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9. ABSTRACT

A description of pertinent characteristics of selected concentrations of artisanal fishermen in Panama. They range from groups of unorganized individualistic fishermen to highly organized fishing cooperatives. The equipment used extends from motorless dugout canoes and handlines to motorized fiberglass boats and monofilament gill nets. Among the characteristics described are: numbers of cooperative and independent fishermen; boats and motors used; types of pier/dock; existence of cooperative building or store and the presence of running water, electricity, ice-chests, electric cold rooms, freezers, freezing plant, ice plant, dryers, and vehicles; total production; and local population. Small groups of fishermen and/or cooperative representatives were interviewed, and data from these interviews along with observations and previously published data are summarized in this report. Because of a FAO/BID project, conditions in the various locations are expected to change a great deal. The project consists of reorganizing and modernizing a number of fishing cooperatives on both coasts, as well as technical assistance.

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Artisanal Fisheries in Panama

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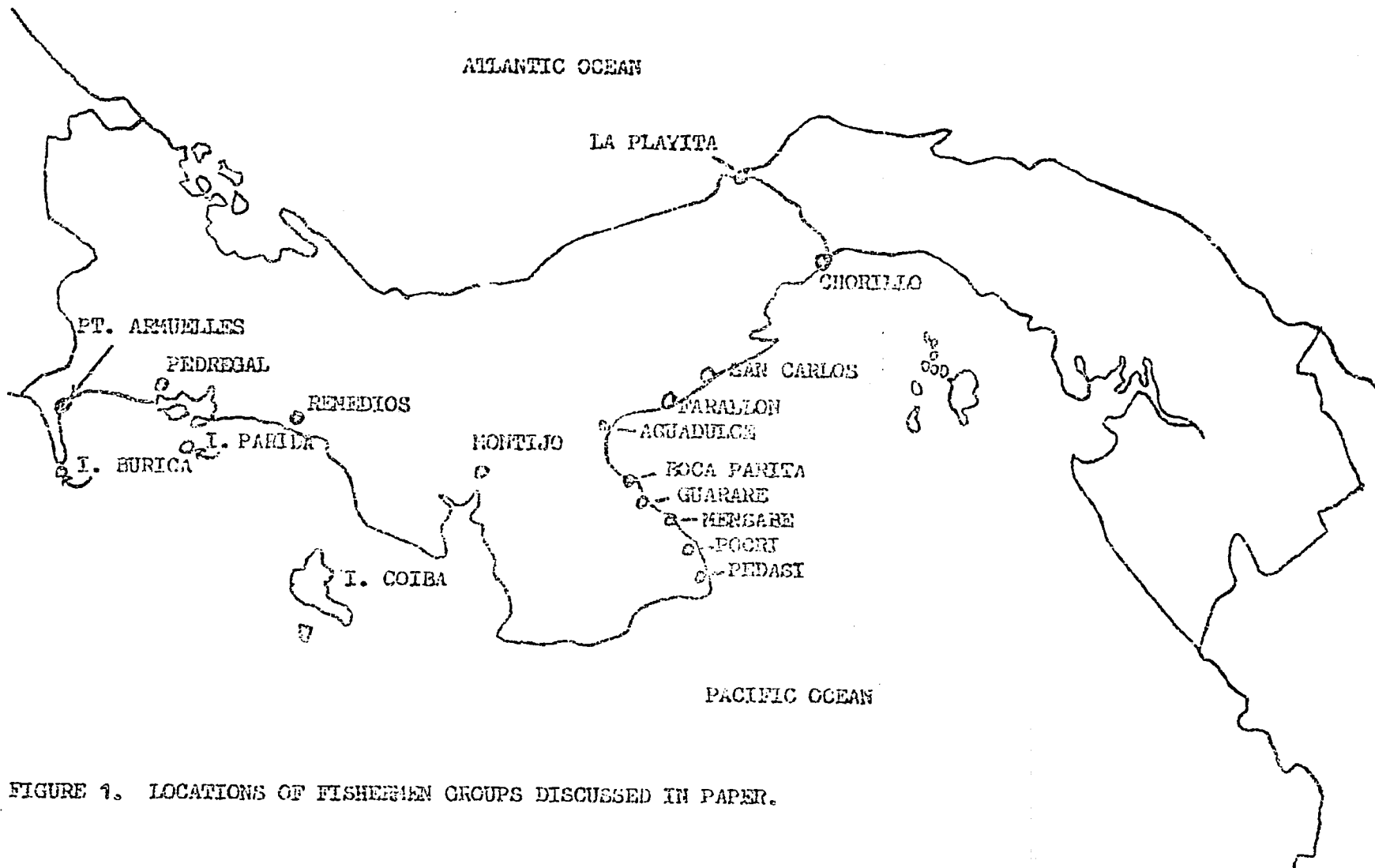


