FISHERY COOPERATIVE OPERATIONS

FCS
RESEARCH
REPORT 30

FARMER
COOPERATIVE
SERVICE

UNITED STATES
DEPARTMENT OF
AGRICULTURE

CONTENTS

HIGHLIGHTS

U.S. fishermen are not catching the benefits of cooperative action.

They use cooperatives far less than do farmers, for example. Only 1 fisherman out of 24 is a member of a cooperative, whereas agricultural cooperative memberships considerably outnumber farmers. This means many farmers belong to more than one cooperative.

Even fishermen of many other countries are well ahead of those in the United States in cooperative development, having established highly integrated systems both organizationally and functionally.

One reason for the cooperative lag in the U.S. fishing industry is perhaps the lack of information about U.S. fishery cooperatives. An analysis of selected fishery cooperative operations indicates the cooperative business method is providing the same benefits to these fishermen as it does to people using it in other economic pursuits. This method includes bringing together the necessary capital to conduct a successful business, reducing input costs and service costs, and increasing returns through improved marketing.

Members of a shrimp cooperative realized net income 36 percent higher than did a group of shrimp fishermen operating individually.

A lobster cooperative paid off a $10,000 loan in the first year of its operation.

Sales of a fin and shellfish cooperative in 8 years of operation tripled and assets increased five times.

Processing costs for a clam cooperative dropped from 49 cents to 35 cents a bushel.

These benefits of cooperative action do not come easy, the experiences of these cooperatives indicate. Members must commit capital for initial and continuing operations; they must support the cooperative in good times and bad; and they must persevere even in the face of economic retaliation from businesses they dealt with in the past.

One manager offers these success factors:

– fishermen must want to be members;

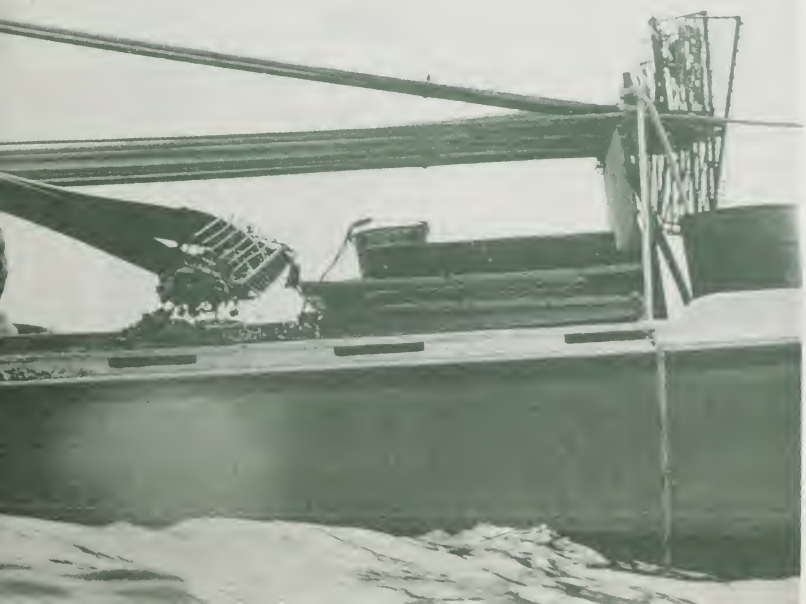
– the manager should know fishermen and be able to get along with them;

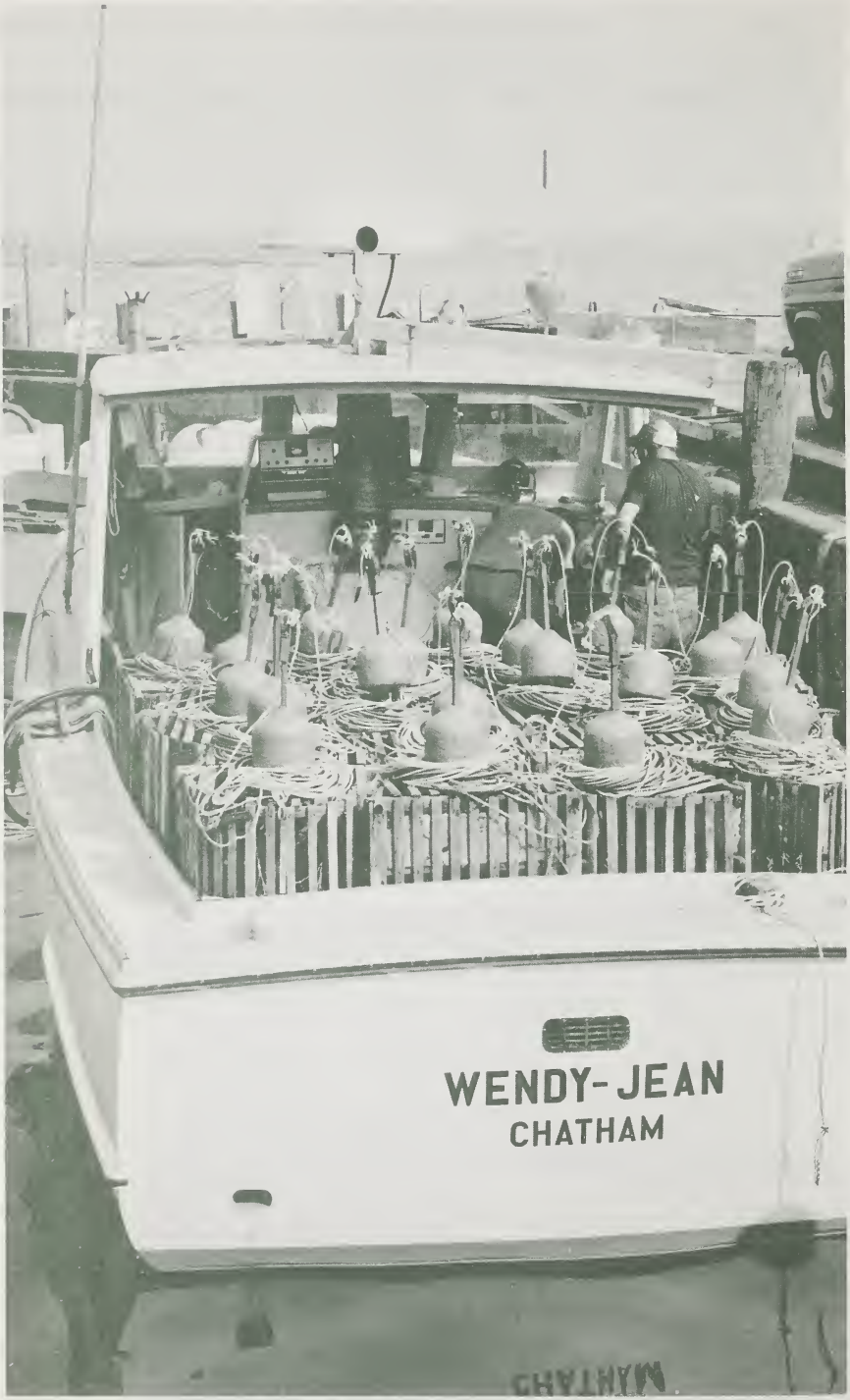
– employees must be conscientious and be paid better than average wages; and

