

A Study of People's Power: BANGUS FRY CATCHERS IN CONTROL OF PRODUCTION

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BANGUS FRY CATCHERS IN
CONTROL OF PRODUCTION

by

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EDITOR'S NOTE:

This slim volume actually contains two independent studies in one, both tackling the problems of the bangus fry catchers of Antique. The first, written by Dr. Amaryllis Torres and Rosita Sia, is a comprehensive study of the Bangus Fry Industry, focusing on the various aspects of the production processes and their efforts in organizing themselves for self-reliance. The second part of this book is a study of the marketing system of the Bangus Fry Industry; written by PROCESS researchers Anna Kristina U. Goño and Kimberly Wylie, examining the marketing process as well as ventures into the prospects of the entire industry. Considering the similarity of the approaches and the concern of both studies, we found it fit to put together this two pioneering studies in a single volume for the benefit of all concerned with the plight of the bangus fry catchers in Antique.

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I. INTRODUCTION

A. Fish as Food

Seafoods, especially fish, have traditionally been a major source of protein for Filipinos. In 1983, 61% of families all over the Philippines consumed first class fish (Manto, V.A. and H. Tohoh, 1986). In 1979, the per capita consumption of fish was 33.5 kg., as compared to 23 kilos of livestock products. By 1989-1990, it is estimated that Filipinos will consume 41 kilos of fish, per capita, while only 26 kg. of meat will be used as food (Min. of Agric., 1980).

The popularity of fish and fish products as food may be traced to their abundance in these islands and, consequently, to their relatively cheaper prices in comparison to meat and poultry (Kent, G., 1984). Of the various species of fish, milkfish or *bangus* is one of the most popular, thus making it a major food source. As such, milkfish is one of the most widely-cultured fish in this country, comprising about 40 percent of total aquaculture production (Goco, N.D.).

Bangus (scientific name *chanos chanos*) is essentially a marine species, but easily adapts itself to both marine and freshwater conditions. It is widely distributed in the tropic and subtropic areas of the Indian and Pacific Oceans. The adult bangus (the *sabalo*) spends much of its time in the sea, but larval stages migrate from the spawning grounds to the coastal zones (*The Philippines Recommends for Bangus*, 1983). The culture of bangus, therefore, begins with the collection of its fry from "the wild" — the coastal areas where they are found in great quantities.

B. The Fry Industry in Antique

Antique is one of the five provinces comprising Western Visayas. Located in the westernmost part of Panay island, it is bordered by Cuyo Pass and the Western Visayas Sea — areas deemed to be among the richest fishing grounds in this country. The coastal areas of Antique, moreover, are known to be abundant in milkfish, and about half of all families living along its shores engage in fry gathering (PROCESS, 1986a).

Despite the economic dependence of municipal fishermen on fry gathering, however, this resource has generally been under the control of non-fishermen them-

selves — the individual concessionaires who have been awarded municipal rights over designated fry grounds. Under this arrangement, the gatherers sell the collected fry to the concessionaires, who determine the value of the stock per thousand units. The latter then sell the fry to dealers or nursery pond operators for later trading to milkfish pond operators.

Given these onerous conditions, the price paid to the gatherers usually represents only 20%-50% of what the fry dealer or fishpond operator pays the concessionaire. Thus, fry gatherers have remained impoverished, with little or no control over the pricing and distribution of this vital resource for aquaculture.

C. Organizing Bangus Fry Catchers

The fishermen in Antique are not ignorant of the reasons for their unabated hardships. In the past year (1986), groups of fry gatherers in parts of Antique have banded together into Bangus Fry Catchers (BFCs) Organizations to convince the municipal councils to grant them direct rights to the fry grounds, rather than work under individual concessionaires. In this manner, the fry gatherers in Belison, Hamtic, Barbasa, Culasi, San Jose, and Patnongon negotiated to be granted permits to collect fry in designated fry zones.

The organization of the BFCs was facilitated by the community workers of PROCESS, which has been working among the farmers and fishermen families of Antique for the past several years. Through PROCESS, the fry catchers were able to gain a broader perspective concerning the laws affecting them, given the chance to reflect on their situation and to trace the roots of their subsistence living. Eventually, the fry gatherers decided a better life may be possible by trying to work as a collective for the right to gather fry from the coastal zones, rather than relying on the payments given by the concessionaires for their collected stock.

There have been few experiences documented in the past decade wherein fry gatherers themselves have been given the right to the fry grounds, either as community groups or as cooperatives (PCARR, 1975). Thus, the successful efforts in Antique to form the fry collectors into BFCs is a significant and rare occurrence. Yet, it is the ideal situation for the municipal fishermen because it enables them to have direct control of their productive resource, and they may have the chance to dictate the price of the fry stock, rather than be at the mercy of the concessionaires. At the same time, this system of production will eventually redound to the welfare of the larger population of Filipino fish eaters, because the elimination of the middleman (in this case the concessionaire) may help bring down the price of bangus, making it a more affordable protein source.

Despite the laudable efforts of PROCESS to facilitate the organization of BFCs, the long-term impact of this alternative mode of fry production remains to be seen. The host of social, political, economic, and even cultural variables in the local setting may work for or against the new system of fry collection. Moreover, the linkage between production and marketing of the fry remains an important factor to assess.

II. THE RESEARCH PROBLEM

A. Statement of the Problem

The *general objective* of this study is to assess the potential impacts of a community-based system of fry production which has the following features:

- 1) The fry gatherers are organized as a group to bid for their own gathering privileges within designated municipal fry zones;
- 2) in lieu of a concession system, the municipality employs a permits system or an open-access system for fry gathering;
- 3) the marketing of collected fry is undertaken by the gatherers themselves and the intercession of concessionaires.

The *specific objectives* include:

- 1) to identify social, cultural, economic and political factors which affect or are related to the implementation of a community-based production system;
- 2) to identify and predict potential economic and social impacts of a community-based fry production model, especially on the fry gatherers themselves, their families and communities;
- 3) to project the economic and social impacts of a centralized marketing system for bangus fry.

B. Framework for Analysis

It is hypothesized that the organization of bangus fry catchers into productive associations is a process influenced by a host of factors and circumstances in the enveloping community. In turn, collective activity and organized decision-making among the fry catchers are expected to affect the lives of the actors themselves, their families, and their respective municipalities.

In this study, the following sets of variables are predicted to be related to a community-based bangus fry production model (see also Figure 1):

1. Influence Factors on Organizing:

1.1 Social and cultural factors:

- past experience in organizing
- personal circumstances of the fry gatherers
- kinship and community relations
- awareness and understanding of the system of fry production, and its implications on personal circumstances
- presence and action of support groups

1.2 Politico-legal factors:

- government plans, policies and programs on the fishing industry
- relationship between the organized BFCs and the local government
- linkages between the organizing fry gatherers and
- community power structure
- laws, ordinances, and legislations on fry gathering and other aspects of aquaculture
- civilian-military relations

1.3 Economic factors:

- present income derived from fry gathering
- potential income from community-based fry gathering
- other household sources of income
- expected volume of fry to be gathered
- price of fry
- demand for fry

2. Predicted impacts of a Community-Based Fry Gathering Model

2.1 Economic Effects:

- increased employment for fry gatherers
- income generation;
- income distribution
- improved farmgate prices
- elimination of pricing control by concessionaires
- conservation of fry grounds

2.2 Politico-legal impact:

- popular participation in decision for production and marketing of fry
- reform, repeal, amendments to laws, ordinances and other regulatory procedures concerning fry production
- re-alignment of community power structures

- closer linkages between BFCs and other community support groups-
- closer linkages between the BFCs and the local government

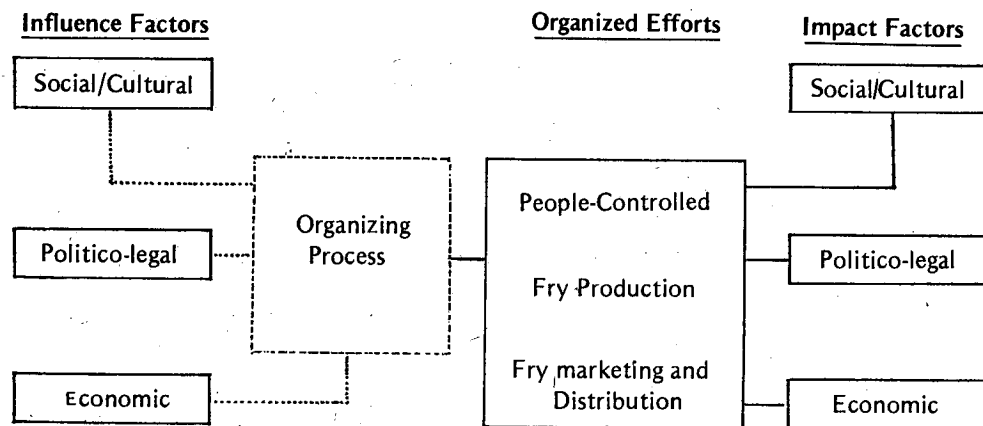
2.3 Social and Cultural Impact:

- improved awareness and understanding of the fry production system
- improved leadership and mobilization skills among local leaders
- improved access to social services
- improved technical knowhow on fry collection

C. Data Collections Strategies

1. Review of research literature on community organizing, the milkfish fry industry, and other relevant materials;
2. Review of PROCESS documents related to the organizing of BFCs;
3. Interview with key informants, including community facilitators, local organizers/leaders, municipal officials, concessionaires, members of the BFCs, and household members.

FIGURE 1: FACTORS ASSOCIATED WITH COMMUNITY-BASED FRY PRODUCTION



III. BACKGROUND LITERATURE

A. Community Organizing as Development Strategy

The development of society hinges on the extent to which its collective personality is enhanced and allowed to blossom to full potential. Genuine development revolves around five core concepts:

1. The individual as the end of development
2. The person as the subject of the development process
3. The development of the collective personality as the expression of individual aspirations
4. Participation of the broad masses in the governance, and
5. Self-reliance as the fulcrum of development (Haque, W., et. al. 1975).

While this philosophy recognizes that the enhancement of individual personality is the end of development, it subscribes to the notion that the development of a nation must be one which involves the greater majority of its people in the process of transformation, unleashing their creative faculties through their collective actions and reflections (PROCESS Brochure, n.d.), in order to achieve independence and self-reliance in its culture, economy, and politics.

These objectives of development are not new, and have found expression since early civilizations as the true aspirations of humanity. Yet, history documents the repeated denial of these values across time, through the instrumentalities of exploitation, maladministration, and misdirected social goals (Haque, et. al., 1975). As a result, underdevelopment is largely characterized by the predominance of a minority elite, who make use of society's natural and manpower resources for the advancement of their own positions rather than for that of the majority, quell the participation of the masses in decision-making, and deny them access to opportunities afforded by social, political and economic spheres of endeavor.

In these societies, therefore, development must mean the process of liberating the majority from "all inhibitions. . . that thus dehumanize its broad masses and prevent them from consummating their full potentials" (Haque, et. al., 1975, p. 15). To achieve liberation, it is first necessary to develop a "collective spirit" through educational and organizational experiences. Community organizing is the strategy

which has been used to achieve this. It is a process by which particular sectors, groups, or geographic communities evolve a collective personality through education, concerted action, and shared reflections.

Community organizing adheres to several basic *principles*, including:

1. the objective of helping communities more towards national transformation, and not only to solve day-to-day problems;
2. recognition and respect for the primary role of the people in national transformation, including a respect for their ability to confront, understand, and deal with the roots of their problems, and to build their own vision of an alternative society;
3. recognition that genuine transformation can only be effected through the people's collective strength; and
4. the use of praxis as a learning approach, i.e., the continuing refinement of theory and understanding through experience (PSS Network, 1985).

Within this set of principles, certain community organizing (CO) *practices* emanate, such as the following:

1. use of the people's felt needs as a starting point for organizing;
2. use of collective process for problem-solving, decision-making, and planning activities with the people;
3. the development of local leaders who will eventually perform the tasks of community organizers;
4. planning for eventual pull-out of the organizers from the community;
5. the formation of open and legal community organizations with publicly-known leaders, members, and activities, and
6. the avoidance of the imposition of an ideology on the people (PSS Network, 1985).

B. PROCESS and its Philosophy of Development

PROCESS is an independent non-governmental organization (NGO) which adheres to these basic principles and practices of CO. It was formally established in 1982, and has since been involved in community organizing efforts in three regions of the Philippines – Central and Western Visayas, and Northern Luzon.

PROCESS espouses a philosophy of development guided by the following tenets:

1. that genuine development is liberative and participatory, with people at the grassroots as the main actors in social transformation;
2. that self-reliance, participation and countervailing power are integral to genuine development; and
3. that development is a means of helping the poor collectively analyze the structures in society which keep them in disadvantaged situations.

In recognition of these principles, PROCESS is considered a facilitator of development. It "learns with the poor and together with them seek ways and means

whereby the people can improve their socio-economic status." While PROCESS seeks to immerse in the people's lives, it ultimately aims to make itself irrelevant to a community that has taken control of its destiny (PROCESS Brochure, n.d.).

With these as its guiding principles, PROCESS has been engaged in the organizing of sustenance fishermen (including fry catchers), farmers and migrant sugar workers. In Antique, PROCESS Community Facilitators (CFs) have been actively engaged, since 1983, in helping out the coastal fishermen achieve economic self-sufficiency.

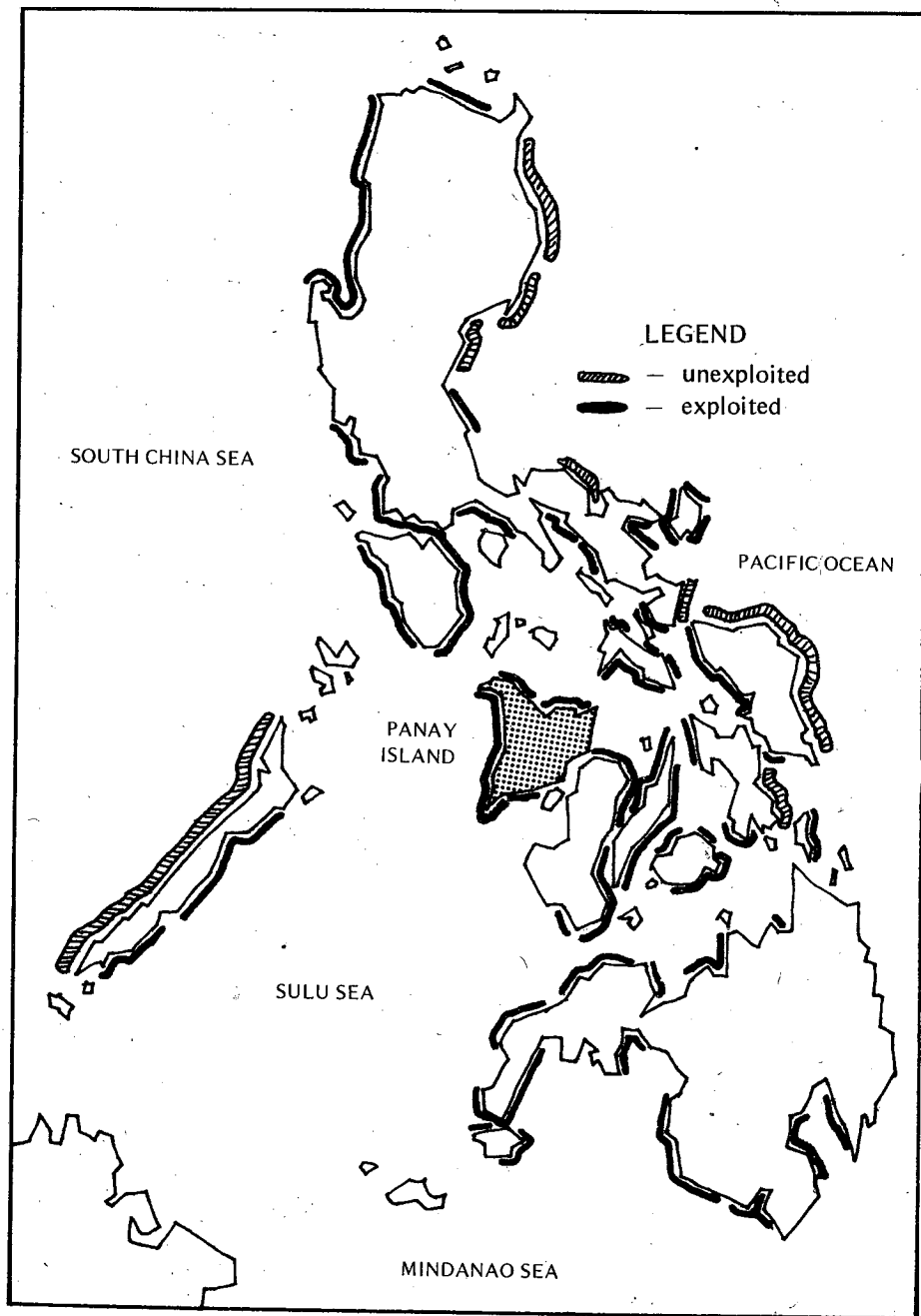
C. The Milkfish Fry Industry

The aquaculture industry in the Philippines is dominated by the culture of bangus, which is considered to be a highly nutritious food source (*The Philippines Recommends. . . 1983*). As such, the major strategies to boost fishpond production under the Expanded Fish Production Program of the Bureau of Fisheries and Aquatic Resources (BFAR) are (1) to increase fishpond yield per hectare and (2) to develop more areas as fishponds (Ganaden, R. et. al., 1984).