FIGURE 1. LOCATIONS OF FISHERMEN GROUPS DISCUSSED IN PAPER.

Artisanal Fisheries in Panama

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INTRODUCTION The purpose of this paper is to describe pertinent characteristics of selected concentrations of artisanal fishermen in Panama. Geographically, the concentrations of fishermen selected include one area on the Atlantic Coast close to the Canal and 13 areas on the Pacific located at various points between Panama City and the Costa Rican Border (see Figure 1). At the present time the areas selected are adjacent to an excellent surface transportation network which links them with significant population concentrations in Panama. Organizationally, the concentrations of artisanal fishermen examined here range from groups of unorganized individualistic fishermen to highly organized fishing cooperatives. The equipment used manifests a similar range of variation from motorless dugout canoes and handlines to motorized fiberglass boats and monofilament gill nets.

The data presented were collected during June 1974. All areas described were visited by the author. Small groups of fishermen and/or cooperative representatives were interviewed, and data from these interviews along with observations and previously published data are summarized below.

CHARACTERISTICS OF SELECTED CONCENTRATIONS OF ARTISANAL FISHERMEN

Locations of the concentrations of fishermen discussed here can be found in Figure 1. Each group of fishermen is discussed in terms of location, numbers and organizational characteristics of personnel, techniques of production and distribution, and other

situationally dependent characteristics. Table 1 in the conclusion presents this information in summary form. The data is presented in geographical order beginning with Puerto Armuelles on the Pacific Coast near Costa Rica, moving along the coast to Panama City, then across Panama to Colon on the Atlantic Coast.

Puerto Armuelles is located at the northwest end of the Gulf of Chiriqui on the Pacific Coast, approximately 500 kilometers by paved road from Panama City. It has a population of approximately 12,500 and functions as port and supply center for the banana plantations of this sector of Panama. Approximately 30,000 people associated with the Banana plantations live within 30 kilometers of Puerto Armuelles (FAO/BID 1975). Puerto Armuelles is connected to the wage earners in the various banana fincas by a network of all weather dirt roads, suggesting a potentially good market for fish products. In addition to the paved road which connects Puerto Armuelles to other sections of Panama, there is a thirty-six inch narrow gauge railroad system (Ferrocarril Nacional de Chiriqui) connecting David (Population 35,700) and Puerto Armuelles with spur lines to Potreillos, Pedregal, and San Andres (Weil, et al 1972). Additionally, Puerto Armuelles has an airport with daily flights to Panama City and a pier for banana boats.

In June 1974, 18 Puerto Armuelles fishermen were organized into a corporation (Corporacion de Pescadores) financed by the Corporacion para el Desarrollo Integral de la Region de Alange ye Baru. Figures concerning the total number of fishermen in Puerto Armuelles were not obtained in 1974, but FAO/BID (1973) reports

52 fishermen in the area.

The Corporacion de Pescadores owns three 26-foot fiberglass boats with two inboard/outboard diesel motors. Each fiberglass boat carries three fishermen. The other fishermen in the organization use 7 wooden boats and 3 outboard motors which belong to individual fishermen. FAO/BID (1973) reports a total of 34 boats and 21 outboard motors in the Puerto Annuelles area. They financed two gill nets, but fishermen interviewed report that they have not used them for two years due to shark damage. Fishing is now done with hand lines. Fish are landed on the beach where an open, thatched roof shelter has been constructed.