– equipment needs to be modern and efficient.

Fishermen wishing to form a cooperative are advised to: (1) study thoroughly the formation and operation of a cooperative, including visiting an existing fishery cooperative; (2) make detailed economic analyses to determine the proposed cooperative's chance for success; (3) require substantial financial commitment of members to take full advantage of lending sources; and (4) hire sound management.

Clammer manipulates tongs in choppy waters.





Boat loaded with lobster traps and markers is ready to head to sea.

FISHERY COOPERATIVE OPERATIONS

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FISHERMEN'S USE OF COOPERATIVES

People in the United States whose livelihood comes from farming the seas do not use near as much cooperative action as do those who farm the land. Further, U.S. fishermen are far behind fishermen of many other countries in the use of cooperatives.

In 1974, a reported 102 cooperatives in the United States had 7,098 members, according to "Fisheries of the United States," published by the U.S. Department of Commerce. The same publication reported 168,773 full- and part-time fishermen for the same year.

Thus, about 1 in 24 fishermen was a cooperative member. This contrasts to agricultural cooperative memberships that exceed the number of farmers, because many farmers belong to more than one cooperative.

An even less favorable comparison is evident concerning cooperative benefits. Many fishery cooperatives apparently perform few services and some are inactive.

Reported numbers of fishery cooperatives and members in the United States may be overstated. While new associations and members are added to totals, delays may occur in subtracting cooperatives and members when operations cease.

The extensive development of fishing cooperatives in other countries is cited in "The Organization of Fishermen's Cooperatives," M. Digby, published 1973 by the Plunkett Foundation, Oxford, England.

Following are some examples:

The Prince Rupert Cooperative in British Columbia is integrated to meet most fishermen's needs—production, supply, processing, marketing, finance, and insurance. In marketing, the cooperative reports handling by types from 15 to 35 percent of the British Columbia catch and sells in Canada, the United States, and Europe. Processing facilities include those for freezing, canning, oil, and reduction.

In Belize (British Honduras), lobster fishermen have successful cooperatives that also handle grouper, conch, crabs, and shrimp. Products are frozen and shipped by sea or air to foreign markets. A federation of cooperatives formed there in 1970 has plans for canning plants, distributing centers for byproducts, centralized accounting and purchasing, and marketing for fishing gear and supplies.

Denmark has a central selling and processing organization, Danok Andelsfisk, with 30 member cooperatives in 1971. Andelsfisk handles about 20 percent of the total Danish catch. It has its own cold storage, central packing plant, and fishmeal and cod-liver oil factory. Exports go to Europe, the Middle East, and U.S. markets.

Cooperation among fishermen is perhaps most advanced in Japan. Activities cover the gamut from simple to complex aspects of production, processing, marketing, supply, credit, and education.

Some 4,000 local fishery cooperatives, 350 special-type fishery cooperatives, and more than 800 fishery production cooperatives are federated in 37 geographic jurisdictions and 35 credit associations. In addition, there are 236 marine product processing federations and 1 credit federation. More than 900,000 members are served by local, secondary, and federated cooperatives.

OPERATIONS PROFILES

U.S. fishermen use cooperatives for marketing products and purchasing supplies and services. Through collective bargaining, they attempt to improve prices for products and lower costs of inputs.

No information has been available on the capital structure or current operations of fishery cooperatives. Fishermen thus lack guide-

lines for considering the potentials and opportunities through cooperative effort.

Financial institutions that could serve fishermen have little comparative basis for making credit decisions. This situation exists within the lending agencies of the Farm Credit System, which, by act of Congress in 1971, received authority to provide financial services to fishermen.

Selected fishery cooperatives in this report provide information on capital requirements, scope of operations, costs and returns, problems, and benefits.