Approximately 40% of these areas earmarked for development are for bangus aquaculture. Therefore, inasmuch as the "seedlings" for bangus aquaculture are available to date only from the wild, the bangus fry industry is an important first component of the milkfish industry.

Figure 2 (from Ganaden, et. al., 1984) shows the established and potential fry grounds of the country. From the map, it can be seen that practically all of the coastal areas of the country are sources of bangus fry. Fry gathering thus provides income to about 170,000 people who gather fry along shallow sandy coasts, along tidal creeks and river mouths (PCARRD, 1982). Nonetheless, fry supply varies with location and time of year, and as one travels from north to south in the Philippines, the fry season becomes longer and the peak occurs later in the year (*The Philippine Recommends. . . 1983*). On the average, the fry season begins in March and lasts until July, with May or June as peak months. In some areas – like Leyte del Sur, Western Samar, Bohol, Negros Oriental, Antique and Iloilo, the fry supply peaks within the months of May and June and again from October to November. In the coastal areas of Cotabato and Zamboanga del Sur, fry can be caught throughout the year (*Ibid.*).

The province of Antique is one of the richest fry grounds in the country. Located on the westernmost part of Panay, it is bordered by the Cuyo Pass and the Western Visayas Sea – waters which are the spawning grounds of the *sabalo*. Its fry apparently find their way towards the coastal areas of Antique. Not surprisingly, about half of the families living along the coastline of this province depend on fry gathering for their livelihood. In 1983, there were about 6,000 bangus fry gatherers in 3850 coastal households of Antique (PROCESS, 1986a).



Source: Ganaden et al. The Bangus Fry Industry in the Philippines

FIGURE 2: BANGUS FRYGROUNDS IN THE PHILIPPINES

1. *The Laws on Fry Grounds and Concessions*

In 1952, the Philippine government legislated Republic Act 4003 which empowered municipalities to grant exclusive fry gathering privileges through a bidding process. This Act was enacted to provide a source of municipal income, and has led to the extensive adoption of the concession bidding system by municipalities throughout the country (Smith, I., 1981).

To make a concession system operable, a municipal fishing ordinance is first proposed which defines the areas or portions of the municipal waters to be designated as fishing zones and the fry reservation. This is submitted to the Fisheries Regional Office for approval or disapproval. Once approved, the municipal council, or the *Sangguniang Bayan*, calls for sealed bids for the privilege of milkfish fry gathering. Individuals, partnerships or associations may participate in this public auction of the concessions.

An Auction Committee, chaired by the municipal treasurer and with two others in the council as members, prepares the guidelines and procedures for the bidding, indicating the qualifications of the participants. These notices are placed in conspicuous public places or published in newspapers of general and local circulation. The Auction Committee then conducts the public bidding and canvasses its results. The bids are publicized, indicating the names of the participants and the amount of their bids. The highest bidder then enters into a contract with the municipality, with the mayor signing on the latter's behalf.

The length of a concession is limited to five years. However, municipalities have been more inclined to grant these fry gathering rights for only one to three years, because of the fierce competition for the privilege. In an earlier study, it was noted that concessionaires have usually been single proprietorships or partnerships. Of 36 concessions studied, only one was a cooperative and another a corporation (Smith, I., 1981).

The concession fees are also set by the *Sangguniang Bayan*. In most municipalities along coastal waters, these fees represent a significant portion of revenues. Smith (*Ibid.*) found that Antique was the province most dependent on concession income. In 1976, fees totalling P1.5 million represented 21% of the P7M income of its 15 coastal towns. The fry grounds in Hamtic contributed fees amounting to fifty percent of its revenue for the same year. In Barbasa and Culasi, concession fees contributed 25% and 35% of the municipal revenues, respectively.

2. *Effects of a Concession System on Fry Gatherers*

With the practice of awarding exclusive privileges to collect fry in designated coastal zones only to licensed parties, the produce of fry grounds become the 'property' of the concessionaires, and whatever fry are collected in these sites belong to them. It has also been mentioned that the parties who are able to afford the fees

demand by the municipal councils are private entrepreneurs, fishpond operators, and other wealthy individuals or corporations. In only rare cases are the concessionaires the fry gatherers themselves. The latter, therefore, sell whatever they collect along the shores to the concessionaires, who dictate the price of the fry. The collected fry are then sold in turn by the concessionaires to fry dealers or nursery pond operators.

Figure 3 (from Ganaden, et. al., 1984) provides a bird's eye view of the movement of bangus fry in aquaculture, from the fry grounds to the rearing ponds. It may be noted that the bangus fry change hands several times before they are used as stock in the fishponds. At each level of transaction, the price commensurately increases, indicating that the cheapest price is found at the 'farmgates.' This is the amount paid to the fry gatherers.

In 1986, concessionaires in Antique paid P60 per thousand units of fry during the month of April. In reality, however, each batch of fry exceeds a thousand by about two-to-five hundred pieces, to allow for mortality. Consequently, the gatherer is in fact paid only P0.04 – .05 for every fry. When the fry are sold to the dealers or nursery operators, they pay the concessionaires P250 to P300 per thousand on the average. During the peak months, the concessionaires may pay the fry gatherers as little as P25 to P35 per 1200-1500 fry. In turn these are sold to dealers or operators for P50-P60 per thousand. The concessionaires, therefore, post a mark-up of 100 to 600 percent of the price they pay the fry catchers.

Concessionaires aver that the low prices paid to the gatherers are justified because they provide the latter with material assistance – including equipment for fry gathering, daily subsistence needs, and other materials needed in production. In one study, it was determined that about 26% of fry gatherers receive amenities like the educational benefits. Seventeen percent had cash advances to purchase needed gear and equipments. These advances were repaid during the fry season, with the fry collection as the usual security for the loan (SEAFDEC Annual Report, 1975).

3. Profile of the Fry Gatherer

Owing to the seasonality of its supply, the price of bangus fry varies across the months and across regions. The income of fry gatherers, therefore, fluctuate with market prices and is usually sufficient for family needs only during peak periods (Torres, A.T. & R.F. Ventura, 1983).

A typical bangus fry catcher, therefore, may be depicted as follows (SEAFDEC Annual Report, 1975): The fry catcher is usually male, about 39 years old, and has been to elementary school. Most often this man has resided in the coastal areas all his life.

About 58% of the fry gatherers own their residential lots, while the rest rent or live on relative's lots. Three out of four gatherers may own a radio but almost no one has a television set. Most use the traditional wood stove for cooking and depend on kerosene lamps for their light.

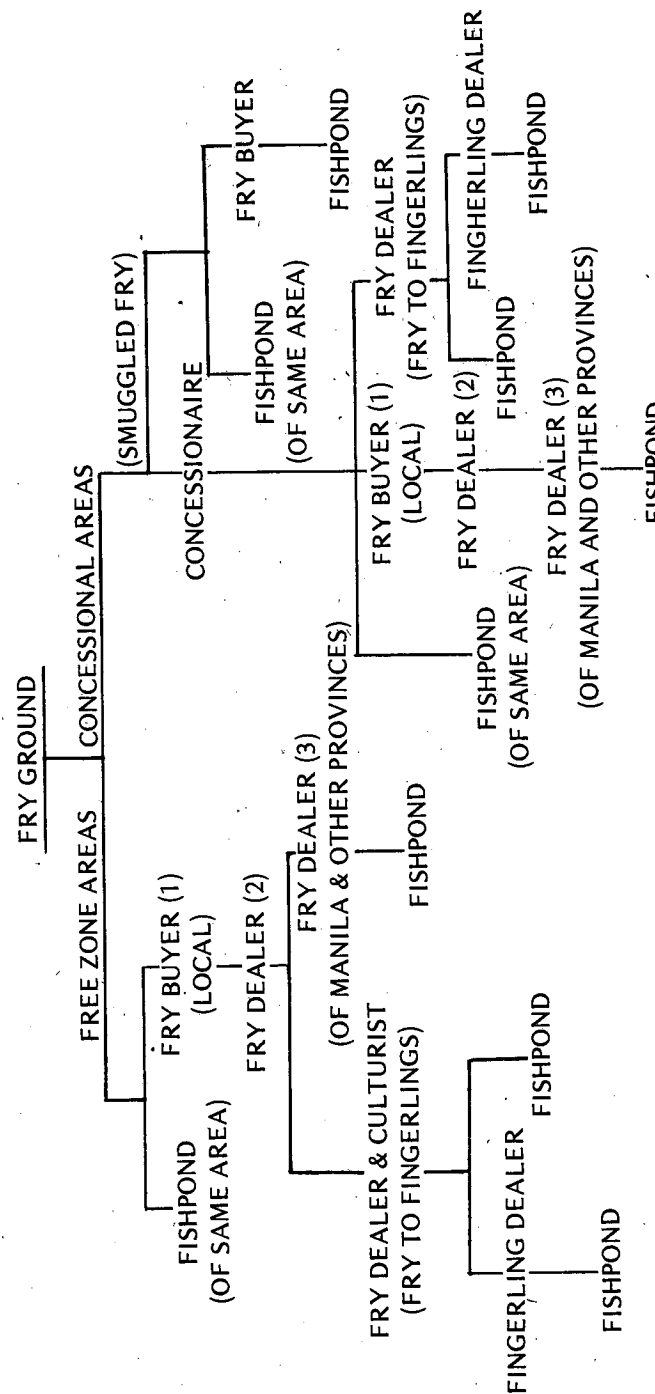


FIGURE 3: FLOW CHART OF BANGUS FRY

In 1975, the fry gatherer on the average earned a net income of P1029 per year, supplemented by earnings from other occupations which totalled P2,225. At that time, it was noted that the yearly income of these gatherers fell below the national annual average income of P3,736. Bangus fry catchers, therefore, belong among the impoverished sectors of the agricultural economy. Even in comparison to the amount of income derived by other workers in bangus aquaculture, it is seen that these fry gatherers receive the lowest for their labor. In 1983, a study made the following comparisons (Torres, A.T. & R.F. Ventura):

- 1) fry catchers obtain a gross income of P1,061 and a net income of P1,019 from fry collection; individual concessionaires, however, receive as much as P80,618 as gross income from which they net P34,298.
- 2) Other fishfarm laborers receive considerably more in wages than do the fry catchers: pond caretakers can net an average of P5,439, representing 60% in commissions from the average net income of P3,030 (date derived from SEAFDEC-PCARR, 1971).

The situation of the bangus fry catchers clearly represents an oppressive situation which requires developmental intervention. To begin with, while these people supply the 'seedlings' for milkfish aquaculture, without which there can be no industry to speak of, they have been deprived of control over the source of the fry and sell their labor instead to concessionaire-entrepreneurs. They have not been made to participate in decisions concerning collection, pricing, and marketing. Instead, these aspects of production are determined by the local officials, the concessionaires and the fry dealers. Because of these circumstances, a quasi landlord-tenant relationship is evident between the gatherers and the concessionaires, and few of the fruits of fry production revert to the former group. The basic human aspirations of these people, therefore, cannot find full fruition. Rather, they have been used merely as the means by which the minority group (in this case, the concessionaires, fry dealers and pond cultivators) fulfill their own aspirations. A program for liberative development appears to be the better alternative for this disadvantageous group.

D. Development Alternatives for Subsistence Fishermen

The conditions of poverty characterizing bangus fry gatherers have received wide attention from the government in the past decade and resulted in their having been exposed to development programs of "varied hue and form" (Smith, I., 1979). The overriding problem of the sustenance fishermen has been recognized to be that of a low standard of living, particularly low income. The factors which contribute to this profile include: limited fisheries resources, inadequate vessel and gear, lack of alternative income sources, lack of market power, and inflation (Smith, I. *Ibid.*).

Past solutions to this situation of underdevelopment tended to focus in the past decade on technological solutions that sought to improve vessel and gear. However,

evidence accumulated which showed that these types of development programs merely exacerbate the inequalities within and between communities. Consequently, later developmental approaches formulated solutions within more holistic approaches that aimed to uplift the conditions of rural areas in general, rather than focused on fishing problems alone. The newer solutions, moreover, recognized that fisheries encompasses input supply, production and distribution sectors, each with linkages to others in the rural communities (Smith, I., *Ibid.*).

Rural development as strategy is concerned with both the provision of physical infrastructures as well as the development or adaptation of rural institutions to changing societies. Primarily, these programs encouraged the involvement of the communities themselves in planning out their projects and thus led to the formation of cooperatives and other fishermen groups. These innovative strategies sought to identify or generate alternative income sources for the households, to increase prices and lower the costs of production, and to raise the market power of the fishermen families (Smith, I., *Ibid.*). Yet, these approaches continued to have limited effects on the lives of the fishermen, because of other technological, economic and social forces at work in the communities.

Within the general framework of participatory planning for rural development, it is also possible to examine efforts made by fishermen themselves to improve the quality of their lives. A case in point is the experience of CALARIZ (organized fishermen in the Cavite, Laguna, Rizal coastal and lakeshore areas).

In 1978, the sustenance fishermen in the lakeshore towns around Laguna de Bay decided to act on the multitudinous problems facing them, which were rooted in two circumstances: (a) the onslaught of privately owned fishpens in the Lake in response to P.D. 704, which encouraged the production of fish through culture, but which then deprived the lakeshore fishermen of access to their means of livelihood; (b) the increasing pollution of the lake because of chemical wastes disgorged by factories in surrounding towns into its waters.

The fishermen underwent the painful process of self-examination and sought to attain a greater understanding of the circumstances facing them through seminars, meetings, reflection sessions, and through mutual sharing of ideas and experiences in fishing. This process was facilitated by a community development agency, the Asian Social Institute, which transmitted to them the necessary skills and perspectives to develop as a collective their own understanding of their problems, a set of solutions identified by themselves, and with their own leadership. Through the process of community organizing, the fishermen in this core group developed the strength to express their problems before the instrumentalities of government (then under martial law), to seek due process before the courts, and to negotiate for their rights to fishing resources (*The Small Fishermen of Binangonan*, n.d.). In this manner, CALARIZ was born, and eventually expanded to cover all the lakeshore and coastal communities of the three provinces. Today, there are about 17 such local fishermen's groups in the lakeshore and coastal areas.

Expectedly, there were many attempts to discredit CALARIZ by both private parties and by government. Counter-efforts were also initiated by the Laguna Lake Development Authority (LLDA), which attempted to organize its own fishermen's groups through promises of technical and credit assistance. CALARIZ responded by setting-up its own socio-economic projects in participating barangays, wherein the fishermen were given control, management and participation in the profits and ownership of the enterprises. Through the demonstrated success of these projects, other fishermen were drawn to join the organization, and sought participation in its cooperative-type projects.

Through the years, CALARIZ has instituted procedures to encourage collective action. Its members pay dues which are used for capital build-up, and they are entitled in return to vote for representatives in the organization's working committee, which sets policies, defines jobs, enters into technical linkages, and dispenses benefits to its members (*The Small Fishermen*, n.d.).

