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Mexico Looks To The Future Of Her Fisheries

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Abstract

In December, 1961, Abelardo L. Rodriguez was appointed director of the newly formed National Fisheries Consultive Commission, members of nine governmental agencies concerned with marine resources, have joined together to advise the President of proposals for investigating and developing Mexico's fisheries.

As a result of preliminary considerations of the problems facing development of fisheries in Mexico, a 21 point program, including pollution control, distribution and marketing, research, training of new fishermen in modern technology, and credit for expansion of fishing and processing has been adopted.

MEXICO SET NEW GOALS when on December 8, 1961, the President of the Republic, under the provisions of the Fishery Law, created by decree the "Comision Nacional Consultiva de Pesca", translated literally, The National Fishery Consultive Commission, with the objectives of finding ways and means of developing the fisheries for the national interest. Almost immediately he appointed General Abelardo L. Rodríguez, ex-President of the Republic to head the Commission. The Vice-Chairmanship, as provided by the decree, goes to the Director of Fisheries, in this case to Admiral Antonio Vazquez del Mercado, who is also the Executive Officer for the Commission.

These actions made welcome news to all of those that live from and are interested in our fisheries and also among the many friends that we have in other countries, especially in the United States. It is no more than natural that a great interest has been shown in knowing just what these steps taken by our government mean to our fishery industry.

It is for this reason that I was called upon for information on the scope of the Commission, its purposes, composition, procedures, and results obtained in its short life to the present.

The Commission and Its Composition. It is formed by nine members all of whom represent many Ministries or Governmental Agencies which have a relation to the fisheries; and will coordinate the functions of these Departments.

The Commission is a consultive and advisory body to the President and to the Secretary of Industry and Commerce in the matter of fisheries in all its phases and ramifications.

Its objectives are to consider, investigate, and promote the development of

our marine resources in every way possible, commensurate with good management, for the benefit of an increased and improved diet of the public, and the economy of the fishermen and all of those that participate in it.

Its nine members are appointed by the President and represent, in addition to the Chairman, the following Government Departments: Secretaría de Industria y Comercio, Secretaría de Marina, Secretaría de Agricultura y Ganadería, Secretaría de Hacienda y Crédito Público, Banco Nacional de Fomento Cooperativo, S.A., Cía. Nacional de Subsistencias Populares, S.A., Almacenes Nacionales de Depósito, S.A., and Banco del Pequeño Comercio.

The Commission proceeded to appoint two advisors and seeks the services of experts in the various fields related to its purposes, such as industrial engineering, refrigeration and warehousing, transportation, marketing, publicity and promotions, and others that may be required in the preparation of programs and the developing of the projects, as approved.

The Commission, upon being convened, went immediately into action, and started on a flying tour of all of our fishing ports on both Pacific and Gulf of Mexico coasts, for the purpose of obtaining first hand information on the problems affecting the industry and evaluation of the prevalent conditions affecting them. Public hearings were held in each fishing center, to receive and discuss petitions from fishermen, cooperatives, boat owners, and industrial plant owners, as well as government officials and business organizations, all of whom had been previously invited to appear and by word or in writing to present their problems and suggestions looking toward possible solutions.

A wealth of first hand information was gathered by these means and from the experience and data in the hands of the Fishery Department, other Departments of the Government, and other dependable sources. This is now the basis for a program for an integral exploitation of our fisheries, covering long term projects as well as urgent and immediate measures.

After three months of an intensive preparatory phase followed by investigation and study of the most urgent and important problems affecting our fisheries, the first conclusions were reached and these may be considered as the foundation of the program that was approved on June 15, 1962.

Before I go into the contents of the program, it is of interest to recall what the real situation of the Mexican fishing industry was on June 15, 1962.

Except for the important volume of exported shrimp, some lobsters, abalone, and groupers and the canning of sardines and mackerel on the Pacific Coast; fishing for other species of market fish, remains static and lags behind our explosive population growth which will reach 100,000,000 by 1990. Our inshore fishery is outdated and un-productive; and pelagic fishing practically does not exist. Our per capita consumption of fishery products of all kinds remains at 2.8 kilograms because our city population eats fish only on Fridays, if at all, and in the rural districts little or none at any time. We know little of our fishery resources and the best ways and means of conserving or developing them to the fullest advantage. Also our fishing, navigation and tax laws are antiquated and impractical; and the industry does not have sources of credit, as such, even at high rates of interest.

These and many other smaller problems retard the development of the marine resources available along both our extensive coasts.

The following is the 21 point program; accomplishments to date are indicated after each section:

National Institute for Marine Biological Research

Research is considered of paramount importance in the program for development of our fisheries. The Fisheries Office had done creditable work on some species, but mostly on a fragmentary basis. It is now proposed to intensify research, to provide the needed information for the development and management of the resource.