These cooperatives perform the following services for members:

1. Provide or arrange for capital to conduct a successful business.
2. Reduce costs of inputs such as fuel, ice, and some boat and gear supplies.
3. Provide essential dockside services at cost such as unloading, sorting, and packing products; and
4. Increase returns from products by performing marketing services.

Shrimp #1

Fourteen shrimpers with 21 vessels incorporated as a cooperative in 1961 to improve their economic position.

Membership grew slowly and by 1966, 52 members had 74 vessels. Membership peaked in 1969 at 61. Members in 1974 totaled 57 and they operated 84 vessels. Only owners of vessels are members and currently more than 90 percent of members are active fishermen. Membership is dropped automatically when a member is not a producer for 1 year.

Shrimpers desiring membership in the cooperative now deliver their catches for a 6-month trial period—a feature started in 1971. Shrimpers from other ports may sell through the cooperative when circumstances of a physical nature like storms or shortages of ice or fuel preclude reaching home ports. Their participation is treated the same as that for members with respect to distribution of patronage.

The cooperative has no formal marketing agreement but recognizes a policy feature that members will not unload at any other place in the port.

Capital. Member capital was provided by a membership fee, preferred stock, and a volume retain. The membership fee is a dollar. Initially, members each paid in $1,000 as preferred stock that paid interest of 8 percent. Before 1966, retains of a cent a pound of

shrimp marketed were credited as preferred stock and also carried an interest rate of 8 percent; they were used for operating capital. Currently, only 2 years of preferred stock are outstanding and these no longer bear interest.

Additional initial capital consisted of a $25,000 commercial bank loan guaranteed by the original members. This loan was repaid during the first 3 years of operation.

Beginning in 1966, no further retains were withheld and members received the going ex-vessel (landed on the dock) price for current deliveries. The differential received by the cooperative for dockside and delivery services has been sufficient to provide working capital, yearend patronage, and allocations of margins to members.

The patronage dividend is based on pounds and size categories. In accord with Internal Revenue Service rulings, a minimum of 20 percent is paid in cash. The cash payout has been up to 65 percent of patronage with the amount dependent on capital requirements.

Facilities. Beginning facilities included a dock, unloading and boxing equipment, and office space. The dock was available through a rental arrangement with the local city.

In 1964, an ice plant of 30 tons capacity was installed. This plant capacity was increased by another 30 tons in 1966. In 1968, a second ice plant of 60 tons capacity was added, giving a total ice capacity of 120 tons.

Also in 1968, a second unloading dock was added. The cooperative entered the freezing field in 1968 by purchasing freezing equipment and installing it in a rented bonded warehouse.

The freezing operation was aimed at price improvement through grading and holding in inventory for later distribution. The volume frozen was too small to be economically successful, so in 1969 the equipment was rented to a processor. The cooperative holds title to the equipment and options for its use. A small volume was frozen in 1973 by the cooperative.

Before 1967, buyers picked up the shrimp at the cooperative. Since 1967, the cooperative provides delivery service with its own trucks. In 1974 it operated three diesel truck tractors with refrigerated trailers and one unit for local deliveries.

In 1970, diesel fuel facilities of 400,000-gallon storage were installed. Currently, another 400,000 gallons of storage is being added.

Operations. The original operation consisted of unloading and marketing the shrimp. Marketing activities amounted to direct contact

with processors, freezers, or wholesalers without the service of a broker. This same general procedure is followed today.

A roster of buyers is maintained and sales are made on the basis of best daily telephone quotes. Four processing and wholesale firms get the bulk of cooperative volume.

Shrimp have heads removed and are sorted by grade aboard vessels at sea. In port, shrimp are ice-packed in 100-pound boxes and loaded in the cooperative's refrigerated trucks for delivery to buyers.

Crew members, in accord with local practices, receive a share of each vessel's proceeds based on the going ex-vessel price. They thus have no further interest in the returns received by the cooperative. Members are paid the ex-vessel price at time of delivery and the cooperative takes title to the shrimp. Shrimp that grade below commercial standards are sold locally with the price based on utilization. This separate handling of members' catch serves as an incentive for quality and eliminates problems that may arise from mingling different grades.

Under current operations, members obtain ice for their vessels for about $10 a ton. Fuel is provided members at a cent markup over cost. This low margin is possible because of heavy usage—the normal vessel capacity is 20,000 gallons or more. Fuel volume for the cooperative during the busy season amounts to around 500,000 gallons a month. Credit is extended for both ice and fuel purchases, with a discount if paid within 30 days.

In addition to fuel and ice, some items for vessel operation are handled. However, general items such as ropes, nets, and cables are not handled because of capital needed for inventory and receivables.

The cooperative has group insurance for both health and life plans for members and 18 regular employees and their families. No insurance program for vessels is available through the cooperative.

During the past 4 years of operations, the volume of business has fluctuated between 3.2 million and 5.4 million pounds and between $3.8 million and $7.3 million. Selling prices of shrimp by the cooperative ranged from $1.16 to $1.98 per pound and net margins varied from 4.9 to 9.4 cents per pound.

The net margin per pound of 4.9 cents when applied to the catch per vessel for the year in which the average was 53,300 pounds showed an added return per vessel of about $2,500. The net margin of 9.4 cents when applied to the average catch per vessel of 38,400 pounds returned a benefit of about $3,600 per vessel. These returns can be considered above current market prices, inasmuch as crew members obtain settlement based on daily ex-vessel competitive prices in the port.