Its work has not been without problems. Foremost among these have been the scarcity of capital for socio-economic ventures and difficulties in obtaining assistance from technical experts. Nevertheless, the members of CALARIZ persist, and they believe that the advantages they receive continue to outweigh the shortcomings, primarily because the organization assures them "participation and control of their own destiny." CALARIZ has also been able to dispense profits broadly, to restore craftsmanship and quality, and to increase their productivity.

IV. THE COMMUNITIES OF THE FRY CATCHERS

Included in this study are the municipalities of Antique in which bangus fry catchers organizations have been formed. From north to south, these are the coastal towns of Culasi, Barbaza, Patnongon, Belison, San Jose, and Hamtic (Figure 4).

A. Brief Profile of Antique

Antique is one of the four provinces on the island of Panay. It has approximately 2522 square kilometers of land area, and 155 km. of coastline. The economic life of this province is dominated by both farming and fishing. In 1975, it had a total population of 308,484, of which 51.7% belong to the labor force. There are some 59,092 working in agriculture, fishing and forestry. Milkfish fry is one of the natural resources of this province. In 1985, it was determined that more than 113 million fry were gathered, particularly in the municipalities of Hamtic, San Jose, Patnongon and Culasi. As mentioned in the previous chapter, in 1982 there were some 6,000 milkfish fry gatherers in 3,850 fishing households. Moreover, fry gathering becomes the main source of household income during the peak gathering periods. For example, a survey in the town of Bugasong showed that during the peak month of May about 85% of the households engaged in fry collection while only 10.7% did so in February, a lean month.

B. The Fry Industry and the Gatherers in Antique

In 1982, it was estimated that 60% of the households engaged in fry gathering collected about 40,000 fry, at most. The average volume collected per household was 27,000 with a value of P4320 when prices were most favorable. In turn, the municipalities derived some 20 to 30 percent of their total municipal incomes from the concession fees, charging in terms of the richness of the fry grounds. These fees, therefore, may range from P30,000 to P250,000, to be paid within the span of a year.

The fry gatherer in Antique is not much different from the one described earlier. In 1982, the fishing household had a median net income of P2890 per annum. Their houses are usually built of light materials with about 30% enjoying the use of water-sealed toilets and 7% with electricity. Only 30% reached high school and about 5% have no education at all. (PROCESS, 1986a).

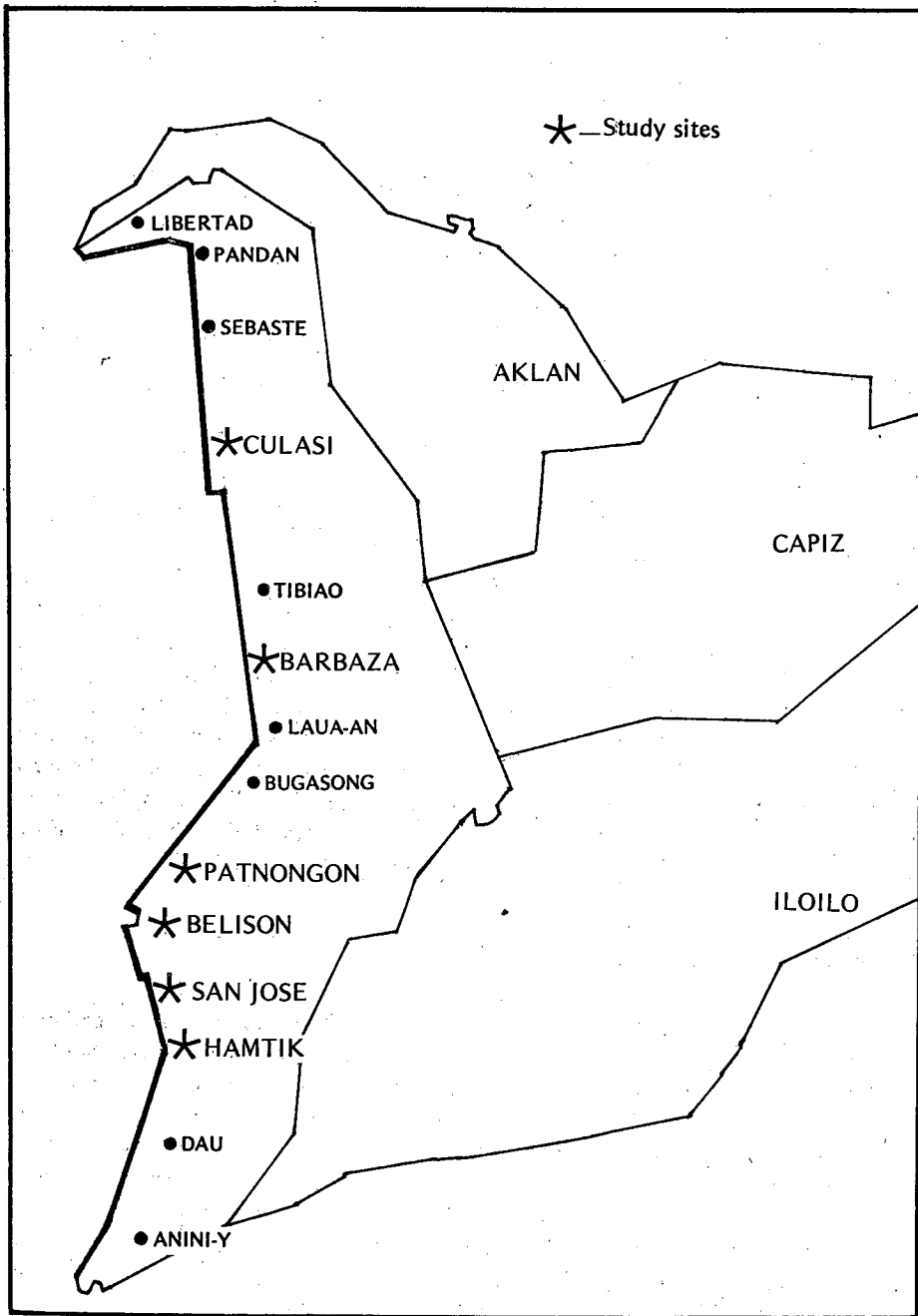


FIGURE 4: MAP OF ANTIQUE

C. Brief View of the BFC Communities

The six municipalities wherein BFCs were organized are necessarily coastal communities. A road network extends the whole length of Antique, connecting the northern municipalities with Aklan and the ones towards the south with Iloilo. Buses provide transportation between municipalities, and between provinces on the island. Within the towns, jeepneys provide the major means of transportation. There is an airport in San Jose, which is the provincial capital, but it was closed during the year the study was done because of a damaged runway.

San Jose, as the capital, possesses all the basic facilities and social services. Next to it, Culasi is the most advanced town, with its own sea port and a District Hospital. The other municipalities likewise enjoy the facilities of a health center, schools, government buildings, etcetera. Nonetheless, many of the people in these communities are poor, and eke out only a meager income from farming and fishing.

V. FACTORS AFFECTING THE ORGANIZATION OF FRY CATCHERS

According to development practitioners, community organizing is a tool for liberation in "a situation where a level of dissatisfaction exists within a given order," and that this dissatisfaction becomes the catalyst for the development of collective consciousness and collective action (Maulana, S., 1986). Dissatisfaction may be felt whenever it is perceived that something due to a person or party does not accrue, when needs are not gratified, or the requirements of an event are not fully met (Merriam-Webster Dictionary).

An individual or a group of persons undergoing a shared experience will feel dissatisfaction to the extent that (a) they are fully aware of the logical train of events leading up to desired consequences; (b) they are aware of the reasons for present shortcomings in attaining their goals; and (c) they know of alternative paths to obtain stated goals. In the underdeveloped society, there are many events which may give rise to dissatisfactions, especially whenever the inequalities between persons or classes are markedly evident. However, this 'feeling' becomes a potent motive for change only when the disadvantaged group perceives an alternative solution within their reach to be an effective means towards obtaining more satisfactory experiences. In this manner, the educative processes integral to CO lead participants to become aware of their stringent circumstances more fully, to identify alternative paths of action, and to seize upon a promising course of action as a collective entity.

A. Preconditions to Organizing

The fry gatherers of Antique definitely felt dissatisfaction concerning their circumstances. They felt that the prices paid them for the fry were too low, that illegal fishing and pollution had diminished the supply of fry in the wild, and that the trawl boats that fished offshore contributed to the destruction of the fry sanctuaries (PROCESS, 1986).

They knew that the concessionaires traded the fry for at least a hundred percent more than what they had been paid. Yet, they were made to bear the burden of offsetting mortality costs by adding at least 200 more fry to every batch of a thousand. The fry gatherers lived hand-to-mouth, dependent on the concessionaires for even their

most basic needs, and they secured loans through their fry collections. At times, the payments for the fry were delayed and this resulted in even greater deprivations for the fishing households.

Because the incomes obtained by the gatherers were severely inadequate, they sometimes resorted to smuggling, and sold their catch to 'outsiders,' or parties other than those with concession rights. In this manner, they obtained better prices for the fry but they also faced the risks of imprisonment or torture at the hands of the concessionaires' henchmen. Illegal activities, therefore, failed to become a reasonable solution to their unsatisfactory lives. In fact, it merely added a new dimension to their already difficult existence — fear of torture or apprehension.

Unfortunately, the fry catchers were not fully aware of their rights to the fry grounds, and that there were alternatives to the system of bidding for the fry concessions. Thus, while they rankled under the existing conditions of fry production, they were at a loss for other solutions. It was at this time that the community organizing process was initiated.

PROCESS has been engaged in CO work in the town of Tibiao since 1982. At that time, they were working with the farmers, and one fishing community in Malabor. Through the years, it became clear that the bangus fry catchers was a significant sector of the province, both because of their number and their role in aquaculture. Initial social investigation revealed that the fry catchers had problems unique to their sector, which had been left unattended to by both governmental and non-governmental development agencies. Dominant among these were the relations which they had with the private concessionaires, around which their livelihood as fry gatherers revolved.

B. The Organizing Process

1. Role of the Agency

The circumstances which led to the formation of the core groups in the six municipalities essentially followed the principles and practice of CO (cf. PSS, 1985). The Community Facilitators (CFs) started groundwork in different coastal barangays adjacent to Tibiao in early 1986. The barangay captains and other local officials were first approached to tap indigenous local leaders. House-to-house visits were undertaken and the problems of fry collection were discussed. In addition, the CFs accompanied the fry catchers while at work, to obtain a better understanding and appreciation of their occupation, its procedures, needed gear, and attendant difficulties. Small meetings of community members were called, and the problem faced by the fry catchers in the concessions were discussed. Slowly, the CFs obtained a better view of the problems and needs of the fry catchers, the solutions they identified, their values and attitudes towards work, the concession system and their life circumstances.

With the wealth of information at hand, and the presence of interest groups among the fry gatherers, the time was opportune to begin the conscientization

process. Training seminars were held in the various communities, with the ultimate goal of helping the participants realize the value of organized effort as an alternative approach to their problems. The following training objectives were set:

- (1) to provide the fry catchers with basic information on the social, political and economic situation;
- (2) to identify common problems affecting them;
- (3) to verbalize the need for them to be organized in order to solve the articulated problems; and
- (4) to help them understand development.

The objectives of these seminars were successfully met. In their feedback to the CFs, the fry gatherers articulated that they had benefitted from the training because it allowed them to learn new ideas from the exchanges and the sharing of experiences, it had opened their eyes to the fact that they were being exploited, and it gave them a new perspective – that they may be liberated from their present hardships through organized action.

Through these seminars, it also emerged that there were common perceptions concerning their problems in fry production. The articulated problems included: the low price for fry, especially during peak months; the number of fry required to offset mortality; and the decreasing supply of fry in the wild. It was pointed out that the first two problems are interrelated and that they result from the bidding system in obtaining concession rights. These procedures allow only the wealthy to avail of the rights to the fry grounds. At the same time, to be able to pay the municipal fees, the concessionaires pay very low prices to the gatherers for the fry and require at least 20% more fry per batch for mortality allowance. The diminution in the supply of fry, in turn, was perceived to be largely the result of illegal fishing methods which destroy fish sanctuaries, of water pollution caused by the spill-over of chemical pesticides and other wastes, and of the illegal catching of the *sabalo* by commercial fishermen.

2. Organizing Goals

In the face of the first two problems, it was agreed that the bangus fry gatherers may get a 'better deal' out of life if they were given the concession rights themselves. In this way, they would have direct control over the resource, from which they drew their livelihood. It would mean that they could raise the prices paid each gatherer for the fry, since they could sell directly to the fry dealers or pond operators themselves. It also meant that there would no longer be a dependency relationship between them and the concessionaire – entrepreneur, and that they could agree as a group on what the rules and procedures would be for apportioning income to each member-gatherer.

Realizing these, the fry catchers were eager to form their organizations. They contacted other fry catchers in their barangays and in other areas within their municipalities. They shared their views with these other individuals and convinced

them of the merits of organized action to obtain the concession rights. From these efforts, the various *Katilingban kang mga Similyador* were formed in the municipalities. First among these were the groups in Hamtic and San Jose, followed by those in Belison, Patnongon, Barbaza, and Culasi. In all these area, the fry gatherers agreed that there would only be one association to represent them in negotiating for the concession rights – the *Katilingban* . . . of the municipality. In effect, this meant that only the members of these associations could have the privilege to gather fry within the concessions.

While these described circumstances were generally true of the BFC's there were also particularities in each town. Worthwhile mentioning is the situation in Patnongon. Even before PROCESS had formed its core group in this municipality, the Patnongon Credit Cooperative Incorporated had already made initial efforts to form a fry catchers cooperative. However, the municipality stipulated that to qualify as a bidder, the group had to be registered with the Securities and Exchange Commission. This discouraged the fry catchers and the formation of the group failed to push through.

Aware of their interest to organize, the CF assigned to the town contacted the fry catchers, which eventually formed an ad hoc committee. They entered into negotiations with the Patnongon municipal council and sought to bid for the fry concessions. Fortunately, there were no other bidders to contest their claim, and the *Katilingban kang mga Similyador sa Patnongon* won gathering rights over the municipal fry grounds. Nonetheless, the same consciousness-raising procedures were followed for the fry catchers to recognize the value of organizing.

3. Factors Facilitating Organization

In analyzing the situation in Antique which accompanied the efforts to conscientize and to organize the fry catchers, the *political* scenario emerges as an important *factor*. The key element which pushed forward the organization of the bangus fry catchers was the post-Revolution euphoria which swept the country in 1986. In the various municipalities of Antique, the old power structures which had held sway in Antique hastily crumbled with the demise of Mr. Marcos. In place of the former local officials, Officers-in-charge were appointed who had been faithful and rabid campaigners for the Laban Party of Corazon Aquino. People's power continued to be a rallying point and various issues were aired through collective action. It was thus an opportune time for people's power to emerge.

Antique used to be 'Pacifador Country,' and its politics and economics were controlled by Arturo Pacifador, a close Marcos associate. As member of the then Philippine parliament, he engaged Antique Governor Evelio Javier in a power struggle during the hastily-called presidential elections in 1986. When it was apparent that the LABAN candidates had won, Governor Javier was assassinated. Pacifador was the prime suspect in the case.

With the triumph of Corazon Aquino following the events of February 1986, the Antique governorship and all the local seats were taken up by LABAN supporters. In

most of the towns, the officers-in-charge (OICs) for the mayoralty were professionals with no visible vested interests in the fry grounds. For instance, a lawyer in the Regional Office of the Ministry of Labor became the OIC of Patnongon. In Hamtic, the OIC was a science graduate and a fishpond operator. In San Jose, both the acting mayor and vice mayor had been former members of the Provincial Development Staff. In Culasi, the OIC was a physicist, who had served as a school teacher and as secretary to the municipal judge. Similarly, the members of the *Sangguniang Bayan* in the various towns were changed. In Culasi, in fact, the president of the fry catchers association became the Barangay officer-in-charge in place of the former barangay captain, while in Barbaza the chairman of the Barangay Council joined as member of the *Katilingan kang mga Similyador sa Barbaza*.