The Corporacion de Pescadores has a fish shop constructed of wood with a concrete foundation. The shop is equipped with a small electric freezer, a cleaning area with running water, several tables, and a scale. They possess no vehicles; thus they are limited to sales in the local area. Ice for on and off board fish preservation is purchased from the shrimp company at Pedregal for \$1.50 per 100 lbs.

In June 1974, fishermen reported fishing at Burica Island, 1½ hours by motorized boats. Catches were reported to be as low as 500 lbs. per boat, per week during the off season. In July fishing is conducted at Parida Island. Fishing is conducted as far away as Coiba Island, (reported to be 11 hours by motorized boat). When fish are running, a trip to the islands can produce 3000 lbs. of fish for 2 motorized boats, with three fishermen each. FAO/BID (1973) reports that the total annual production

(corporation & independent fishermen) was 74 metric tons in 1972.

Fish captured are sold locally by the corporation, and the fishermen are paid weekly by check according to their production. It is reported that overall demand exceeds production.

Pedregal is located approximately six kilometers south of David (population 37,500) on a river which empties into the north-central part of Chiriqui Gulf. There is easy access to the Pan American Highway which passes through David, as well as a narrow gauge railway system connecting David and Puerto Armuelles with spur lines to Pedregal, San Andres, and Potreillos. Additionally, David has an airport with daily flights to Panama City.

Fishermen interviewed in June 1974 reported more than 30 artisanal fishermen in the Pedregal area, but no fishermen organization. An earlier attempt to form a fishermen's cooperative was reported to have failed due to a loss of funds. Fishermen reported that the government organized a trip to Farrallon to demonstrate how a cooperative could work, but they returned unimpressed, saying that they like to work alone and individually select buyers for their products. FAO/BID (1973) reports a total of 95 fishermen in the Pedregal area, with 25 organized into a pre-cooperative. Presumably, this is the pre-cooperative which failed.

No reliable figures could be obtained concerning numbers of boats and motors in June 1974. FAO/BID (1973) reports 34 boats with 25 outboard and one diesel motor. Fishing is done with handlines, gillnets, and throw nets. Fish are landed on the piers and steps of the shrimp company which is located on a river that empties into the sea. Ice for fish storage is purchased indivi-

dually from the shrimp company. The total annual production of Pedregal was 146 metric tons in 1972 (FAO/BID 1973).

Most fish produced are purchased by a middleman/shopkeeper located just north of Pedregal. The middleman reportedly has three trucks and a storage capacity of 5000 lbs.

Remedios is located just south of the Pan American Highway approximately 95 kilometers from David and 110 kilometers from Santiago (Population 14,000). It is situated on a river which empties into the northeastern section of the Gulf of Chiriqui.

In June 1974, 24 fishermen at Remedios were organizing into a pre-cooperative. Until recently they had been obtaining individual loans from the development corporation in David, but they have been convinced that they can obtain more equipment as a cooperative.

The fishermen operate with one twenty-eight foot and two twenty foot fiberglass boats with motors. Until recently they had four twenty-eight foot boats, but three were repossessed due to failure to repay loans. Fishing is conducted with handlines and gillnets (2). Fish are landed on the river bank and cleaned in an open, tin roofed shed. No running water or electricity is available. Fish are stored in a fiberglass cooling chest. Ice is purchased in small blocks from a local bar at \$2.50 per 150 lbs.

From the landing area it takes approximately one hour under motor to get to sea. Boats usually go out eight hours per day and obtain 100-200 lbs. per boat. An auto is rented (reportedly for 20% of total sales) to distribute the fish. Fish are usually

hawked to individuals around Remedios, but when catches are excessive they are sold to a supermarket in David.