On August 29, 1962, the Institute for Marine Biological Research was founded and the installation of laboratories begun. On October 11, 1962, contracts were signed for the construction of buildings for two Biological Research Stations, one at Ensenada, Lower California, on the Pacific Coast, and one at Campeche, Campeche, in the Gulf of Mexico, and two sub-stations, one at Mazatlán, Sinaloa, and the other at Salina Cruz, Oaxaca, both on the Pacific Coast.

Two 150-gross ton fishing vessels, the "YOLANDA" and "GRACIELA," have been fully reconditioned and equipped for use in biological, oceanographic and technical research. The two boats have made their first trial voyages from Mazatlán. Their refrigeration equipment is now being reconditioned.

The creation of two new fishing schools at La Paz and Manzanillo on the Pacific, and remodeling and enlarging the two now operating at Campeche and Veracruz in the Gulf of Mexico. The purpose is to train a new generation of fishermen with a practical knowledge of navigation, mechanics, fishing techniques, and processing methods.

During the month of September, the two new schools were established as planned, with an enrollment of 50 students at La Paz and 40 at Manzanillo.

Two fishing boats are being reconditioned and equipped for practical training in fishing.

The new publication *The Fisherman* is being edited and profusely distributed as a means of informing the industry and educating the fishermen.

Vigilance and inspection service, has been improved and properly equipped, to serve adequately in reducing violations of the fishing laws, now prevalent in our extensive coastline and detrimental to the resource.

Contracts have been signed for the construction of three coastal patrol boats to be delivered next December and January. These first three boats will be used for service along the Lower California Pacific Coast.

Three Hughes helicopters have been purchased and will be in service this month.

Additional personnel for inspection and vigilance in bays and protected waters have been recruited.

Immediate measures have been adopted against pollution of bays, lagoons, and streams. This situation is being aggravated by the industrial development of the country, and its effects are now evident in extensive inland bodies of water which are most important as breeding grounds of valuable species of fish and shellfish.

Fishing laws will be amended, to aid the fishing and to accelerate its development by modernizing its functions.

At the same time our fishing tax laws will be modified, by reducing the tariffs and facilitating the method of payment and the free movement of the products to the market.

It is expected that these measures will increase and diversify our present fishing effort; will promote the creation of new industrial projects; will

increase the production of many fish; and will create more jobs and new products for the consumer.

Some fishing activities waste part of their catches, while at the same time our market can use thousands of tons of fish meal and fish oil. Tax exemptions and other inducements are provided for new industries established under the program.

To provide the much needed animal protein in the diet of our fast growing population, special efforts and investigations are being made to develop a fish flour or the "fish protein concentrate."

The program also provides for the rehabilitation of the old and rich natural pearl fishery in Lower California, at present of no commercial importance but once productive of the black and multicolor natural pearls, of world renown. The pearl oyster died on all of our Pacific Coast waters about 1937 or 1938, by some unknown phenomena. The beds have recuperated slowly since, but predators, man in this case, have not permitted them to reach full growth. It is planned to protect these natural beds, and at the same time study possibilities of developing a cultivated pearl in these same waters.

A new shark fishery in the Penal Colony at Islas Marias in the Pacific will serve as a pilot plant for dry salting the meat and processing the other products of the shark such as hides, fins, livers for their vitamin oils, and fish meal from the remains. It is also considered as a rehabilitation project for the Colony.

Proposals to amend the Fishery Law, the Fishery Tax Law, and the Navigation Law for Fishing Vessels are now in formulation to be submitted for approval by the present Congress, to offer the industry and the individual fishermen the benefits and the stimulant needed for the resurgence of the fishery.

A biologist with auxiliary personnel has been commissioned to survey the natural pearl oyster producing banks, for the rehabilitation of these grounds and the establishment of new breeding and cultivating areas.

The new fish drying and salting plant at Islas Marias Islands is now 75% completed and will be in production in December, 1962.

Better distribution and marketing of the fishery products will be accomplished by improving transportation from the fishing grounds on our coasts to the consuming centers, particularly inland towns and cities. The establishment of ice and refrigerated storage and freezing plants at selected coastal points and also at strategic distributing centers and the use of proper transportation equipment is a principal goal.

A study of our domestic and export markets is included for a better allocation of the production, to supply the domestic demand and in as far as possible, to stabilize prices for fishermen and the public.

Publicity and advertising is considered of the greatest importance in the development of the program, to create a new demand by the public, but most important, to gain its principal aim, that is, to provide a much needed food for the better nutrition of our population. The most modern publicity methods will be used.

The intensive phase of the advertising promotion for the consumption of fish and all kinds of fishery products has been now under way for three months, using radio, TV, and newspaper media in 70 cities across the country, and has met with an unprecedented success. It is estimated that the increase has been 40%, in all fishery products, during this period. The increase has been considerably greater in the less popular market fish species, due no doubt to

the fact that each one of these has received direct advertising.

