in inland and marine water environments
- design and implementation of procedures for degraded reservoir recovery.

The Faculty is involved in inland fisheries development programmes in developing countries, i.a., in Iraq.

Table 1 lists types of schools and fields of education and training in fisheries available in Poland.

Most of the specialists educated and trained in Poland find employment in fisheries of their respective countries, thereby influencing the development of fisheries there. Their role is evidenced by the fact that they take up senior positions in fisheries, state administration, universities and research institutions, and in fisheries education. This is particularly true with respect to such countries as Vietnam, Korea, Peru, Egypt, Cuba,

Types of schools and fields of education

Vocational and secondary schools	Maritime academies	University-level institutions of higher education
<p>Vocational schools (3 years)</p> <p>qualifications:</p> <ul style="list-style-type: none"> – marine fishermen – mechanic <p>Secondary schools (5 years)</p> <p>qualifications:</p> <ul style="list-style-type: none"> – fisheries navigation technician – mechanic – electrician – radio communication technician – fish processing technician – refrigeration technician 	<p>Maritime Academy, Szczecin</p> <p>Department of Navigation</p> <p>qualifications:</p> <ul style="list-style-type: none"> – fishing fleet navigation officer – merchant fleet navigation officer – harbour management officer <p>Department of Engineering</p> <p>qualifications:</p> <ul style="list-style-type: none"> – shp's engineer <p>Maritime Academy, Gdynia</p> <p>Department of Electrical Engineering</p> <p>qualifications:</p> <ul style="list-style-type: none"> – electrical engineer – radio officer 	<p>Academy of Agriculture, Szczecin</p> <p>Faculty of Sea Fisheries and Food Technology</p> <p>fields of specialisation:</p> <ul style="list-style-type: none"> – ichthyology and resources exploitation – sea food technology – water and marine environment protection – aquaculture <p>Academy of Agriculture and Technology, Olsztyn</p> <p>Faculty of Inland Fisheries and Water Protection</p> <p>fields of specialisation:</p> <ul style="list-style-type: none"> – inland fisheries – water protection

Yugoslavia, and Nigeria. Listed below are some of the Faculty of Sea Fisheries and Food Technology prominent graduates and Ph.D. holders:

1. Dr. Leszek Bruno PREŃSKI, citizen of Argentina; deputy director of Instituto Nacional de Investigación y Desarrollo Pesquero, Mar del Plata, Argentina;
2. Dr. Quiterio Asunción VALENCIA MECOLA, citizen of Peru; lecturer at Taona University, Peru;
3. Dr Nguyen XUAN LOC, citizen of Vietnam; director of the Sea Fisheries Institute, Haiphong, Vietnam;
4. Dr. Le TRONG PHAN, citizen of Vietnam; lecturer at Hanoi University, Vietnam;
5. Veselin GEORGIEV, M.Sc., citizen of Bulgaria; department head at the Ministry of Fisheries, Bulgaria;
6. Gin QI JUN, citizen of Korean Peoples' Democratic Republic; employee of the Ministry of Fisheries, Korean Peoples' Democratic Republic;
7. Drs. Taman Esmail Abdel BACKY, Fawzy EL KARACHILY, Mustafa Nader FADLY, Ibrahim SOLIMAN citizens of Egypt; research workers at the Institute of Marine Fisheries and University of Alexandria, Egypt;
8. Armando MALASQUEZ MENDOZA, M.Sc., citizen of Peru; research worker at Lima University, Peru;
9. Hugo Jacinto LASTARRIA TAPIA, citizen of Peru; research worker at Lima, University, Peru;
10. Dr. Ngo DINH KHAI, citizen of Vietnam; employee of the Ministry of Fisheries, Vietnam;
11. Manuel Simon MORENO MASÓ, M.Sc., citizen of Cuba; research worker at the Havana Fisheries Institute's field station, Cuba;
12. Ileana Margarita MORALES, M.Sc., citizen of Cuba; research worker at the Fisheries Technology Institute, Havana, Cuba.