The rapport between these local officials and the bangus fry catchers, therefore, was easier to develop than what it would have been if the former had still been those of the old order. In at least two of these towns, the major concessionaires in the past had been the mayors themselves and would not be expected to be sympathetic to the cause of the fry gatherers.

Apart from the political situation in Antique, *cultural factors* must also be mentioned as circumstances which may have helped hasten organization. As in other rural communities of the Philippines, the towns of Antique are characterized by the presence of only a few families which are related through blood and marriage ties. Thus, when a member of a clan becomes convinced of the goals of an organization, it is easy to enlist others in his/her family to join also. In consequence, the leadership and membership of the various BFC organizations are characterized by kinship relations.

Past experience of communities in development efforts also serve to influence the prospects of organizing. The fishermen in Antique are no strangers to these experiences themselves. All six municipalities have had community associations in the past. Predominant among these are those initiated by government, including the Samahang Nayon (mentioned by residents of Belison and Hamtic), the SEAP-Kalusugan Project in Hamtic, a Mothers Club in San Jose, credit cooperatives in Patnongon and Belison, and a BLISS Livelihood Association in Belison.

Community development agencies linked to religious groups have likewise attempted to form local associations, such as a consumers' cooperative in Barbaza and a youth group in Patnongon.

Two communities also report having had previous indigenous associations for agriculture: Barbaza and Culasi. The JINBAR Fishing Venture was a fisherman's cooperative which was made up of local fishermen. Previously, two politicians in separate instances had also tried to organize the fry catchers (circa 1972-73) in order to improve their lot in life. However, these efforts were apparently shortlived. In Culasi, there is a group of farmers and agricultural workers in the upland barangays which is battling for land reform rights. Unfortunately, the fry catchers are not familiar with its activities.

In summary, therefore, it is seen that the political situation following the 'snap revolution' in February 1986 had a tremendous influence on efforts to empower bangus fry catchers for their rights to fishing resources. This circumstance, along with the community organizing process to which the fry catchers became participants, facilitated the development of awareness concerning their fry gathering rights and opened vistas of alternative solutions to their unabated poverty.

VI. THE FRUITS OF ORGANIZED ACTION

It was stated earlier that, in the analysis of the bangus fry catchers, their poverty situation has persisted because the bidding system for the concessions technically deprived them of the right to 'own' the fry which they collect along the shores. Hence, they sought a solution which would enable them to sidestep this existing fry collection system.

A. Negotiating for Concession Rights

When the bangus fry catchers had gained sufficient perspectives on their situation, they were then ready to engage in concerted action vis-a-vis their demands. In this case, the fry catchers were interested in gaining access to the fry grounds directly, without having to sell their produce to other private parties.

1. Negotiations in San Jose and Hamtic

The municipalities within which the fry gatherers had been first organized were those of Hamtic and San Jose. In these areas, the people decided almost immediately after they had been appraised of their situations that they wanted to obtain the concessions for themselves. Thus, soon after the *Katilingban kang Manogsimilya sa San Jose* (KSMJ) and *Katiligban Kang Mga Similyador sa Hamtic* (KASIHA) were organized, negotiations with the municipal governments also commenced. The gist of these discussions was that the organizations themselves wanted to be participants in the public bidding, and that these associations represented the fry catchers in the two municipalities, with chapters in separate barangays.

In San Jose, the negotiations with the *Sangguniang Bayan* lasted for a month, after which the concession rights were awarded to the KMSJ. However, while these negotiations ended in August 1986, the effectivity of the award was for 1987, or a period of one year. The KMSJ was asked to pay a concession fee of P70,000, to be remitted in installments over the period of the award.

In Hamtic, the negotiations also transpired in August, but the award became effectively immediately because, by this time, the former concessionaire failed to pay his outstanding installment fee.

The agreement entered into by KASIHA with the municipality was as follows: each fry gatherer would pay P200 for each fry collection gear he used. Since KASIHA had 1096 members, with a minimum of 600 collection gear, this meant that the municipality would earn as much as P120,000 from gear fees, a value bigger than the concession fees in the previous year.

2. Alternatives to Cash Payments in Belison

In Belison, a permits system was instituted for 1986, inasmuch as there were no other bidders for the concessions then. The fishermen paid an average of P520 per permit to gather fry.

Unfortunately, by December 1986, there were still some permit fees which had not been fully paid. The municipal officials, therefore, were inclined to grant the concession to another party. The *Katilingban kang mga Similyador sa Belison* (KASIBE), with the community facilitator, opened discussions with the mayor, and offered that the fry catchers be allowed instead to pay the equivalent of their fees by working on the municipal roads projects as laborers. The mayor agreed. In January, negotiations commenced once more concerning the concession fees. KASIBE proposed that the concession be given for P65,000 while the *Sangguniang Bayan* wanted to peg the fee at P80,000. Eventually, the two parties agreed that the concession would be awarded to KASIBE for P70,000. If this amount is to be shared by the members, each would pay P409 for the year. The contract was also executed on two levels: with the KASIBE as an organization, and with each of the individual fry catchers. The KASIBE was made responsible for ensuring that its members pay the corresponding individual fees, while the amount to be contributed by the fry catchers was stipulated in their own contracts. In effect, therefore, the system operating in Belison is a modified permits system, with the organization made responsible for its members' obligations to the municipality.

3. Dealing with Competition in Patnongon

The situation which arose in Patnongon is interesting. The mayor of this town during the past regime, had allegedly been the principal concessionaire to the fry grounds. With the change in administration, the mayor gave up his rights, and even failed to remit P154,000 in concession fees. Thus, the municipality resorted to a permits system.

At the same time, the Patnongon Credit Cooperative Incorporated (PCCI) was trying to win the concessions. However, it failed to organize the fry gatherers into an effective body. Hence, when the *Katilingban kang mga Similyador sa Patnongon* (KASIPA) was organized, it became the negotiating party for the fry gatherers who wished to participate in the bidding process.

The municipal government set many stringent conditions for the KASIPA to become a bidder. For one, it required that the association be registered with the

Securities and Exchange Commission. Secondly, it asked for a surety/property bond in the equivalent of P128,000 from KASIPA. The fry catchers expectedly had a difficult time meeting these conditions, particularly that which involved a surety for their bid. Their situation became doubly difficult when the PCCI and another private party now indicated interest in the fry concessions. In the face of these adverse events, the KASIPA met and studied various ways of responding to the requirements of the municipal council. They rejected the mayor's suggestion that they obtain loans to put up the required fee. Instead, they insisted that they be allowed to put up as surety whatever amount they could raise. The mayor accepted the suggestion in the end, because he was no longer sure that there would still be other bidders for the fry grounds.

As a result of these talks, the KASIPA put up P20,000 in real property as surety for their bid, plus a cash bond of P1700. In addition, the municipal council accepted their first installment of P40,000 in June 1987 (all the money that the members could raise at that time), in lieu of the originally required amount of P64,000. The concession fee, however, was fixed at P160,000, the same as that for the previous year.

4. *A Sharing System for Fry Income*

The process of empowerment in Barbaza took longest. The *Katilingban kang mga Semilyador sa Barbaza* (KASIBA) initiated discussions with local officials as early as October 1986. The fry catchers, like those in the other municipalities, wanted to participate in the public auction for the fry grounds. However, the *Sangguniang Bayan* vehemently rejected their offers, and two such meetings wound up with both parties shouting and insulting the other. Eventually, the fry concession was awarded to a private individual.

This person held the concessions until mid-year. He was able to pay the initial installment of P110,000 but could no longer pay the rest of the fee (totaling P220,000). At that time, the municipal itself took over the concession, and the fry catchers sold their collected stock to the town.

By September, the KASIBA renewed its efforts to negotiate for concession rights. A month later, or by October 6, 1987, the fry catchers organization obtained the exclusive privilege to gather fry in Barbaza. Instead of a straight concession fee, moreover, the municipality and the fry catchers agreed that the latter would turn over to the former earnings equivalent to 30% of the collected fry, while KASIBA would retain and distribute to its members 70% of income.

Culasi, on its part, was able to obtain gathering privileges for its fry catchers in a relatively short time. The *Katilingban kang mga Semilyador sa Culasi* (KASICU) started negotiations for the fry grounds in January of this year. By March, they were awarded the rights to the concessions because there were no other bidders.

The agreement which they developed with the municipal council was the model emulated by the KASIBA. In Culasi, the KASICU successfully put forward the

suggestion that their fees be pegged to a percentage of the earnings from the fry: 25% for the municipal coffers and 75% for the organization and its members. The KASICU also agreed to take charge of accounting for the fry collected and sold by the organization.

B. *Effects of Negotiations on the Fry Catchers*

It may be seen that the process of organizing enabled the fry catchers in the different municipalities of Antique to explore ways and means by which they could obtain gathering privileges for themselves. By voicing their demands in unison, the municipal governments had to listen, assess the merits of their suggestions, and either agree to the fry catchers stipulations or negotiate for compromise agreements.

1. *Fry Catchers in Control of Production*

One of the significant gains obtained by the fry catchers is that they were allowed to operate the fry grounds as concessionaires themselves. In this case, the parties awarded the privilege were the local fry catchers associations. Thus, the responsibility over the operations of the fry grounds became largely an internal matter to the organizations, which instituted their own rules and procedures for fry collection, accounting, storage and marketing. This decidedly provided the fishermen with many opportunities to engage in problem-solving and decision-making activities — processes essential to empowerment.

For instance, the Board of Directors of the various BFC organizations are composed of the respective presidents or vice presidents of the barangay chapters. This structure allows them to consult their constituencies on their plans for collections, income distribution, and other matters concerning the operations of the concessions. In fact, the board members aver that all their plans are submitted to the barangay assemblies for discussion. Whenever there are objections raised, these are discussed in the meetings of the board, threshed out and referred again to the barangay members. The barangay *Katilingban* also try to meet as a regularly as possible, usually once a month. With these participative mechanisms, the members are constantly updated on developments in the municipality while the board of directors of the *Katilingban* also have a continuous flow of information from the individual members.

2. *Understanding Rules and Instituting Innovations*

Another effect of organized effort was that the fry gatherers were forced to learn and to understand details of the bureaucratic procedures involved in obtaining concession rights, something that they did not completely know as mere fry collectors. In the process, they also discovered that there were many alternatives to the old system of concessionaire-gatherer fry production. One of the innovations instituted through the BFCs is that of profit-sharing on the income from bangus. This system is

currently the practice in the municipalities of Culasi and Barbaza. With this arrangement, the fry catchers are spared the risks of not having enough earnings to pay the concession fee. At the same time, the municipality is able to extract revenue from the fry grounds commensurate to the volume of stock harvested rather than in terms of projected fry production levels. The *Katilingban* then acts to safeguard the interests of both the municipality (by ensuring that honest and complete reporting of fry collections are made) and the fry catchers (by giving them the percentage on earnings due them).

Another change facilitated by the collective action of the fry catchers is that they have been able to negotiate downwards the concession fees dictated by the *Sangguniang Bayan*. Thus, in San Jose, the fry catchers succeeded in lowering the fee from P80,000 to P70,000. In Belison, it was reduced from P80,000 to P70,000. In Patnongon, while the fee remained as stipulated by the municipal officials, the KASIPA was able to modify the surety requirements of the concession and to reduce the amount of the first installment. In Hamtic, instead of a straight fee for the concession, the use of collection gear became the basis for the payments.

3. *Developing Leadership Skills*

Since the BFCs themselves had to deal with the municipal councils directly, they had to obtain new skills for handling this situation. Thus, the community facilitators engaged them in a series of planning, problem solving and role-playing sessions, so that they may anticipate what could transpire during the negotiations, and plan their responses. In the end, the officers and BFCs who took part in these meetings felt greater personal strength and self-confidence than before.

Among the new-found skills of the fry catchers were the ability to preside at meetings, to talk about the community situation and answer questions from members. The BFC leaders also perceive themselves as having developed skills in mobilization. For instance, through the work of these local organizers, the fry catchers in Belison worked together to build the *bodega* (storage hut) for the collected fry. They also worked together to build artificial reefs. In Hamtic, the members of the KASIHA do not only participate in production activities. They can also be counted on to join community affairs such as rallies, independence day parades, and other activities of the *barangays*. New leaders, therefore, emerged from these dynamics.

C. *Attendant Influences on Organizing*

An analysis of the events accompanying the efforts of the BFCs reveals that there were other forces which helped resolve the question of concession rights. One important factor to note is that, in five of these six municipalities, there were in fact no other persistent bidders for the fry grounds. In Hamtic, there was supposed to have been a private concessionaire in 1986. However, this party issued bouncing checks to

the municipal government, and his lease was therefore revoked. Since this happened towards August, the municipality readily agreed to the offer of the KASIHA to take over the concession under new arrangements, rather than re-open the concession was originally awarded to an individual. However, he, too, was unable to complete payments on the required fee. Thus, one offer of the KASIBA to run the concession in his place was accepted.¹

The exception was in the town of Patnongon. In this municipality, the PCCI and another entity signified interest in participating in the public auction for the fry grounds. However, when the bids were called for two times, neither party formalized their bids. Hence, given time constraints and potential revenue losses, the municipal council finally decided to award the concession to the KASIPA.

In all the municipalities, therefore, there was no fierce opposition to the bids made by the *Katilingban kang mga Similyador*. The question may then be asked: why not?

The lackadaisical interest in the fry concessions may be traced to the observation, by the fry catchers and concessionaires alike, that the supply of fry in the Antique waters has been declining through the years. Comparative data given by the BFC informants on the volume of fry catch in 1986 and 1987 bear out this observation in most of the municipalities. For example, in Culasi, the average catch in 1986, across 10 months (from March to September, 1987), was about 3,600 fry. The following year, from March to September, the catch has only been about 2,000 fry. Similarly, in Barbaza, the catch across the two years declined by about half, with no catch reported for the months of July and August. Hence, entrepreneurs were hesitant to invest in the fry grounds.

Another reason that should be mentioned is that the former concessionaires were usually politicians in these areas. For one reason or another, they lost interest in bidding for the concessions once there was a changeover in the local government. There are rumors that these individuals were in fact only 'dummies' of former Marcos cronies. Thus, the 'network' of investments in the fry grounds has apparently been broken by the shift in political power.

D. *Changes in Occupational Patterns*

The shift in the system of fry production, from a concessionaire-gatherer relationship to that of gatherers-as-concessionaire, carries with it certain impacts. Originally, the fry catchers fought for this privilege with the vision that it would improve their economic situation. The extent to which this has been realized will now be assessed.

1. *Effects on Employment*

Employment generation for fry catchers has, in general, been encouraged by the new system of fry production. Using membership records of the different *Katilingban*

as basis, it is seen that there were more fishermen who sought employment through fry gathering this year than in the previous year. This was observed in Culasi, where the membership rose from 897 to about a thousand, particularly during the peak season; in Patnongon, where there were 480 members listed this year against 224 last year; and, in Belison, where five more fry catchers enlisted in the KASIBE, bringing the total to 177.

2. Apportioning Income from Sale of Fry

The BFC organizations instituted procedures in the apportionment of income from the sale of fry that would provide the following:

- a) income for the fry gatherers
- b) payment for the concession fees;
- c) capital build-up fund, to be used later in payment of future concession bidding fees;
- d) general fund for the association, to cover costs of supplies, transportation for marketing, and other petty expenses; and
- e) barangay funds, to cover the cost of transporting fry from the villages to the municipal BFC *bodega*.

The proportional allocation of the income from fry differed across municipalities, and was arrived at after consultation with the members. The schedules of payment of these dues were also arrived at through consensus. In addition, the system used by the BFCs to market fry affected the method of apportioning income.

In general, there are two approaches to marketing practiced by the BFCs. In Culasi and Barbaza, the KASICU and the KASIBA have instituted centralized marketing. The first thing that these associations did was to borrow capital to enable them to purchase fry from the members. With this system, the members of KASICU bring their collected stock to the barangay bodega, where they are counted. A mortality allowance of 200 fry is required. Later, barangay officers or other members of the *Katilingban* make a recount and bring all the fry to the central storage hut. The fry are kept here, recounted and fed until buyers come to purchase them. A Pricing Committee determines the selling price of the bangus fry. In principle, the price of the fry becomes distributed as follows: 25% for the municipality, 65% for the labor of the fry catchers 5% of which or 3.25% of the total is reserved for the Capital Build-Up Fund (CBU), and 10% for operating expenses.

