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REPORT BY THE

Comptroller General

OF THE UNITED STATES

Developing Markets For Fish Not Traditionally Harvested By The United States: The Problems And The Federal Role

Opportunities exist for the U.S. fishing industry to make greater use of fish species not traditionally harvested by it. Although several different programs can be adopted to further promote the development of such species, a regional approach led by industry, with Federal and State support, appears to be one of the best strategies. Industry must participate actively, and the Federal Government can play an important role by providing financing, consumer education, and quality control programs and by helping to ease trade barriers.

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The Chairman and Ranking Minority Member
House Committee on Merchant Marine
and Fisheries *HSE62700*
and the Chairman and Ranking Minority Member
Subcommittee on Fisheries and Wildlife
Conservation and the Environment *HSE02702*
House Committee on Merchant Marine
and Fisheries

Ab-e 00293
Pursuant to your March 7, 1979, request and discussions
with your offices, this is our report on the National Marine
Fisheries Service's fishery development efforts. The re-
port deals with market development, financial assistance,
assessment of fish resources, and the need for new technol-
ogy and includes consideration of alternatives to improve
development.

As arranged with your offices, unless you publicly
announce its contents earlier, we plan no further distri-
bution of this report until 2 days from the date of the
report. At that time we will send copies to the appropriate
House and Senate committees, the heads of departments and
agencies whose programs we discuss, Members of Congress,
and other interested parties.

James B. Steeds
Comptroller General
of the United States



D I G E S T

Opportunities exist for the United States to make greater use of its nontraditional fisheries--those which have not been developed to their full potential. Development of such fisheries could have significant economic benefits, including creating jobs and expanding exports. For example, according to the National Marine Fisheries Service, development of six nontraditional species could produce 38,000 new jobs and contribute \$1 billion to the Nation's economy by 1990, while reducing the U.S. trade deficit by at least \$1.5 billion.

In response to a congressional request, GAO studied the National Marine Fisheries Service's fishery development programs. GAO examined market development, financial assistance, assessments of fish resources, and the need for new technology and considered alternatives to improve these areas.

MARKET DEVELOPMENT

Marketing is the key to development of nontraditional fish species. However, before such development can occur, obstacles such as low price, inferior product quality, restrictive foreign trade policies, and lack of consumer acceptance must be overcome. Because the nature and extent of the obstacles vary by species and regions, no one solution exists to developing markets for nontraditional species.
(See p. 6.)

Although several different programs can be adopted to further promote nontraditional species, the regional approach led by industry, with Federal and State support, appears to be one of the best strategies and one

that GAO supports. Industry must participate actively because without strong interest by fishermen and processors, expanded use of nontraditional species will not take place. (See p. 13.)

The Federal Government can also continue to play an important role by providing financing, consumer education, and quality control programs and by helping to ease trade barriers. Its program to provide funds for grants and cooperative agreements for specific, regionally oriented fishery development projects is a good beginning. GAO also supports the administration's efforts to improve access to foreign markets for fish products by including them as a priority item in the Department of Commerce's export promotion program and by working to ease trade barriers. (See p. 11.)

Although the recently initiated programs have merit and will help expedite fisheries development, they are only a beginning. If, because of the complex nature of fishery development problems, these initiatives do not prove to be enough, the administration may have to take further steps. (See p. 18.)

FINANCIAL ASSISTANCE

Lending institutions often perceive development of nontraditional fisheries as a high-risk endeavor. As a result, financing can be difficult to obtain. (See p. 19.)

The National Marine Fisheries Service's financial assistance programs are not designed for developing new fisheries. For example, the Fishing Vessel Obligation Guarantee Program is limited to those projects which meet strict financial soundness criteria and demonstrate economic feasibility; thus, this program cannot be used until the species' commercial success has been demonstrated.

Neither the National Marine Fisheries Service's Capital Construction Fund nor

its Fishing Vessel Obligation Guarantee Program may be used directly for shoreside processing facilities or to acquire used vessels. Legislative changes to these programs to include higher risk ventures, used vessels, and processors of nontraditional fish could help create a more favorable economic environment to accelerate the domestic development of nontraditional fisheries.

Foreign investment is also a source of financing for U.S. fisheries. Such investment has positive effects, including creating employment opportunities for U.S. citizens. Concern has been expressed, however, that increased foreign investment may inhibit domestic development of nontraditional fisheries. (See p. 28.)

In addition to the needs of fishermen and processors, community facilities that support the fishing industry also require special attention, particularly in Alaska. Needed improvements include harbors, docks, and water and sewer systems. Constructing these facilities is costly and will require extensive cooperation at all government levels and within the fishing industry.

ACTIONS WHICH COULD BE TAKEN
BY THE COMMITTEE

Improved financing for the development of nontraditional fisheries could be accomplished by amending the Merchant Marine Act of 1936, as amended, to

- guarantee, through a Fishing Vessel Obligation Guarantee high-risk subfund, loans to initial ventures for harvesting and/or processing nontraditional species;
- allow Fishing Vessel Obligation Guarantee funds to be used to acquire used vessels and convert them to harvest nontraditional fisheries; and

--expand the Fishing Vessel Obligation Guarantee and Capital Construction Fund programs to include nontraditional fish processors. (See p. 32.)

AGENCY COMMENTS

The Department of Commerce said the matters concerning the Fishing Vessel Obligation Guarantee and Capital Construction Fund Programs are consistent with the views of many in the fishing industry who feel that this type of support will be necessary to successfully develop underutilized fish resources. It also said there is little doubt that shoreside facilities capacity is lagging behind harvesting capacity and that substantial shoreside investments will have to be made in order to develop our major underutilized fisheries. It said that the administration is not, however, presently in a position to support extension of the programs to shoreside fishing facilities. (See app. IV.)

The Farm Credit Administration and Small Business Administration provided written comments (see apps. V and VI), while the Department of Agriculture chose to comment orally. For the most part the comments provided updated information or were editorial in nature, and appropriate changes have been made to the report to reflect them.

RESOURCE ASSESSMENTS

The need for improved fishery resource assessments has been widely discussed. They could help nontraditional fisheries development by defining the extent of the resource for both the fishing industry and potential investors. The National Marine Fisheries Service agrees that improvements are needed and has established a task force to evaluate ways of improving its resource assessment program. (See p. 34.)

Meanwhile, fishing industry representatives and others continue to question the validity of the National Marine Fisheries Service's resource assessment data, particularly for

nontraditional species. The Service could improve the usefulness and acceptability of its data by improving public relations and coordination with industry. (See p. 37.)

RECOMMENDATIONS

X GAO recommends that the Secretary of Commerce direct the National Marine Fisheries Service to undertake a public relations program to emphasize to the fishing industry (1) the purposes of its fishery resource assessment program and (2) the degree of reliability and usefulness of the data collected. As part of this program, the Service should regularly meet with fishing industry groups to discuss the status of available assessment data and define mutual goals for improving it. (See p. 38.)

AGENCY COMMENTS

The Department of Commerce accepted the recommendation to publicize the purpose of its fishery resources assessment program. It added that the National Marine Fisheries Service is responding to this recommendation through its interaction with Regional Fishery Management Councils at whose meetings industry groups are represented. (See app. IV.)

TECHNOLOGY

Although some new technology is needed, the level of U.S. technology generally is not a major hindrance to the further commercial development of nontraditional species. Much of the technology already exists in the United States, and the rest can be adapted from foreign sources. Where new technology is needed, the Fisheries Service should continue to actively help industry in developing equipment to harvest and/or process nontraditional species. (See p. 40.)

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ABBREVIATIONS

CCF	Capital Construction Fund
EDA	Economic Development Administration
FCA	Farm Credit Administration
FmHA	Farmers Home Administration
FVOG	Fishing Vessel Obligation Guarantee
GAO	General Accounting Office
GATT	General Agreement of Tariff and Trade
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
SBA	Small Business Administration
S/K	Saltonstall/Kennedy

CHAPTER 1

INTRODUCTION

On March 7, 1979, the Chairmen and Ranking Minority Members of the House Committee on Merchant Marine and Fisheries and its Subcommittee on Fisheries and Wildlife Conservation and the Environment requested that we study the Department of Commerce's National Oceanic and Atmospheric Administration's (NOAA's) National Marine Fisheries Service's (NMFS's) fishery utilization and development programs, including alternatives to improve them. The committee was concerned with market development, financial assistance, assessments of fish resources, and the need for new technology. At the committee's request, our study focused on specific fisheries, including New England groundfish and squid, Alaska bottomfish, and underutilized Gulf of Mexico species such as mullet and sardines.

The Fishery Conservation and Management Act of 1976 (16 U.S.C. 1801 et seq.) sets forth the Nation's basic fisheries goals--conservation and management of resources and development of the U.S. fishing industry to assure that our citizens benefit from the employment, food supply, and revenue which can be generated thereby. The act provides for U.S. control over all fisheries (except for highly migratory species such as tuna) within 200 miles of our shores. It provides a framework for managing fishery resources on the basis of maximum sustainable biological yields 1/ as modified by relevant social, economic, and ecological factors. U.S. fishermen and processors receive preferential access to fisheries resources within the 200-mile fisheries zone. Foreign harvest is limited to that portion of the allowable catch of each resource which exceeds the U.S. harvesting capacity. Accordingly, the act created opportunities for major industry expansion, especially in the area of underutilized or nontraditional species. Non-traditional fisheries are those which are not developed to their full commercial potential.

THE U.S. FISHING INDUSTRY

The U.S. fishing industry is an important segment of the Nation's economy. According to NMFS statistics, in 1979 the fishing industry produced goods and services that contributed

1/The balance between the amount of the fishery resource that can be taken and still allow sufficient quantities to permit the fishery resource to renew itself.

approximately \$7 billion to the Nation's gross national product. This industry directly employs more than 260,000 individuals, and its products are an important source of protein for U.S. consumers.

Although the variety of species in the U.S. catch is great, U.S. fishermen tend to concentrate on a few high-value or high-volume species which yield good profits. Of more than 200 species caught by U.S. fishermen, one--menhaden, used for industrial fish products--accounts for over one-third of the catch by weight. Crab, shrimp, and tuna follow in volume of harvests. Despite menhaden's predominance in weight, the four highest valued species in the U.S. catch in 1978 were shrimp (\$386 million), crab (\$285 million), salmon (\$255 million), and tuna (\$176 million). These four species account for about 60 percent of the total value of the U.S. harvest. Differences in quantity and value of the catch exist among the various regions due to distribution of species. For example, although the greatest quantity of fish is landed in the Gulf of Mexico, the Pacific (including Alaska) produces harvests with the greatest value.

Fisheries development must take into account the unique aspects of the industry. Several factors differentiate the fishing industry from others:

- Fish harvesting is based on diverse, natural, biological resources, for which total catch is limited and variable and is not controlled by individual firms. These factors lead to uncertainty in the size and composition of catches, to volatile market conditions in some cases, and to increased investment risks.
- While some segments of the fishing industry are large, most firms are small and independent. Most fishing firms have some form of profit-sharing among labor, capital, and management.
- The heterogeneity of almost all components of the fishing industry is striking. The characteristics, interests, and problems of fishermen, processors, marketers, and consumers vary from region to region and from fish species to fish species. Harvesting varies from operations of small shore vessels to the deepwater activities of large, sophisticated fishing vessels. Processing operations may also be small and local or segments of large multinational conglomerates.

STUDIES PERTAINING TO NMFS' FISHERIES
DEVELOPMENT POLICY

Various studies have been made of the U.S. fishing industry and the potential for expanded use of nontraditional species.

Our studies

We have issued several reports on the U.S. fishing industry which concerned development and conservation. Our reports have recommended specific measures to manage and conserve fisheries in general as well as to develop non-traditional species. Appendix II lists our reports issued on this subject since 1975.

Independent studies

A major study on export opportunities in 16 foreign countries and domestic market potential for underutilized U.S. fish was conducted for NMFS by Earl R. Combs, Inc., in 1978. A report entitled "Export and Domestic Market Opportunities for Underutilized Fish and Shellfish," issued in December 1978, pointed out that additional underutilized fishery resources exist in all U.S. coastal regions. Worldwide demand for fish is substantial, and large export markets exist for many underutilized species in several countries. Furthermore, the domestic market for the white-fleshed fish group is substantial and is growing. The study, however, also pointed out impediments to the development of underutilized fishery resources. Because of those impediments, a high degree of perceived risks is associated with new development of these resources.

NMFS Fisheries' Development Task Force

NMFS established a task force on fisheries development in January 1979. The task force's final report, "Toward a Partnership for the Development of the United States Commercial Fishing Industry," issued on May 23, 1979, concluded that:

- An opportunity exists for major expansion of many segments of the U.S. fishing industry that could have significant national economic benefits. Task force studies indicated that developing six major new fisheries off Alaska, the West Coast, the Gulf of Mexico, New England, and the mid-Atlantic could

produce 38,000 new jobs and contribute \$1 billion to the U.S. economy by 1990, while reducing the U.S. trade deficit by at least \$1.5 billion. Additional benefits would be created by developing other fisheries.

