

## DISCUSSION

### **Fisheries Subsidy Session**

Discussion Leader: DENNIS M. O'CONNOR

Discussion Panel: J. STEELE CULBERTSON, BILLY F. GREER,  
WILLIAM R. NEBLETT, JOHN MITCHELL

### ***Fishery-Development Policy in Canada***

WILLIAM C. MACKENZIE

- Q. William R. Neblett: Dr. MacKenzie, at what level of government are fisheries represented? What departments in Canada administer the fisheries program and make government policy concerning it?

A. MacKenzie: The central responsibility for the administration of the fishing industry and the fish trade in Canada is a federal department, formerly the Department of Fisheries, but now expanded into the Department of Fisheries and Forestry. The Fishery Service of the Department of Fisheries and Forestry has the responsibility of carrying out the provisions of the Fisheries Act, the basic law in Canada determining the administration of resource management as related to the fishing industry. The Fisheries Development Act, Coastal Fisheries Protection Act, and Fisheries Research Board Act are also administered by that service.

Other federal agencies also have a very direct and powerful impact on fishery development. The Department of Regional Economic Expansion has a growing role in the administration of programs to raise the level of the economy or to improve the economic growth record of backward regions. In some of these regions fishery resources are basic to industrial development. The integration and coordination of these several agencies involved in fishery development have become increasingly difficult.

I referred earlier to the role of the provincial administrations. Because they have no direct responsibility for fishery resource management, they have a relatively minor role to play. They do, however, involve themselves in programs that affect the fishery development because of their interest in the industrial growth of their particular constituency.

Q. J. Steele  
Culbertson: Congressman Rogers said yesterday that the U.S. position among fishery producing nations of the world had dropped from second to sixth place. Since the early fifties production of edible species of fish by the U.S. fishing fleets has declined from about 23 pounds per inhabitant on a round weight basis to about 10 pounds. With a population of 150 million people in the early fifties we were able to produce 3.1 billion pounds. Today we have over 200 million people and produce only 2.1 billion pounds.

Canadians seem to have had better success in their fishing industry. Do you know how the production per inhabitant in Canada has fared in the last 15 years? I'm speaking of food fish on a round weight basis.

A. MacKenzie: I think the notion has got abroad that the Canadian industry is expanding more rapidly than it really is and that government policy has been more successful than it really has been. I cannot give you measures that compare directly with those Mr. Culbertson has quoted, but Canada's position as a fish producer among the nations of the world has dropped, I think, from sixth place 10 years ago to about tenth place at the present time. Our total production is increasing more in value than in actual quantity, but there has been some increase in quantity due to the expansion of such large volume fisheries as the herring fishery. The contribution made by

the fishing industry to Canada's gross national product is still slightly under 1%. Its real importance in the Canadian economy is its importance to regional economy. Perhaps I should add that I have been speaking only of the commercial fisheries. There is no doubt that the recreational use of some of our fishery resources will be far more valuable to the economy than the commercial use.

Q. John Mitchell:

Dr. MacKenzie, you have indicated that unemployment among fishermen is one of your problems. One of the greatest problems of the U.S. fishing industry is in recruiting additional crew members and upgrading those we have now. Does Canada have a formal training program to teach fishermen the fundamentals of boat handling, net mending, pot repairing and navigation?

A. MacKenzie:

I should explain that we have two kinds of commercial fishing industries in Canada. The first is a traditional industry which is quite primitive and vastly over-manned. This fishery-dependent population of our remote regions is one of Canada's major social problems. It compares with the problem the U.S. faces with its Appalachian population.

Then, we have a modern industry which developed in the present century that makes use of distant water trawlers, long lines and other more sophisticated equipment. It is in this industry that we are experiencing an underemployment problem.

For some years there has been a system of training in institutes established by the provincial governments and assisted by the Federal Manpower Administration. The problem has not been solved. Training manpower is only part of the problem. Fleets must first be able to attract men to this rather arduous occupation by offering sufficiently high incomes—higher incomes than those available from occupations ashore. At the present time very few sectors of our fisheries are able to do that.

Q. Dennis O'Connor:

The Canadian policy goal on the one hand of pursuing fishing on an industrial scale, and on the other of protecting a way of life for the populations in remote coastal regions, presents very difficult problems. Is there any way that these two goals can be accommodated within a single framework?

A. MacKenzie:

We would like to divorce the policy and programs that are concerned with social welfare and the rehabilitation of these disadvantaged sections of our people from programs concerned with developing the fishing industry. These latter programs should be directed exclusively to the development of a viable and economically successful fishing industry. I really can't tell how successful we shall be.