In the other towns, the associations wait for buyers to come and make their offers. If the prices offered are acceptable to the members, then the fry are collected and brought to the purchasers. In this case, no allowance for fry mortality is asked of the fry gatherers. The income is then distributed as follows: the fry catchers are paid from 80% to 95% of the price of the fry, 3% – 5% are allocated to the capital fund, 1% – 3% for the general fund, and 1% – 3% for the barangay funds (see Table 1). In

cases, however, where there are no ready buyers, the officers bring the fry to the buying centers in Capiz or Iloilo. When this happens, then a mortality allowance of 100 per thousand is stipulated. The same apportionment of the income is then instituted.

3. Income Earned from a Community-Based Fry Production System

Finally, it is important to determine the value of income earned from fry gathering by the individual fry catchers. In order to do this, the fry catchers were asked to estimate the volume of bangus fry which they had collected and the corresponding prices at which these had been sold. In the course of the interviews, it was apparent that fry gatherers account for their produce and earnings on a daily basis. Hence, the estimates provided by them for each month of the year refer to average daily estimates of fry catch and fry prices (see Table 2).

The profile of fry collection may be drawn as follows:

- a) There are municipalities in which the fry supply declined from '86 to '87, namely: Culasi, Barbaza, and Patnongon.
- b) The fry catch in Belison, San Jose, and Hamtic increased appreciably across the two years, almost double in volume despite the fact that only 9 months in 1987 have been accounted for.
- c) At the time of the researcher's visit to Antique in September, the KASIBE in Belison reported that it had no fry collections for the past three months, or from July. Similarly, the fry catchers in Barbaza had no collections to report for March and September.
- d) In general, the range of prices for fry in each of the municipalities increased from 1986-1987, from P20 per thousand during peak months to P200 per thousand on lean months. In 1986, the range was only from P20-P170.
- e) Despite the improved price of fry, the average price obtained for the catch in 1987 tended to decrease in most of the municipalities. It was only in Culasi and San Jose where the comparative yearly prices increased rather than decreased. In Belison, there were no incomes reported for the lean months.

Apart from bangus, the fishermen are also able to catch prawn fry in the Antique waters. The income from these catch supplement what they get for milkfish fry. The town of Culasi reportedly had the most voluminous catch of prawn fry in the past year, with a maximum harvest of 7000 fry in February. The KASIPA reported prawn fry collections for lower volumes but for six months in the past year. The fry catchers in San Jose harvested as much as 3000 prawn fry in January, but had no catch from March to July. Other towns with many lean months for prawn fry were Hamtic and Belison. In Barbaza, there are no reports at all of prawn fry collections. (Table 3).

In most municipalities, the 1987 volume of prawn fry harvest was smaller than what it was for 1986. The exceptions were in the towns of San Jose and Hamtic, where the current catch has been almost double what it was in the previous year. How-

ever, they have been able to collect prawn fry for only four months this year (accounted up to the September).

Corresponding to these catch, the sales from prawn fry tripled in value in Culasi and San Jose. It remained almost the same in Patnongon and Hamtic, and decreased in Belison. Despite the smaller volume of prawn fry harvested, however, the fishermen obtained considerably better prices for these than for bangus fry (compare Table 2 and 4). During lean months, the highest price commanded by bangus fry was P200. For prawn fry, the sale price reached P650. During the peak season, bangus fry sold for as low as P20 per thousand; prawn fry was sold for P60.

When these figures are compared to data obtained in 1974 (Librero, A., et. al.) the following may be noted:

a) the range of prices reported in Antique for the past two years is wider than what it was in 1974 (Table 5). Twelve years ago, the highest reported price for bangus fry was P80; in the past two years, it was P200. However, bangus during peak months has been sold in Antique for as low as P20 in the past two years; in 1974, the lowest reported price of bangus fry in Western Visayas was P30.61.

b) similarly, the price of prawn fry has increased considerably over a 12 year period, and can now command as much as P650 per thousand. In 1974, the highest selling price for prawn was only P94.52. The lowest prices for this fry in the two periods studied have not been too different however: in 1974, prawn fry was cheapest in July at P52.61; in 1986, in the months of September and October, prawn fry sold for as low as P60 in Culasi.

Since the data obtained from the BFCs are daily estimates of municipal catch rather than household data, it is not possible to estimate the income obtained by each fry gatherer. Interpretation of the available information, nevertheless, allows the following conclusions to be attempted:

a) If the price of fry is used as indicator, then it is seen that potential earnings from bangus fry have not changed considerably in the past twelve years.

b) Despite its lower potential volume in the wild, the expected income from prawn fry collection is at least a hundred percent better than what it is for bangus fry. However, the longevity of this potential income is uncertain, considering the relative success in prawn spawning technology in recent years (SEAFDEC, 1975).

c) If the price of fry has not changed, what has altered is the fact that the income obtained by the BFCs now represents a larger share of the sales. As discussed in the earlier section, the individual fry catchers in the organized municipalities receive as much as 60% to 95% of the income from sales. If the fry were sold for P60, therefore, a fry catcher could receive as much as P37-P57 per thousand of catch. This is decidedly bigger than what they had previously received from the concessionaires.

d) To further increase the income of the fry gatherers, it is important to help improve the supply of fry in the wild. The obtained data shows that in certain municipalities of Antique, the volume of catch has indeed depleted considerably. Technology and protective measures are thus required to improve harvest. This will be discussed further in the next section.

TABLE 1. Volume of Catch of Bangus Fry Per Catcher

Month	Culasi		Barbaza		Patnongon		Belison		San Jose		Hamtic	
	1986	1987	1986	1987	1986	1987	1986	1987	1986	1987	1986	1987
* March	1,000- 2,000	100 1,000	500		20-100		1,000**		300-500	500	** 30	200
April	1,000- 2,000	1,000 2,000	1,000	200	50-500	10-100	2,000	100- 1,000	1,500- 2,000	800 2,000	** 100	200
*** May	5,000- 10,000	5,000 10,000	1,500	200	1,000 2,000	100 1,000	5,000	100 1,000	6,000 10,000	5,000 27,000	150	300
*** June	5,000 10,000	1,000 4,000	1,500	400	50-100	100 1,000	500	100 19,000	300-500	3,000 4,000	300 500	
July	1,000 2,000	1,000		400	50-100	10-100			300-500	300 1,000	200 50	
August	300 500	100	200		20-100				100-200	200-300	10	200
September	300 500	100	500		20-50	10-50	1,000		1,000 2,000	100 800	50	300
October	5,000 10,000		500				1,000		50-100		200	
November	5,000 10,000		500									
December	500 1,000											

* last week
** localized catch

***peak — catching is daily; the rest, catching is during
"sicla" (new or full moon) only — about 2 weeks

TABLE 2. Prices of Bangus Fry (in P/000 fry)

Month	Culasi		Barbaza		Patnongon		Belison		San Jose		Hamtic	
	1986	1987	1986	1987	1986	1987	1986	1987	1986	1987	1986	1987
March	60	200	80		28		160		30	170	170	170
April	50	200-110	60	60	28	22	100	45	30	170	160	160
May	120-25	120-65	40	50	18	8	50	45	25	75	100	75
June	20-25	65-55	30-25	20	8	30-	40	30-25	20	65	60	50
July	50	22-30		20	18	30			20	65	40	35
August	60	35-65		25	20-22				20	10-25	45	55
September	60	65	50	35	20-22	40	100		20	55	55	55-60
October	60		50				100		25		90	
November			50									
December												

TABLE 3. Volume of Catch of Prawn Per Catcher

Month	Culasi		Barbaza *		Patnongon		Belison		San Jose		Hamtic	
	1986	1987	1986	1987	1986	1987	1986	1987	1986	1987	1986	1987
January	5,000-7,000	5,000-7,000			100-1,000	100-500	300	100-1,000	100-1,000	190	50	300
February	5,000-7,000	5,000-7,000			100-1,000	200-1,000	150	200-1,000	200-100	600	30	200
March	200	200			50-500	200-1,000						
April					50-100	100-500						
May		20										
July		20										
August	100	30			20-50	5-50	500		100	50-80	20	20-50
September	1,000-2,000	50			50-100	20-300	500		100-200	300	30	30
October	1,000-2,000				100-500		1,000-2,000				200	
November	2,000-3,000				100-500		1,000-2,000				200	
December	5,000-7,000				100-1,000		2,000		100-300		50	

* no prawn

TABLE 4. Prices of Prawn Fry (in P/000 fry)

Month	Culasi		Barbaza*		Patnongon		Belison		San Jose		Hamtic	
	1986	1987	1986	1987	1986	1987	1986	1987	1986	1987	1986	1987
January	100	150			240	280	300	20-290	120	270	150	180
February	100	200	240	240	240	240	300		120-110	400	140	190
March	100	340-650	180	220								
April		450	200	180								
May		120										
July		300										
August	50	500	360	350	80	80	80	510	500	500		
September	60	500	360	380	120	120	120	470	450	450		
October	60		280		250	250	250	200	200	200		
November	100		180		300	300	300	170	170	170		
December	100		160		300	300	300					

* no prawn

TABLE 5. Quantity, volume and price of fry gathered per month by species

Western Visayas, 1974

Month	Bangus			Prawn		
	No. of reporting	Quantity/ gatherer thousand pcs.	Value/ gatherer thousand pesos	No. of reporting	Quantity/ gatherer thousand pcs.	Price/ gatherer thousand pcs.
January	—	—	—	3	1.67	135
February	11	1.00	80	2	1.90	159
March	20	4.09	149	1	3.00	270
April	32	10.83	623	3	2.33	177
May	36	9.44	289	6	1.83	116
June	22	10.36	362	6	1.97	99
July	14	7.56	214	4	1.15	61
August	6	3.28	159	6	1.75	140
September	6	5.68	248	5	1.68	95
October	9	6.38	418	7	1.00	68
November	7	3.49	225	8	3.14	289
December	2	9.00	630	8	4.09	386
Monthly Average		8.11	344		2.20	174

Source: Librero, A. et al., SEAFDEC Research Paper No. 1, 1979

E. Alliance-Building

Integral to the process of the development of a self-sustaining people's organization is the task of building working relationships with various support groups in the community and with interested parties and institutions operating on a broader scale. Such an effort is important in many ways. First, enlisting the support of other sectors in a community can strengthen the voice of the aggrieved or discontented. Second, there may be resources needed by a mobilizing group which are in the possession of other organizations. Third, relating with other institutions, agencies or sectors can provide new interpretations to presenting problems, broaden the scope of potential solutions and even raise the level of the collective action — from a local issue, for instance, to one with regional or national implications.

1. *Linking-up with Local Government*

In its effort to obtain rights to the fry grounds, the BFCs were afforded the opportunity to work with other institutions and associations. Foremost among the community forces with which the *Katilingban* had dealings were their respective local governments.

The mayors and municipal councilors in three municipalities have been highly supportive of the BFCs. Two have expressed their support by helping the associations find buyers for the fry, going as far as Iloilo and Manila to establish contacts. In another town, the municipal officials helped link the BFC with the Bureau of Fisheries and Aquatic Resources (BFAR) for technical assistance, especially for the construction of artificial reefs. Another set of local officials have given advise to the fry catchers on how to build their capital sufficiently, so that they will have a bigger surety for next year's bid. In another town, the mayor is no longer concerned as much as before concerning the town's revenue share from fry sales. After all, he says, the people continue to earn, and that is what's important.

The background of these various local officials has undoubtedly affected their stance vis-a-vis the fry gatherers. As was described in the previous chapter, many of them are college-educated, and former government employees. The fact that they failed to 'fit-in' with the former government also points to their idealism. Of course, one cannot also discount the possibility that these men are cultivating the favor of the fry catchers. Knowing that they have become a powerful voice in the six municipalities, they can be significant political allies in future elections.

2. *Linkages for Technical Assistance*

In three of the studied municipalities, the BFCs enlisted the assistance of the BFAR through the Antique Provincial Food and Agricultural Council, a multisectoral agency. The members of these associations were offered training in fry handling,

storage, packaging and transporting. In the course of training, the issue of a steadily declining supply of bangus fry was discussed. Knowing that the despoilment of marine ecology had much to do with this problem, the BFAR technical staff introduced the fry catchers to the method of building artificial reefs.

The project was first tried out in one barangay of San Jose and later replicated in Belison. The structures were made out of bamboo, which the BFCs constructed themselves. These man-made reefs were intended to provide sanctuary to the spawning sabalo, who had been deprived of her natural spawning grounds by illegal fishing practices.

The investment in these structures paid-off for the fry catchers in Belison and San Jose. Soon after the artificial reefs were constructed in San Jose, their harvest increased dramatically. From a maximum collection of 2000 fry in April, they managed to gather as many as 27,000 fry the following month. Similarly, in Belison, the bangus fry collection rose from 1000 in May to 19,000 in June. The increase in fry harvest experienced by these two municipalities, therefore, may largely be accounted for by the construction of the artificial reefs. None of the other BFCs were able to collect the quantity of fry that were reported during the peak season in these two areas. The BFC in Hamtic also had plans to build artificial reefs, but a problem arose with the local government before they could carry this out.

3. *Linkages for Credit Assistance*

The Antique Development Fund (ADF) was established by Governor Enrique Zaldivar to provide financial assistance for development activities in the province. The KASICU availed of the assistance of ADF when it established its central marketing scheme in Culasi. First, the technical staff of the ADF helped conduct a feasibility study on the marketing scheme. Soon after the zone rights were awarded to KASICU in March, they applied for a loan to capitalize the buying of fry from the individual fry catchers. The loan, in the amount of P63,000 was approved the following month. The arrangement with ADF is that the loan should be repaid in the period of a year, with 12% interest.

In Barbaza, the KASIBA obtained its capital fund from KASSAMMA-Malabor, a fishing cooperative in the town of Tibiao which was put up in 1983 through the *Kilusang Kabuhayan at Kaunlaran* (KKK) project of the former Ministry of Human Settlements. The KASIBA borrowed P5000 from this cooperative also to be used for fry payments.

4. *Networking with other Fishermen*

Having learned that the Minister of Agriculture was arriving in San Jose to join in activities marking the death anniversary of Evelio Javier, the BFCs decided to use the occasion to air their grievances and demands. The Minister (at that time, Min.

Mitra) left early and the fry catchers were unable to have an audience with him. Instead, they decided to use the time to share experiences and discuss common problems. At this meeting, the idea emerged that the fry catchers should form themselves into a federation with the municipal BFCs as members. The BFCs were attracted to the idea, and the following month, in March 1987, they met in Malabor, Tibiao, to report on the status of their organizations and to formalize the establishment of the Antique Federation of Small Fishermen's Organizations (*Kahublagan kang Mangagmay nga Mangingisda kag Similyador sa Antique*).

The following month, a provincial congress was held to draft the constitution and by-laws of the Federation. These documents were then presented in barangay meetings of the BFCs for study and discussion. Four months later, these were ratified and the officers of the Federation elected. A workplan was then drawn up, and actions for the resolution of common problems across the province were initiated.

Not satisfied with these accomplishments, a Consultation was held in September among Visayan fishermen, under the sponsorship of PROCESS. Representatives from fishermen's organizations in Antique, Aklan, Capiz, Iloilo, Negros Occidental and Bohol attended the consultation. A Federation called *Hublag sang Mangagmay nga Mangingisda sa Bisaya* was born through this consultation. Its initial activity is to lobby in Congress for legal reforms to improve the lot of small fishermen, especially through the repeal of P.D. 704, the abrogation of the RP-Japan Treaty of Amity, Commerce and Navigation, the formation of a Department of Fisheries, and the recognition of the fishermen as a separate sector to be accorded representation in government.

With the formation of the provincial Federation and of the Visayan Federation, the problems of the fry catchers have changed in scope and character. Now, it is no longer confined to the daily problems of production and income. Instead, the issues have been raised to those which deal with the political structure, foreign trade relations, and sectoral participation in governance. The original organizing goals of improving economic conditions has become transformed into a more basic aspiration — the right to be heard and to propose structural reforms as a significant sector of Philippine society.