--A number of impediments are blocking or slowing U.S. industry's development of individual fisheries. These impediments vary from area to area because each fishery is unique. Their effect is particularly severe because most fishermen are small, independent businessmen.

--Existing Federal programs, if appropriately applied, are generally sufficient to address these impediments. Most Federal programs applying to fishery development problems are administered by the Department of Commerce.

Based on its study, NMFS proposed a cooperative Government/industry program to develop and utilize resources which are not traditionally harvested by American fishermen in our 200-mile fishery conservation zone.

DEVELOPMENT POTENTIAL OF SPECIES REVIEWED

The fisheries we studied have been identified by NMFS as having potential for further development. Bottomfish species in Alaska waters constitute some of the most abundant fish resources found anywhere in the world. In addition to pollock, which dominate Alaska's bottomfish resources, abundant species include cod, rockfish, flatfish, and sablefish. NMFS estimates that the U.S. fishing industry could market about 1.5 million metric tons of bottomfish annually.

NMFS identified squid, whiting, butterfish, mackerel, and dogfish as having good development potential in the Northeast; squid and whiting have the best potential. NMFS estimates that an additional 90,000 metric tons of whiting and an additional 50,000 metric tons of squid can be marketed annually by the U.S. fishing industry.

NMFS has identified mullet and sardines, including Spanish sardines, thread herring, scaled sardines, round herring, and groundfish such as croaker and spot, as having development potential in the Gulf of Mexico. Although NMFS does not have figures on the potential market for Gulf fish by each species, it estimates that U.S. industry could eventually market about 100,000 metric tons of Gulf groundfish annually.

SCOPE OF REVIEW

In response to the committee's request, we concentrated on certain areas needing specific attention for the development of nontraditional fisheries. These included marketing, financial assistance, assessments of fish resources, and the need for new technology. As requested by the committee, we also concentrated on specific fisheries, including New England groundfish and squid, Alaska bottomfish, and such underutilized species in the Gulf of Mexico as mullet and sardines. Those species were identified by NMFS as having potential for further development. We focused on the gross benefits which would accrue to the U.S. economy if these nontraditional species were developed to their full commercial potential.

We reviewed NMFS fishery development programs in the three regions. Work was performed at NMFS headquarters in Washington, D.C., NMFS regional offices in Seattle, Washington; St. Petersburg, Florida; Gloucester, Massachusetts; and Juneau, Alaska; and NMFS regional fisheries centers in Seattle, Washington; Miami, Florida; and Woods Hole, Massachusetts.

We concentrated on reviewing and evaluating various fishery development studies and interviewing fishermen, processors, and NMFS and State officials to get their views on ongoing and proposed fishery development activities. We also discussed development activities with officials from the Alaska Fisheries Development Foundation, the Gulf and South Atlantic Fisheries Development Foundation, and the New England Fisheries Steering Committee.

We also met with officials of various commercial banks and Federal and State agencies that finance the fishing industry to discuss their fishery development activities. Besides NMFS, the Federal agencies included the Small Business Administration (SBA), the Economic Development Administration (EDA), and the Farmers Home Administration (FmHA). We also met with officials of banks and associations regulated and sponsored by the Farm Credit Administration (FCA), an independent Federal agency.

CHAPTER 2

MARKETING NONTRADITIONAL SPECIES

Marketing is the key to development of nontraditional fish species. Opportunities exist for the United States to market its nontraditional species both domestically and abroad. However, before such development can occur, obstacles such as low price, inferior product quality, restrictive foreign trade policies, and lack of consumer acceptance must be overcome. The nature and extent of the obstacles vary by species and regions, and no simple solution exists to developing markets for nontraditional species.

Although several different programs can be adopted to further develop and market nontraditional species, a regional approach led by industry, with some Federal and State support, appears to be one of the best strategies. Industry must participate actively because without strong interest by fishermen and fish processors, expanded use of nontraditional species will not take place.

The Federal Government should also continue to play an important role in fisheries development. The Government can assist by providing or helping to provide financing, developing consumer education and quality control programs, and by working to ease existing trade barriers.

MARKETING OBSTACLES

Although preferences vary by region, Americans generally do not consume large amounts of fish and fish products (about 13 pounds per capita annual fish consumption compared to about 60 pounds for the Japanese). Americans also tend to be highly selective in the types of fish and fish products that they buy. According to marketing specialists, Americans prefer large white flaky-fleshed fish--the type usually found in cold northern latitudes. Along with these species, Americans prefer convenience products such as fillets--fresh and frozen--which account for over half the total U.S. fish consumption.

Obstacles such as low price, lack of consumer acceptance, and inferior product quality hamper further development of domestic markets for nontraditional species. Some of these problems also affect the foreign marketing of these species, and restrictive trade policies present additional obstacles to improved market development. Various obstacles and differences in marketing potential are illustrated by the species we looked at. Some species, such as squid and Gulf of Mexico

mullet and sardines, have good export potential but very limited domestic potential; others, such as whiting, have limited export potential but some domestic potential. Alaska bottomfish are a large resource with domestic and export potential if various obstacles can be overcome.

Alaska bottomfish

Foreigners dominate the Alaska bottomfish market. The U.S. fishing industry has not entered the domestic bottomfish market to any extent because it cannot compete profitably with foreign suppliers. U.S. processors have been unable to provide a continuous supply of high-quality bottomfish products at prices competitive with foreign products.

Japan offers an enormous U.S. marketing opportunity for Alaska bottomfish because it consumes large amounts of fish--about 8 million metric tons in 1976. About one-third of Japan's fish harvests come from areas within 200 miles of foreign countries; about 38 percent are taken from inside the U.S. 200-mile zone. Japan is the largest harvester of Alaska bottomfish and in 1978 caught 1.1 million metric tons--about 74 percent of the total bottomfish harvest. With the probable decline of Japanese fishing inside the U.S. 200-mile zone, Japan is faced with decreasing supply. This situation, however, offers the United States a prime market for Alaska bottomfish.

Despite marketing opportunities in Japan, tariff and nontariff trade barriers hamper U.S. marketing efforts there. Japan maintains a tariff between 5 and 15 percent on most imported fresh and frozen fish, including pollock.

Nontariff restrictions, such as import quotas, present an even more important barrier to U.S. exports to Japan. Pollock is one of Japan's import quota items. In 1978 the dollar-volume quota was \$20 million for 98 countries, including the United States.

The quality of U.S.-processed fish concerns foreign consumers and may limit U.S. competition in the Japanese and European bottomfish markets. According to a consultant's report to the State of Alaska, Alaska fishery products have a poor quality reputation worldwide. Concern about quality is especially noteworthy in Japan. In November 1978 a member of a Japanese trade mission to the United States stated that Japanese firms were willing to buy 50,000 metric tons of Alaska pollock surimi (pollock in a paste form) but doubted that the United States could

presently produce the quality required by Japanese markets at an acceptable price.

Some U.S. fishing industry officials believe that one way to crack the large Japanese pollock market is through joint ventures. Joint venture operations involve U.S. fishermen selling their catch to foreign processing vessels, thereby providing U.S. fishermen with a ready market. An official representing the joint venture, under which U.S. fishermen sell their Alaska bottomfish to a Korean processing vessel estimated that the operation will provide over 100 primary jobs in the fishing industry and pay over \$20 million annually to U.S. fishermen. Other industry officials feel, however, that joint venture arrangements may slow U.S. interest in the development of bottomfish processing capacity.

Whiting

A large and growing U.S. market exists for frozen whiting fillets and blocks. Some whiting fillets but no whiting blocks are produced domestically. For example, in 1978 the United States imported about 40 million pounds of frozen whiting blocks and over 20 million pounds of frozen whiting fillets, a total of more than 60 million pounds. In contrast, in 1978 the U.S. industry produced only about 900,000 pounds of whiting fillets.

The U.S. whiting block and fillet market is presently supplied almost exclusively by duty-free imports, particularly from South America and South Africa. Foreign blocks and fillets are produced cheaply due primarily to lower labor costs. For the United States to effectively compete with imports, machinery must be developed to fillet whiting, which can then be processed into block form. Whether domestic producers can become competitive depends on several factors, especially the yield of the machinery and the cost of obtaining a steady supply of whiting from U.S. fishermen. Some restrictions in the form of either tariffs or quotas on imported whiting may also be needed until the U.S. whiting block industry is developed.

NMFS and industry officials do not believe that a good export potential exists for whiting because U.S. whiting cannot compete economically with South American and South African whiting.

Squid

Although a small domestic market exists for squid, it is sold primarily to certain ethnic groups, and growth in U.S. squid consumption is expected to be limited.

A potentially large export market exists for whole, frozen squid. Some U.S. processors are presently exporting both loligo (large-finned) and illex (short-finned) squid. Japan and Western European countries buy illex, but it brings only about half the price of loligo because it is less palatable.

Squid is shipped in whole, frozen form and packaged according to size. One problem that must be overcome is foreigners' attitude that U.S. squid is of poor quality. The Japanese have either rejected what they consider poor-quality U.S. squid or paid a low price for it. However, foreign firms seem to be very willing to help U.S. exporters improve quality control.

Another problem is that Europeans and Japanese are not dependent on U.S. squid resources. Their fleets harvest squid off the coasts of Africa and Australia. Because there are a number of squid fisheries, world squid demands and prices fluctuate. Therefore, the United States must develop knowledge of these unstable markets in order to compete. Although several Federal agencies collect information on overseas markets, at present, Government officials do not have timely or accurate reports on foreign market demands for squid and other nontraditional species.

As an example of fluctuating market conditions, one U.S. harvester operating a harvester/processor vessel off the U.S. east coast was unable to sell relatively large quantities of illex he had caught to either the Japanese or Western Europeans. The harvester said that before he caught the squid, Japanese and Western European buyers had expressed great interest in purchasing such a catch.

Thus, while a good export market potential seems to exist for frozen, whole squid, especially loligo, American fishermen must be cautious because of the fluctuating market demands and prices. In addition, the actual size of U.S. squid resources is unknown although large stocks are believed to exist in America's offshore waters.

To date U.S. squid fishing has generally been limited to catches by small vessels fishing in waters close to the shore (inshore) while foreigners have been fishing in offshore waters. However, several U.S. firms, recognizing the potential of offshore fishing for squid and other nontraditional species, have built or are planning to build catcher/processor vessels. These relatively large vessels have enough storage to hold and/or process the catch at sea. Such freezing or processing at sea is necessary because squid tends to spoil rapidly.

Gulf of Mexico species

Gulf species such as mullet and sardines mature rapidly and are generally smaller than the predominant species in other regions. Dealers have had difficulty selling such fish for human consumption in the United States.

Possible uses for Gulf species extend from the lowest use--fish meal and pet food--to the highest possible use--human consumption. Generally, the higher the use to which the raw fish can be put, the higher the price for the raw product. U.S. demand for traditional species is so strong, however, that some market analysts believe that a price differential of one-third or more would have to exist before dealers could sell the less popular species for human consumption, even if serious shortages of traditional species were to occur.

The U.S. pet food market is not large but presents some potential for growth. Pet food, however, is a lower use of the fish, and the dockside price for such fish is considerably less than for nontraditional species used for human consumption.

Exports offer the greatest potential for marketing nontraditional species native to U.S. Gulf waters. Prospects are especially good to sell nontraditional Gulf species, including mullet and sardines, to African countries. The fish would be landed in Gulf ports and frozen whole for export.

As an indication of the potential, marketing specialists believe Nigeria and Egypt could buy all the mullet--a traditional food fish in those countries--the United States can produce if the price is right and if American exporters can solve holding and transportation problems to deliver in high volumes when promised.

A large American firm, which previously canned Gulf fish for cat food, is setting up a pilot plant to can Spanish sardines for human consumption. This company's Brazilian affiliate has established a market in Brazil for the sardines. According to a company official, it has the market, the necessary canning technology, and the financing to use the Gulf's Spanish sardine fishery. All the company needs is the resource, and it has contracted with an experienced fishing firm to harvest the Spanish sardines during the warm months when the fish come close inshore. However, at other times of the year when Spanish sardines go far offshore, neither the fishing firm nor NMFS has information on where the fish are or how plentiful they are.

Certain fishing interests have suggested that the menhaden fleet, with some modification, might be used to harvest thread herring and Spanish sardines when not fishing for menhaden. If the details can be worked out, this practice might enable fishermen to harvest in sufficient volume to develop an offshore fishery for these two underutilized species. Exploratory fishing with a midwater trawl could also be an effective means of acquainting Gulf fishermen with foreign technology that has been used in foreign waters to harvest species similar to the Spanish sardine and thread herring. A foreign company has expressed interest in bringing a midwater trawler into the Gulf to do exploratory fishing and demonstrate techniques.