Table 1—Operating and financial information, shrimp cooperative #1, selected years

Item	Year						
	1962	1964	1969	1971	1972	1973	1974
Number of members	14	26	61	54	60	58	57
Number of vessels	21	--	--	90	96	102	84
	1,000 pounds						
Volume (heads off)	989	1,318	3,820	3,265	4,238	5,441	3,226
	Cents per pound						
Price received by co-op	--	68	87	116	159	133	198
Net margin above ex-vessel price	1.8	1.7	5.2	6.6	5.8	4.9	9.4
	1,000 dollars						
Total net margins	19	23	197	216	247	267	304
Total assets[1]	67	85	783	722	839	971	974
Plant and equipment	-	44	516	436	390	412	401
Net worth	33	59	395	406	434	522	632
	Percent						
Plant and equipment as percent of assets	--	52	66	60	46	42	41
Net worth (member equity) as a percent of assets	49	70	50	56	52	54	65
Percent return on total assets	28	27	25	30	29	28	31
Percent return on net worth	57	39	50	53	58	51	48

[1]Initial capital: members, $14,000; bank loans, $25,000; total, $39,000.

An average patronage return of $3,000 per vessel would amount to about a 36-percent increase over the average net income of $8,220 per vessel reported in a 1971 Texas study of shrimp vessels.

Total assets of the cooperative in 1974 amounted to $974,000, with a member equity of $632,000, or about 65 percent of assets. During the past 4 years, member equity has never been lower than 51.8 percent of assets.

Net margins during the past 4 years have ranged from 27.5 to 31.3 percent of total assets. Return on member equity ranged from 48 to 58 percent. Investment in plant and equipment amounted to 41 to 60 percent of total assets.

The present cooperative is not large enough to affect the market. Shrimp cooperatives have made no effort to organize a joint marketing strategy. This is recognized not only as a problem but as a future opportunity.

Shrimp #2

A shrimp cooperative that started in 1969 with 25 members now has a membership of 65. The fishermen operate from a docksite leased from a railroad. The cooperative has an option for renewal.

Original capital came mostly from a $10,000 Small Business Administration (SBA) loan for working capital and a $7,000 loan from a commercial bank, secured by facilities and guaranteed by members. Members paid $2 each as a membership fee. The bylaws stipulate that at least 50 percent of a member's catch should be delivered to the co-op. Because boats move around considerably and may be some distance from home port when shrimping is completed, this bylaw provision is not strictly observed. Most of the boats are small and limited to bay fishing.

The cooperative has a board of seven members. One of the board's difficult responsibilities has been the almost yearly replacement of managers.

Facilities consist of a metal building for offices and receiving operations. Refrigerated on-dock storage has a capacity of 1,200 100-pound boxes of iced shrimp. A movable elevator with automatic scales takes the shrimp from boats to boxes.

Table 2—Operating and financial information, shrimp cooperative #2, 1970-74

Item	Years				
	1970	1971	1972	1973	1974
	1,000 pounds				
Operations:					
Volume (heads on)	462.5	679.3	218.3	508.3	1,076.3
	1,000 dollars				
Sales	251.9	271.0	162.1	443.4	717.0
	Cents per pound				
Price received by co-op	55.00	40.00	74.00	87.00	66.00
Advance to members	48.00	33.00	67.00	77.00	54.00
Gross operating margin	7.00	7.00	7.00	10.00	12.00
Operating costs	5.67	4.13	8.00	6.86	3.64
Net margins	1.33	2.87	(1.0)	3.14	8.36
Capital:					
	1,000 dollars				
Total net margins	6.1	19.5	(4.1)	16.0	89.9
Total assets	24.6	41.2	42.4	47.6	[1]134.2
Plant and equipment	6.9	6.5	27.8	30.5	29.5
Member equity	22.0	39.4	31.5	47.5	124.2
	Percent				
Plant and equipment as a percent of assets	28	16	65	64	22
Net worth (member equity as a percent of that asset)	89	95	74	100	100
Percent return on total assets	25	47	loss	34	68
Percent return on net worth	28	50	loss	33	68

[1]Includes 1974 net income of $89,900 before cash patronage refunds.

Operations. Most members of this cooperative fish relatively close to shore and plan to return each day to port. Volume per trip may range from 50 to 500 pounds of shrimp. Some crushed ice is taken on boats at a price of $2 for 300 pounds. The cooperative buys the ice in 300-pound blocks and sells it crushed to members. Most ice is used by the cooperative in packing the shrimp.

The cooperative arranges sales by calling buyers for price quotations. Buyers pick up shrimp at the dock. Members are paid cash each Friday for products delivered and accepted by buyers since date of last payment.

In the 5-year period, 1970-74, volume fluctuated from 218,000 pounds to 1,076,000 pounds of heads-on shrimp. Dollar volume increased each year except for 1972—a poor catch year—from $252,000 in 1970 to $717,000 in 1974.

The cooperative plans for a gross operating margin of 7 to 10 cents a pound. Except for 1972 (a loss year), patronage earnings have ranged from 1.3 cents to 8.4 cents for each pound delivered. During the 5-year period, patronage amounted to 4.3 cents for each pound of shrimp. Margins are allocated according to the volume of shrimp delivered. Twenty percent of net margins is paid in cash.

This cooperative was able to repay the SBA loan in its first year of operation and finish the year with a member equity of $16,000. Equity increased yearly, except for an operating loss in 1972. At the end of the 1974 fiscal year, total assets amounted to more than $134,000 and almost 100 percent was member equity. Property, plant, and equipment accounted for 22 percent of total assets.

A wise practice in this cooperative is having an annual audit report by a certified public accounting firm.

Plans for the future include installation of icemaking equipment.

Lobster

Ten fishermen contributed $100 each in 1948 for a share of stock to begin a cooperative to receive, box, and market their lobsters.