Coupled with this effort has been an intensive promotion to interest private capital in the creation of a network of freezing, refrigerated storage, and ice plants. We hope, under this plan, to provide the most distant population centers with good quality products at reasonable prices. Liberal terms for financing this enterprise have been arranged by the Commission.

Construction of new fishing ports and improvement of facilities in others is planned.

The Banco Nacional de Fomento Cooperativo financed a new fishery harbor, the first to be specifically constructed with facilities to integrate all fishery processing operations. Work was begun in November, 1962, by three government dredges to open and deepen the channel and the bay at the port of Alvarado, Veracruz. The main objective of the project is to increase the production of market fish for the country's needs, and will handle the production of several hundred canoes and boats that operate in the area. The cost of this fishing center will be \$76,890,000.00 Pesos. It will be comprised of docks, handling facilities for 80 tons daily, and a boat yard to handle boats up to 200 tons.

The center will also put into operation five 110-gross ton fishing vessels, geared for trawling, seining, and long line fishing. This probably is the first real effort made in our Gulf of Mexico fishery in oceanic waters.

Credit is most important in the development of the program, in providing adequate capital, required by an expanding fishing and processing industry. Without ample and long term credit at reasonable rates, private enterprise would be unable to participate in this development, and this is considered essential to the success and the future of the industry.

The Banco Nacional de Fomento Cooperativo has expanded its credit field to finance not only fishermen's cooperatives but to the industry in general and all worthy projects are being given due consideration. Long term loans are granted up to 50% of their investment value.

It has been shown by experience that the hundreds of individual fishermen on our extensive coasts can better be helped to produce more with the necessary equipment, and to obtain better marketing results by grouping them into cooperatives so they can receive the benefits of credits, organizing for producing and selling. This specialized fishing institution is providing the much needed financing with much success and good results.

The Commission, recognizing the interrelationship between countries in fisheries biological research and conservation, has recently recommended to the Ministries of Industry and Commerce, and State, that México give every consideration to participating in treaties with the U.S.A., for research and conservation of shrimp in the Gulf of Mexico and with the Pacific Tuna Tropical Commission. Mexico has sent observers to the meetings held in recent months by this Commission.

Breeding grounds: Their recovery and protection is a most important point in the program, as many small and great bodies of water on both our coasts are being closed or have been closed by the action of the currents, causing the loss of incalculable amounts of fish, shrimp, and oysters.

Determined efforts are being made through the proper Government Departments to eliminate illegal pollution of inland waters.

One of the first jobs to be done is to open the entrances to the Laguna

Madre in Northern Tamaulipas, and a contract has been granted for the construction of an adequate dredge for the purpose, to be delivered for operation in January, 1963.

All of these measures have been approved, and they comprise the program for the present year. It is however considered as a "minimum program" because of the urgency of time, but sufficiently adequate to serve as the basis for the immediate expansion of the industry. However, the Commission is charged with the obligation of preparing and approving a program of action for succeeding years.

This program has a budgeted cost of approximately \$28,000,000.00 Pesos, only for those projects directly in charge of the Commission. The largest items in the budget are for the Institute for Biological Research and for the publicity and promotional campaign.

In closing, the industry, fishermen, cooperatives and all concerned are 100% in support of the Commission, the program it has approved and its Chairman, General Abelardo L. Rodríguez, the pioneer of our fishing industry.

What is the United States' Position in the World's Fisheries?

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WHAT IS THE UNITED STATES' POSITION in the world's fisheries? That story is quickly told. It is bad and getting steadily worse both absolutely and relative to the rest of the world. I should like to comment on that and make some suggestions as to how the trend might be changed.

The total catch of fish and shellfish in the United States as recorded by the Bureau of Commercial Fisheries (Fisheries of the United States 1961, CES no. 2900, April, 1962), has remained remarkably stable for a very long while. It exceeded four billion pounds in 1934, and reached very nearly five billion pounds in 1936. It has moved between those two limits with very few exceptions for the past twenty-five years.

This has not been the case with other countries of the world. According to the Food and Agriculture Organization of the United Nations (Year book of Fishery Statistics, 1960) the world catch of fish and shellfish in 1960 (83.2 billion pounds) was approximately double what it was in 1938 and 1948, just before and after World War II. Furthermore it was up by 6% over the record of the previous year (1959: 78.5 billion pounds) and a third more than it had been in 1955 (62.4 billion pounds). While the statistics will not be available for some time, it is obvious from trade information and preliminary reports that the total catch of fish and shellfish in the world has continued this rapid increase during 1961 and 1962. For instance, Peru alone, which is listed by FAO as having a catch of 7.8 billion pounds in 1960, will exceed 12.0 billion pounds of fish catch in 1962, and may reach 13.0 billion pounds.

The incidence of fish catch is far from even among the countries of the world. Out of the more than one hundred independent countries in the world, the top ten fishing countries caught 69.4% of the total world fish production