FEDERAL MARKETING EFFORTS

In developing underutilized species, the Federal Government's role is limited because product marketing and consumer acceptance are primarily functions of the private sector. Education programs to inform present and potential consumers of seafood's nutritional value are a valid public health role for the Federal Government, as is ensuring product safety and quality. Reducing and/or eliminating tariff and non-tariff trade barriers is a Government function that cannot be performed by the private sector.

NMFS is the primary Federal agency that assists the U.S. fishing industry. In carrying out this responsibility, NMFS established a Fishery Development Division. NMFS activities include (1) collecting and disseminating information on domestic and export marketing opportunities, (2) participating in foreign trade missions and trade fairs, (3) improving seafood merchandising practices, and (4) educating consumers on the health and economic benefits of seafoods. Related efforts include working to reduce or eliminate foreign trade barriers for more favorable treatment of U.S. fish exports.

Improving trade

Government programs include marketing assistance, such as collecting and disseminating information about opportunities to sell U.S. fish products in foreign markets, participation in foreign trade missions and trade fairs, and efforts to lower tariff and nontariff barriers to U.S. fishery product exports.

Foreign marketing assistance is available from NMFS, the Industry and Trade Administration, the Bureau of Economic Analysis, the Office of Minority Business Enterprise, and the Bureau of the Census within the Department of Commerce,

as well as from other Federal agencies such as the Department of Agriculture, the Small Business Administration, and the Export-Import Bank.

According to NMFS, lack of adequate information about foreign markets inhibits U.S. producers from trying to sell their products abroad. The United States has only two fisheries attaches (one in Mexico City and one in Tokyo), and the commercial and agriculture attaches and economic officers abroad do not expend much effort on fish as a U.S. export commodity. As part of its fishery development program, NMFS proposed that six additional fishery attaches be assigned to various parts of the world. The primary functions of these attaches would be export promotion and liaison with foreign fishery administrations and fishery interests.

In November 1979, however, a reorganization of the Federal Government's international trade functions was announced. As part of the reorganization, the Department of State's commercial attaches will be transferred to the Department of Commerce.

In December 1979 the Assistant Administrator for Fisheries said that in light of the recently announced reorganization, NMFS did not see the need to authorize regional fisheries attaches. He said the commercial attaches should be able to carry out a trade promotion function for fisheries, especially because fisheries will be a priority item in the Department's export promotion program.

As previously pointed out, many foreign nations have high tariffs or complicated systems of nontariff barriers, such as import quotas, which restrict U.S. fish exports. In other cases, barriers such as domestic subsidies and required minimum processing of imported products may make U.S. competition difficult.

To accelerate American exports and reduce the U.S. trade deficit, in September 1978 President Carter announced a program to increase foreign trade opportunities for U.S. exporters. The program's objectives include helping exporters and trying to reduce foreign trade barriers and unfair trade practices. Department of Commerce officials believe that increased domestic use of fishery resources within the 200-mile fishing zone can contribute significantly to reducing the trade deficit.

Foreign nations made both tariff and nontariff concessions under the recently concluded Multilateral Trade Negotiations, which were conducted under the General Agreement of

Tariff and Trade (GATT). According to NMFS, the tariff concessions of all involved countries on fishery items will affect trade of about half a billion dollars. Tariff cuts will be implemented over a period of 8 years beginning in 1980. Also, under the Trade Agreements Act of 1979 (Public Law 96-39, dated July 26, 1979), U.S. law was changed to agree with GATT.

A major accomplishment of the trade negotiations was the development of a series of "codes of conduct" on the use of nontariff measures. Under the codes a U.S. businessman can petition for countervailing duties to be put on an imported product if, because that product is subsidized, he is harmed because he can not compete with it. Injury, however, can be difficult to prove. The codes also contain measures favorable to exporters. They give U.S. exporters the opportunity to obtain relief if foreign product standards are used as unfair trade barriers. This provision should help U.S. fish exporters because foreign product standards are sometimes used unfairly to restrict imports.

To help U.S. industries take advantage of the GATT provisions, the Department of Commerce is establishing a special trade complaint center. This center will receive complaints on nontariff barriers and unfair trade practices. The Department will analyze the complaints and, if warranted, take them to the international forum for solution. NMFS will assist in fishery cases. The center is expected to begin operations in 1980 when the GATT rulings become effective.

A REGIONAL, INDUSTRY-LED APPROACH
CAN BE THE CORNERSTONE TO DEVELOP
AND MARKET NONTRADITIONAL SPECIES

As pointed out in chapter 1, a high degree of fragmentation characterizes nearly all sectors of the fishing industry. The characteristics, interests, and problems of fishermen, processors, marketing entities, and consumers vary by geographical region and fish species. Accordingly, in our opinion, a regional, industry-led approach to non-traditional fisheries development and marketing has considerable merit.

Saltonstall/Kennedy (S/K) funds can be a major source of Federal financial support for regional fishery development projects. In addition, the recently established Regional Fishery Development Foundations can provide a mechanism for industry to collectively undertake development projects of mutual benefit in cooperation with NMFS and the States.

Saltonstall/Kennedy funds

Thirty percent of the gross receipts from customs duties on fishery products are made available to the Secretary of Commerce for fishery programs under the Saltonstall/Kennedy Act of 1954 (15 U.S.C. 713c-3). S/K funds can be used to help promote and develop fishery products and to conduct technological, biological, and other research pertaining to American fisheries.

Under the S/K Act, the Secretary of Commerce is directed to cooperate with appropriate Federal, State, and local government agencies; private organizations; and individuals interested in fisheries in carrying out the activities authorized by the act. Accordingly, such funds can be a major source of Federal financial support for regional fishery development projects.

A large amount of the S/K funds, however, has traditionally been used to support NMFS fisheries management and development activities. For years S/K funds transferred to Commerce amounted to about \$7 to \$9 million annually. However, recently S/K funds have increased substantially; for example, S/K transfers to Commerce increased from about \$8 million in fiscal year 1977 to \$13 million in fiscal year 1978. In fiscal year 1979 these funds amounted to \$17.4 million. For fiscal years 1980 through 1989, estimates are that up to \$30 million in S/K funds will be available to Commerce annually. On May 23, 1979, as part of its fisheries development policy and program, the administration released \$5.7 million in S/K funds for fiscal year 1979, of which about \$2.8 million went to the Foundations for various fishery development projects.

In November 1979 NMFS announced that it would allocate about \$10 million in S/K funds during fiscal year 1980 for grants and cooperative agreements for fisheries development projects. Emphasis would be on joint Federal/private cost sharing, regionally oriented projects, and targeting on specific fisheries. In announcing the increased program, the Administrator of NOAA said that this is the first step in carrying out the administration's fishery development plan announced in May 1979. He said such regionally oriented projects will remove economic and technological impediments to the use of nontraditional fish species and help develop and strengthen the U.S. fishing industry. In commenting on this program in December 1979, NOAA's Assistant Administrator for Fisheries said the administration strongly supports a Government/industry partnership to develop and broaden the U.S. fishing industry.

Activities of the Foundations

As previously pointed out, the Regional Foundations provide a mechanism for industry to collectively undertake development projects of mutual benefit in cooperation with NMFS and the States. Regional Foundation groups and some of their activities are as follows:

- Alaska Fisheries Development Foundation: created in 1978; financed initially by \$100,000 from the State of Alaska and \$40,000 in industry in-kind contributions; engages in exploratory fishing, economic feasibility analysis and demonstrations, gear development work, and other development activities. In May 1979 NMFS provided \$1.5 million in S/K funds to partially fund a 7-month technological and economic feasibility analysis of Alaska bottomfish. The project's objectives include demonstrating that American fishermen can harvest an ever-increasing share of Alaska's bottomfish resources, as well as coordinating and expediting the development of the harvesting and processing segments. Other objectives are (1) measuring and comparing the economic and production capabilities of vessels converted to harvest bottomfish with the most sophisticated automated equipment, (2) providing immediate transfer of gear and fish-handling technology to the domestic industry, (3) providing reliable and current information for better decisionmaking and management, (4) identifying current markets for Alaskan bottomfish, and (5) forming a strategy for competing with foreign imports.

- Gulf and South Atlantic Fisheries Development Foundation: organized in 1976; financed by the Economic Development Administration, the Coastal Plans Commission, and NOAA at \$1.25 million and \$1.1 million in fiscal years 1978 and 1979, respectively, in addition to \$300,000 in industry in-kind services and \$360,000 in in-kind services from six States. Foundation activities include a Midwest marketing project to introduce Gulf products to the Midwest region; economic feasibility analysis and demonstrations; regional port and harbor planning; and export marketing, including participation in fish trade fairs abroad.

In May 1979 NMFS provided \$600,000 in S/K funds to the Foundation for projects to resolve identified impediments to developing fishery resources in the Gulf and South Atlantic area.

- New England Fisheries Steering Committee: Fisheries Development Task Force of the steering committee organized in 1973; financed by NOAA contributions of \$400,000 per year and State and industry contributions of \$300,000 to \$500,000 per year; engages in numerous projects to help develop economically sound industries from nontraditional species. Research and development work includes reviewing data on resource availability; developing or adapting harvesting, handling, and processing technology; investigating various product forms in both domestic and foreign markets; and developing new or expanded markets. The committee also publishes a monthly fisheries newsletter and holds seminars on fisheries topics in various New England ports. In May 1979 NMFS provided \$492,000 in S/K funds to the program for projects to solve impediments to developing various New England species, including whiting and squid.
- Mid-Atlantic Fisheries Development Foundation: organized in 1978; has conducted organizational activities and one project for the Gulf and South Atlantic Fisheries Development Foundation; funded in 1978 by \$10,000 from NOAA and \$2,800 in dues from industry, plus nearly \$50,000 in in-kind services from industry and the State of Maryland. In May 1979 NMFS provided the Foundation with \$100,000 in S/K funds to analyze fishery development opportunities, impediments, and priorities in the mid-Atlantic area.
- West Coast Fisheries Development Foundation: incorporated in May 1979. NMFS provided \$95,000 in S/K funds to the Foundation to plan development of Pacific coast resources, with particular emphasis on Pacific hake.
- Pacific Tuna Development Corporation: created in 1974; financed from S/K funds at a level of about \$1 million per year up to fiscal year 1978 and \$2.5 million in fiscal year 1979, plus over \$400,000 per year of industry in-cash and in-kind services; engages in exploratory fishing, economic feasibility analyses and demonstrations, and gear development.

Fishing industry representatives we talked to generally approve of an industry-dominated regional approach to developing nontraditional fisheries. They emphasized that although they favor Federal support and input, they want to see industry control over fisheries development.

CONCLUSIONS

Opportunities exist for the United States to market its nontraditional species both domestically and for export. However, before such species can be fully utilized, various obstacles must be overcome. Because the nature and extent of the obstacles vary by species and regions, no simple, over-all solution exists to developing markets for nontraditional species.

Although several different programs can be adopted to further promote the development and marketing of nontraditional species, a regional approach led by industry, with Federal and State support, appears to be one of the best strategies. Industry must participate actively because without strong interest by fishermen and fish processors, expanded use of nontraditional species will not take place.

The Federal Government should continue to play an important role in developing nontraditional fisheries. It can help provide financing, consumer education, and quality control programs and can strive to ease trade barriers.

We support the industry-dominated regional approach for developing and marketing nontraditional fisheries. We believe that the administration's program to provide S/K funds for grants and cooperative, specific regionally oriented fishery development projects is a good beginning. We also support the administration's efforts to improve access to foreign markets by including fish products as a priority item in the Department of Commerce's export promotion program and working within the context of GATT to ease trade barriers.

We also recognize that although the recently initiated efforts have merit and will help expedite fisheries development, they are only a beginning. It is too early to tell whether specific projects, such as the technological and economic feasibility analysis for Alaska bottomfish, will provide conclusive results and specific development strategies or if the United States will be successful in further easing foreign trade barriers and promoting exports of U.S. fish and fish products.

If, because of the complex nature of fishery development problems, these initiatives do not prove to be enough, the administration may have to take further steps. Several actions should be considered:

- The Department of Commerce should consider seeking higher tariffs or quotas on imported fish and fish products. The imposition of tariffs or quotas on imported nontraditional species, such as whiting or Alaska pollock, used in the domestic frozen fish industry would allow domestic fishermen to better compete for this market. However, imposition of such tariffs and quotas would also increase the price of the product to the U.S. consumer.

- The Secretary of Commerce, in consultation with the Secretary of State, should consider substantial increases in "user fees" paid by foreign fleets fishing in U.S. waters. This action would enable domestic fishermen to better compete with foreign products, especially in the frozen block market, since a considerable portion of the imported frozen blocks are produced from fish caught in U.S. waters. Increasing user fees, however, could also raise the price of fish products to the U.S. consumer.