Membership in 1973 was 130 with 65 boats fishing. The board of directors has 11 members; all come up for reelection each year. All but one of the present directors have served more than one term. The

board has scheduled monthly meetings for which an operating statement is prepared.

A prospective member delivers lobsters for 6 or 8 weeks before the board decides on extending membership. There is no formal marketing agreement. The manager estimates that the cooperative handles between 90 and 95 percent of member volume. The co-op has seven competing lobster dealers in the area but estimates its share of the market at around 30 percent.

Membership fee is $10 but to vote or serve on the board, members must own two shares of $100 common stock. This provision of stock ownership assures that voting or serving on the board is restricted to those who have a capital stake in the cooperative. Preferred stock bearing 6 percent interest is of minor significance. A capital fund was developed over a 4-year period without allocation of margins to members. Federal tax was paid on that amount so it is part of net worth with no patronage claim against it by members.

Over the years, the cooperative has been able to obtain most of its working capital, pay sizable cash dividends, and generate capital on the margins obtained between ex-vessel prices paid members and selling prices of the crated lobsters.

Assets have increased considerably in recent years—from $82,000 in 1970 to $236,000 in 1973. Member equity in the latter year was $81,000, or 34 percent of total assets.

Operations. For 5 years, the cooperative operated from a floater with no land facilities. In 1953, the dock facilities were obtained. A second dock facility was bought in 1972. Facilities at the principal dock site include a building for offices, supplies, and board room. Another building at the water's edge has ice and bait storage along with platforms for storage of shipping boxes, and hoists for loading lobsters. In the water is a lobster car with several compartments. Fuel storage and pumping facilities for gasoline and diesel are included.

From an initial service of receiving and selling lobsters on a floater in the bay, several services are presently provided members. Handling lobsters accounts for about 80 percent of dollar volume. In season, scallop, shrimp, and fin fish are handled. The shrimp and scallops are bought from members, packed in ice, and sold to distributors or processors. Fish have been received, boxed, and iced for a dealer who pays members directly and pays the cooperative a cent a pound for its services. In 1975, the cooperative plans to buy fin fish and sell to

Salesgirl at cooperative's retail market offers lobster selection from circulating water tank.

This is a lobster floating storage facility. The boxed lobsters behind it are ready to be iced for shipment.

buyers in like manner as shrimp and scallops are presently handled, performing ownership and dealer services.

Lobsters are received in late afternoon, weighed, and placed in compartments of a floating car until time for sale at dockside or delivery to buyer. A daily price is determined by calling other lobster handlers, including cooperatives. Members are paid the day following delivery to permit deductions for bait or fuel purchased for next-day fishing.

Lobsters are packed in 100-pound iced crates for live delivery. Ice is purchased for the packing operation.

About 30 percent of the lobster volume goes to a city auction by the co-op truck. The rest is sold to local buyers.

Bait is required daily and is provided at near cost. Herring cuttings and red fish skeletons are the principal bait.

Most types of supplies needed by fishermen are handled by the cooperative. Fuel—diesel and gasoline—is sold to members at about 3 cents a gallon above cost.

To stabilize price and assure a more constant supply, a rented pounding facility is used at a cost of 20 cents a pound.

Fin and Shellfish

By leasing public pier facilities and taking over an existing business, 50 fishermen in 1966 were able to begin cooperative operations with payment of $100 each for a share of stock. Fish were shipped to a central auction market by hired transport.

Membership is now up to 98 with 80 members active. The 80 active members have a total of 40 boats. Crew members are eligible for membership if fishing accounts for more than 50 percent of income and an associate membership is available for part-time fishermen. They have no vote but get the benefits of discounts on gear and other items.

The board of directors has seven members with staggered terms. A balance sheet and operating statement are prepared for monthly board meetings. An annual meeting is held for members. Member support is maintained by a marketing agreement calling for delivery of 100 percent of fin fish with some exceptions for shellfish.

Capital. In addition to the $100 common stock subscription from original members, $9,700 was advanced by members through notes

Member arrives at his cooperative with catch of finfish.

to give the cooperative an initial capital from members of about $15,000. Recent bylaws provide for preferred stock rather than notes from members.

A nonrefundable initiation fee of $25 was instituted in 1967 and raised to $50 in 1973. The fee was devised so new members share in past organization and development costs.

In the early years of operation, capital was borrowed from local banks. Land and retail market facilities were purchased under a mortgage from a local bank.

Other funds as needed have come largely from notes owed to local banks, a bank for cooperatives, and increasing shareholders' equity through net margin retains.

Assets in the cooperative at the end of 1967 were slightly less than $80,000, with about equal amounts in accounts receivable, inventory, and equipment. Member equity was about $30,000.

In 1969, a year after the start of retail and wholesale operations, assets were about $214,000, with $114,000 in fixed assets. Member equity was down to $16,000, reflecting losses during the retail and wholesale startup period.

By the end of 1973, assets totaled $333,000, with an inventory of $110,000 and fixed assets of $133,000. Accounts receivable, after deducting a reserve for bad debts, were $54,000. Member equity amounted to $56,000, or about 20 percent of total assets.

Operations. Early activities were quite complete because the cooperative assumed the lease and operations of one of two companies buying fish at the town pier. Services included boxing fish and shipping directly to large city markets in hired trucks. An inventory of gear was carried and operations were carried on from a rented portion of an old home until present facilities were completed in 1968.

Present facilities include a retail seafood store, freezer, storage area for gear, ice machine at pier, and leased fuel tanks and pumps. For transport, the cooperative owns two large diesel trucks and two smaller delivery trucks. For high summer season wholesale and retail volume, additional trucks are rented.