Montijo is located approximately 240 kilometers from Panama City on a paved road approximately 13 kilometers from Santiago. The local towns and villages encompass a population of about 22,200 (FAO/BID 1973).

In June 1974 it was reported that 72 fishermen were organized into a fishermen's cooperative organization. 21 of them were classified as active fishermen at the time of the interview (the off season). Additionally, 8 independents were reported to fish occasionally with cooperative members. This cooperative recently received a \$30,000 loan from the Ministerio de Desarrollo Agropecuario (MIDA).

The cooperative has 15 boats, six fiberglass and nine wood. All boats have motors. Additionally, the cooperative owns an old shrimp boat which is used for both shrimp and fish. They also have 24 multifilament gill nets, most of which are in storage. Only three boats use the gill nets; the others use old shrimp nets to capture fish at low tide at the river mouths. Fish are landed at a riverine dock in Puerto Nutis approximately 7 kilometers from the cooperative building in Montijo. The cooperative plans to install an ice plant at the landing area as soon as a potable water supply is available. The cooperative building is made of wood with a tin roof and has electricity, running water, adequate electric powered cold storage rooms, freezers, and a small ice plant. The cooperative just purchased a diesel powered ford pickup truck in June 1974. The cooperative building also contains a shop which

provides food and fuel on credit and loans to fishermen who repay from their catches.

Cooperative statistics show that during May-June 1974 boat loads ranged from under 100 to 1600 lbs. of fish, with a mode of 100-300 lbs. FAO/BID (1973) reports that the total annual production of Montijo (cooperative and non-cooperative) was 227 metric tons. Fish are either sold from the store in the cooperative building, or distributed with adequate cold storage to other areas by the cooperative.

The following five concentrations of fishermen are located on the east coasts of Herrera and Los Santos Provinces, either in the Gulfs of Parita or Panama. The area in which they are located must be examined in terms of a relatively unique local entrepreneur, the Garcias. The Garcias own a fish shop in Chitre and act as middlemen to distribute marine products to other areas such as Panama City and Santiago. Garcia also maintains a stall in the Market of Santiago.

The Garcia's success can be attributed to the good relations they maintain with the fishermen in this area. First, they provide services for the fishermen they deal with: they use their vehicles to purchase food for fishermen at supermarkets where it is less expensive and do not charge for the service. Further, they extend credit and provide loans for both personal and fishing related expenses. Probably most important for the artisanal fisherman, they provide free ice for preservation of fish until it can be picked up, and they use their extensive distribution network and storage facilities to effectively distribute the variable catches.

As with any business, however, not everyone views the Garcias in a favorable light. For example, several fishermen indicated that the Garcias occasionally fail to purchase their fish which subsequently spoils.

The new government run plant recently completed at Mensabe may solve some of the distribution problems related to periodicity of catch in the area. This plant was almost operational in late June 1974. It consists of a substantial building, ice machines, cooling rooms, and fish processing areas with running water. This government run plant will, in effect, compete with the Garcias by sending out trucks with cold storage to purchase fish from fishermen in the area. Nevertheless, problems with distribution reported by some fishermen in the area suggest that there are sufficient resources to permit both of these distributors to compete profitably.

Boca Parita is located on the Gulf of Parita 7 kilometers from Chitre and 240 kilometers from Panama City. The town of Chitre and other local villages encompass a population of approximately 23,200 (FA/BID 1973). Boca Parita has access to good roads to Chitre and the Pan American Highway.

FAO/BID (1973) reports that the fishermen of Boca Parita are organized into a cooperative of 26 members. Prior to the author's visit in June 1974, the cooperative had internal problems resulting from failure to repay loans, and at the time of the visit a National Guard Captain and a MIDA representative were administering the cooperative. The Cooperative had approximately 15 active members in June 1974. However, approximately 25 fish-

ermen were selling their catch through the cooperative. FAO/BID (1973) reports 65 independent fishermen at Boca Parita.