Their positions and important tasks they perform are an evidence of sound theoretical and practical professional background they have obtained when studying in Poland.

Training of foreigners on board Polish fishing vessels

Within the frames of cooperation in fisheries between Poland and developing countries, fishermen from the latter are trained on board Polish fishing vessels. The following data elucidate the scope of this activity:

- 1,600 fishermen from Peru trained in the years 1972–1982
- 800 fishermen from Senegal trained in the years 1977–1980
- 70 fishermen from the Philippines trained in the years 1978–1979.

Many research workers from coastal states such as Argentina, Columbia, India, Australia, and New Zealand took an opportunity to get acquainted with equipment and research methods on resources assessment and fish processing and to exchange views and ideas with Polish crews and scientific staffs during open-ocean survey cruises of Polish research and commercial vessels. Fishermen from Surinam, Guyana, Venezuela, and Nigeria had an opportunity to become familiarised with Polish techniques used in coastal fishery.

POLISH OFFER TO EDUCATE AND TRAIN FISHERIES CADRES FOR DEVELOPING COUNTRIES

When considering the professional training of fishermen and fisheries education system in a given country, general criteria of fisheries development should be taken into account.

Those criteria are:

- resources available
- general level of technological advancement and infrastructure
- current state of fishing fleet and gear
- traditions and habits of fisheries and fish consumption patterns.

When considering existing needs in fisheries education, programme designs, and education system organisation, the following should be borne in mind:

1. The scope of teaching and curricula should be adjusted to general plans of economic development, including development of fisheries, in a given country;
2. The assistance in education and curricula worked out should emphasise local factors and potentials, especially with respect to the teaching personnel;
3. Educational programmes should be tuned to the needs of both the small-scale coastal fisheries and the open-sea commercial operations, which is important from the standpoint of training teaching personnel for courses of varying levels and scopes;
4. Education of
 - administrative staff for fisheries management, fisheries organisations as well as for assessment, exploitation, and protection of resources,
 - personnel for research institutions should be carried out simultaneously.

Because of the urgent need to exploit, in an efficient and rational way, fish resources from each interested country's economic zone, the training of qualified personnel and the organisation of fisheries education is of vital importance in those countries. These tasks can be implemented with the assistance rendered by countries enjoying well-organised education systems and experience as well as by specialised international bodies, notably the FAO.

With respect to the developing countries' needs in trained personnel the Polish education system offers the experience, expertise, and well-organised education and is willing to adjust the services rendered to specific needs of a country concerned.

Depending on the nature of fisheries in various countries, the needs of small-scale boat (coastal) fisheries, open-ocean commercial fisheries, and inland fisheries can be accommodated.

Bearing in mind the directions of fisheries development and human resources in a given country, Poland offers a choice of the following fields and levels of education:

at the vocational and secondary level:

- marine boat fishermen
- deck hands
- fish processing assistants
- mechanics

- inland fishermen
- navigation and fishing technicians
- engineering technicians (for main and auxillary engines)

at the officer's level (B.Sc.equivalent)

- navigation officers
- engineers
- electric engineers
- radio officers

at the university level – M.Sc. in

- fisheries oceanography
- ichthyology
- fishing gear and techniques
- resources assessment and management
- fish preservation and processing
- marine environment protection
- fisheries economics and planning
- fisheries management
- fishing harbour management.

With a due consideration to conditions prevailing in an applicant country, its needs, and educational standards, we offer training either on the spot (in a country wishing to develop its fisheries) or in Poland.

In the case of on the spot training, in order to shorten the duration of training, we offer short- and long-term professional improvement classes for the following:

- marine boat fishermen
- boat engine operators
- fish processing and refrigeration technicians
- net makers and deck hands
- inland fishermen
- others, as desired.

The training to be carried out on the spot will pay a due attention to the needs of specific fishing communities; local fishermen of no or scant theoretical background will be educated, supplied with appropriate teaching aids and taught by means of appropriate teaching methods. Administrative personnel in fisheries management organisations and social welfare can be trained as well. Such classes can be organised, based on local facilities and, in part, on a local teaching personnel. Poland will then provide instructors in professional subjects, equipment and teaching aids. This form of education should also make it possible to prepare local teachers who will take over the training of local fishermen.

