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AQUABUSINESS

Financing Is Difficult, But Some Financial and Other Assistance Is Available From USDA

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Mr. Chairman and Members of the Committee:

I am pleased to be here to participate in this hearing on issues affecting aquaculture. By "aquaculture," we mean the production of any plant or animal in water and under controlled conditions. In preparation for reauthorizing the National Aquaculture Act of 1980, several members of the Senate and House expressed concerns about the availability of commercial and federal financing for aquaculture as well as the availability of other assistance for the industry from the U.S. Department of Agriculture (USDA). To address these concerns, over the past 2 months we have talked extensively with lenders, government officials, researchers, and aquaculturalists and reviewed available information from USDA. Today, I would like to discuss some of what we learned.

In short, although there is little quantitative data on the availability of financing for aquaculture, the lenders, producers, and USDA officials we interviewed said that financing is generally difficult to obtain, primarily because of the inherent risks of doing business in an emerging industry. However, aquaculturalists can turn to one source of credit available to any risky agricultural operation--the Farmers Home Administration (FmHA). Since October 1990, FmHA has made or guaranteed almost $38 million in aquaculture loans.

USDA provides other types of assistance as well, including research, information services, and export promotion. In fiscal year 1993, USDA budgeted over $24 million for these activities. But, some people we spoke with indicated that USDA's current services may not match the unique or most urgent needs of the industry. While we have summarized these concerns, we did not evaluate the policy and budget implications of changing USDA's services to respond to them.

BACKGROUND

Unlike most of the mature agriculture sector, aquaculture in the United States is largely an infant industry. For example, the catfish business--accounting for over half of the total value of the U.S. aquaculture production, at over $800 million annually--has developed into a viable operation over the past 30 years. The aquaculture industry is amazingly diverse--products range from those traditionally considered to be aquaculture, such as catfish and trout, to lesser-known commodities such as pearls and seaweed. Similarly, producers range from the individual with a pond in the backyard to owners of multimillion-dollar hatcheries and recirculating systems.

During the late 1970s, the Congress became concerned that despite the potential for development, the U.S. aquaculture industry was being inhibited by scientific, legal, and production

issues and that federal support was justified because of expected national benefits, such as industrial development and increased job opportunities. As a result, the Congress enacted the National Aquaculture Act of 1980. The act was intended to promote increased aquaculture production in the United States by establishing and implementing a national aquaculture plan, coordinating federal assistance for aquaculture--currently under the leadership of the Secretary of Agriculture--and encouraging aquaculture in both the public and private sectors.

For this testimony, we spoke with representatives of the American Bankers Association, the Independent Bankers Association of America, and each of the Farm Credit System's district offices. For information on federal lending, we spoke with FmHA representatives in headquarters who, at our request, surveyed each of the approximately 1,700 county offices regarding aquaculture loan applications between October 1, 1990, and July 31, 1993. To obtain the producers' perspective, we spoke with representatives of three major industry associations, a discussion group of Maryland aquaculturalists, the national director of the National Organization of Aquaculture Coordinators, and selected individual producers. Additionally, we spoke with recognized research experts in selected states nationwide. Finally, we spoke with USDA officials to discuss the Department's activities in support of aquaculture.

FINANCING IS DIFFICULT TO OBTAIN

The lenders, research experts, and producers we spoke with all agree that financing can be difficult for aquaculturalists to obtain. However, they disagreed on the severity of the problem and its relative importance in comparison with other obstacles to the industry's growth. According to the lenders, research experts, and producers we spoke with, a principal source of financing difficulties for aquaculture is the real or perceived high risk associated with these businesses: They require intensive and skilled around-the-clock management; many operations involve expensive state-of-the-art technology that has an uncertain resale potential should the businesses fail; and species can take 9 to 18 months or more to mature and to begin to bring cash returns.[1] Furthermore, research experts and producers told us that many lenders do not understand such basic aspects of the industry as price cycles or inventory valuation and expected yields. The researchers and producers believe that this lack of knowledge makes it hard for the lenders to evaluate business plans, and, as a result, they may reject an aquaculturalist's application in favor of one from a prospective borrower in a more conventional business or require the aquaculturalist to have a higher percentage of owner equity. For example, in order to make loans, commercial banks

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[1]In Rural Credit: Availability of Credit for Agriculture, Rural Development, and Infrastructure (GAO/RCED-93-27, Nov. 25, 1992), we found that producers growing other nontraditional crops face similar difficulties in obtaining financing.

require catfish farmers in Arkansas to have 65 percent equity, as opposed to about 30 percent for producers of more traditional agricultural crops.

While there is general agreement among those we interviewed that credit for aquaculture is difficult to obtain, little data are available--commercial lenders do not compile data on aquaculture loans and documented research on the issue is scant. In general, the financing situation varies by region, species, type and size of operation, and experience level of the aquaculturalist. For example, we were told that both commercial and FmHA loans for catfish farming are relatively easy to obtain in regions where production is high, such as Mississippi or Louisiana; however, one farmer, who eventually became a successful catfish producer, indicated that he had difficulty in obtaining start-up financing in Maryland, where catfish farming is less well-known. Similarly, we were told that FmHA loans for baitfish operations are relatively easy to obtain in Arkansas, where baitfish farms are prevalent; however, such loans are difficult to obtain in Iowa, where raising baitfish is less common.