Cooperative equipment includes 6 boats and 5 motors, two of which are inoperative. They also have three monofilament gill nets and one old shrimp net. Some fishing is done with handlines. Fish are landed on a riverine dock which is connected to the cooperative building by a paved road. The cooperative has a tin roofed open shed as well as a substantial shop with running water, electricity, cleaning tables, and cold storage tanks. Ice is brought in with the use of the one vehicle operated by the cooperative.

Fishing times are variable--some fishermen report fishing at night from 2000 to 0800, and others report leaving at 0500 and returning at 1400 to 1500. Fishing is conducted an average of 15 kilometers from the landing place. Cooperative records show that the best cooperative fisherman captured 1771 pounds of fish from 20 to 31 May, 1974, while the second best captured 1370 pounds. In 1972 the cooperative produced 78 metric tons of fish (FAO/BID 1973). Distribution of the catch is handled by the cooperative. Fish are sold from the cooperative store or distributed to other sales points with the use of the cooperative vehicle.

Pedasi is situated on a paved road approximately 70 kilometers southeast of Chitre. It is located close to the eastern most extension of Los Santos Province in the Gulf of Panama.

There are approximately 15 fishermen in Pedasi. All fishermen are independents--there is no artisanal fishing organization. A

fisherman interviewed claimed that the people do not want a cooperative because "in a cooperative some people work and others don't; and those who don't still get the benefits."

The fishermen of Pedasi are reported to have approximately 9 boats and 4 motors. One man uses a net for trapping lobster at the river mouth. Other fishermen use handlines to capture fish. The landing area on the beach is approximately 5 kilometers by dirt road from Pedasi.

Fishermen reportedly go out for 6 to 8 hours per day. In June fishing was reported to be poor with some catches being less than 20 pounds per day. From November to March it is reported that three to four boats can bring in 3000 pounds per day. One fisherman interviewed reports obtaining 30 to 50 pounds of lobster per day with a net.

Fish are sold locally or to middlemen who distribute fish to other areas. The Garcias are perhaps the most active middlemen in this area. Fishermen report that the Garcias were unable to buy all available fish during the last good season and many were lost. Lobster is sold to the Garcias and other middlemen who take them to Panama City.

Pocri is located approximately 50 kilometers southeast of Chitre, just inland from the Gulf of Panama. It is situated on a paved road which connects it with Las Tablas, Chitre, and the Pan American Highway.

There are 9 active, independent fishermen in Pocri. No fisherman's organization is present. The fishermen use three boats, all with motors. Fishing is done with monofilament gill nets and

hand lines. Fish are kept cool in wooden cooling chests obtained from a beer company. Ice is purchased for these chests at \$2 per 100 pounds, and sometimes the Garcias provide free ice. One of the fishermen owns an electric freezer, but power failures have resulted in the loss of fish. Additionally, the freezer is not efficient enough to preserve a full load if they are not prefrozen. Pocerí is 15 minutes by car from the landing area on the beach.

Production at Pocerí often exceeds the capacity of the distribution network. Boats obtain from 150 to 300 pounds per trip. If each boat has at least 300 pounds, the fishermen must stop fishing for several days until the fish are distributed. It is reported that at times a boat can obtain 300 pounds in just two hours.

Fish are distributed through the Garcias or a middleman at Boca Parita. Fishermen report that these middlemen often fail to purchase fish and they must try to sell the fish in the local area (e.g. La Palma and Las Tablas). When fish are distributed by the fishermen themselves they use a pickup truck for which they pay the owner 20% of the selling price of the fish. Overall fishermen are limited by their ability to distribute the catch before it spoils.

Mensabe is situated on a sandy river mouth which empties into the Gulf of Panama. 15 Kilometers of dirt road connect Mensabe with Las Tablas. A paved road leads from Las Tablas to Chitre (30 kilometers) and the Pan American Highway.

There are 22 independent artisanal fishermen fishing from Mensabe. They are at present unorganized, but the new plant at

Mansabo, discussed above, may have some effect on their organization. The fishermen operate 7 boats with motors. For the most part they use handlines, but possess three gill nets. They have an insulated box and ice provided free by the Garcias. Fish are landed on the beach, and at present are distributed by the Garcias.