Another form of an ad hoc training offered by Poland is to employ skippers and training instructors on board and to engage fisheries advisors. Here Poland has many years of experience and substantial achievements; in view of a considerable number of highly qualified specialists, the services rendered can be expanded.

The programmes offered take the role played by women in developing countries' small-scale fisheries, aquaculture, fish processing and marketing into consideration by including special courses for on the spot training.

The education carried out in Poland at schools of types already presented can proceed as:

- 1) full-time programmes at various schools
 - following the already existing curricula
 - following curricula adjusted in form and content to the special needs of students
- 2) special short- or long-time courses
 - at schools and research centres
 - at fisheries education and training centres for developing countries, following specially adjusted curricula
- 3) post-graduate programmes for those having a strong professional background and employed by the fisheries, and/or graduates in natural sciences and technology. The programmes are offered in the following fields:
 - aquaculture
 - hydrolocation and resources assessment
 - fishing gear and techniques
 - preservation and processing of sea foods
 - fisheries economics and planning.

Additionally, our offer includes:

- post-graduate courses for fisheries managers and administrators
- individualised apprenticeships and internships at centres of fisheries research and sea-food production
- doctoral courses

The Polish education and training programmes offered stress particularly the needs stemming from fisheries development planning in a country concerned, the programmes being executed by appropriately selected teaching staff aware of problems and needs of the applicant country. Should an „on the spot” programme be preferred, the bulk of basic teaching is left to the local personnel, the Polish contribution being to refine and/or supplement the knowledge gained.

Regardless of various types of training, any education system should include construction and equipment of schools as well as laying out research programmes and construction of research centres. In this respect, Poland offers:

- to design plans for education and training system development as well as to construct schools and provide equipment, teaching personnel, and textbooks;
- to design, construct, and equip marine research laboratories, aquaria, and research vessels and to provide initial operation for them.

Polish activities of these types are exemplified by organising and equipping, in 1978, the Sea Fisheries Vocational School in Mocamedes, Angola. Curricula and syllabuses for professional subjects were worked out in Poland; laboratories and workshops were designed and equipped by Polish specialists who are also teachers and instructors at the

School. The School has gained an international reputation and attracts students from other African countries.

TECHNOLOGICAL SERVICES

Regardless of typically educational activities, Polish fisheries experts offer also their consulting services in the following areas:

- techno-economical reporting on the fisheries status and developmental programmes for marine and inland fisheries,
- primary production estimation and resources assessment in various fishing regions,
- hydrochemical assessment of lakes, rivers, and marine coastal waters in terms of their utility for fisheries,
- design and technological documentation of fish culture installations producing stocking material and marketable fish in ponds, lakes, rivers, channels, dam and cooling water reservoirs,
- design and technological documentation of fishing gear adjusted to a required fishing ground, vessel type, and fish species to be caught; production and delivery of complete sets of gear,
- plans and documentation of fishing gear production plants and technologies,
- techno-economical documentation for production of various sea-foods.

Polish activities in those fields are exemplified by the design of Fisheries Oceanographic Laboratory in Cameroon, consisting of an on-shore laboratory, aquarium, and a research vessel. Regardless of the design and complete construction of such an object, Poland provides also for the training of research personnel, Polish experts being involved in the initial operation of such centres.

Poland has accumulated a considerable experience in education and training for fisheries, our potential enabling us to contribute even more to educating fisheries personnel in various countries and to cooperate with them. Taking the opportunity provided by this wide and distinguished international forum, we wish to present our offer and hope to incite an interest in the countries developing their fisheries.

SUMMARY

Efficient development in fisheries depends on the knowledgeable use of advanced technologies. Therefore, regardless of fish resources and fish consumption patterns, those countries wishing to develop their fisheries have to take their technological potential and professional background of fishermen into consideration, which in turn bears on the system of education and research.