VII. BIRTH PAINS IN THE EVOLUTION OF A COLLECTIVE SPIRIT: SYMPTOMS AND ANTIDOTES

Thus far, the analysis which has been undertaken focuses on the web of circumstances affecting, and affected by, organizing. In this section, the problems attendant to the development of an embryonic organization — changing in form from a mass of separate individuals to one with a collective personality — will be dealt with. The analysis will be based on informant interviews, discussions with the community facilitators and interpretations of data.

A. Problems Concerning Income from Fry Production

When the fry catchers are asked what they perceive to be their most serious problems, they mention "*mababang presyo*" and "*walang huli*" (low price of fry; no catch). These problems, it must be remembered, were those which originally motivated them to join the BFCs. They are rooted in factors still outside of the control of the organizations, including the natural variation in the volume of fry across the months of a year, and in the decline in its supply due to ecological problems. Yet, since they are still the most pressing concerns of the fry catchers, viable solutions will have to be identified.

Related to the problem of obtaining a good price for the fry is that of marketing. As was mentioned in the previous chapter, most of the BFCs rely on fry buyers coming to the municipalities in order to sell their fry. Thus far, they have not been able to penetrate the network of fry buyers and dealers to the extent that they would have orders for fry well in advance, at agreed prices, and with set dates of delivery. It was only in the latter months of this year that the local officials have reportedly tried to secure buyers for the BFCs. Greater consciousness regarding the need to 'unload' the harvest quickly has been injected among the BFCs so that they can set plans for the systematic marketing of their produce. Otherwise, the problems of fry mortality are very real, as well as control over the storage and transport of the stock within reasonable periods after collection.

The increase in fry collection in the two barangays wherein artificial reefs were installed also brings home the point that more assistance on fisheries technology are needed by the fry catchers. Although the depletion in the fry supply has been a

consequence of the malpractices of trawlers and other fishermen, they can apply technology to enhance the marine environment so that their own livelihood may be safeguarded and improved. More frequent interactions with the BFAR are apparently needed in this respect, as well as assistance from the two BFCs which have reaped the benefits of artificial reef construction.

The depletion in the supply of fry across months in a year is a biological phenomenon which makes fry gathering a seasonal activity. For this reason, fry collection is deemed a secondary source of income in most parts of the country, and is engaged in by coastal dwellers for only a quarter of the year. The fry gatherers in Antique are more fortunate because the supply peaks twice during the year in its surrounding waters. Be that as it may, it is important to develop other sources of income during the lean months, or the fishing families will continue to face starvation and deprivation of other basic necessities.

This solution is already perceived by the fry gathers themselves, and several BFCs report that their plans include the introduction of income-generating projects. Several have been encouraged by the profitable venture of the KASAMMA in Malabor, Tibiao, and are thinking also of engaging in *otoshi ami* fishing. Others likewise express the view that supplementary sources of income are important so that they may be able to pay the permit fees more easily.

Finally, the fry gatherers express the need for more training on fry handling, packaging, storage and transport. If part of the reason for the low volumes of fry collection is caused by stock mismanagement, then more technological knowhow on these matters are definitely warranted. The experiences of the BFCs who underwent such a training program would also be a useful reference point.

B. Problems in Developing Organizational Commitment

Another set of problems usually encountered by community organizations is that related to the development of group cohesiveness: including the processes of developing trust, interest in organizational activities, and movement towards common goals. A strong organization is characterized by these elements, and every evolving aggrupation of individuals has to grapple with these dynamics. The *Katilingban* in Antique are no exceptions.

Some members express suspiciousness concerning the motives of their officers, especially when the matters of payments for the fry are concerned. Others are apprehensive that the latter do not give them their fair share, and that they receive unreasonably high allowances for managing the projects.

On their part, the officers complain that the fry catchers do not attend the barangay assemblies diligently enough, so that they fail to be informed of developments and plans related to fry production. In fact, they counter that the ones who gripe are those who have been relatively uninvolved in the work of the associations.

In Hamtic, the cordial relations between the KASIHA and the municipality was disrupted because six of its members violated the agreement that the fry would only be sold through the association. Afraid that they would be suspended from further gathering activities, they spoke against the KASIHA to the mayor, who thereafter revoked the concession right of the organization. As a result, an open-access system was instituted and anyone may now collect fry in Hamtic. This has led to the demoralization of the KASIHA and its membership has been reduced.

Apparently, further efforts to strengthen the BFCs are badly needed. As suggested by some officers, leadership training programs should be conducted, as well as other activities which will enrich the interaction between the members. Consciousness-raising activities are also needed, and the work of the Federations should be allowed to seep down to the villages and households. Perhaps, an awareness and understanding of the more complex socio-political forces which affect their livelihood and lifestyles will motivate the fry gatherers to become more active and constructive members of the BFCs.

In order to be able to do these effectively, there is a need for the CF and the local organizers to deepen their understanding of the interpersonal-cultural milieu of the fry gatherers, so that they may be encouraged to undertake collective action more spiritedly. Other types of community activities should be encouraged as well, in order to keep the collective spirit alive. These may include health care projects, community theater and arts, community crafts, or other equally appealing (and necessary) undertakings.

In other words, there is a need to be more holistic in planning the development of these communities of fry gatherer-fishermen. After all, even if economic life pervades our existence, its enhancement can be approached from many angles. Integral to these efforts however, is the education of the individual to appreciate the fact that his development is pegged to the development of his community and society, and that he has to act with them if he is to help himself.

VIII. PEOPLE'S POWER IN THE MAKING: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This study was undertaken to identify the factors which facilitate the development of a community-based production system, and to project its potential impacts on the participating families. The framework for the study assumes that social, cultural, political and economic variables affect the organizing process, and that the evolved community-based system will in turn lead to changes and development in the social milieu. The setting for this study was Antique, particularly the six municipalities which have been assisted by PROCESS to form fry catchers organizations.

A. Facilitating Factors in Evolving People's Organizations

The primary ingredient necessary to the development of organized action is the *awareness* by the concerned sector that their present circumstances can be improved through collective decision-making and activity. In this particular instance, the felt need was for direct access to concession rights so that income from fry collection can be increased. The identified approach to obtaining concession rights, moreover, was to take concerted action in dealing with the municipal council and its imposed procedures for awarding this privilege.

The appreciation by the fry catchers that organized effort may be a feasible alternative to the existing system of fry production was facilitated by the *community organizing process*. Through these dynamics, the fry catchers had the opportunity to come to grips with their problems, to determine that they were equally dissatisfied with their existing life situation, and that they had the abilities within themselves to work out decisions and plans for an alternative fry production system.

Given these preconditions, the process of enhancing the 'collective spirit' was influenced further by the *sociopolitical situation* in Antique. It was fortunate that these development occurred along with changes in the political structures of the local governments in the municipalities, such that the powers which had been entrenched in the Marcos regime was now thrown over, and replaced by officials with deeper commitments to the democratic process. In the process, it was not only the helmsmanship of community power which was broken but the network of controls over the fry concessions, as well.

B. The Content of Collective Action

The efforts of the fry catchers' was directed at obtaining rights to the fry concessions as an organized sector. To do this, they had first to be recognized as a bidding party by the municipalities with the required capital to pay for the concession fees. The recognition of the BFCs as bidders again necessitated people's action, and led to a series of *dialogues and negotiation meetings* with the municipal governments. In these confrontations, the BFCs established their valid rights to bid for the fry grounds and offered alternative procedures for awarding the bids — in terms of cash payments as well as organizational relationships between them and the municipalities.

Through these mobilizations, the organizations grew and strengthened. Dealings with the municipalities provided the BFCs with the opportunities to test the limits of their skills in leadership, planning, decision-making and negotiations. They were made to realize the potent powers of collective actions.

Nevertheless, the take-over by the people of the concessions was facilitated by the *perceived fact* that, during their negotiations with government, there were no other persistent bidders to the fry grounds. This happened partly because the former concessionaires' had been identified with the old municipal power structures, but largely because the fry grounds had dwindling reserves of fry and were no longer seen to be economically viable by businessmen. Thus, this vacuum was easily filled by the BFCs.

C. Impacts of People's Power in Fry Production

The long-term effects of a community-based fry production system cannot yet be projected because the *Katilingban* have just taken over the concessions. Nevertheless, certain impacts may already be visible, particularly in terms of income distribution.

With the demise of private concessionaires, a larger portion of the income derived from the sale of fry can now be distributed to the fry collectors. Whereas in the past they received only about 10% of the sales, they were now able to obtain as much as 90% of the income from the fry. As a result, the number of community members who seek employment by collecting fry through the BFC concessions has generally increased.

Another outcome which the community-based fry production system has facilitated is the development of direct linkages between the BFCs and support groups: including the local governments, financial and technical support institutions. A concrete example is the linkage established with BFAR, which offered the BFCs training in fry management and extended assistance in building artificial reefs. Because of this, the concerned BFCs have been able to increase fry production at least fourfold.

The relative success of the BFCs has also emboldened them to network with fishermen organizations all over Antique, and even in the whole Visayas. Their new

agenda for action involves proposals for legislative reform and for more direct participation in policy-making for fisheries.

D. Problems and Proposed Solutions

The nature of problems faced by the BFCs may be classified in two ways: *one*, those concerning fry production itself, and *two*, those concerning the internal affairs of the people's organizations.

1. Problems on Fry Production

Presently, the most serious problems which face the BFCs concern the declining supply of fry in the wild, and the development of a more effective marketing strategy. Both have solutions already within the reach of the BFCs.

The diminishing supply of fry has been traced to the destructive treatment of marine resources. Hence, protective and reclamatory procedures have to be instituted to safeguard and enhance marine ecology. Legal and technological measures need to be proposed and implemented, and the BFCs can take the lead in these actions.

Marketing strategies have to evolve which ensure the timely sale of fry while obtaining reasonable prices. More efforts have to be exerted in order to penetrate the network of fry dealership. The same mobilization tactics that were employed in gaining access to the concessions may have to be tried out, in order to obtain a foothold within the fry marketing network of the region.

Corollary to these two activities, other sources of family income have to be generated, to augment what are presently obtained from fry especially during the lean months of production. Thus, more technical assistance programs are necessary to develop alternative livelihood skills, after which credit assistance must be sought.

2. Problems in Building People's Organization

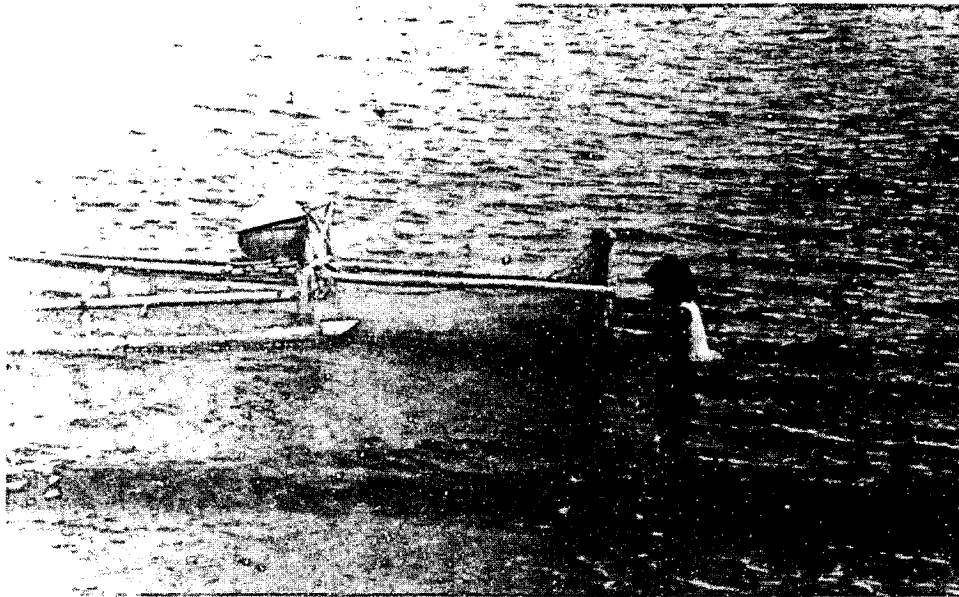
Organizing and the evolution of a collective personality are dynamic, and not static processes. Hence, problems which surface in the early stages of developing people's power are anticipated. In the BFCs, organizational ills are related to an incomplete understanding of the organizational goals by the members, consequently diminishing their overt commitments to organized work in fry production.

To overcome these limitations, more effort should be exerted to educate the members on (both the organization's goals as well as on their individual circumstances) and to engage them in other forms of collective action. The task of the community facilitators now has to be redirected toward helping the BFCs in strengthening their internal cohesiveness, to improving interactions between members and leaders, and to evolve more effective communications and feedback channels.

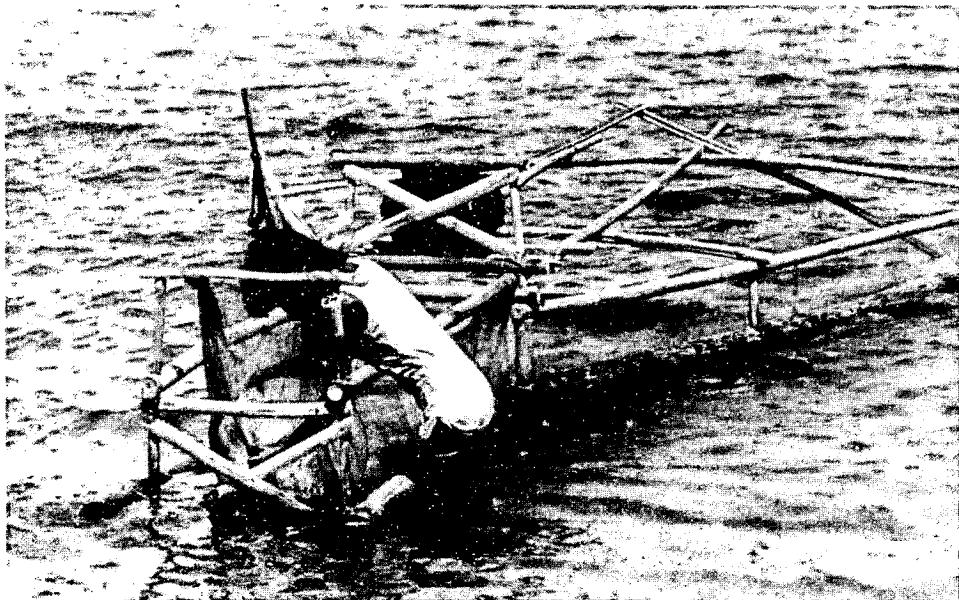
An analysis of the bangus fry catchers' organizations demonstrate the latent power of organized action. It also indicates that there are circumstances in the enveloping society which may either facilitate or deter the efforts at evolving people's organizations, and that the dynamics of developing a collective personality require difficult interrelations and strategies at various stages of the organization's life. The perspective which develops from these observations, therefore, is that while community organizing must remain close to, and in step with, the people's felt needs and consciousness, the organizer (or community facilitator) must be constantly aware of the generic nature of the process, so that new skills, perspectives and relations are developed in the collective body as people's power blossoms to full fruition.



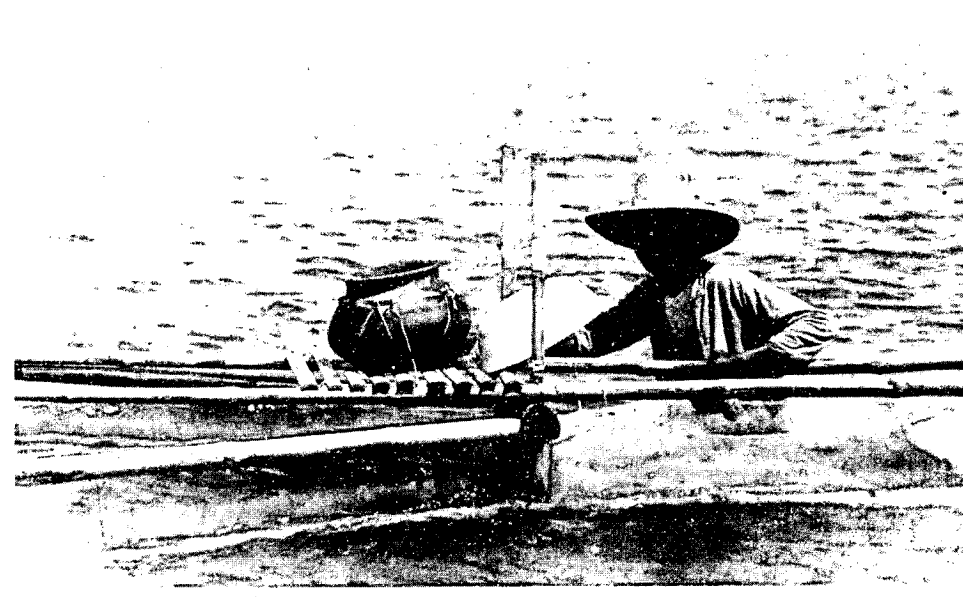
As the bangus fry catcher pushes the fry sweeper parallel to the shoreline, fry gather at the narrowest end of the contraption.