Guarare is located on the Gulf of Panama approximately 25 kilometers southeast of Chitre. It is situated on a paved road which connects it with Chitre and the Pan American Highway.

The 32 fishermen of Guarare are organized into a precooperative. In June 1974 they reported being organized for more than a year. The precooperative is managed by the manager of the local salinas (salt evaporation ponds). They have an agreement with the Farallon cooperative to obtain tax free gasoline. The precooperative members are interested in becoming a full cooperative so that they can obtain more equipment.

The Precooperative fishermen use 7 motorized boats, two of which belong to the cooperative. The fishermen use both gill nets (3) and handlines. Fish are landed on the beach at the mouth of a river 4 kilometers from the precooperative building in Guarare. There is a storage shed for motors and nets at the landing place. The precooperative now occupies a substantial building which was formerly a schoolhouse. It has electricity, but no running water. The precooperative has a fiberglass cold storage tank and an old inoperative freezer in which fish are iced. The precooperative also has one automobile.

The range of capture per boat is from less than 100 to 300 pounds per trip. The average catch is reported to be 200 pounds. The precooperative sells 200 pounds of fish per week to a regional

hospital. Fish are also sold from the preoperative building in Guarare and are taken to be sold in neighboring towns and villages with the use of the preoperative vehicle.

Aguadulce is situated on the Pan American Highway approximately 190 kilometers from Panama City and adjacent to the Gulf of Parita. It has a population of approximately 8000, and is the location of a large sugar processing company which has a dock for ocean going vessels. Additionally, a large number of salinas (salt evaporation ponds) are located nearby, and Ralston Purina has proposed cultivating shrimp in the immediate vicinity. Local population concentrations include Nata (ca. 3500) and Penenome (ca. 5000).

27 fishermen of Aguadulce are organized into a preoperative. Fishermen report that the organization facilitates obtaining loans and eliminating uncertainty in the distribution of fish. Additionally, the treasurer of the preoperative reported that he has had no complaints from the fishermen concerning the organization.

The preoperative owns 2 boats with motors. Five additional boats and three motors are individually owned by preoperative members. The fishermen use gill nets, throw nets, and hand lines. Fish are landed on the river bank 11 kilometers by dirt road from Aguadulce. The preoperative has an open shed, scales, and several cooling tanks fashioned from old refrigerators at the landing point. Running water and electricity are not immediately available. Ice for cooling tanks is purchased in Aguadulce

at \$1.40 per 100 pounds. The precooperative uses one small toyota pickup truck to move the catch from the beach.

In June 1974 fishermen were capturing both fish and shrimp. Total shrimp catches for the precooperative were reported to be 300 pounds on a good day, 10 pounds on a very bad day, and 70 pounds on an average day. Data on fish captured was inconsistent.

Fish are transported to Aguadulce with the use of a small pickup truck. Some fish are sold in the market in Aguadulce and some are sold by the cooperative manager from his home where he uses an electric freezer to preserve the fish.

Farallon is located on the Gulf of Panama approximately 110 kilometers from Panama City. Local population concentrations include Aguadulce (80 Kilometers, Population 8000), Penenome (30 kilometers, Population 5000), Nata (63 kilometers, population 3500) and Anton (12 Kilometers, population 3500). Additionally, a large National Guard Base is situated near Farallon. Farallon itself functions as a residential area for some of the National Guard personnel and weekend people. It is situated just over the dunes from a lovely beach.

In June 1974, it was reported that 40 families were active in the Farallon cooperative. The cooperative is run by an extremely effective manager who was formerly a school teacher. He uses his former experience in attempts to educate the local fishermen with regard to fishing techniques, management of money, etc. He uses training aids such as films. He suggests that a

cooperative manager should live with the fishermen so as to be sensitive to their needs and be in a position to contact them when they are most receptive. His managerial abilities have made the Farallon Fisherman's Cooperative one of the most successful in Panama.