We have in Canada now a government that seems prepared to do some necessary, if unpopular, things. Perhaps if we have that government long enough, we will make some progress. In the past, these two areas of policy have always been very badly confused. This is not only true of fisheries

in our country; agriculture, for example, has also suffered from this confused policy-making.

For example, the salmon fisheries of our Pacific Coast and the lobster fisheries of the Atlantic Coast, which are fisheries that have long passed the stage of maturity, have now been stabilized by regulations. That is, the quantity that can be taken by the fishery in any particular season is fixed. What we are trying to do now is to rationalize these fisheries by withdrawing from them the excess capital and manpower that has moved into them over the years.

In the case of fisheries just coming into existence or in the early stages of development, the policy is very different. In these we hope to encourage research to determine the best way to utilize the stocks that are known, to find supplementary stocks and to encourage the investment and the application of the latest technology for utilization of these resources.

Q. Billy F. Greer: In speaking of vessel insurance, you said that the government was subsidizing 1 to 2% of the vessel owners' insurance premium, but mentioned that the rate would be adjusted. What was the adjustment? Do you think it was successful and should be continued?

A. MacKenzie: I'm afraid I was misunderstood. I said that the premium rate for this government-sponsored insurance plan is from 1 to 2%, depending on the region of the country where the vessel and the fleet are located. This plan is directed to the smaller boat fleets which found it practically impossible to get any insurance service from commercial companies in Canada. The government does not provide insurance for craft appraised at more than \$25,000. The owners of larger craft can obtain insurance from commercial sources. At the present time, they are required to pay exorbitantly high premiums, but, so far, no plan has been devised to assist them.

Q. Richard T. Whiteleather: With regard to the small vessel insurance program, could you give me some idea of the amount of the losses in the course of a year?

A. MacKenzie: There should not be any losses now since the rates have been revised to make this scheme sound. There have been losses in the past. I think about \$600,000 has been lost since 1953 when the plan was instituted. The federal government has absorbed the administrative cost of the service—about one half-million dollars a year.

#### ***The Development of Japanese Fisheries with Government Aids<sup>1</sup>***

YUTAKA HIRASAWA

Q. Neblett: It sometimes appears to us in the United States that the fisheries of other nations are often heavily subsidized and

<sup>1</sup>Paper translated, read and discussed by Yosuke Hirono of the Rosenstiel School of Marine and Atmospheric Sciences.

controlled by the government. However, it was my good fortune last year to visit Japan and observe Dr. Fujinaga's shrimp farming operations in Kobe. At that time Dr. Fujinaga told me that no part of his operation was government-financed, but that it was supported entirely by private industry. I would like to know the extent to which private industry operates independently from government in Japanese fisheries.

- A. Yosuke Hirono: Although I cannot answer that completely, I do know, for example, that Dr. Fujinaga's shrimp farm produces more than enough shrimp for the shrimp farmers. The government then steps in and buys excess baby shrimp to plant along the shoreline.
- Q. Culbertson: Could you comment on the general level of wages in the fishing industry in Japan? Realizing that there may be minor salary differences for the overseas fleets, salmon fleets and tuna fleets, I would like to know if the salaries of people engaged in the fishing industry are comparable to salaries for shore workers.
- A. Hirono: Some deep-sea fishing crews work for a commission, and at times make more than other industrial workers. However, most of the shoreline fishermen are fishing in depleted waters so their income is not entirely stabilized. Yet even they do not make much less than other industrial workers.
- Q. Neblett: When do the young men in Japan begin their education in fishing?
- A. Hirono: Most have some high school fisheries or training school experience. Others go into the fisheries' college to train as specialists in navigation, fishing gear, fish culture or fish technology.
- Q. Thomas A. Robertson: In the United States at this time I believe there are less than a hundred people involved in applied fisheries training. Can you give us some idea of how many people in the high school and university levels are involved in fisheries training in Japan?
- A. Hirono: I don't know exactly how many we have in the fishing training school in the whole of Japan. I would estimate that each high school graduates about 100 students every year. About 2,000 are trained this way by the high schools, but I don't know how many come from the colleges.
- Q. Arthur J. Lyons: You mentioned that some fishermen work on a commission basis. Do they get a share of the catch? Are those on salary paid on a per month or per annum basis?
- A. Hirono: None of the fishermen work for a regular base salary. I believe most of the shoreline fishermen work for themselves. After turning over their catch to the union, they are paid.
- Q. Frederick J. Laney: Are fishery training programs in the curriculum of all the high schools or do you have specific high schools that teach fishery training?
- A. Hirono: Specific high schools.
- Q. Laney: Where are they located?