Pushing the sweeper at a very slow pace: children are trained early in life.



The catcher, after raking a few meters, pauses to dip her basin into the narrow opening...



... and deposit the salt water into clay pots, "kaldero," larger basins, or pails. Hopefully, the basin-full also contains the precious fry, among other organisms and inorganics.



Once the clay pots or pails are full, they are brought ashore for initial sorting. Weeds, debris and other species of fish are thrown away to the ground or back to the water; prawn fry are segregated from the bangus species.



A sufficient stock on shore is carried to a central storage for inventory, in the case of a centralized production and marketing scheme. Here, the stock is transferred to cleaner basins, counted, and subjected to final sorting.



Counting and sorting is done using white bowls (for better visibility). A scoop from the mother basin takes in about 5 to 10 fry, and the scooped are poured into another basin. Every 50th fry, a pebble is thrown inside the basin to signal the end of the series of 50's and introduce another. As the last scoop is poured, the pebbles are counted and then multiplied by 50 to get total population in the basin. (photos by Gerard Boreno)

A Study on the MARKETING SYSTEM OF THE BANGUS FRY INDUSTRY *IN ANTIQUE*

by:
Anna Kristina U. Goño
and
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HISTORY AND REVIEW OF THE BANGUS FRY INDUSTRY

Evidence of milkfish cultivation dates back almost 500 years to Indonesia, where fish farming using salt water ponds was first developed. Milkfish production was introduced to the Philippines and Taiwan around the 16th century, valued for its quality "meaty" flesh, milkfish, considered a "middle class" fish, is lucrative when sold for consumption.

Until very recently, it has been impossible to breed milkfish in hatcheries, and because milkfish are consumed prior to sexual maturation, the process of natural fry fishing has been relied upon to stock ponds.

One of the single most important factors pertaining to the fry industry, concerns its seasonal nature, with a peak season occurring between April to June, and to a lesser extent from September to November. The production of mature milkfish is composed of four stages, involving the fry (*kawag-kawag*); fingerling (*hatirin*) marketable size (*bangus*) and adult (*sabalo*). The focus of this study, however, concerns only the first stage. In a report entitled the "Economics of the Milkfish Fry and Fingerling Industry," the author examines the fry system within three contexts: (1) the fry industry itself, consisting of the fry gatherers (producers) and nursery and rearing pond operators (consumers), linked by middlemen operating on behalf of one or both parties. Major fishpond areas are said to be located in the provinces of Iloilo, Quezon, Zambonga del Sur, Rizal, Bulacan, Capiz, Negros Occidental, Pangasinan and Pampanga; (2) the fry marketing system, in which fry are distributed from fry grounds to fishponds; and (3) the fingerling industry, consisting of pond operators (producers) and fish pen and rearing pond operators (consumers).⁵

This report will attempt to examine issues pertaining to the first two aspects of the fry industry, while only making a cursory examination into the third.

FIGHTING FOR THE CONCESSION: ECONOMIC INDEPENDENCE

In Antique and throughout the Philippines, the process of collecting, distributing and marketing fry has and continues to be intricately linked to the concession system, formally enacted in 1982 by the Philippine government, and under which fry gathering operates. The concession system requires that an organization or individual submit a bid to the municipal government for exclusive harvesting rights over municipal bangus fry grounds. The privilege is awarded to the highest bidder either through a negotiated contract, an individual permit, or a permit system through the organization. This process renders any other gathering activity illegal, unless gatherers sell to the designated concessionaire. A major drawback, however, is that the gatherers will inevitably be coerced into selling fry at prices lower than the prevailing market rates. The concessionaire, in turn, sells to the pond owners who propagate bangus from the fry catch. The concession system provides a form of continuous income for the given municipality, and affords the concessionaire a wide profit margin at the expense of the

I. INTRODUCTION

The Philippine Bangus Fry Industry is said to be worth 57 million pesos per year, with approximately 176,000 people depending on fry for their livelihood. More than 176,000 hectare of fishponds are allocated to rearing fry.¹ In Antique alone, a 1983 survey concluded that bangus fry gathering sustains about 8,000 to 9,000 families along the coastline. Studies show that in provinces where fry fishing is widespread, municipalities, have come to depend on income raised by fry marketing concession fees. For example, one survey of 35 municipalities showed that Hamtik, Antique, relied on concession fees more than any other city, with 49.9% of its 1976 calendar year income derived from the concession fees.² Moreover, in those areas where fry grounds are prevalent, there has been little initiative to develop alternative forms of income generation, making the fry industry crucial to the entire community's survival.³

Despite these facts and figures, suggesting the overwhelming importance of the fry industry on the entire Philippine economy, the industry is beset with complaints of dwindling supply of fry, price and technical inefficiencies, exploitation of small fishermen by concessionaires, buyers, fishpen operators and middlemen, and the inevitable difficulties associated with a seasonal industry at the mercy of nature. Unfortunately, a review of the literature indicates that many of the problems documented in this report, have been discussed inconclusively since at least 1939.⁴ In addition, a host of government regulations, conservation measures, marketing models, and even illegal means have been created as ways of grappling with problems or circumventing perceived difficulties.

The problems posed by the exploitative concession system and the alleged difficulties in marketing bangus fry became the primary concern of PROCESS organizing efforts in Antique in 1986; the goal was to clarify some of the myths, and to elucidate the realities of the bangus fry industry, both throughout the Philippines and specifically in Antique. Information gathered during an extensive survey conducted by PROCESS of fry gatherers, buyers, and fishpond/pen operators, the results of which are discussed later in this report, provide further insight into the current situation affecting the bangus fry industry.

poor gatherers — who continue to be the most impoverished sector of the entire industry.

While the concession system is in many respects as exploitative as that exhibited by feudal land lords over their fiefdoms in the Middle Ages, there is reason to believe that this inequality can be overcome. In Antique, for example, the reorganization of the bangus fry catchers of Hamtik in May of 1986 has resulted in their eventual acquisition of the concession. Fry catchers in San Jose and Culasi have also been able to win the concession for themselves. The production component of the bangus fry business — jurisdiction over the fry grounds and who may work there — is in the hands of the organized gatherers themselves. In addition to setting work and production ethics, they may also determine the terms and limits of their business practices. The remaining challenge is for the gatherers to remain free from the dictates of previous concessionaires, and to safeguard that which has been achieved through continuous debate and struggle.

FRY GATHERING AND MARKETING: AN OVERVIEW

The procedures followed in gathering and marketing fry appear simple on paper, yet in reality, an intricate chain of events and personalities makes the process far from routine. Reduced to its simplest form, the fry gathering and marketing process unfolds as follows:

- 1) Fry are gathered by any number of net-contraptions, including, but not limited to, the scissor net, fry seine, *bulldozer* or sweeper;
- 2) Fry are sorted and counted, usually immediately after collection, using small white plastic bowls. Fry counts are conducted in pairs, with one person counting, and the other accruing pebbles for every ten or fifty fries counted. An alternative, "comparative density" method, may be used, whereby after the first batch of 1000 to 3000 fry are counted, one makes a comparative estimate of succeeding batches;
- 3) Fry are stored in basins, earthen jars, bancas, or styrofoam boxes, while awaiting either a buyer or a higher price;
- 4) Distribution of fry by sale — either directly to a milkfish cultivator (sometimes the concessionaire) or through a middleman who in turn sells to fishpond owners. Transportation of fry and fingerlings is most often via oxygenated plastic bags.

There is no doubt that one of the greatest advantages to having the fishermen themselves maintain the concession concerns the ensuing control over the marketing scheme which this affords. Vested with the concession, the fishermen have influence over price, quantity of fry sold, when to sell, and to whom. Lacking the concession, marketing becomes the prerogative of the concessionaire, who, as sole buyer of all fry gathered in his area, can determine the price of fry — usually 25 to 30 percent below the prevailing price.

MARKETING: PROBLEMS AND POTENTIAL SOLUTIONS

"Opportunism, that is, behavior which promotes one's ends with no particular regard for principles, was cited by respondents at all levels as the major problem facing the industry. Several respondents even characterized the fry business as attracting more gamblers and cheaters than any other business in the country."⁶

As is true of most businesses today, the bangus fry industry has been marred by accusations of inefficiency, corruption, and neglect. However, the bangus fry industry is not and does not purport to be based on "high technology." Despite the fact that the milkfish has been farmed for hundreds of years, much research has yet to be done in order to fully understand the best methods for its cultivation and marketing. Rigorous economic analysis pertaining to price, technology, and particularly to assumptions about supply and demand, must be reviewed with these caveats in mind. The need for caution will become clearer in the following paragraphs, when some of the arguments levied against the bangus fry industry are reviewed and critiqued.

A. Dwindling Supply of Fry

The debate over the so-called dwindling supply of fish fry appears to this day to be unresolved. Accurate statistics are hard to come by, and it is unclear to what degree reductions in numbers of fry are due to pollution, floods, destructive or overfishing or other natural disasters. For example, a 1976 study attributed a shortage in fry to "an increase in fishpond acreage, intensification of stocking rates, and consistently high mortality in collecting, sorting, counting and transport of fry."⁸ A study published in 1981 claimed that the "fry and fingerling industry of milkfish suffers from imperfections (including) annual shortages of catch necessary to meet stocking requirements. . ."⁹ In contrast, a 1986 study claimed that "in the Philippines, annual yields from freshwater fishpens and brackishwater ponds are increasing steadily."¹⁰

Reports alleging that shortages exist have created a perceived need for greater government regulation over the supply and distribution of fry. For example, while the Philippines once exported fry to Taiwan and Hong Kong, exportation abroad is now banned, and perceived "sectoral shortages" of fry between 1975-78 forced the government to place restrictions on fry trade within the country. Lacking appropriate statistics, however, it remains to be seen whether economic restrictions of this sort are in fact necessary or advantageous.

A study conducted in 1982, appears most useful in explaining the "shortage" debate: according to the authors,

"Allegations of fry shortage do not conform to the purely economic definition of shortage. A shortage can only arise if some external factor,

such as government price control, produces market distortions, and makes it impossible for demand and supply to achieve market equilibrium. Shortage develops when consumers demand larger quantities of the commodity, at the price set by the government, than producers would be willing to supply."¹¹

In the Philippines, however, despite the fact that P.D. 704 allows for the fixing of a "fair and reasonable" price for fry, the authors contend that price nevertheless "freely moves to market equilibrium, eliminating shortage in the economic sense." Price fluctuations occur during peak months, when price is lower, and during lean months, when, with dwindling supply, price remains high. The authors conclude that:

"The reported fry shortage refers simply to the allegation that the annual catch of fry is less than the quantity received by biologists to maximize production from existing pond sites. Shortage in this sense, therefore, is not due to market distortions. . . It appears that this shortage has been highly exaggerated."¹²

On an even more optimistic note, the authors suggest that the Philippines has yet to reach the "maximum sustainable yields" of fry resources, leaving plenty of leeway for the development of effective marketing strategies.

Another reason for optimism concerns recent innovations geared towards raising milkfish in captivity until they have reached sexual maturation. While experimentation has only begun in this area (originating in Taiwan) there has been some success in captive spawning, leaving the future open to the development of alternative commercial hatcheries. While such establishments might help dispell fears of dwindling supplies of fish, displacement of natural fry gatherers by such commercial industries must be avoided.

B. Price and Technical Inefficiencies

Lacking highly technical means of gathering and marketing fry, many assert that inefficiencies result. For example, the rather primitive method of hand-counting, or "eye-ball" estimating the number of fry in a given bowl, is said to create feelings of mistrust and suspicion between buyers and sellers. Overcounting and inaccurate reports of numbers of fish supplied are common. Another inefficiency involves methods of transporting fry: widespread reports indicate that mortality rates for fry during gathering and storage range from 14.3%¹³ to 8.7%¹⁴. One report suggested that mortality rates during rearing can be as high as 54%, and that "of every 100 fry caught, 38 are harvested at marketable size."¹⁵ Furthermore, once fry are relinquished into the hands of buyers, sellers must accept the word of the buyer concerning both mortality rates and numbers actually delivered. One suggestion for reducing fear of

deceit is to form partnership or organizations of buyers and sellers who are also relatives.¹⁶

In addition to drastic price fluctuations associated with the seasonality of catch, reports indicate that more often than not, nursery pond operators receive a greater rate of return than the gatherers. Gatherers are said to be caught in a cost-price squeeze, as the price of fry has fluctuated wildly, while feed and fertilizers continue to increase. There is also widespread fear that, with per-capita income levels down and a high rate of inflation in the Philippines, that a drop in numbers of people eating milkfish will ultimately effect the fry industry.¹⁷

Financial constraints have historically placed severe limitations on fry gatherers. A relatively small amount of capital investment is required for initial fry gathering activities, however, many gatherers who do not own the rights to the concession are forced to depend on the concessionaire for occasional financial assistance or loans after they have been in the business for a while. Financial difficulties taking the form of insufficient credit assistance from government channels; poor loan availability; insufficient collateral and high interest rates all further reduce the ability of the fry gatherer to effectively market fry.

C. Opportunism and Exploitation

Two factors most responsible for preventing the development of sound, effective marketing practices concern the tendency to resort to opportunism and exploitation. For example, the practice of fry "smuggling," or running, allows one to undermine the concession system. Runners, who smuggle fry and act as dealers, can attract prices which are reportedly 50 to 100 percent higher than the price paid by concessionaires. While individuals involved in the fry industry do not hesitate to complain of widespread smuggling, reports indicate that little is being done to arrest these problems. According to one report, "concessionaires in Southern Mindanao, though all publicly claiming that smuggling was their biggest problem, were all actively engaged in smuggling from each other."¹⁸ Additionally, reports indicate that too few fishermen are willing to become involved in working to prevent illegal activities.

Other forms of smuggling which are detrimental to the fry industry involve the transport of fry between regions without appropriate legal papers, or with erroneous estimates of numbers of fry included. Finally, irrespective of bans on the export of fry, smuggling of fry to other Southeast Asian countries is said to occur with a fair amount of regularity.

OBJECTIVES OF THE STUDY

The marketing of bangus fry is far from a simple process. The gathering, carried out under all weather conditions, is a draining, tedious task. The counting of fry, using antiquated techniques is monotonous, while the actual distribution is fraught with

technical, emotional and pricing difficulties.

The marketing problems in the marketing system of the industry as articulated by the bangus fry catchers remain to be allegations unless they are actually documented and collated on a larger scale. The study, then, aimed to establish some of these allegations as factual, among them: [1] That middlemen systematically bar the direct sale of bangus fry by the catchers to pond operators; [2] That catchers take very little, or no, part in making pricing decisions that will prove favorable for them; and [3] That a large percentage of the harvested bangus fry is lost in storage and transport.

The attempts to set these allegations straight required that market operations should initially be understood. And since knowledge of market operations is also integral to making marketing decisions, in fact, inseparable from it, this study then hoped to draw a clearer picture of the structure, conduct, and performance of the distribution and pricing systems of the bangus fry industry in the Western Visayas. In the end, we shall gain a deeper understanding, too, of the incidences, and possible areas, of exploitation among the catchers, leading us perhaps to suggest pointers for marketing which are most appropriate for the given circumstances.

METHODOLOGY

The methodology employed for this study was twofold: First, a comprehensive review of the literature was conducted, to gain an understanding of the historical context and current issues that create an impact on the bangus fry industry. Data on bangus fry production levels, shipments and location was acquired from published statistics furnished by institutions such as BFAR, MAF, and SEAFDEC. In addition, there were also lists of fry gatherer associations and members, baseline data on municipal fisheries, and listings of dealers and fishpond/pen operators that were gathered from preliminary social investigation activities of PROCESS community facilitators in Antique, as well as from unpublished records of BFAR in Quezon City.