Most fishermen return in the late afternoon with their catches of several types of fin fish and lobsters, shrimp, and scallops among shellfish types.

Products other than lobsters are sorted, weighed and ice-packed in boxes ready for shipment to outlets. Orders for next-day wholesale and retail outlets receive first attention, then orders for established dealer outlets in a central market, and the balance to a regular auction market. By shipping to two large markets, the cooperative is able to watch the supply and price situations and allocate supplies where most beneficial to members. Orders for central market dealers for the next day are received in the morning through telephone calls in which prices are determined for the previous day's catch that was shipped overnight for early morning arrival. Then, depending on the price received for the previous day's catch, the current day's catch is allocated among dealers and markets.

The cooperative handles members' fish for a margin of about 6 cents a pound. A goal of the directors is to withhold an amount that is not much in excess of costs.

Members are extended credit for purchases of ice, bait, fuel, and gear to a limit of $500. Fuel, ice, and bait purchases are deducted from fish payments as part of dockside activities and bookkeeping.

Discounts are given to members for gear and fuel purchases. The ice plant provides good savings for members. Costs for manufacturing ice are less than $5 a ton, compared with commercial purchase prices of up to $24 a ton.

Bait costs members 15 cents a pound, compared with 20 cents at non-co-op outlets.

To reduce shipping costs, the cooperative bought a machine for making cardboard boxes. Because the cooperative use of boxes was not sufficient for an economical operation, the machine is leased to a firm that pays the cooperative on each unit of production. At the time the machine was acquired, wooden boxes cost $1.75, compared with $1.30 for cardboard. Current costs are $2.75 for wood and $1.60 for cardboard.

Total sales volume has increased from $800,000 in the first year of operation to $2.3 million in 1973 with an increase each year since 1968. While sales have about tripled during the 8 years of operation, total assets have risen five times.

Wholesale and Retail. The wholesale operation has had more rapid growth than the retail. Retail expansion has been limited by location and facilities. For both wholesale and retail, a relatively complete variety of seafoods is handled with member catch providing only a

part of wholesale and retail volume. Items not available from members are purchased in the central markets. A second retail market was operated with satisfactory results in rented facilities in another area during the summer tourist season.

For the first year of wholesale operations, wholesale volume amounted to about 2 percent of fish sales. For the latest year, wholesale accounted for about 24 percent of fish sales. The wholesale route serves outlets up to 30 miles on both sides of the cooperative location. The number of outlets served varied from 60 to 120 with the high number during the summer tourist months.

Retail volume in its first year accounted for 3 percent and for the latest year, about 10 percent of fish sales. Seafood purchases needed to adequately meet wholesale and retail requirements, above those supplied by members, amounted to about 22 percent of total fish purchases in the latest year.

The high-volume summer months for wholesale and retail operations require a big increase in total capital. For instance, December 1973 yearend assets were $333,335 compared with July assets of $585,223, a 75-percent increase. Total fish sales averaged $102,072 per month for the first 3 months of the year but were about $462,000 in July and $567,000 in August.

Winter purchases per month from members may be down to $60,000 and up to more than $300,000 in the summer.

By type of distribution, retail sales per month rose from an average of $13,000 per month in the first 3 months of 1974 to $83,000 in August. For the same periods, volume of wholesale went from $15,000 to $124,700.

Sales other than retail and wholesale rose from $74,000 to $359,000. Purchase of local fish (from members) averaged $85,270 in the first 3 months and $321,588 for the month of August.

Retail and wholesale volume in the first 3 months of 1974 accounted for 27 percent of total sales. But in August, volume was 37 percent of total.

These changes in sales volume suggest the problems of cash flow, inventories, and labor requirements. Operation of retail and wholesale outlets required the outside purchase of items that were not included in the catch of members. For the first 8 months of 1974, about 25 percent of fish purchases were from outside sources.

The low-volume winter months and the overhead required to maintain operations showed a retail loss that was not cleared until

the fifth month and a total operational loss not cleared until the seventh month.

The influence of labor costs on operations is indicated for different periods. In the first 3 months, sales averaged $9.91 per dollar of wages: for 8 months, the figure was $14.89; and for the month of August sales were $20.97 for each dollar of wages.

In taking over an ongoing operation, the cooperative had net margins for the first 2 years. Expanding to retail and wholesale showed losses for 3 years and net margins in the next 3 that more than doubly recovered the losses of the previous 3 years.

Clam

A water pollution situation that might require facilities for depuration (purifying) of clams was the basis for clammers to consider joint action for maintaining their occupations. Individually, clammers could not afford facilities, so the threat of loss of livelihoods brought about the cooperative organization of clam farmers in 1968.

The threatened pollution did not materialize, but by 1970 the members were considering their own receiving, packing, and selling operations. The possible entry of clammers as competitors in the clam market stirred a reaction in the local industry. The clam cooperative manager reported these developments: (1) clammers who were prospective members of the cooperative encountered difficulty in selling to buyers on the dock; (2) the cooperative found it difficult to make sales to dealers in the city market; and (3) truckers feared a loss of some business if they hauled the cooperative's clams.

In response to these actions and threats, the clammers were rushed to ready their facilities to handle the products of members. Two trucks were purchased for delivery of product to upstate New York. Shipments to Chicago were stopped by truckers' reluctance to haul co-op products. Competitors undersold the cooperative in interior markets and the cooperative, lacking adequate financial backing to combat such activities, depended on the near city market as an outlet.