- The Department of Commerce, in consultation with the Department of State, should give special attention to those countries that maintain significant trade barriers on U.S. fish products and still receive permits to fish within the U.S. 200-mile zone. If such countries do not lower their trade barriers, consideration should be given to withdrawing their permits to fish in U.S. waters or at least to reducing their allocations. Such actions, however, are retaliatory and should only be considered in the overall context of U.S. trade and foreign policy.

CHAPTER 3

FINANCING CAN BE DIFFICULT TO OBTAIN FOR NONTRADITIONAL FISHERIES PROJECTS

Lending institutions often perceive development of nontraditional fisheries as a high-risk endeavor. As a result, financing can be difficult to obtain. Sources of financing, including commercial banks, NMFS, and other Federal agencies, use lending criteria which favor traditional fisheries and limit funds for the development of higher risk nontraditional fisheries.

NMFS' Fishing Vessel Obligation Guarantee (FVOG) and Capital Construction Fund (CCF) Programs are directed to the harvesting sector. Although some Federal programs can be used to help obtain financing for processing facilities, no Federal programs are specifically directed to fish processors.

Community facilities such as harbors and docks to support the fishing industry also require attention, particularly in Alaska. Constructing these facilities is costly and will require extensive cooperation at all government levels and within the fishing industry.

NONTRADITIONAL FISHERIES PROJECTS ARE VIEWED AS HIGH RISK

Lending institutions often treat nontraditional fisheries projects as high risks. Nearly all lenders we interviewed thought those interested in nontraditional fisheries development would have trouble getting funds. Reasons cited included lack of historical profit and loss data, cyclical forecasted earnings, unavailability of markets, unproved financial track records of borrowers, and lack of reliable data on the status of fish stocks.

FINANCING FOR NONTRADITIONAL SPECIES IS LIMITED

Harvesting nontraditional fisheries will require new vessels or modifications to existing ones. Most of the leading institutions we contacted make loans to fishermen seeking to build new vessels; however, they tend to favor the traditional species fishermen. For example, most of the institutions look for experienced owners and/or operators who have proven track records as businessmen and fishermen. The lack of historical profit and loss data contributes to the

high-risk nature of nontraditional fisheries development and hinders those who seek financial assistance for non-traditional ventures.

Few programs meet the large financing needs required by processors wishing to expand existing facilities or develop new processing plants for nontraditional species. To strike a proper balance in the capacities to harvest and process bottomfish, adequate financing for bottomfish processing facilities is just as important as the funds to harvest the fish.

Commercial banks

Commercial banks view fishing experience and repayment ability as the prime considerations for loans. Since few fishermen regularly fish for nontraditional species, potential nontraditional fish harvesters and processors find it difficult to demonstrate adequate sources of supply and stable markets as well as reliable profit and loss projections. Bank officials said they are taking a cautious approach to making loans for development of high-risk nontraditional fisheries.

According to representatives of the two largest Washington State commercial banks making fishing vessel loans to Alaska fishermen, most loan applications involve crab and salmon fisheries. Neither bank has had a significant number of requests to finance new bottom-fishing vessels. The officials said that their outstanding loans for processing facilities also involve primarily crab or salmon operations and that no loans have been made to anyone who processes only bottomfish. The officials said that in some cases processors who have gotten loans may process certain bottomfish species on an incidental basis.

We contacted several commercial banks serving most of the major New England ports. None of these banks had made loans for vessels to fish nontraditional species. Most had received no applications for such loans and said they were not interested in making them. Although most New England banks have made loans to traditional processors, only two banks have made loans to nontraditional fish processors. Each loaned money to one processor. One of the two processing plants being financed also has a Small Business Administration guarantee. Commercial bank officials that we interviewed said that they had received very few applications for loans from nontraditional fish processors.

In the Gulf of Mexico, commercial banks also are reluctant to finance development of nontraditional species. Bank officials said that commercial banks are interested only in sound business investments, and vessels fishing for and facilities processing nontraditional species are usually not considered sound ventures. One official said that only the top echelons of business could qualify for a commercial bank loan for nontraditional fisheries. Even then the loan terms would include a large downpayment, a high interest rate, ample collateral, and a detailed feasibility study.

Federal sources

Federal direct or guaranteed loan sources include NMFS, the Small Business Administration, the Farmers Home Administration, and the Economic Development Administration. Credit is also provided through the Farm Credit System, regulated and supervised by the Farm Credit Administration. With the exception of NMFS, these sources have had limited involvement with fish harvesters or processors. Federal loans and loan guarantees for nontraditional fish processors are more limited than those for vessels. NMFS has several financial assistance programs directed to the harvesting sector. Although there are Federal programs which can be used to help obtain financing for processing facilities, there are no Federal programs specifically directed to fish processors.

National Marine Fisheries Service

NMFS is the primary Federal agency providing financial aid to the fishing industry. This agency has two major assistance programs--the FVOG and the CCF. Both programs are authorized pursuant to the Merchant Marine Act of 1936, as amended (46 U.S.C. 1271-1280). NMFS also has a \$13 million direct loan fund for financing vessel construction. The program, however, has been under an administrative moratorium since 1972, and its authority will expire in September 1980.

The FVOG program, implemented in 1974, guarantees loans for constructing, reconstructing, or reconditioning U.S. commercial fishing vessels of at least 5 net tons. It does not apply to the acquisition of used vessels. Guarantees are available for up to 87-1/2 percent of the construction, reconstruction, or reconditioning cost. Loans may be made for up to 25 years at market interest rates. To be eligible for a guarantee, applicants must be able to justify that their proposed project will result in a profit by virtue of (1) the the fishing operations they intend to pursue, (2) their

projected expenses and earnings, (3) the venture's capitalization, (4) their character, integrity, and management ability, and (5) the availability of experienced captains and crews. As of December 31, 1979, the program had guaranteed about \$232 million in vessel loans, of which about \$135 million was outstanding.

The CCF program was implemented in 1972. It enables fishermen to defer Federal tax on income earned from the operation of fishing vessels when that income is reserved to pay for vessel construction, reconstruction, or acquisition. Deferred taxes are recaptured through decreased depreciation allowances on vessels constructed or reconstructed with tax-deferred funds.

Although FVOG and CCF programs have been used by many fishing vessel owners, the programs are not designed for developing new fisheries. For example, the FVOG program is limited to those projects demonstrating economic feasibility. The program cannot be used for less popular species, such as Alaska bottomfish, until the species' commercial success has been demonstrated. For example, as of December 31, 1979, NMFS' Seattle regional office had approved \$40 million worth of FVOG loans. However, the vessels primarily harvest high-value species, such as shrimp, crab, herring, or tuna, off the Pacific and North Pacific coasts.

An NMFS official stated that New England fishermen have shown little interest in FVOG guarantees for vessels that will be fishing for nontraditional species. According to NMFS and fishing industry representatives, traditional New England fishermen have little interest in fishing for nontraditional species such as whiting if they can harvest and continue to get good prices for traditional species such as cod and haddock. Interest has been expressed in harvesting squid, however, by individuals other than traditional New England fishermen. According to NMFS regional officials, if such "pioneers" can obtain financing--perhaps through higher risk subfunds to FVOG--and if they prove successful, then others will follow.

In recognition of the need for some higher risk financing for nontraditional species, NMFS has recently proposed legislative changes to transfer funds from the Fisheries Loan Fund to the FVOG program to provide guaranteed financing for higher risk vessels in developing fisheries.

As previously noted, the FVOG program cannot be used to acquire used vessels. Modifying the FVOG program to allow loan funds to be used to acquire used vessels and convert

them to harvest nontraditional fisheries could benefit both nontraditional and traditional fisheries. In this regard, vessels used for fully developed traditional fisheries would be converted for use in nontraditional fisheries. For example, according to a 1978 study, Alaska shrimp and crab vessels could be converted for use in Alaska bottomfish fisheries for relatively low estimated costs of about \$35,000 for an 86-foot shrimp vessel and about \$550,000 for a 160-foot crab vessel.

Representatives of the National Fisheries Institute have testified that FVOG funds should be made available for used vessels. In testimony before the Subcommittee on Fisheries and Wildlife Conservation and the Environment, House Committee on Merchant Marine and Fisheries, on December 10, 1979, the Director of Government Relations of the National Fisheries Institute pointed out that purchasing and modifying used boats for floating processing vessels would be economical. He said 26 ships in the Government-owned merchant fleet, all over 1,500 tons, are amenable, according to the Department of Commerce, to conversion for use as harvesting, processing, or combination harvester/processor vessels. Although NMFS recognizes the merits of extending the FVOG guarantee to the purchase of used vessels, it has taken no action to propose such legislative changes.

Under current NMFS regulations, neither the CCF nor the FVOG programs can be used to increase the harvesting capacity in a fishery that NMFS has designated as "conditional" (fully developed--that is, fished at or near capacity), such as Alaska's king crab and salmon fisheries. This regulation is intended to encourage wise use of fishery resources through balanced harvesting capacity--a desirable objective. However, it prevents fishermen from obtaining loan guarantees for vessels that would be used in both conditional and nontraditional fisheries, such as Alaska bottomfish. NMFS is studying the possibility of modifying its conditional fishery regulations to allow vessels using the Government assistance programs to make some profits in conditional fisheries and thereby have a reasonably stable financial base, while assuming the risk of entering into nontraditional fisheries. On January 11, 1979, NMFS published for public comment advance notice of proposed changes to its conditional fisheries regulations which would allow use of NMFS financing programs for vessels capable of operating in underutilized fisheries even though they were also capable of operating in conditional fisheries.

Neither FVOG nor CCF funds are generally available to finance shoreside processing facilities. FVOG can indirectly be used to finance processing facilities only if the processor requesting the loan guarantee owns fishing vessels that

can be use as collateral for a guaranteed loan, the proceeds of which could be used to finance processing facilities. Since most processors are separate entities from the fishermen who supply them, they are ineligible for FVOG loans.

Various fishing interests have advocated extending the FVOG and CCF programs to include shoreside processing facilities. Fishing industry representatives we talked to generally believed extending these programs to shoreside facilities would help stimulate fisheries development, especially because in some areas an imbalance may exist between harvesting and processing capacity. As a result, inadequate shoreside facilities may be impeding the development of underutilized species.

In December 1979 NOAA's Assistant Administrator for Fisheries said NMFS is not now prepared to support the inclusion of fishery shoreside facilities in these programs. He said the risks and benefits of guaranteeing obligations for shoreside facilities and extending CCF to such facilities needed to be studied further. He proposed a review of the issue with the assistance of the Department of the Treasury. In May 1979, however, NMFS had concluded that CCF should be extended to shoreside facilities. In a draft of its Fisheries Development Program, NMFS provided for extending CCF to shoreside facilities. However, the provision was later deleted from the final program at the request of the Office of Management and Budget, which said that the proposal needed further study.

Fishing industry representatives in Alaska told us that they were interested in expanding bottomfish processing capabilities but have been unable to secure financing. Some said that the Japanese are interested in financing processing facilities, but U.S. lenders are not.

Farm Credit Administration

The Farm Credit Administration is an independent agency which regulates and supervises the Farm Credit System comprised of cooperative organizations, such as Federal intermediate credit banks, Federal land banks, banks for cooperatives, and production credit associations. This system makes credit available to farmers, ranchers, rural homeowners, and producers or harvesters of aquatic products. Credit standards used are similar to those used by commercial banks. In 1971 the Congress enabled production credit associations and banks for cooperatives to make aquatic loans. However, the program is still primarily geared to financing agricultural programs, and the \$280 million of credit extended to the fishing industry is proportionately a small share of the total credit

extended. Most credit extended to the fishing industry has gone to traditional fishermen.

Since no production credit associations or banks for cooperatives are located in Alaska, the Northwest Livestock Production Credit Association in Portland, Oregon, and the Spokane Bank for Cooperatives are responsible for lending operations in Alaska. A substantial downpayment is usually required, and the loans have a maximum 15-year term. Northwest Livestock Production Credit Association officials said that the Association has about \$41 million in outstanding fishing loans. Most loans involve salmon and crab fishing vessels.

In New England, the production credit associations have between \$19 and \$20 million in outstanding loans on some 450 vessels. Loans are limited to 75 percent of a new vessel's cost. An official told us that as of October 1979 they had received no loan applications for nontraditional species although one fisherman interested in harvesting squid had inquired about a loan. In the Gulf area no loans have been made for nontraditional commercial fishing vessels.

Small Business Administration

SBA provides direct, guaranteed, and lender participation loans to foster and promote small business. Although SBA programs may be used for vessel and processor financing, their use is limited because most loans have a \$500,000 maximum limit.

The SBA programs are aimed mainly at vessels of under 5 net tons, which would be too small for year-round, deep-water nontraditional fisheries. As of April 1979 SBA's Anchorage district office had 17 outstanding vessel loans, averaging about \$100,000 each. Since most new vessels with bottomfish capability cost much more, SBA is not a likely candidate for such loans. As in Alaska, the need for medium or large vessels also limits the usefulness of SBA programs for vessels needed to harvest deepwater fishes in New England. According to SBA officials in regions IV and VI, which have jurisdiction over the Gulf Coast States, no loans for vessel construction or modification have been made for developing nontraditional fisheries. SBA officials we talked to said the industry had shown little interest in developing nontraditional fisheries.