The Farallon Cooperative owns 30 boats with motors. The fishermen use both nets and handlines. The cooperative owns substantial buildings with running water, electricity, an ice plant, three cold rooms, a fish cleaning plant, freezing plant, 4 trucks, and a maintenance shop. Fish are landed on the beach adjacent to the cooperative buildings.

The Farallon cooperative has diversified its activities by operating a bar and tourist facilities on the beach. Additionally, they are raising and selling substantial numbers of chickens, turkeys, and ducks. These diversified activities keep the cooperative members active during the off season for fish.

Fishing is conducted 5 to 15 miles from the landing area. FAO/BID (1973) reports that the Farallon cooperative produced 155 metric tons of marine products in 1972.

Marine products are distributed both to local population centers and Panama City. FAO/BID (1973) reports that the cooperative exports a yearly average of 100 metric tons of fish to Panama City. Fish are distributed salted or iced to local towns and villages with the use of cooperative vehicles. Fish are sold directly from the vehicles in some areas and through the public market at Penonome. The cooperative manager reported plans to put selling

locations in 27 small towns around Farallon. Marine & poultry products are also sold to a nearby hotel and school.

San Carlos is located on the Gulf of Panama approximately 100 kilometers from Panama City. The Pan American Highway connects it with other parts of Panama.

Twenty-three San Carlos Fishermen are organized into a fishermen's cooperative. The cooperative has one large diesel powered boat (no further data) and 6 other boats with motors. Fishing is conducted with gill nets and hand lines. The cooperative building is located on the Pan American Highway three kilometers from the beach where fish are landed. The building houses a small general store which sells fish locally or to passing motorists. It has electricity, a well, cooling chests, and a refrigerator. Ice is purchased from San Carlos at \$2.00 per 100 pounds. The cooperative has 3 trucks, one of which belonged to the government in June 1974. Recursos Marinos statistics indicate that the total production of San Carlos for 1973 was 143,611 pounds.

Chorrillo is located in Panama City in an area adjacent to the Canal Zone. The 1970 population of Panama City was reported to be 418,013 (Weil, et al 1972).

Thirty-four fishermen operating out of Chorrillo are organized into a fishermen's cooperative. The cooperative members use 21 boats with motors. Most of the boats are 26 foot dugouts. Fishing is conducted with both handlines and gill nets. The cooperative has a substantial building located on the beach where the

fish are landed. The cooperative building contains a selling location with running water, electricity, freezing plant, ice machine, cold rooms, fish cleaning areas, and equipment storage rooms. A UNFAO drying machine is used to dry shark which is packaged in plastic bags and distributed throughout Panama. The cooperative has 2 vehicles.

Recursos Marinos statistics report the 1975 production of Chorrillo to be 153,582 pounds. Most of the fish are sold in Panama City, especially Panama Viejo (Old Panama).

Colon: La Playita The artisanal fishing cooperative in Colon is located on the east bank of Bahía de Limón at the Caribbean entrance of the Panama Canal. The 1970 population of Colon was 67,641 (Weil, et al 1972). Colon is connected to Panama City by railroad, an excellent highway, and the Panama Canal.

The Cooperativa de Pescadores de la Playita has 48 members, 27 of which are active fishermen. The fishermen operate 25 individually owned wooden boats (14 with motor) and 2 cooperative owned fiberglass boats with motors. Fishermen use both handlines and gill nets. The cooperative owns 4 gill nets, and in June 1974 had materials to make 3 more. Fish are landed on the beach next to the cooperative building. The cooperative buildings are constructed of wood and include a two-story office, a meeting hall, an equipment repair and storage building and a fish shop with a cleaning area and scales. The fish shop has several cold storage tanks and electric lights. Running water is not available in the shop.