The paper outlines principles of the Polish system of education and training for fisheries, the system involving vocational and secondary schools as well as maritime

academies and university-level institutions of higher education. Fields of training, education and specialisation, qualifications, and degrees which can be earned are presented. The number of foreign specialists educated in various types of fishery-oriented Polish schools is given, as are examples of positions occupied in industry and research by foreign graduates in their respective countries. Forms of consulting and assistance offered by Poland in organising fisheries-oriented training and education in various countries are presented.

Additionally, the paper presents proposals for a further development of fisheries training and education services. With a due consideration to local conditions and needs of a given country, various forms of training may be introduced directly in that country.

Apart from typically educational activities, Polish achievements and offers with regard to technological services in setting up education systems, construction of school and research laboratories, and in carrying out research projects are presented.

EDUCACION PESQUERA EN POLONIA PARA LOS PAISES DE ASIA, AFRICA Y AMERICA LATINA

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RESUMEN

El éxito del desarrollo pesquero depende de la capacidad de emplear las técnicas más modernas. Bajo ésta situación, el desarrollo de la pesca en los diferentes países debe contemplar además de los recursos pesqueros y de la tradición alimentaria, el potencial técnico de igual manera que el nivel de preparación profesional de los pescadores, y a su vez debe de estar vinculado al sistema de educación y a la investigación científica.

En el documento se presenta la organización del Sistema de Educación Pesquera de Polonia. En él se explica el grado y tipo de especialistas que pueden formarse bajo este sistema instruccional, así como las obligaciones y títulos que obtiene cada uno de los especialistas al término de sus estudios. También se hace mención al papel y cargos científico – administrativos que actualmente – desempeñan tanto en sus países como organizaciones internacionales los alumnos egresados de las diferentes escuelas de Polonia.

Teniendo en cuenta las necesidades y condiciones de los países interesados, en el documento, se plantean las formas como Polonia ofrece su asesoría y ayuda en la organización de la – Educación Pesquera, en la construcción de escuelas y laboratorios, en la construcción y equipamiento de centros experimentales y de investigación, y en la realización y seguimiento de proyectos de investigación científico – pesquero.

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DLA KRAJÓW AZJI, AFRYKI I AMERYKI ŁACIŃSKIEJ

STRESZCZENIE

Efektywność rozwoju rybołówstwa zależy od umiejętności stosowania najnowszych zdobyczy techniki. W tej sytuacji rozwój rybołówstwa w poszczególnych krajach musi uwzględniać niezależnie od stanu zasobów ryb i tradycji ich spożycia również potencjał techniczny oraz przygotowanie zawodowe rybaków. Jest to związane z systemem i organizacją szkolnictwa oraz badań naukowych.

W opracowaniu przedstawiono zasady polskiego systemu szkolnictwa rybackiego kształcącego specjalistów na poziomie zawodowym, w technikach, w wyższych szkołach morskich i uczelniach uniwersyteckich z wyszczególnieniem kierunków i specjalności kształcenia oraz uzyskiwanych tytułów i uprawnień po zakończeniu nauki. Podano również ilość specjalistów zagranicznych wykształconych w różnych typach szkół w Polsce, wraz z przykładami zajmowanych obecnie przez niektórych absolwentów stanowisk w instytucjach naukowych i gospodarczych swych krajów i organizacji międzynarodowych. Przedstawiono formy doradztwa i pomocy w organizacji szkolnictwa rybackiego w różnych krajach przez Polskę.

W opracowaniu przedstawiono również propozycje dalszego szkolenia kadr rybackich w Polsce. Uwzględniając warunki danego kraju i jego potrzeby oraz poziom kształcenia zaprezentowano różne formy szkolenia bezpośrednio w zainteresowanych krajach. Niezależnie od działalności typowo szkoleniowej przedstawiono również dokonania i oferty usług technicznych jakie Polska może wykonywać w zakresie szkolenia, organizacji szkolnictwa, budowy szkół i laboratoriów badawczych oraz prowadzenia badań naukowych.

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