SBA has made few loans to processors of nontraditional species. As of April 1979 the Anchorage, Alaska, SBA office had 36 loans outstanding to shore-based processors and

2 loans outstanding to floating processors. The average processing plant loan was about \$350,000 to \$400,000. These loans were generally for salmon and crab processing. In New England, SBA has guaranteed only one nontraditional processor's loan although it has made several loans to traditional fish processors. According to SBA officials in Gulf Coast regions IV and VI, no loans have been made for processing plants to develop nontraditional species.

Farmers Home Administration

FmHA, an agency within the Department of Agriculture, makes loans to improve, develop, or finance business and industry. FmHA can guarantee loans for fishing vessels and processing facilities through its Business and Industrial Loan Program. Loans are granted at market interest rates for a maximum of 30 years. To qualify for a business and industrial loan, the facility must be located in an area where the population does not exceed 50,000. Priority is given to areas with a population of 25,000 or less. FmHA intends that its guarantees will result in the creation of new jobs.

As of December 31, 1978, Alaska's FmHA office had two outstanding vessel loans to a single borrower, totaling about \$1.5 million. According to the regional director, one loan involves a floating processor and the other a crew vessel. FmHA regional officials in New England told us that they have two vessel loan guarantees outstanding, neither of them for nontraditional fisheries.

Few FmHA loans have been made to processors of nontraditional species. As of December 31, 1978, only one of five outstanding FmHA business and industrial loans in Alaska involved a processing facility--a king crab floating processor vessel. The Alaska area director said that since January 1979 his office has received many calls from processors desiring to expand their plants' capacities to handle bottomfish. No applicants, however, are seeking loans for plants devoted solely to bottomfish. Most processor loan applications involve crab or salmon.

FmHA has helped develop nontraditional fisheries in the Gulf of Mexico. For example, in southwest Louisiana it has approved a \$5.1 million loan to build a pilot processing plant to produce a protein supplement from nontraditional fish. The supplement will initially be used in livestock and pet markets, but officials have expressed hopes of eventually penetrating the human consumption market. Although the venture is perceived as high risk, FmHA regional officials were optimistic. In Sabine Pass,

Texas, FmHA is planning to provide \$5.3 million for vessels, plants, and working capital for fishery development. In Florida, the agency hopes to extend aid for construction of a new port in the northeastern Gulf of Mexico. FmHA has not financed processing facilities in New England.

Economic Development Administration

EDA creates permanent jobs through the development of public facilities and private enterprise. This goal is accomplished through business loans and grants. EDA financing programs are available to help fishermen. However, EDA's major role in this area is fisheries-related community facilities development. EDA regional officials told us they have not made any loans for developing nontraditional fisheries in either New England or the Gulf of Mexico.

EDA has three outstanding loans involving Alaska fishing interests. These loans range from \$455,000 to \$3.5 million. The \$3.5 million loan was made to rebuild an Alaska fish cannery destroyed by fire. The new cannery will process primarily salmon and crab, but plans are also being made to process bottomfish.

Other sources of financial assistance

A few States have programs to make or guarantee loans to help develop nontraditional fisheries.

Of the New England States with substantial involvement in fishing, only Maine has agencies to guarantee loans to fishermen or processors. The State has three such agencies: the Maine Small Business Loan Authority, the Maine Veterans Small Business Loan Authority, and the Maine Guarantee Authority. The first two agencies, each of which will guarantee a maximum of \$30,000, have made many loan guarantees to fishermen. However, the small amount guaranteed makes them of little use to nontraditional fishermen.

Guarantees by the Maine Guarantee Authority have no financial limitations. However, traditional Maine fishermen have shown little interest in expanding into nontraditional fisheries, and no formal guarantee requests have been received from either fishermen or processors. Also, the program's interest rates are high (market rate plus 1 percent).

Gulf Coast States have done little to develop capital resources for nontraditional fisheries. State officials told us that programs have been limited to consumer education, marketing surveys, and biological studies. States

have provided no direct dollar assistance to help finance vessels or processing plants.

During the past several years, the State of Alaska has created several programs whereby individuals and corporations may borrow funds for harvesting, processing, and marketing Alaska fishery resources. These programs include the Commercial Fishing Loan Program, the Small Business Loan Program, the Commercial Fishing and Agricultural Bank, the Renewable Resources Development Fund, and a small business direct-loan program. To date, however, potential bottomfish interests have made few requests.

Alaska's Commercial Fishing Loan Program grants loans of up to \$500,000 to resident fishermen and processors at 7-1/2 percent annual interest. As of May 31, 1979, the program's outstanding loan balance totaled about \$33 million. Most loans are for fishing vessels. Since the program's loan limit increased from \$150,000 to \$500,000 in July 1978, only about six loans have been made at the higher loan limit. The director said that the program has made no loans since January 1979 due to inadequate funds.

Foreign investment

Foreign investment is also a source of financing for U.S. fish processing facilities. Such investment generally takes two forms: purchase of debt items, such as bonds and notes, or equity items, such as stocks in U.S. companies.

Foreign investment in U.S. processing facilities has positive effects by creating employment for U.S. citizens in onshore plants processing nontraditional species which--given the limited availability of U.S. financing--might not otherwise be in operation. Furthermore, the processing plants serve as outlets for U.S. fishermen to sell their catches and provide, through their foreign investors, access to foreign markets. Such investment also encourages technology transfer and helps counter the U.S. trade deficit.

Concern has been expressed that development of non-traditional species may be inhibited because of increasing foreign investment and control over U.S. processing companies. This concern is particularly great in Alaska. Some believe that Alaska bottomfish marketing may be slowed because foreign investors may be reluctant to help develop U.S. bottomfish capabilities. To support U.S. bottomfish development would accelerate the time when foreign operators no longer dominate in the U.S. 200-mile fishing zone off Alaska.

The extent of foreign investment in the Alaska fish processing industry is unknown but is believed to be extensive. In 1979 a State of Alaska legislative committee reported that most foreign investment in the State comes from Japan and that companies with Japanese investment produce 65 to 85 percent of Alaska's commercial seafood products. According to the committee's report, through their extensive investments in Alaska's fisheries, the Japanese retain a voice in what is produced and where it is marketed. Japanese investment typically involves purchasing an equity position in processing firms. Equity, or ownership interest, gives the investor a voice in a firm's operations.

Subsequently, the State of Alaska contracted with a private consulting firm to further analyze the extent of foreign investment. According to the consultant's January 1980 report entitled "Foreign Investment in the Alaska Seafood Industry," foreign equity capital was found in 31 of 81 registered corporations filing reports with the State of Alaska in 1977. Japanese equity interests were identified in 29 firms (holdings ranged from 9 to 100 percent) and Canadian capital was identified in 2. The firms with Japanese investment accounted for 33 percent of the total market value of all Alaska-processed fish in 1977.

According to a University of Alaska Sea Grant official, Japanese investment in the Alaska fishing industry is primarily motivated by the desire to maintain access to fish supplies. Japan consumes great amounts of seafood and relies heavily on imports for food supply. The Sea Grant official said another possible motive is the desire to maintain tight control on market buying and selling to obtain better purchasing terms. A third possible motive is that foreign companies may wish to gain or expand access to U.S. and other export markets.

Some processors and fishermen fear the consequences of Japan's dominance in Alaska seafood processing and marketing. Some contend that since the Japanese harvest most Alaska bottomfish and own or control at least a portion of many Alaska processing operations, the Japanese companies would not be inclined to promote development of bottomfish processing capabilities in those U.S. companies in which they have an interest. Increased U.S. bottomfish capability and use will mean that the United States will reduce bottomfish allocations to foreign countries fishing in the U.S. conservation zone. Such a prospect would not be favorable to foreign countries that fish the zone, particularly Japan.

COMMUNITY SUPPORT FACILITIES
REQUIRE ATTENTION

Community facilities that support the fishing industry also require special attention, particularly in Alaska. The potentially large volume of Alaska bottomfish will require increases not only in processing capabilities but also in appropriate community support facilities, such as harbors, docks, roads, processing sites, equipment, and other shore-side facilities. To effectively plan and construct necessary community support facilities in Alaska will require that industry and Government clearly define their expectations. An NMFS contracted study estimated that developing Alaska's onshore bottomfish industry will require about \$1.2 billion in private and public investment. This estimate included about \$527 million in public funds for site preparation, docks, water and sewer systems, and roads.

While various Federal assistance programs may be available to finance needed community facilities, the two Federal agencies best able to provide public funding are EDA and FmHA. Both agencies have funded port and harbor facilities. EDA headquarters officials estimate that EDA has invested about \$241 million in loans and grants in projects involving a direct or indirect contribution to fisheries development nationwide between fiscal years 1969 and 1979.

According to an EDA regional official, EDA's Alaska allocations total about \$3 million each fiscal year. EDA focuses on communities and areas that are burdened by high unemployment or low family incomes. Its programs, which could be appropriate for community support facilities, include public works and development grants, business development loans, technical assistance services, economic adjustment assistance, and planning grants. In fiscal year 1979 Alaska projects for these programs totaled about \$1.2 million. The projects included \$100,000 for a bottomfish development plan and \$500,000 to develop a coastal community water system. EDA and NMFS are also participating in an Alaska fisheries development study designed to determine and present a plan for facilities needed in the State.

FmHA has several loan and grant programs which could be used to help finance community support facilities for the fishing industry. These include the Community Facility Loan Program, the Resource Conservation and Development Loan Program, and the Industrial Development Grant Program. FmHA's fiscal year 1979 allocations for Alaska totaled about \$7.5 million. The FmHA Community Facility Loan Program could be a major source for funding Alaska's community needs. Under the program, FmHA can loan funds to develop public community

facilities in rural areas and towns of not more than 10,000 people. Such programs include constructing, enlarging extending, or improving water systems, sewer systems, cargo facilities, port facilities, marinas, or docking facilities. Most Alaska communities qualify for FmHA loans. As of December 31, 1978, the Community Facility Loan Program had 26 loans outstanding, with initial loans totaling about \$11 million. These were generally for constructing or improving water and sewer facilities for at least 13 Alaska communities, including fishing communities. As of December 31, 1978, FmHA had also made 11 grants to 7 Alaska communities, totaling about \$1.9 million. Some grants went to fishing communities for water and sewer systems.

CONCLUSIONS

Financing is available for harvesters and processors of traditional fisheries. Development of nontraditional species, however, is viewed as financially risky by many lenders. As a result, financing can be difficult to obtain. Sources of financing, including commercial banks, NMFS, and other Federal agencies, use lending criteria which favor the traditional fisheries and limit funds for the development of high-risk nontraditional fisheries.

Neither the CCF nor FVOG programs may be used directly for shoreside processing facilities. Also, FVOG funds cannot be used to acquire used vessels. Legislative changes to NMFS' FVOG and CCF programs to (1) guarantee higher risk loans for initial ventures to harvest and/or process nontraditional species, (2) supply funds to acquire used vessels and convert them to harvest nontraditional fisheries, and (3) include processors of nontraditional fisheries would provide a more favorable economic environment to accelerate domestic industry development of nontraditional fisheries.

NMFS is considering modifying its conditional fishery regulations to allow vessels using FVOG and CCF assistance to make some profits in conditional fisheries while taking the risk of entering new nontraditional fisheries. Modifying the programs' conditional fishery restrictions could provide loan guarantees for vessels to be used part time in existing conditional fisheries and part time in nontraditional fisheries. Fishermen could begin harvesting nontraditional fisheries while maintaining an income base in traditional fisheries. However, easing the restrictions could also contribute to unneeded harvesting capacity of traditional fisheries.

Foreign investment is one source of funding for U.S. fisheries. Such investment has positive effects in that it creates employment opportunities for U.S. citizens in onshore processing plants which, in turn, serve as outlets for U.S. fishermen to market their catch and provide, through their foreign investors, access to foreign markets. Concern has been expressed, however, that increased foreign investment may inhibit domestic development of nontraditional fisheries.

In addition to the needs of fishermen and processors, community facilities that support the fishing industry also require special attention, particularly in Alaska. Needed improvements include harbors, docks, and water and sewer systems. Constructing these facilities is costly and will require extensive cooperation at all government levels and within the fishing industry.

ACTIONS WHICH COULD BE TAKEN BY THE COMMITTEE

Improved financing for development of nontraditional fisheries could be accomplished by amending the Merchant Marine Act of 1936, as amended, to

- guarantee, through an FVOG high-risk subfund, loans to initial ventures for harvesting and/or processing non-traditional species;
- allow FVOG funds to be used to acquire used vessels and convert them to harvest nontraditional fisheries; and
- expand the FVOG and CCF programs to include nontraditional fish processors.