	Pt. Armuelles	Pedregal	Remedios	Montijo	Podasi	Pocri	Mensabe	Boca Parita	Guarare	Aguadulce	Farallon	San Carlos	Chorillo	La Playita
FISHERMEN IN COOPERATIVE ²	18	00	24 ^p	72	00	00	00	32 ^p	15	27 ^p	40	23	4	48
INDEPENDENT FISHERMEN	25 ¹	95 ¹	-	53 ¹	15	09	11	-	65 ¹	-	94 ¹	-	-	-
COOPERATIVE (BOATS USED) ³	10	-	03	16	-	-	-	07	06	07	30	07	21	27
COOPERATIVE (MOTORS USED) ³	05	-	03	16	-	-	-	07	05	05	30	07	21	16
INDEPENDENTS (BOATS USED)	-	34 ¹	-	-	09	03	07	-	-	-	41 ¹	-	-	-
INDEPENDENTS (MOTORS USED)	-	26 ¹	-	-	04	03	07	-	-	-	13 ¹	-	-	-
PIER/DOCK	0	0	0	X	0	0	0	0	X	0	0	0	0	0
COOPERATIVE BUILDING ³	X	0	X	X	0	0	*	X	X	X	X	X	X	X
COOPERATIVE STORE ³	X	0	0	X	0	0	*	X	X	X ⁵	X	X	X	X
RUNNING WATER AT COOPERATIVE	X	0	0	X	0	0	*	0	X	0	X	W	X	0
ELECTRICITY AT COOPERATIVE	X	0	0	X	0	0	*	X	X	0	X	X	X	X
ICE CHESTS AVAILABLE	X	0	X	X	0	X	X	X	X	X	X	X	X	X
ELECTRIC COOLD ROOMS AT COOPERATIVE	0	0	0	X	0	0	*	0	0	0	X	0	X	0
FREEZER AVAILABLE	X	0	0	X	0	X	*	0	0	X ⁵	X	0	X	0
FREEZING PLANT AT COOPERATIVE	0	0	0	X	0	0	*	0	0	0	X	0	X	0
ICE PLANT AT COOPERATIVE	0	0	0	X	0	0	*	0	0	0	X	0	X	0
DRYER AT COOPERATIVE	0	0	0	0	0	0	0	0	0	0	0	0	X	0
COOPERATIVE VEHICLES	0	0	0	1	0	0	-	1	1	1	4	3	2	0
TOTAL PRODUCTION (METRIC TONS)	74 ¹	146 ¹	-	227 ¹	-	-	-	-	175 ¹	-	155 ¹	65 ⁶	672 ¹	35 ⁶
LOCAL POPULATION (THOUSANDS)	43 ¹	51 ¹	-	23 ¹	-	-	-	-	23 ¹	-	21 ¹	-	418	68

¹FAO/BID (1973) ²Cooperative or precooperative: if precooperative 'p' follows number in column.

³cooperative or precooperative ⁴new plant at Mensabe not included ⁵at home of precooperative manager

⁶Recursos Marinos statistics W = well, water not piped in *at Mensabe distribution plant under construction.

TABLE 1. SUMMARY OF DATA.

Fishing is conducted between 0400 and 1600 daily except Sunday. Recursos Marinos statistics report a total catch of 76,455 pounds in 1973. Most of the catch is sold to local people through the small cooperative shop. Surplus fish are sold on the streets of Colon. Stalls are not rented in the Colon public market for selling fish from La Playita. Reports that fish are brought from Panama City to be sold in the Colon Market suggest that local demand exceeds local supply.

SUMMARY Table 1 summarizes much of the data contained in this report. Conditions at the various locations are expected to change a great deal in the near future as a result of a FAO/BID project which was beginning in June 1974 (FAO/BID 1973). This project consists of reorganizing and modernizing a number of fishing cooperatives on both coasts. The proposal also calls for establishment of a federation of cooperatives in Panama City which will coordinate marketing and operations of the artisanal fleet. Proposed modernization of the artisanal fisheries includes new landing facilities, boats, freezing plants, and a terminal for marine products in Panama City. The project also includes a provision for technical assistance.

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