Another adversity was the cooperative's procedure of paying weekly—on Friday for clams delivered for the preceding week of Thursday through Wednesday. Historically, clammers received cash at the dock at time of delivery. This deterred some clammers from joining and delivering their product.

Capital. From 1968 to 1970, when the cooperative started, 75 clammers put up $250 each for stock and $20 as a membership fee for a total member capital of about $20,000. A bank for cooperatives provided credit secured by notes, mortgages, and current accounts receivable.

A clam operation like this cooperative is not a capital-intensive business. Facilities for receiving, processing, and storage are minimal and working capital requirements exceed those for fixed assets. In 1973, current assets accounted for about 75 percent of total assets of $69,000.

Accounts receivable amounted to more than 50 percent of current assets at the end of the 1973 fiscal year; and with cash, the two items equaled 85 percent of current assets. During the summer months, accounts receivable would be considerably larger because of the high-volume months.

With sales of $460,000 for the year, total capital of $69,000 at yearend was turned more than 6.5 times during the year.

By the end of 1973, member equity amounted to almost 75 percent of total assets, including the revolving fund from the 25-cent a bushel retain that amounted to almost $20,000. An operating deficit incurred during the first 20 months of operations will be more than cleared from the books in the current year.

Membership. Membership is open and increased to 117 in 1973. A share of stock costs $250 and is required for voting. Initially, a membership fee was $20. Currently the fee is $250 and is not refunded. The fee must be paid in cash. Producer patrons may be classed as nonmembers, members, and member-stockholders.

There are nine members on the board of directors for staggered terms of 3 years. To help assure better knowledge of supervision of operations, there are four standing committees, each headed by a board member. Committee assignments are for maintenance, purchasing and production, marketing, and accounting. Member involvement on the committees provides rapport between the members and the board and adds to member understanding of management and operations.

Operations. By March 1971, after 10 months' operations and two managers, producers using the cooperative were down to 15 and the financial status was such that producer payments were 4 weeks behind scheduled payment plans.

Boats arrive at the docking and packing facilities of a clam cooperative. In the foreground are harvesting rakes.

Humidifiers above and below maintain quality of bagged clams in storage.

Factors responsible for the poor financial situation were partly internal. Confusion in procedures and loose organization, coupled with inadequate attention to operations by the board, allowed management too much freedom in decision-making and daily operations. Excessive labor boosted costs. Inadequate receivables data used as security for borrowed working capital depleted the line of credit. Inadequate auditing failed to alert directors to problem areas.

Several corrective actions were taken. The third manager selected was promoted from within. He had been in charge of the production line. A CPA auditing firm was hired to submit monthly reports to the board and bank. An accountant was employed to replace a bookkeeper. A sorting machine was designed and constructed by members to make seven grades by size rather than the regular three in the trade. That machine enabled the cooperative to obtain prices that more accurately reflected the value of the actual product, resulting in higher returns for the members.

Operations of the cooperative consist of receiving, weighing, sorting, and marketing delivered clams. Dock space is rented from the city. Boats pull up to a covered dock. Before grading by size, clams are weighed and recorded by pounds. After grading, clams are handled as bushels weighing 70 pounds to conform to industry practices. Payments to producers are based on daily volume and prices from Thursday through the following Wednesday's deliveries. Initially, checks were made on the Friday after Wednesday deliveries. That schedule was too burdensome for details of recordkeeping and the current practice of paying on Friday, a week later or 9 days after the closing period, was adopted.

Starting in 1970, withholding of 25 cents a bushel was begun. This operating fund is on a 5-year revolving basis and by 1973 it amounted to nearly $20,000.

After retrenching from its early effort to deliver and sell in out-of-area markets, the cooperative sold its two trucks and concentrated sales efforts on telephone contacts and used hired transport. This effort has been successful and currently nearly all output is sold outside the local market, except during the summer.

During the 1974 year, the cooperative had about 30 outlets; about one-third were retail, with the rest among brokers and wholesalers. Volume sold to wholesalers amounted to nearly 70 percent of production.

One outlet accounts for about 20 percent of yearly volume and is picked up weekly for distribution in California and Hawaii. The regular volume to this outlet is particularly important to the cooperative during the winter months when demand by wholesalers is low.

Volume and demand in summer are higher. Part-time clammers are more active and tourist-vacation season increases demand.

A feature of this cooperative is its fine set of records and their regular use for maintaining control of operations. Volume, prices paid and received, fixed and overhead unit costs, operating costs and margins are time-charted in the office for employee and member information.

The employee in charge of the processing operation pays particular attention to the posted figures and trend lines. For instance, in a current period of 9 weeks, bushels per week were 640 at the start, reached a high of 819 bushels and ended with a low of 406 bushels per week. Processing cost per bushel at the beginning was 49 cents but was down to 35 cents per bushel for the last week. The explanation for lower unit costs for lower volume was the closer attention given to use of part-time labor. Most production is received in mid-afternoon to late afternoon and local high school students, many the sons of clammers, make up the receiving and processing labor force. Under such a situation, labor is employed to match the needs of two grading machines and maximum use of labor for one machine is made under conditions of lower volume.

Volume handled over the past 4 years increased from 545,000 pounds to 800,000 pounds. Operating margins have ranged from 1 cent to 14 cents a pound. While most net margins are currently distributed each year in cash, net worth in the past 3 years increased by almost $40,000.

The increase in volume marketed by the cooperative in recent years indicates some measure of satisfaction held by the members. An increasing number of services, expansion of facilities, cash payment of margins, and increase in assets and member equity attest to the forward direction of this cooperative.