- A. Hirono: Most are located in the coastal prefectures of the Sea of Japan or the Pacific Ocean.
- Q. John Davis: At the beginning of your paper, you mentioned the formation of Japanese cooperatives. Later on you said the cooperatives expanded their activities to include marketing as well as other fisheries activities. Are the in-shore fisheries organized totally in cooperatives? Are these cooperatives concerned with other activities beyond actual fishing operations?
- A. Hirono: The inshore fisheries are organized totally into cooperative unions which market the fish and sell fishing gear, supplies and fuel.

***Financial and Technical Assistance to the  
U.S. Fishing Industry***

HARVEY M. HUTCHINGS

- Q. Neblett: Dr. Hutchings, one of your slides showed that no shrimp boats have been built under the subsidy act. One of the greatest problems in the shrimp fishery is in finding a way to get rid of or renovate its obsolete vessels. Is there any program in the Bureau of Commercial Fisheries that would assist a fishery in updating its vessels?
- A. Harvey Hutchings: In quite a few fisheries we have over-capacity and obsolete vessels. We have given considerable study to a trade-in provision in the construction subsidy bill, but we have had difficulty in devising one that we think would be practical. We are still working on this. One of the bills which has been submitted to Congress to expand and renew the construction subsidy program has a provision for securing different types of studies. One of these studies could investigate the desirability of a trade-in provision. I think this will eventually become a necessary part of this program.
- Q. Culbertson: What dollar amount would have been needed to honor all applications for loans and subsidies? In other words, are these programs adequately funded to give the assistance required by the industry?
- A. Hutchings: The answer is no. Since the beginning of these programs, our expenditures have totaled \$72 million. If there are no duplications, it has been distributed among some 1,450 vessels. In the domestic fishing industry we have more than 12,000 commercial vessels over five gross tons, and 65,000 or 70,000 boats less than five gross tons. Our modest program has aided only 1,400 vessels over a period of almost 10 years. Obviously, the bulk of the domestic fleet is unaided.
- Culbertson:  
(Comment) It has been suggested that the trade-in provision be provided for those vessels that are in regulated fisheries or in fisheries that are under treaty. Because there are many vessels in the United States that are not engaged in those types of fisheries, it seems more equitable for a trade-in allowance to be applicable to all segments of the fishing industry.

- Hutchings:  
(Comment)           Anywhere you have over-capacity or obsolete fishing vessels, a trade-in provision would facilitate removal of some of these vessels. This should apply to any fishery where this condition exists. It could be a very expensive undertaking, however.
- Q. John Mitchell:       I would take a very strong stand that in the construction of a small fishing vessel the United States builder is not just competitive with most foreign builders; he can build at a more favorable price to the buyer.  
I also recommend for your consideration that rather than a subsidy program for our fisheries an accelerated depreciation program would be much more attractive to our industry. I don't think we need a direct subsidy of any consequence in many of our fisheries.  
The prices that were shown on your slides of vessels from 60 to 80 feet were greatly in excess of any that I know of in the yards in this country. Can you tell me where and for what type of vessel those figures were collected?
- A. Hutchings:       That was a Maritime Commission contract study of a couple years ago. Supposedly they were objective in their approach. They attempted to get realistic figures for this particular vessel. Although I'm not sure what fishery this applied to, I suspect that it was one in the North Atlantic. They also attempted to get good estimates of typical costs from foreign and domestic shipyards. The conditions and estimates vary in every fishery making it difficult to generalize or present an average figure. I understand the domestic cost for shrimp vessels is often small compared to foreign cost. As a matter of fact, we are exporting United States built shrimp vessels. However, this is not the case for most fisheries.  
In one of the bills that has been introduced in the Congress to renew the construction subsidy program there are provisions to improve the design of vessels and, therefore, to decrease the cost by mass production methods. There is also a provision to study the desirability of establishing a construction reserve fund tax provision. These two provisions may benefit the financing of domestic vessels for some fisheries.
- Q. Greer:           Under the renewed construction subsidy program, fisheries would be divided into three categories: those which are adequately capitalized, under-capitalized and over-capitalized. These categories will tremendously influence the amount of funds available to each industry. Who will determine which fishery requires extensive subsidizing?
- A. Hutchings:       Yesterday, Bill Terry commented on the joint master plan, a mechanism for collecting and analyzing all available data on each of our major fisheries. These multi-discipline analyses will provide some estimates of where we stand in terms of available resource and fleet capacity. At that point, a close comparison will give some very good indica-