Appendix III contains suggested legislative language.

AGENCY COMMENTS

We sent a draft of this report to the Departments of Commerce and Agriculture, FCA, and SBA for comment. The Department of Commerce by letter dated March 11, 1980, said the matters concerning the FVOG and CCF programs are consistent with the views of many in the fishing industry who feel that this type of support will be necessary to successfully develop underutilized fish resources. It also said there is little doubt that shoreside facilities capacity is lagging behind harvesting capacity and that substantial shoreside investments will have to be made in order to develop our major

underutilized fisheries. It said that the Administration is not, however, presently in a position to support extension of the programs to shoreside fishing facilities. (See app. IV.)

The Farm Credit Administration and Small Business Administration provided written comments (see apps. V and VI), while the Department of Agriculture chose to comment orally. Each agency commented on portions of the report dealing with its programs. For the most part the comments provided updated information or were editorial in nature, and appropriate changes have been made to the report to reflect them.

CHAPTER 4

IMPROVED RESOURCE ASSESSMENTS

COULD HELP SUPPORT

FISHERY DEVELOPMENT EFFORTS

The need for improved fishery resource assessments has been widely discussed, including in our 1979 report on fisheries management. Although some resource assessment data is available, fishing industry representatives and others question its validity, particularly for nontraditional species. More accurate assessment data could help nontraditional fishery development by defining the extent of the resource for both the fishing industry and potential investors. NMFS agrees that improvements are needed and has established a task force to evaluate ways to improve its resource assessment program.

DESCRIPTION OF RESOURCE ASSESSMENTS

NMFS, through its resource assessment process, estimates the relative and absolute abundance of numerous fish species. Assessing fish stocks is a difficult and imprecise process because of the large number of variables that must be considered.

NMFS assesses biological and commercial aspects of fishery resources and attempts to determine the effects of harvesting and other factors, such as environment and pollution, on the resources. The major objective of resource assessments is to support resource management by developing estimates of maximum sustainable biological yields. NMFS gathers resource assessment data from resource surveys and analysis of domestic and foreign catch statistics, including port sampling. NMFS' present budget for stock assessment, exclusive of ship time, is about \$25 million.

RESOURCE ASSESSMENT DATA ON NONTRADITIONAL SPECIES IS UNRELIABLE

NMFS, State, and industry officials believe that the resource assessment data for traditional and nontraditional species, particularly the latter, is of questionable completeness and validity. According to an NMFS scientist, NMFS assessment data is most reliable for traditional species, such as cod, haddock, and yellowtail flounder,

because these species are heavily fished and NMFS has considerable historical landing data on them. He said, however, that even for these species the estimates' error rate is probably plus or minus 50 percent. He added that the error rate can probably be reduced by making more resource surveys, but assessments can never be exact due to the large number of variables in estimating fish populations.

Resource surveys

NMFS conducts resource surveys from research vessels to (1) obtain annual estimates of the relative abundance of the number and weight of major species, (2) determine long-term changes in relative abundance and species composition, (3) describe fish distribution on a broad scale, and (4) gather information on age and species composition, growth and maturity changes, mortality, food habits, stock identification, and future repopulation.

Data on inshore fish stocks is particularly limited. NMFS and State officials believe that assessments of these stocks are one of the weakest parts of the assessment process. For example, the State of Alaska has little inshore resource data available except for Cook Inlet and Kodiak.

Although NMFS makes most resource surveys, some States make limited inshore surveys of traditional and nontraditional stocks. For example, Massachusetts has four staff engaged in semiannual resource surveys, and the resulting data is incorporated into the NMFS assessment process. Officials in coastal States emphasized that State funding for stock assessments is limited, and they believe the States need more Federal money to expand their programs.

NMFS officials believe that to make more resource surveys for traditional and nontraditional species, more staff and research vessels are needed. Twelve of 25 NOAA research ships spend some time on NMFS research. For fiscal year 1979 about \$6.3 million of the NOAA fleet's total \$28.8 million budget was spent for the NMFS resources assessment programs. According to NMFS, the current allocation of ship time is not adequate for research needs even though NOAA makes available to NMFS about 90 percent of the total ship time that is suitable for fishery research. To supplement the NOAA fleet, NMFS contracts with States, universities, fishermen, and others for charter vessels to do fisheries research. Such charters enable NMFS to get the type of ship needed at the time it is needed and foster cooperation between NMFS, States, academia, and fishermen.

In October 1978 NOAA awarded a contract to study the immediate and future mix of vessels necessary to meet its program needs. Preliminary study results show requirements for 10 new or replacement NOAA fleet vessels; 5 would be used for NMFS support and 4 of the 5, for direct support of Fishery Conservation and Management Act research.

The cost of additional resources to improve assessment surveys may be high, especially if additional fishery research vessels are added to the NOAA fleet, and should be carefully considered. Our report to the Chairman, Subcommittee on Oceanography, House Committee on Merchant Marine and Fisheries, entitled "Need for Improving Management of U.S. Oceanographic Assets" (CED-78-125, June 16, 1978), recommended that all viable alternatives, such as leasing or conversion of old hulls, be considered before authorizing new vessel construction.

Commercial and foreign statistical data

NMFS incorporates commercial and foreign catch statistics into its assessment analysis.

Commercial data

The commercial statistical data gathered by NMFS shows the characteristics of the fish being caught. NMFS determines commercial harvests of various species by gathering and summarizing dealer records on pounds of fish purchased and prices paid to fishermen. The agency also does dock-side sampling of commercial catches to determine length and age compositions of the catches, growth rates, and length/weight relationships of different species. Some limited at-sea sampling is done to determine the length and age composition of catches and amount of discarded fish. Finally, NMFS statistics personnel, called port samplers, interview selected vessel captains to get data on pounds of fish caught by species, area fished, gear used, number and duration of tows, and estimates of discards.

Regional assessment officials in New England believed that inadequate port sampling is a major weakness in the assessment process. This is a problem for traditional species and will become greater for nontraditional species as more of the latter are landed.

Foreign observer data

NMFS is beginning to analyze fishery resources data

gathered from the U.S. foreign vessel observer program. NMFS assigns observers to foreign vessels fishing in U.S. waters to assure that they comply with fishing regulations and to gather data on their catches. Because an observer is not assigned to a vessel for the entire time it is fishing, observers cover only about 20 percent of the total fishing days for all foreign vessels. Data gathered includes the species composition of catches and the count and weight of each species group. Such data also provides information on position and depth of fishing, catch rates, and the age and size of certain species. Although the foreign vessel observer program is a source of information for specific productive fishing grounds and other data, little use had been made of the observer data until recently. We discussed the foreign observer program in our September 12, 1979, report to the Congress entitled "Enforcement Problems Hinder Effective Implementation of New Fishery Management Activities" (CED-79-120).

INDUSTRY CRITICISM OF RESOURCE ASSESSMENT DATA

Fishing industry officials and fishery experts believe that NMFS resource assessment data is questionable. Furthermore, they believe that all assessment data has not been communicated to the industry, and what has been made available is not in the most usable, understandable format. More accurate assessment data, particularly for nontraditional species, would enable those groups interested in promoting the use of these species to make more intelligent and informed decisions.

Many fishermen we interviewed said they did not use the NMFS assessment information and relied more on information gathered during their own work. Various fishing industry representatives complained that the assessments are too technical and that they cannot understand them. Even an NMFS official said that the results should be better communicated to the fishing industry.

OUR PREVIOUS REPORT AND NMFS' TASK FORCE ON RESOURCE ASSESSMENTS

In our January 9, 1979, report entitled "Progress and Problems of Fisheries Management Under the Fishery Conservation and Management Act" (CED-79-23), we pointed out that fishery stock assessment data is limited and should be improved. NMFS agreed and established a task force to evaluate its resource assessment programs. The task force is looking at NMFS activities and methods used to assess stocks and

interactions of resource assessment activities with other NMFS programs, including fisheries development activities. NMFS officials said they expect task force recommendations in early 1980, including improved assessment techniques, emphasis on multispecies modeling, and increased budget.

With regard to increased budgets, NMFS officials involved in resource assessment activities estimated, in fiscal year 1977, that the NMFS resource assessment program would need an annual budget of about \$40 million. In addition, they estimated that program staff should be increased by about 70.

CONCLUSIONS

The need for improved fishery resource assessments has been widely discussed, including in our 1979 report on fisheries management. More accurate assessment data could help nontraditional fisheries development by defining the extent of the resource for both the fishing industry and potential investors. NMFS agrees that improvements are needed and has established a task force to evaluate ways to improve its resource assessment program.

Improvements, however, may require costly additional resources, especially if new Federal vessels are acquired to perform additional resource surveys, and should be carefully evaluated in terms of marginal benefits and marginal costs. Chartering vessels to make resource assessment surveys could provide a good supplement to the NOAA fleet.

Meanwhile, fishing industry representatives and others continue to question the validity of NMFS resource assessment data, particularly for nontraditional species. Also, industry representatives complain that data has not been provided in the most usable, understandable format. NMFS could improve the usefulness and acceptability of its available resource assessment data by improving public relations, including better coordination with industry.

RECOMMENDATIONS TO THE SECRETARY OF COMMERCE

We recommend that the Secretary direct NMFS to undertake a public relations program to emphasize to the fishing industry the purposes of the fishery resource assessment program and the degree of reliability and usefulness of the data collected. As part of this program, NMFS should regularly meet with fishing industry groups to discuss the status of available assessment data and define mutual goals for improving it.

AGENCY COMMENTS

The Department of Commerce accepted the recommendations to publicize the purpose of its fishery resources assessment program. It added that NMFS is responding to this recommendation through its interaction with Regional Fishery Management Councils at whose meetings industry groups are represented.

CHAPTER 5

SOME NEW TECHNOLOGY IS NEEDED TO

HARVEST AND PROCESS NONTRADITIONAL SPECIES

Although some new technology is needed, the current level of U.S. technology generally is not a major hindrance to the further commercial development of nontraditional species. Much of the technology already exists in the United States, and the rest can be adapted from foreign sources. Where new technology is needed, NMFS should continue to help industry develop equipment to harvest and/or process nontraditional species.

TECHNOLOGY NEEDS AND EFFORTS TO MEET THOSE NEEDS

Harvesting technology generally does not present a problem because as a rule, American, as well as foreign, fishermen use standard trawling methods to catch nontraditional species.

American processing methods, however, need to be improved if the United States expects to successfully develop its nontraditional species. In this regard, NMFS and the States are engaged in various efforts to improve processing technology. The following sections describe technology needs and what is being done to meet those needs for each of the species we reviewed.

Alaska bottomfish

Alaska bottomfish harvesters have learned most of their harvesting techniques by experimenting with gear developed by other domestic and European or Canadian fishermen. Alaska fishermen told us they had no problem in locating and acquiring European bottomfishing gear. To obtain bottomfishing technology, some Alaska fishermen traveled to Europe to discuss and observe European bottomfishing techniques with fishermen, processors, shipbuilders, and others. Moreover, some European manufacturers traveled to the United States to demonstrate and sell their fishing and processing equipment.

Alaska and NMFS have also been involved in programs to improve bottomfish harvesting technology. For example, Alaska signed a \$90,000 contract with two Kodiak fishermen to spend 60 days fishing for bottomfish on a commercial basis, but with guaranteed incomes. The project's purpose is to assess harvesting techniques and production volume.

In May 1979 NMFS provided \$1.45 million in S/K funds to the Alaska Fisheries Development Foundation for a technological and economic feasibility analysis of Alaska bottomfish. As part of the program, three vessel owner/captains will conduct a 2-month fishing operation demonstrating bottom and midwater trawling gear as well as an automated longline system.

When Alaska bottomfish processors started their operations, they met certain processing problems. Some problems were common to all species, but many were peculiar to particular species. For example, one processor had significant problems in handling, storing, and processing Alaska pollock. The processor said that 90 percent of his 1978 pollock purchases were 14 inches long or less but that existing machinery would successfully fillet only pollock measuring over 20 inches in length. In 1979, to best match processing equipment with fish size, the company installed new European-made processing equipment which can effectively process pollock and cod as small as 14 inches.

The Federal Government and Alaska are also conducting activities to find out more about Alaska bottomfish technology needs. NMFS scientists are researching ways to handle and process bottomfish products. Their studies have assessed the reasons for the rapid deterioration of pollock and evaluated ways to improve its handling and preservation.

The State of Alaska has several programs to develop bottomfish technology. For example, the State contracted with the University of Alaska to conduct a comprehensive training course for plant supervisory personnel covering all phases of bottomfish processing. The State will also offer processing training in its vocational education and community college system.

New England species

Both American and foreign fishermen use small-mesh trawl nets to catch whiting. American whiting fishermen harvest fish close inshore from small vessels staying at sea only a few days per trip. The foreign whiting fishermen, on the other hand, fish offshore in large vessels for much longer periods.