Although there is little information available on commercial aquaculture loans, we were able to compile data on FmHA loans. FmHA, the nation's agricultural lender of last resort, provides direct and guaranteed loans for high-risk agricultural borrowers, including aquaculturalists. For October 1990 through July 1993,

FmHA made or guaranteed nearly 300 aquaculture loans amounting to almost $38 million. (App. I provides a breakdown, by state, of the FmHA loans.) During the same period, the agency rejected 21 percent of the applicants for these loans, which is roughly equivalent to the agency's rejection rate for all agricultural loans. According to FmHA field office lending officials, the two major reasons for rejecting aquaculture borrowers were that the applicants were found ineligible for assistance[2] or the proposed operations did not appear capable of providing sufficient income to ensure repayment. Most of the loans were made to catfish farmers, mainly in Mississippi and Louisiana--these borrowers received 74 percent of the total amount lent.

USDA's Rural Development Administration (RDA) also guarantees loans for rural businesses under its Business and Industry Loan Guarantee Program, including aquabusinesses. While RDA and FmHA[3] did not guarantee any aquaculture loans under this program between October 1990 and September 1993, the agency obligated $845,000 in loans for seafood businesses. Because of the way RDA categorizes loans, we could not readily identify the amount specifically for aquaculture.

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[2]Eligibility for an FmHA loan is determined by a county committee composed of local citizens. The committee determines eligibility by assessing a number of factors, including the applicant's experience, credit history, and reliability.

[3]RDA's predecessor was FmHA. During fiscal year 1992, the responsibility for guaranteeing business and industry loans was gradually transferred from FmHA to the newly created RDA.

USDA PROVIDES ADDITIONAL ASSISTANCE

In addition to making and guaranteeing loans to aquabusinesses, USDA provides a variety of other services to the industry. In fiscal year 1993, funding for these services directly related to aquaculture amounted to over $24 million. USDA's principal support for aquaculture includes the following:

-- The Cooperative State Research Service (CSRS) sponsors aquaculture research, through formula funds and competitive grants, at state universities, agricultural experiment stations, and the five Regional Aquaculture Centers (which conduct region-specific research). CSRS-sponsored research for aquaculture was approximately $17 million in fiscal year 1993, second only to that for beef, according to CSRS officials.

-- The Agricultural Research Service (ARS), sponsors in-house research for aquaculture. Funding for the 18 on-going projects in fiscal year 1993 amounted to about $7 million.

-- The Extension Service (ES) offers a variety of educational services to aquaculturalists, including instruction on farm management and fish diseases. In addition, in some areas ES has led seminars for lenders to educate them on the business aspects of aquaculture.

-- The National Agricultural Library's Aquaculture Information Center provides information services on all aspects of scientific and marketing research. These services range from providing individualized information searches to publishing manuals, such as one detailing federal food safety regulations for aquaculture. For fiscal year 1993, funding allocated for the Center (excluding salaries) was about $33,000.

-- The Foreign Agriculture Service (FAS) promotes exports of aquaculture through the Market Promotion Program. FAS' only activity specifically for aquaculture promotes catfish exports and was funded at $210,000 in fiscal year 1993.

In addition, USDA's Office of Aquaculture, housed in CSRS, coordinates USDA-wide activities and provides leadership for the executive branch's Joint Subcommittee on Aquaculture. The office, in conjunction with ES, also coordinates the operations of the Regional Aquaculture Centers, funded at about $4 million in fiscal year 1993.[4] Catfish farmers, the largest recipients of USDA-backed loans, are also a primary recipient of USDA's other assistance for aquaculture. The sole export promotion program targeted for a specific aquaculture species is devoted to catfish exports.

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[4]The $4 million for the Regional Aquaculture Centers is included in the total budgeted for CSRS aquaculture research, about $17 million.

Further, catfish research projects constitute about 29 percent of all USDA-funded aquaculture research.

Numerous other agencies within and outside of USDA also offer services to aquaculture. For example, USDA's Animal and Plant Health Inspection Service provides assistance with damage and depredation done to facilities by birds. Outside of USDA, Food and Drug Administration staff work with the industry to develop quality assurance programs; the Interior Department's Fish and Wildlife Service makes expertise in fish culture available to the private industry; and the Small Business Administration provides financial assistance and management counseling.

SOME OFFICIALS FEEL USDA'S SERVICES MAY NOT ADDRESS INDUSTRY'S NEEDS

While USDA offers numerous services to support aquabusinesses, some officials indicated that these may not address the industry's unique or most urgent needs. We did not evaluate the policy or budget implications of changing USDA services to respond to these concerns, which are summarized below.