A continuing problem for the cooperative is that of getting the highest return for product.

A current problem is to reduce hours worked at overtime rates. The manager stressed that a beginning cooperative is certain to face the efforts of competitors to raise prices paid to fishermen to discourage them from supporting a cooperative.

Table 3—Financial data on selected fishery cooperatives, 1973

Type of cooperative	Assets	Net worth or member equity	Volume of business
		Dollars	
Shrimp #1	974,000	632,000	6,400,000
Shrimp #2	134,000	134,000	717,000
Lobster	236,000	81,000	1,651,000
Fin and shellfish	333,000	56,000	2,300,000
Clam	69,000	52,000	460,000

ANALYSIS AND GUIDELINES

The cooperatives described in this report have several things in common. There was group action to solve some problem or improve an adverse condition. Those affected assumed responsibility for an organization and provided initial capital to begin operations. A common guiding principle is operation at cost. If a marketing service is provided, members receive an initial payment for products with the final payment realized after costs of operation are determined. For a supply service, members pay initially more than anticipated cost with final settlement dependent on costs of providing the service. A challenge for cooperatives is correctly estimating costs so that gross margins will be sufficient to cover costs. The manner in which initial payments or charges are adjusted after covering costs of operation is by a patronage refund—returning net margins according to volume of business done by each member.

Another general feature of cooperatives is one-member, one-vote in the election of directors and conduct of business sessions.

Group efforts may be channeled in actions where bargaining strength achieves goals without the group performing given services. Such action includes contracts with marketers or suppliers to provide services at agreed prices. These contracts tend to assure firm volume and price elements to both parties of the contract and provide members the benefits of group rather than individual presence in the marketplace.

Bargaining by cooperatives is used extensively in agriculture, but to a lesser extent in fisheries. Some fishermen currently bargain on

prices received for fish and prices paid for supplies such as fuel and ice, and costs of services like insurance.

However, the benefits accruing to agriculture from a wide range of cooperative efforts are equally available to fishermen by more active participation in group effort.

One manager suggested the following factors for success:

1. Fishermen must want to be members.
2. Manager should be one who knows fishermen and can get along with them.
3. Employees should be conscientious in their interest and efforts.
4. Modernize equipment to make labor easier and more efficient.
5. Pay better than average wages.

Based in part on the experience of these cooperatives, fishermen desiring to form a cooperative should also consider these suggestions:

1. Study cooperative publications in the fields of formation, by-laws, bookkeeping, and operations—see list of publications available.
2. Make detailed analysis of projected operations and capital requirements. This may delay a start but improves chances for success.
3. Require a substantial capital contribution by members. This not only builds capital but helps assure member interest and support. Use of retains and net margins from operations add to the capital pool as requirements increase.
4. Allow for initial operations to lag behind plans. Capital needs may be greater and net margins lower than planned.
5. Take full advantage of the means for financing available to fishing cooperatives in the lending agencies of the Farm Credit Administration.
6. Recognize that, along with member interest and support, sound management is essential for success.
7. Contact an operating cooperative for on-the-spot information.
8. For cooperatives operating within a State or region, consideration should be given to uniting in a federation to improve individual marketing, purchasing, and other services.

OTHER FCS PUBLICATIONS

Members Make Co-ops Go. C. H. Kirkman, Jr. Revised 1973. Information 72. 12 pp.

What Co-op Directors Do. C. H. Kirkman, Jr. Revised 1972. Information 71. 12 pp.

Guides to Co-op Bookkeeping. Francis P. Yager. Revised 1972. Information 89. 16 pp.

Is There a Co-op in Your Future? C. H. Kirkman, Jr. 1971. Information 81. 40 pp.

Bookkeeping Forms Your Co-op Needs. Francis P. Yager. 1971. Information 82. 40 pp.

Manager Holds an Important Key to Co-op Success. C. H. Kirkman, Jr. 1970. Information 74. 12 pp.

How to Start a Cooperative. 1965. Educational Circular 18. 18 pp.

For a copy, write Farmer Cooperative Service, U.S. Department of Agriculture, Washington, D.C. 20250.

PUBLICATIONS FROM OTHER SOURCES

Organizing and Operating a Fishery Cooperative. Part One, S.G. No. 19 and Part Two, S.G. No. 19A (Bylaws and Marketing Agreements). Extension Marine Advisory Program. Oregon State University Extension, Corvallis, Oreg.

Fisheries Cooperatives—Their Formation and Operation. From a workshop. Marine Memorandum 30, Marine Advisory Service, 1972, University of Rhode Island, Narragansett, R.I.

The Fisherman and The Farm Credit System. SUSF S.G. 73-004 Marine Advisory Program. Florida Cooperative Extension Service. University of Florida, Gainesville, Fla.

FARMER COOPERATIVE SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Farmer Cooperative Service provides research, management, and educational assistance to cooperatives to strengthen the economic position of farmers and other rural residents. It works directly with cooperative leaders and Federal and State agencies to improve organization, leadership, and operation of cooperatives and to give guidance to further development.

The Service (1) helps farmers and other rural residents obtain supplies and services at lower cost and to get better prices for products they sell; (2) advises rural residents on developing existing resources through cooperative action to enhance rural living; (3) helps cooperatives improve services and operating efficiency; (4) informs members, directors, employees, and the public on how cooperatives work and benefit their members and their communities; and (5) encourages international cooperative programs.

The Service publishes research and educational materials and issues "News for Farmer Cooperatives." All programs and activities are conducted on a nondiscriminatory basis, without regard to race, creed, color, sex, or national origin.