The major problem in harvesting whiting is not how to catch the fish but how to preserve it until it can be

landed ashore for processing and/or distribution. Whiting, a soft-fleshed fish which spoils rapidly, must be carefully preserved between catching and processing. This problem will become more acute as American fishermen begin to fish for whiting further offshore.

In the inshore whiting fishery, U.S. fishermen are able to use ice to preserve the fish because they frequently return to shore to offload. If they want to fish further offshore, they will have to adopt foreign techniques and install freezers or other forms of mechanical holding on large vessels.

The processing of whiting into frozen fillet block form needs further improvement. At present, U.S. processing of whiting in frozen fillet block form has not been perfected, and there is no U.S. whiting block industry. For U.S. processors to penetrate the sizable U.S. whiting block market presently supplied by importers, they must produce whiting blocks of comparable quality at competitive prices. Such production will require the use of mechanical filleting since hand filleting is too expensive to compete with the imports. Mechanical filleting of whiting, however, has not yet been successful in a U.S. commercial plant. Tests run to date have shown potential, but more testing is needed.

NMFS and the New England Fisheries Development Program are supporting the development of whiting processing machinery. They have funded a partially successful commercial demonstration of mechanical filleting machines. Recently they awarded a contract for a commercial demonstration using modified, presumably higher yield machines.

As with whiting, U.S. fishermen use standard trawl nets to catch squid. One U.S. fisherman who is building a vessel to fish primarily for squid told us that it will use standard bottom trawls similar to those used by foreign vessels fishing in our waters. Squid, however, like whiting, must be preserved at sea because they spoil quickly. The best method to preserve squid caught in the offshore fishery is to freeze them whole at sea. Because squid is generally marketed in whole frozen form, minimal processing technology, other than fast freezing, is needed. American fishermen, therefore, will have to operate large, freezer-equipped harvester/processor vessels to successfully fish for squid in offshore waters. These vessels would be similar to those presently being operated by foreign fishermen off the New England and mid-Atlantic coasts and will range in size from about 90 feet to 220 feet.

The proposed "AMFISH" venture

There is a bill before the Congress--H.R. 4360, the Underutilized Species Development Act of 1979--which would enable U.S. firms in cooperative ventures with foreign firms to use foreign fishing vessels and crews to train U.S. crews and transfer foreign harvesting and processing technology. In return, the foreign vessels would be afforded rights and privileges similar to those of U.S. vessels to harvest underutilized species in the fishery conservation zone and land their catches in the United States. Under the plan, however, the venture must also build a U.S. vessel or vessels to replace the foreign vessels. The trained American crew would then shift to the new U.S. vessel.

The major venture proposed under this bill is the so-called AMFISH venture in which a U.S. firm--Fisheries Development Corporation--plans to form a partnership with an Italian firm to fish offshore U.S. waters for squid. The Italian firm now has harvester/processor vessels fishing in certain offshore U.S. waters under its total allowable level of foreign catch for squid and other species. Under the venture, the Italian firm would train U.S. crew and fishermen in the techniques of harvesting and processing squid on one or more of its vessels, which would be allowed to fish in U.S. waters with rights and privileges similar to those of U.S. fishing vessels. At the same time, Fisheries Development Corporation would build one or more large 200-foot harvester/processor vessels in U.S. shipyards at a cost of about \$7.5 million each to eventually replace the Italian vessels. The Italian firm would provide some of the vessel financing and guarantee markets for the squid.

H.R. 4360 has been criticized and generally received with disfavor by representatives of the U.S. fishing industry partly because of fear that the bill's passage would open the doors to a great influx of foreign fishing. In testifying against the bill before the Subcommittee on Fisheries and Wildlife Conservation and the Environment, House Committee on Merchant Marine and Fisheries, in September 1979, NMFS' Assistant Administrator for Fisheries said that technology transfer and the need for crew training were not impediments to developing fisheries and do not require provisions like those in H.R. 4360. He pointed out that one way that U.S. fishermen have been able to obtain access to foreign technology is to engage in traditional joint venture operations with foreign companies whereby U.S.-harvested fish are transferred at sea to foreign processing vessels. He said experience with such joint venture operations indicates that the foreign companies involved provide any needed technical assistance to domestic fishermen for harvesting the target species.

An official of Fisheries Development Corporation said that whether or not H.R. 4360 passes, he probably will proceed with the AMFISH venture. The American vessels would be built to harvest and process the squid. In the interim, American crew and fishermen for the U.S.-built vessels would be trained on one of the Italian firm's harvester/processor vessels restricted to fishing in certain U.S. waters, or the crew would be trained on one of the same firm's vessels now fishing off the African coast.

Gulf species

In the Southeast, fisheries such as mullet and sardines will require some new harvesting and processing technology. In the past, little interest had been shown in developing nontraditional species in the Gulf, and little had been done to advance the necessary technology. Recently, however, NMFS and industry have undertaken to improve technology. They are working on new and improved gear to catch undeveloped Gulf species and on freezing techniques to better preserve such species.

NMFS and the Gulf and South Atlantic Foundation are also undertaking projects to improve the processing of nontraditional species. The NMFS Charleston, South Carolina, Laboratory, one of eight laboratories within the Southeastern Fisheries Center, has responsibility for freezer-handling and food technology. The Foundation plans to contract out seven projects for which the Charleston Laboratory will act as technical advisor with universities doing the work, and one project for which the Laboratory will be the prime contractor. Projects to be done by universities cover handling and storage technologies, waste treatment, and commercial-scale production. The Laboratory will be responsible for product research.

CONCLUSIONS

Although some new technology is needed, including better methods of at-sea preservation and improved filleting machinery, technology to harvest and process nontraditional species is generally not a major hindrance to developing these species. Much of the technology already exists in the United States, and the rest can be adapted from foreign sources. Where new technology is needed, NMFS should continue to help industry develop equipment to harvest and/or process nontraditional species.

NINETY-SIXTH CONGRESS

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U.S. House of Representatives
Committee on
Merchant Marine and Fisheries
 Room 1334, Longworth House Office Building
 Washington, D.C. 20515

March 7, 1979

CHIEF OF STAFF
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Honorable Elmer B. Staats
 Comptroller General of the
 United States
 General Accounting Office
 441 G Street
 Washington, D.C. 20548

Dear Mr. Staats:

In accordance with a request of the Committee on Merchant Marine and Fisheries, the General Accounting Office (GAO) reviewed selected issues involving the implementation of the Fishery Conservation and Management Act of 1976.

As a result of this work, GAO issued a report in January 1979 analyzing fisheries management policy and recommending improvements to the Secretary of Commerce. We have been advised by your staff that another report, in response to the Committee's expressed interest, will be issued in about a month. This report, emanating from our original request, will discuss the impact of the Act on selected fisheries. We find the reports of the GAO extremely useful to us.

With respect to future work by GAO in this area of great concern to the Committee, we have met with your staff on several occasions during the past few weeks. In these meetings, we have expressed our concern relative to the need for specific information on the National Marine Fisheries Service (NMFS) fishery utilization and development program. We have also expressed our view of the need for GAO's development and analysis of the merits of various alternatives to improve the NMFS program. Some of the areas of greatest concern to the Committee include:

- Resource location - Is additional research needed to promote the commercial development of currently

underutilized species? If additional research is needed or desirable, at what should it be specifically directed?


- Technology - To what extent is the lack of technology an obstacle to developing underutilized fisheries?
- Financial assistance - To what extent is capital available for expanding various sectors of the industry, particularly the harvesting and processing sectors?
- Market development - What is the nature and extent of existing market development efforts for fish and fisheries products whether conducted by the private sector or through State or Federal programs?

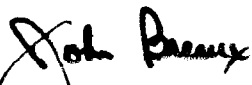
To help reduce the amount of time needed to provide the information to the Committee, we would like GAO to focus its efforts on specific fisheries. For example, the Boston staff can review the program with respect to New England groundfish and squid. Similarly, your regional office staff in Seattle and New Orleans can concentrate on specific fisheries in their geographical areas. With respect to the Gulf area, we would like the study to have particular regard to the problems encountered by U.S. shrimp fishermen as a result of the closure of the Mexican zone to their operations. Can the fishery efforts of these shrimpers be economically and efficiently directed to other species in the Gulf?

The Committee plans to conduct hearings early next year on needed legislative actions. Therefore, we would like to have your report by December 1979. As GAO progresses in this work, we would appreciate periodic briefings by your staff.


We appreciate the assistance that GAO has provided to us in the past and look forward to working with your Office in the future on these matters of significant interest to the Nation and of concern to all the members of the Committee.


Sincerely,


JOHN M. MURPHY
Chairman


JOHN B. BREAUX
Chairman

Subcommittee on Fisheries
and Wildlife Conservation
and the Environment


PAUL N. McCLOSKEY
Ranking Minority Member


EDWIN B. FORSYTHE
Ranking Minority Member

GAO STUDIES IN THE FISHERIES AREA

- "U.S. Fishing Industry Can Be Strengthened by Developing Underutilized Fish Resources" (GGD-75-68, May 30, 1975)
- "Action Is Needed Now To Protect Our Fishery Resources" (GGD-76-34, Feb. 18, 1976)
- "The U.S. Fishing Industry--Present Condition and Future of Marine Fisheries" (CED-76-130, Dec. 23, 1976)
- "The U.S. Great Lakes Commercial Fishing Industry--Past, Present, and Potential" (CED-77-96, Sept. 30, 1977)
- "The Pacific Fishery Management Council's Role in Salmon Fisheries" (CED-79-4, Nov. 9, 1978)
- "Progress and Problems of Fisheries Management under the Fishery Conservation and Management Act" (CED-79-23, Jan. 9, 1979)
- "Activities of the Interstate Marine Fisheries Commissions under the Fishery Conservation and Management Act of 1976" (CED-79-46, Feb. 26, 1979)
- "The Fishery Conservation and Management Act's Impact on Selected Fisheries" (CED-79-57, Apr. 3, 1979)
- "Enforcement Problems Hinder Effective Implementation of New Fishery Management Activities" (CED-79-120, Sept. 12, 1979)

SUGGESTED AMMENDMENTS TO
THE MERCHANT MARINE ACT, 1936

Extension of Capital Construction Fund to
Fishery Facilities Processing Nontraditional Fisheries

Sec. 101. (a) IN GENERAL.--Section 607(a) of the Merchant Marine Act, 1936 (46 U.S.C. 1177(a)), is amended to read as follows:

"(a) AGREEMENT RULES.--Any citizen of the United States owning or leasing one or more eligible vessels (as defined in subsection (k)(1)), or one or more eligible fishery facilities (as defined in subsection (k)(9)), may enter into an agreement with the Secretary of Commerce under, and as provided in, this section to establish a capital construction fund (hereinafter in this section referred to as the 'fund') with respect to any or all of such vessels or fishery facilities. Any agreement entered into under this section--

"(1) shall be for the purpose of providing--

"(A) replacement vessels, additional vessels, or reconstructed vessels, built in the United States (or, in the case of fishing vessel, built in the United States, American Samoa, the Virgin Islands, Guam, or any Commonwealth, territory, or possession of the United States) and documented under the laws of the United States for operation in the United States, foreign, Great Lakes, or noncontiguous domestic trade or in the fisheries of the United States, or

"(B) replacement fishery facilities, additional fishery facilities, or reconstructed fishery facilities, located in the United States, American Samoa, the Virgin Islands, Guam, or any Commonwealth, territory, or possession of the United States, and

"(2) shall provide for the deposit in the fund of the amounts agreed upon as necessary or appropriate to provide for qualified withdrawals under subsection (f).

The deposits in the fund, and all withdrawals from the fund, whether qualified or nonqualified, shall be subject to such conditions and requirements as the Secretary of Commerce may by regulations prescribe or as set forth in such agreement; except that the Secretary of Commerce may not require any person to deposit in the fund for any taxable year more than 50 percent of the sum of that portion of such person's taxable income for such year which is attributable to the operation of the agreement vessels and that portion of such person's taxable income for such year which is attributable to the operation of agreement fishery facilities. For purposes of the preceding sentence, taxable income shall be computed in the manner provided in subsection (b)(1)(A)."

(b) DEFINITIONS.--Section 607(k) of the Merchant Marine Act, 1936, is amended by adding at the end thereof the following new paragraphs:

"(9) The term 'eligible fishery facility' means any fishery facility which is located in the United States.

"(10) The term 'qualified fishery facility' means any fishery facility--

"(A) which is located in the United States, and

"(B) which the person maintaining the fund agrees with the Secretary of Commerce will be used for one or more of the functions described in the first sentence of paragraph (12).

For purposes of this paragraph, the term 'United States' includes American Samoa, the Virgin Islands, Guam, and any Commonwealth, territory, or possession of the United States.

"(11) The term 'agreement fishery facility' means any eligible fishery

facility or qualified fishery facility which is subject to an agreement entered into under this section.