Some banking and research officials believe that FmHA's loan limits, set at $200,000 for direct loans and $300,000 or $400,000 for guaranteed loans (depending on their type), are often too low to be useful to aquaculturalists. According to research experts

and producers, aquaculture companies often require large loans because of high capitalization costs--often at least $1 million to begin--coupled with a long lead time for the companies to become solvent. Some research experts and producers told us that in the absence of commercial financing, FmHA's amounts may be too low. Of course, increasing the loan limits would also increase the federal government's exposure to loss.

In addition, according to industry officials, the research being funded by USDA is either often not the type that the industry needs most or does not meet the needs of particular segments of the industry. Currently, USDA funds all types of research, from basic work on the genetics of an individual species such as catfish to the commercialization of computer-monitored recirculating systems. While the officials noted that in an emerging industry like aquaculture, all types of research are needed in the long term, they cited two areas in particular that they believe should be given priority because of their more immediate need.

First, some industry and research representatives cited the need for research on animal drugs to comply with FDA's requirements. Before drugs can be used to treat illness in consumable fish, they must be proved to be safe through an extensive and costly registration process with FDA. For other industries, pharmaceutical companies usually foot the bill for the registration research, passing the costs along to customers.

However, according to producer representatives and researchers we spoke with, no single component of aquaculture--for example, the segment of the business devoted to trout--provides pharmaceutical companies with a large enough market to warrant the several million dollars needed to register the drugs with FDA. Currently, only five drugs have received FDA's approval for use on specific species. Ironically, unregistered drugs can be used by foreign aquabusinesses, which compete with U.S. aquabusinesses in the U.S. market. CSRS representatives noted that USDA spent over $400,000[5] in fiscal year 1993 for research related to the drug approval process. Further, according to the Director of the Office of Aquaculture, the Joint Subcommittee on Aquaculture is considering supporting funding of at least $20 million over the next 5 years for research on the eight priority drugs identified by the industry.

Second, according to producers we spoke with in a discussion group, additional "practical" research to test the commercialization of individual species is needed. They explained that the commercialization of many species is still in a developmental and highly risky phase. Additional research in transferring laboratory results to profitable production would be most useful to much of the industry now, while it is emerging, according to these producers. One commented that the research

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[5]This amount is included in the total budgeted for CSRS' aquaculture research.

being done at the Regional Aquaculture Centers--established since 1987 to enhance commercial aquaculture production--has been a step in the right direction but that the industry, rather than academia, should have more influence on the choice of projects given priority. Two of the producers we interviewed are performing their own commercialization research on-site for tilapia and hybrid striped bass because USDA is not funding research geared toward the specific problems they face.

In addition, several producer representatives highlighted other areas not specifically linked to current USDA services that the industry believes are important issues for the Congress to consider. First, some industry representatives believe that seafood inspection should be mandatory for both domestic and imported aquaculture products. They believe inspection is needed to ensure quality and safety and to underscore the industry's concern for the U.S. consumer. There are currently no mandatory inspection requirements for seafood, although FDA has drafted a mandatory seafood safety program for both domestic and imported products. The draft plan is under review by the Office of Management and Budget.

Second, several industry and research representatives believe that individual producers face increasing difficulty complying with clean water laws. According to the National Aquaculture Association's executive director, the industry expects compliance

with clean water laws to become more difficult and costly as the Congress and states pass new clean water legislation. He added that many of the affected aquabusinesses are small companies with narrow profit margins and so cannot afford to comply with the requirements.

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I hope this overview of issues affecting aquaculture will facilitate your deliberations on the National Aquaculture Act's reauthorization. I would be pleased to answer any questions that you may have.

APPENDIX I

FmHA AQUACULTURE LOANS MADE BETWEEN OCTOBER 1, 1990 AND JULY 31, 1993

State	Number of loans made	Dollar value
Alabama	13	$1,594,820
Alaska	0	
Arizona	0	
Arkansas	48	4,608,420
California	1	35,000
Colorado	0	
Connecticut	0	
Delaware	0	
Florida	2	316,000
Georgia	1	191,500
Hawaii	0	
Idaho	3	263,300
Illinois	0	
Indiana	0	
Iowa	2	133,000
Kansas	0	
Kentucky	5	97,350
Louisiana	59	5,560,080
Maine	11	2,367,000
Maryland	5	353,000
Massachusetts	1	400,000
Michigan	0	
Minnesota	3	122,250
Mississippi	101	18,864,510
Missouri	2	153,300
Montana	0	

State	Number of loans made	Dollar value
Nebraska	0	
Nevada	0	
New Hampshire	1	150,000
New Jersey	2	80,900
New Mexico	0	
New York	0	
North Carolina	11	1,133,000
North Dakota	0	
Ohio	0	
Oklahoma	4	252,330
Oregon	0	
Pennsylvania	3	107,250
Rhode Island	0	
South Carolina	1	124,120
South Dakota	0	
Tennessee	3	231,790
Texas	2	163,700
Utah	0	
Vermont	0	
Virginia	4	246,100
Washington	0	
West Virginia	0	
Wisconsin	2	393,384
Wyoming	0	
Total	290	$37,942,104

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