- tions of where each fishery stands with regard to full capacity, over-capacity or under-capacity.
- Q. O'Connor: Dr. Hutchings, would you comment on two matters not yet discussed? First, the Commission on Marine Sciences, Engineering and Resources has proposed dispensing with the requirement that all fishing craft be built in the United States. This would dispense with the need for any construction subsidy, thus avoiding the defect of using funds from the fishery industries per se. Second, many of the ships in certain parts of the fishing industry of the United States could be improved in design and standardized for mass production.
- A. Hutchings: In answer to your first question, there is a bill in Congress to repeal the 1793 law requiring that fishing vessels be built in the U.S. The Bureau had to report on this very recently. From the point of view of the commercial fishing industry, it would be advantageous to repeal that law. Because this law is designed for the shipbuilding industry, however, there are a great many other interests besides commercial fishing that have to be considered. We felt that we would have to defer to the other segments of the economy in weighing the impact of repealing this law.
- Q. O'Connor: Is there any plan for the government to implement ship design and standardization?
- A. Hutchings: We are very interested in this, and would like to become more involved because there are advantages in incorporating improved technology in new design. We don't have much extra planning in this area in BCF.
- Greer:  
(Comment) The current bill, H.R. 4813, makes a provision for design studies, but it is under-capitalized. At least, it is a start.
- Q. Robertson: Wouldn't the availability of adequate industry financing solve most problems associated with adjusting various fishery subsidies?
- A. Hutchings: Adequate financing isn't available and it probably will not be available in the near future. It is not prudent to have a program which encourages the addition of new vessels into a fishery which already has over-capacity. It may be to the advantage of a particular individual to get a new vessel. Eventually, however, it will be to the detriment of everyone else in the fishery, and sooner or later it will be to his detriment, for this condition brings about over-fishing.

### ***A Guide to Insurance Rates***

JOHN F. KEEGAN

- Q. Harris: What percentage of shrimp vessels are lost in the Gulf of Mexico?
- A. John Keegan: I can't tell you the number of vessels, but I can tell you the loss in dollars. The Gulf area produces between \$5.5 to \$6 million in premiums, and the losses run in excess of 100%.

- Q. Feray: Is the maritime insurance industry funding studies to provide background information that would be significant to marine insurance?
- A. Keegan: Yes, but not for fishing vessels. The fishing industry has no established standards of vessel construction, seaworthiness standards or certification requirements. There are no stated qualifications for officers of fishing vessels as there are on other ships. Because no license is required for fishing vessels, these conditions lead to serious problems. Some things could be done through local fishing associations, such as forming some type of shrimp boat syndicate or "American Fish Trawler Program." Local associations could police themselves to see that the boats were built to conform with certain safety standards. Another improvement would be to allow some sort of a discount, similar to a safe-driving award, to boat owners who hire captains and crewmen that complete training programs.
- Q. Longnecker: What effect do old boats—boats that should be retired from service—have on insurance losses and premiums?
- A. Keegan: We have tried to set up some sort of a guideline of rate-making, and have provided a co-insurance provision on boats over 10 years old. Many insurance rates are based on the surveyor's report. If the surveyor says that a boat is seaworthy and in good condition, we will insure the boat. Frequently we find out, after the boat has sustained an accident, that the surveyor's report was inaccurate.
- Q. Bader: Do you think that we need more fishermen or better fishermen?
- A. Keegan: Both. We need to upgrade people we now have on the boat, and then try to attract new people to the industry. I think training programs will help. The problem with the program, though, is that trainees are being recruited from the area of the fishery. Many times the people that have grown up in the area where the fishing takes place are not enthusiastic about fishing as a career. However, it could seem adventuresome to people from a different locale. If you look over the industry you'll see that many of the best fishermen weren't raised in the fishing industry. They came from Minnesota or the coal mines of Virginia or other unlikely places.
- Longnecker: Those of us who have had a hand in the development of (Comment) the training program feel that putting trained people into the industry will force out a lot of the incompetents.
- Keegan: It appears that these training programs are a good investment of time and money because trained captains and crews (Comment) catch more fish. It will not only train new personnel, but it will influence captains and crews who see the larger catches being caught by trained fishermen.