"(12) The term 'fishery facility' means any structure or appurtenance thereto capable of and intended for, or currently used for, more than token use in unloading and receiving from vessels, the processing, the holding pending processing, the distribution after processing, or the holding pending distribution, of fish from nontraditional fisheries, as defined in section 1101(i). Such term also includes the land necessary for any such structure or appurtenance and the equipment which is for use in connection with any such structure or appurtenance and which performs any function referred to in the preceding sentence.

"(13) The terms 'fishing' and 'fishing vessel' have the meanings given such terms by paragraphs (10) and (11) of section 3 of the Fishery Conservation and Management Act of 1976 (16 U.S.C. 1802).

"(14) The term 'fish' means finfish, mollusks, crustaceans, and all other forms of marine animal and plant life other than marine mammals and birds."

(c) TECHNICAL AND CONFORMING AMENDMENTS.--

(1) Section 607(b) of the Merchant Marine Act, 1936, is amended--

(A) In paragraph (1)(A), by inserting "the sum of (i)" after "(A)", and by inserting "and (ii) that portion of the taxable income of the owner or lessee for such year (as so computed) which is attributable to the operation of the agreement fishery facilities" after "of the United States";

(B) In paragraph (1)(B), by inserting "and the agreement fishery facilities" after "the agreement vessels";

(C) In paragraph (1)(C), by inserting "or agreement fishery facility" after "any agreement vessel" each place it appears; and

(D) In paragraph (2), by inserting "or an agreement fishery facility" after "an agreement vessel" and by inserting "or such facility (as the case may be)" after "such vessel".

(2) Section 607(f)(1) is amended--

(A) In subparagraph (A), by inserting "or a qualified fishery facility" after "a qualified vessel";

(B) In subparagraph (C), to read as follows:

"(C) the payment of the principal on indebtedness incurred in connection with the acquisition, construction, or reconstruction of--

"(i) a qualified vessel,

"(ii) a qualified fishery facility,
or

"(iii) a barge or container which is part of the complement of the qualified vessel."

(3) Section 607(g) is amended--

(A) In paragraphs (2) and (3), by inserting "fishery facility," after "vessel," each place it appears;

(B) In paragraph (4), by inserting "fishery facilities," after "vessels,".

(d) EFFECTIVE DATE.--The amendments made by this section shall apply to taxable years beginning after December 31, 1979.

Guarantee of Obligations for Fishing
Fishing Vessels and for Fishery Facilities
to be Used for Nontraditional Fisheries

Sec. 102. Title XI of the Merchant Marine Act, 1936 (46 U.S.C. 1271-1279) is amended as follows:

(a) Section 1101 is amended by omitting "and" the end of subsection (g), changing the period at the end of subsection (h) to a semicolon, and adding at the end thereof the following new subsections:

"(i) The term 'nontraditional fishery' means any fishery, as defined in section 3 of the Fishery Conservation and Management Act of 1976, that the Secretary of Commerce determines is not developed to its full commercial potential; and

"(j) The term 'fishery facility' means any structure or appurtenance thereto capable of and intended for, or currently used for, more than token use in unloading and receiving from vessels, the processing, the holding pending processing, the distribution after processing, or the holding pending distribution, of fish from nontraditional fisheries. Such term also includes the land necessary for any such structure or appurtenance and the equipment which is for use in connection with any such structure or appurtenance and which performs any function referred to in the preceding sentence."

(b) Section 1103(f) is amended by inserting immediately before the period the following: "; except that 5 percent of such sum shall be reserved for the guarantee of obligations for fishing vessels and fishery facilities that meet the economic soundness criteria set forth in section 1104(d)(1), and 5 percent of such sum shall be reserved for the guarantee of obligations for fishing vessels and fishery facilities that meet the economic soundness criteria set forth in section 1104(d)(2)".

(c)(1) Section 1104(a) is amended by omitting "or" at the end of paragraph (3), by changing the

period at the end of paragraph (4) to "; and", and adding at the end thereof the following new paragraphs:

"(5) financing or refinancing the purchase of existing fishing vessels capable of and intended for, in more than a token way, harvesting nontraditional species; and

"(6) financing or refinancing, the construction, reconstruction, or reconditioning of fishery facilities. Any obligation guaranteed under this paragraph shall be treated, for purposes of this title, in the same manner and to the same extent as an obligation guaranteed under this title which aids in the construction, reconstruction, or reconditioning of a vessel; except with respect to provisions of this title that by their nature can only be applied to vessels.";

(2) Section 1104(d) is amended by omitting "No" and inserting in lieu thereof "(1) Except as provided in paragraph (2), no", and by adding at the end thereof the following:

"(2) In applying paragraph (1) with respect to commitments to guarantee, and the guarantee of, obligations for fishing vessels capable of and intended for, or currently used for more than token harvesting of nontraditional species and fishing facilities, as defined in section 1101(j), designed for use in nontraditional fisheries, the Secretary of Commerce may apply an economic soundness test that is less stringent than that which would apply but for this paragraph."; and

(3) Section 1104(g) is amended by inserting "(1)" immediately after "(g)", and by adding at the end thereof the following new paragraph:

"(2) The Secretary of Commerce shall establish within the Fund the following subfunds:

"(A) The standard fishery subfund which shall contain all moneys received for, and incident to, the guarantee of obligations with respect to fishing vessels and fishery facilities to which the economic soundness criteria set forth in section 1104(d)(1) apply.

"(B) The high-risk fishery subfund which shall contain all moneys received for, and incident to, the

guarantee of obligations with respect to fishing vessels and fishery facilities to which the economic soundness criteria set forth in section 1104(d)(2) apply.

"(C) The general subfund which shall contain all moneys received for, and incident to, the guarantee of obligations for vessels other than fishing vessels."

(d) The first sentence of section 1105(d) is amended by inserting immediately before the period at the end thereof the following: ", and shall be paid from the appropriate subfund required to be established under section 1104(g)(2)".

BRIEF EXPLANATION OF CHANGES

1. Section 101 is intended to expand the Capital Construction Fund program to cover processors that process or plan to process a fair amount of nontraditional species. At present, the program covers only vessels.
2. Section 102 is intended to expand the Fishery Vessel Obligation Guarantee Program to cover these same processors; to make it easier for them and for vessel owners who harvest or plan to harvest a fair amount of nontraditional species to obtain loan guarantees under the program; and to expand guarantees under the program to include loans for the purchase of used vessels that will be used, to a fair extent, to harvest nontraditional species--the program already covers construction and reconditioning of all fishing vessels.



UNITED STATES DEPARTMENT OF COMMERCE
Office of Inspector General
Washington, D.C. 20230

MAR 11 1980

Mr. Henry Eschwege
Director, Community and
Economic Development Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Eschwege,

This is in reply to your letter of February 4, 1980, requesting comments on the draft report entitled: "Helping Improve The U.S. Fishing Industry: The Problems And The Federal Role."

We have reviewed the enclosed comments of the National Oceanic and Atmospheric Administration's Associate Administrator and the Economic Development Administration's Deputy Assistant Secretary for Operations. We believe that the comments are responsive to the matters discussed in the report.

Sincerely,

Mary P. Bass
Inspector General

Enclosures



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Washington, D. C. 20230

OFFICE OF THE ADMINISTRATOR

February 29, 1980

Mr. Henry Eschwege
Director, Community and Economic
Development Division
U. S. General Accounting Office
Washington, D. C. 20548

Dear Mr. Eschwege:

Thank you for the opportunity to review the draft report entitled "Helping Improve the U. S. Fishing Industry: The Problems and the Federal Role." In our review of the report for the Secretary of Commerce, we encountered no serious objections to the recommendations. We made several suggestions to improve the text through the addition of more recent information and through editorial changes. These comments were transmitted orally to Walter Hess of your staff on February 20, 1980.

The recommendation to the Secretary of Commerce to direct the National Marine Fisheries Service (NMFS) to publicize the purpose of the fishery resources assessment program is accepted. The NMFS is currently responding to this through its interaction with the Regional Fishery Management Councils. Fishing industry groups concerned with the resource assessment program are normally represented at Council meetings. Therefore, the NMFS has increased its efforts to provide information on the resource assessment program through these Council meetings.

The recommendations to Congress concerning the Fishing Vessel Obligation Guarantee and the Capital Construction Fund Programs are consistent with the views of many in the fishing industry who feel that this type of support will be necessary to successfully develop underutilized fish resources. There is little doubt that shoreside fisheries capacity is lagging behind current fisheries harvesting capacity and that very substantial shoreside investments will have to be made in order to develop our major underutilized fisheries. The Administration is not, however, presently in a position to support extension of the programs to shoreside fisheries facilities.

Sincerely yours,

for George S. Benton
Associate Administrator



UNITED STATES DEPARTMENT OF COMMERCE
Economic Development Administration
Washington, D.C. 20230

6 MAR 1980

MEMORANDUM FOR GEORGE T. KARRAS
Deputy Assistant Secretary
for Operations

FROM *Charles W. Coss* Charles W. Coss, Director
Office of Public Investments

SUBJECT Comments on NOAA's Response to Draft GAO Fishing
Industry Report

The NOAA letter fails to mention that EDA's major role in fisheries development has been overlooked in the GAO report. EDA's involvement in fisheries development is mentioned twice in the report -- under Financing for Non-Traditional Species is Limited (pg. 43) and Community Support Facilities Require Attention (pg. 47). Both sections could use improvement.

Financing ... (pg. 43)

The first sentence appears inverted. More important is the impression this section gives that EDA is inactive in this area. Reference should be made that our various financing programs (loans, loan guarantees, RLF) are available to assist fishermen. However, EDA's major role is fisheries related community facilities development.

Community ... (pg. 47)

Again, EDA's role is shortchanged. Between FY 1969 and FY 1979 we have invested approximately \$241 million in loans and grants to the development of the fishing industry. That includes projects having both a direct and indirect contribution to fisheries development. Also, the Alaska Fisheries Development Study is a joint EDA/NMFS effort. When completed, it will present a plan for the development of facilities required in Alaska.

Farm Credit Administration

490 L'Enfant Plaza
Suite 4000
Washington, DC 20578
(202) 755-2195



February 25, 1980

Mr. Henry Eschwege, Director
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Eschwege:

We appreciate the opportunity to comment on the draft of a proposed report entitled "Helping Improve The U.S. Fishing Industry: The Problems And The Federal Role."

We have attached a suggested rewrite of the report section pertaining solely to the Farm Credit System. The section as rewritten will avoid the impression that the Farm Credit Administration (FCA) makes loans and will clarify that some credit extended by the System has been to the fishing industry. We suggest also that page 7a of the draft report be rewritten to avoid the impression that FCA is a lender.

Sincerely,

A handwritten signature in cursive script that reads "C.T. Fredrickson".

C.T. Fredrickson
Senior Deputy Governor

Attachment

FARM CREDIT ADMINISTRATION

The Farm Credit Administration (FCA) is an independent agency which regulates and supervises the Farm Credit System comprised of cooperative organizations such as Federal intermediate credit banks, Federal land banks, banks for cooperatives, and production credit associations. This system makes credit available to farmers, ranchers, rural homeowners, and producers or harvesters of aquatic products. Credit standards used are similar to those used by commercial banks. Congress enabled production credit associations and banks for cooperatives to make aquatic loans in 1971. However, the program is still primarily geared to financing agricultural programs and the \$280 million of credit extended to the fishing industry is proportionately a small share of the total credit extended. The majority of the credit extended has been to harvesters of traditional species.

As no production credit association or banks for cooperatives are located in Alaska, the Northwest Livestock Production Credit Association in Portland, Oregon, and the Spokane Bank for Cooperatives have responsibility for lending operations in Alaska. A substantial downpayment is usually required for loans and the loans have only a 15-year maximum term.

Association officials said that the Northwest Livestock Production Credit Association has about \$41 million in outstanding fishing loans. Most loans involve fishing vessels participating in the salmon and crab fisheries.

In New England, the Production Credit Associations have between \$19 and \$20 million in outstanding loans on some 450 vessels. Loans are limited to 75 percent of a new vessel's cost. An official told us that, as of October 1979, they had received only one loan application for a nontraditional species vessel; the loan was not approved. In the Gulf no loans have been made to fund nontraditional commercial fishing for this purpose.



U.S. GOVERNMENT
SMALL BUSINESS ADMINISTRATION
WASHINGTON, D.C. 20416

OFFICE OF THE ADMINISTRATOR

MAR 5 1980

Mr. Henry Eschwege
Director
Community and Economic Development
Division
United States General Accounting Office
Washington, D. C. 20548

Dear Mr. Eschwege:

This is in response to your letter of February 4, 1980, requesting our comments on your draft report entitled, "Helping Improve the U.S. Fishing Industry: The Problems and the Federal Role."

We have reviewed the report and have concluded that it would have no adverse impact on the Small Business Administration.

If you need any additional information, please advise.

Sincerely,

William H. Weaver
A. Vernon Weaver
Administrator

(082080)



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