Second, a three-tiered survey was conducted on the island of Panay. Initially, 49 Antique fry gatherers were interviewed; they in turn were able to identify by name and location their buyers — dealers and middlemen — comprising the second set of interviewees. The same method was applied in identifying the third and last set of interviewees, the fishpen/pond operators. The last two sets of respondents were not necessarily working solely in Antique.

1. *Sampling Method*

Previous researches revealed that there were highly similar responses from among the respondents so that an individual's response is already representative of a great bulk of the population. For this reason, sampling was purposive.

For the first phase of the study, the fourteen bangus fry catching municipalities of Antique were covered as target sites: Patnongon, San Jose, Barbaza, Culasi, Hamtik, Pandan, Tibiao, Belison, Bugasong, Tobias Fornier, Sebaste, Anini-y, Laua-an, and Libertad. Approximately, there was one respondent for every two adjacent fry catching baranggays in each municipality, totalling 49 catcher-respondents:

1.	Patnongon	5	respondents
2.	San Jose	6	
3.	Barbaza	3	
4.	Culasi	4	
5.	Hamtik	5	
6.	Pandan	3	
7.	Tibiao	2	
8.	Belison	3	
9.	Bugasong	3	
10.	Tobias Fornier (Dao)	3	
11.	Sebaste	4	
12.	Anini-y	3	
13.	Laua-an	2	
14.	Libertad	3	
		<hr/>	
		49	respondents

The list of the second and third sets of prospective respondents was based on the actual transactions engaged by the 49 BFCs. The most frequently mentioned names topped the list as first priority for the interviews. Using this sampling method, we were assured of establishing concrete and complete marketing/distribution flows that were representative of the whole industry marketing system in Western Visayas.

We could observe though that there were buyers/dealers and pond operator-respondents who were based outside of Antique, and even, of Panay. Such gave us an idea of the actual market and market operations for the bangus fry coming from Antique. This was important because the marketing decisions the catchers will make in the future should initially include a clear market identification in the process of choosing (direct) buyer.

SCOPE AND LIMITATION OF THE STUDY

This study is practically patterned after an earlier one done by Dr. Ian Smith of ICLARM, published in 1981, entitled "Economics of the Milkfish Fry and Fingerling Industry" (see Introduction). This, however, is on a more localized scope, focusing mainly on the process which the bangus fry undergoes when it leaves the point of acquisition to the point wherein the final user, the fishpond/pen (or nursery pond) operator, deposits it into the fishpond for maturation. For our purposes, the point of

acquisition is limited to the coastal waters of Antique, and the identification of channels which the commodity pass through shall also be limited to those who have had actual transactions with the first set of respondents.

While we can be assured that the first 49 BFC-respondents are already representative of the universe, i.e., the BFCs of Antique, the set of respondents for the second and third phases of the interviews – i.e., with the dealers, middlemen, and fishpond/pen operators – are definitely not sufficient to represent their counterparts in Antique's industry. The reasons for this were: [1] the unavailability of some of the prospective respondents; [2] the long distance from some of the prospective respondents that proved travel to be expensive, and therefore, impractical; and [3] the hesitance of some prospective respondents that kept them from sharing with us substantial information.

Although we can establish conclusive trends in the marketing system at the level of the BFCs, the initial trends that we shall be able to plot for the levels of middlemen, and end-users, will need further validation in the form of additional similar data-gathering. In the meantime, the study, being action-oriented, shall not only delve into trend analysis but also identify resources which the BFCs can possibly explore, such as, favorable contacts with middlemen and fishpond operators.

As such, the organized gatherers can establish a framework for further decisions regarding future action and improvement – whom to sell, where, at what price and how many.

II: HIGHLIGHTS OF THE FINDINGS, ANALYSES AND CONCLUSION

PROFILE OF RESPONDENTS: Characteristics Pertinent to Bangus Fry Marketing

A. The Bangus Fry Catchers of Antique

1. *Location*

Bangus fry catchers (BFCs) work along the shores of fourteen coastal municipalities of Antique. From these fourteen towns, we were able to interview 49 BFCs, representing the common experiences of BFCs operating in their neighboring baranggays. These towns, as described earlier in this report, ranked according to the average volume of fry production in 1985, are: Patnongon, San Jose, Barbaza, Culasi, Hamtik, Pandan, Tibiao, Belison, Bugasong, Dao, Sebaste, Anin-y, Laua-an, and Libertad. (See Figure 4).

2. *Number of BFCs Along the Coast*

Compared to 1986, most BFCs (63%) observed that there was no change in the number of gatherers operating along Antique's coast this year. This should more or less mean that there wasn't much mobility among the BFCs: generally, they did not engage in any other full-time occupation aside from gathering fry.

3. *Are They Organized?*

Almost 80% of the BFCs in Antique are members of a people's organization. 72% of the respondents who claimed to be members hold responsible positions in their respective organizations. There are 16 POs accounted for by the respondents, all of which are municipality-based, namely: KASIHA, KBMSB, KASIBE, KASIPA, KMSJ, SPSNFF, KKK, KSMSK, SNSPP, SN, KASIBA, KBPP, KASICU, KAMMSI, CUPASAM and a PO in Dao.

4. *Their Ideas about Organizing*

The BFCs cited some advantages of being members of a people's organization (PO), among them, mainly, are marketing conveniences that the PO affords them: e.g., being able to command a high price for the fry; providing for financial needs and being able to earn more; lowering of the usual mortality allowance levels; and being able to sell larger quantities of fry. Some social benefits were also mentioned, such as: solidarity of the sector, and the contribution of the PO to the BFCs' education and personal development. Cited, too, were the gains of organizing with reference to the previous concessionaire system, including having been able to put an end to injustices and harassment, and eventually gaining free access to the municipal-designated fry grounds.

The disadvantages that were mentioned, on the other hand, referred to the inefficiencies of the organization, and not on the natural effects of organizing, and so therefore, are manageable. Anyway, these disadvantages included the delinquency of members (e.g., smuggling of fry), and the large percentage asked of the individual's income for organizational operations and sustenance, even if buyers of fry do not pay their debts.

5. *Role of the PO*

The BFCs saw the PO's role as one of gathering and facilitating sale of fry, and centralization of sale and price of fry. Some POs (at least two), though, are not yet operational on marketing bangus fry.

6. *Source of capital*

9 out of 10 BFCs work with their own capital. 2% borrow wholly, while 4% borrow half of their working capital and own the other half. For those who borrowed, the credit sources were buyers/dealers/financers; parents and relatives; and the community cooperative. For those financed by their buyers, 80% let the loan be charged to catch, 20% paid at the end of the season. Twenty per cent of the buyers sometimes takes as guarantee the BFCs promise to sell exclusively to them but some 40% of the creditors ask for no guarantee at all. 3 out of 5 BFCs were able to pay their financiers.

B. *The Bangus Fry Buyers: Dealers and Middlemen*

1. *Location and Distance from the BFCs*

For every 10 direct buyers of fry in Antique, 4 come from Antique, 3 from Aklan, 3 from Iloilo and/or Capiz.

The BFCs estimated the distances from the direct buyers to be quite near; the usual BFC-buyer distance ranges from less than 1 kilometer to about 5 kilometers, and this was attested by roughly 36 out of every hundred BFCs. Only 8 out of every hundred travel 6 to 10 kilometers to transact business, while another 8 travel longer distances (from 10 to 150 kilometers). Most, however, do not know where their buyers' points of origin are: some 45 out of hundred would plead lack of this knowledge.

2. *How Long Have They Been Dealing With the BFCs of Antique?*

Rough counts made by the BFCs revealed that the present set of direct buyers they deal with have been around for at least two seasons only; 33 out of 100 business relationships range from less than a year to two years old. 23 out of a hundred are 3 to 5 years old, while 18 of the same hundred have been working with each other for 6 to 10 years already. Another 10 business relationships have been going on for 11 to 15, and sometimes more than 15, years. Only 13 failed to give their estimates but we can readily observe that a certain permanence has already been established between the BFCs and their respective buyers, who, season after season depend on the same individuals for sale and purchase of fry.

3. *Areas of Operation*

The buyers, around two-thirds of them, buy from more than five zones per month. The rest buy from only one zone.

At least 27 transactions take place in Antique, 12 of which are in San Jose, Tibiao, Anini-y (including Bgys. Casay, Magdalena, and Poblacion) and Patnongon (3 transactions each town); 8 in Hamtik, Dao, Barbaza and Culasi (2 transactions each town); and 3 in San Roque, Sebaste and Pandan (1 transaction each town).

At least 6 purchases are made in Aklan: 2 from Tangalan; and 1 each from New Washington, Macato, Numancia, and Nabas (including Bgy. Malay).

Others also get their fry from Mindanao and Negros (2 transactions each). In addition, the rest of the purchases are made in Iloilo (1); Cebu (1); Davao (1); Romblon (1); and Zamboanga (1).

In sum, out of 10 purchases that the direct buyers/dealers (who also transact business in Antique) make, at least 6 are done in Antique; at least 1 in Aklan; at most 1 in either Mindanao or Negros; and at most 2 in either of Iloilo, Cebu, Davao, Romblon or Zamboanga (or a combination of any two of these provinces).

4. *Volume of Purchases*

For approximately every 100 sales transactions between each BFC and buyer who purchases directly from him, 21 would each have a sales volume of 200 to 1,000.

pieces of fry; 18, of 1,000 to 3,000 pieces; 16, of 5,000 to 10,000 pieces; 3, of less than 200 pieces; another 3, of 20,000 pieces; 1 of 50,000 pieces; and another 1, of sales of more than 100,000 pieces of fry. 29 of the same hundred are sales of undetermined value.

From the estimated sales that BFCs transacted above, we can gather that the usual volume of transaction would range from 200 to 3,000 pieces of fry per BFC.

5. *Relationship with Other Buyers: Degree of Cooperation*

Almost all of the direct buyers (93%) have to contend with competition in the persons of fellow compradors, agents of nursery pond owners and nursery owners themselves, who usually number between four and five, sometimes more than five, and rarely, from two to three.

The presence of competitors have different effects on price. While 28% say there is actually no effect in pricing, 21% say competitors tend to depress prices, and other 21% claim that the presence of competitors increase fry prices.

Buyers compete against other buyers by giving higher prices to catchers or by buying fry the soonest time (immediately). Others (14%) do not compete at all.

6. *Capitalization*

43% complain of shortage of operating capital. Of these, 67% say that the shortage comes about when there is a large supply of fry but only a small capital is available. 17% said that shortage is due to delayed payments by their buyers. Still, 17% claimed that shortage is experienced because of a combination of the two reasons given above.

C. **The Fishpond/pen Owners and Operators (FPOs)**

1. *Location*

Many of the fifteen respondents who comprised the third set of interviews come from Makato, Aklan; 3 from Roxas City, Capis; 2 from Iloilo; 2 from Masbate; and 2 from Manila. The others hail from Zamboanga and Barotac Nuevo. (See Table 1).

2. *Source of Capital*

While 53% do not have a shortage of operating capital, 40% do experience shortages. The reasons most often given for shortages were unexpected expenditures; conversion of fishpond to prawn culture; and crop failure.

60% of the FPOs rely on their own capital to finance their operations. On the other hand, 2 to 3 out of every 10 of them depend on borrowing aside from their own capital. Of those who borrow, 25% use the DBP.

3. *How Much Fry are They Buying?*

Majority (except two of the fifteen respondents) said that they were not buying less fry this year than in the previous year. Only one individual, by shifting to prawn fishing, reported buying less bangus fry this year.

Six out of every 10 fishpond/pen operators purchase from only 1 supplier during the peak season, while 2-3 purchase from over five suppliers. During slack months, 5 to 6 of every 10 still do purchase from one supplier; and 2 to 3 from over five suppliers; with only one out of fifteen purchasing from 2 suppliers. 40% indicated that these estimates were similar to those of previous years, while 27% said they used more suppliers, and 40% used less suppliers than in previous years.

MARKETING PRACTICES IN THE BANGUS FRY INDUSTRY: Highlighting Some Pointers for BFCs in Marketing Bangus Fry

1. *Counting*

Majority, if not all, of the BFCs, dealers and buyers, and FPOs use the "count-all" method for counting the fry, and there are also few (about 20%) who employ the "comparative density" method. While the BFCs do the counting themselves, 2-3 personnel count for the direct buyers, and 2-5 workers perform this task for the FPOs.

According to the BFCs, there are no problems with these methods, except that it being a waste of time, and that counting becomes tiresome, too. This comment is a rather more positive report of what is actually happening, as compared to earlier reports (under "Price and Technical Inefficiencies," this paper) wherein the BFCs experienced feelings of mistrust and suspicion as a result of inaccurate counting among buyers and sellers. Direct buyers, although a small percentage of them, on the other hand, are cautious about cheating in the "count-all" method. They sometimes also complain of faulty estimates of fry counts when employing the comparative density method.

2. *Sorting*

Those who catch the fry also do the sorting. The direct buyers, around 71% of them, likewise sort out the fry stock, giving the reason of fry differentiation; for instance, prawn fry fetches a higher price than bangus fry, so they need to be separated from each other. Majority of the FPOs, 6-7 out of every 10 of them, do a third level sorting in order to eliminate other species; and assure intensified production and lesser mortality. The rest of the FPOs do not bother to sort the fry that they buy because the stock they receive are usually pre-sorted, or contain a negligible number of alien species.

Not only alien species are sorted out, but weak fries are also differentiated from healthy ones. All the BFCs, direct buyers and FPOs use movement of fry as standard

for differentiation: quick, energetic fry are most favored. Other qualities which exhibit the healthiness or weakness of fry are color, length, size of head, age, and size of eyes. It is important for direct buyers and FPOs to buy only healthy fry because of the high mortality rate the weak fry possesses.

However, while 86% of the BFCs do not actually sort weak from healthy fry, and 57% of the direct buyers do not likewise differentiate, 79% of the FPOs do not buy weak fry, or at least do pay a lower price for lower quality fry. Another 43% of the direct buyers similarly do not buy, or do pay a lower price for, weak fry. This shows that there is a need for BFCs to employ quality control measures to assure maximum sales for all the fry gathered. Both the direct buyers and FPOs suggested the cause for weakening of fry to be the careless handling of gatherers, and the use of rough and fine screens that tend to damage the fry.

Some locations are known to produce quality fry, among them, Antique (especially Hamtik, Culasi and Barbaza) and Aklan. Antique's fry is known to be resistant (to diseases, etc.) and are not easily exhausted. They also grow faster, are longer and finer than fries from other areas. Antique's waters were said to be less polluted than others.

Particular months, too, are observed to produce superior quality fry, with May ranking first. Following are June, March and April.

3. Storage and Mortality

Storage of fry after being caught and before being sold is done by both the BFCs (65%) and direct buyers (79%). The span of the fry's stay with the BFCs stretches up to three days on the average with 25% staying only overnight, and 19% going beyond three days (Figure 5). The BFCs store fry while waiting for buyer and looking for the highest bidder. They do so also in order to condition the fry and accumulate more. Another reason for storage is price speculation.

From the BFCs' storage, the fry experiences an average of 4 to 7 days stay with the direct buyers before being transported to the FPOs. Fry is stored at least one night, as done by 14 out of 15 (or 93%). Of the 14, nine store fry from 2 to 3 days. Of the nine, eight hold the fry for another 4 to 7 days. Of the remaining eight, five keep the fry for 8 to 10 days. Of the five, four further keep the fry for 11 to 14 days. Of the four left, only 1 stores the fry for an additional day (total of 15 days) (Figure 6).

The direct buyers store the fry they have just bought from the BFCs, first, in order to be able to accumulate more so that a minimum quantity or volume can be reached before selling to FPOs. They also have to store the fry while waiting for the buyer, and at the same time, condition the fry.

We can observe that before the fry reaches the end-user – the FPO – it actually stays in storage for an average of 7-10 days and undergoes at least two sets of packaging and transporting. No complaints have so far arisen from this rigorous

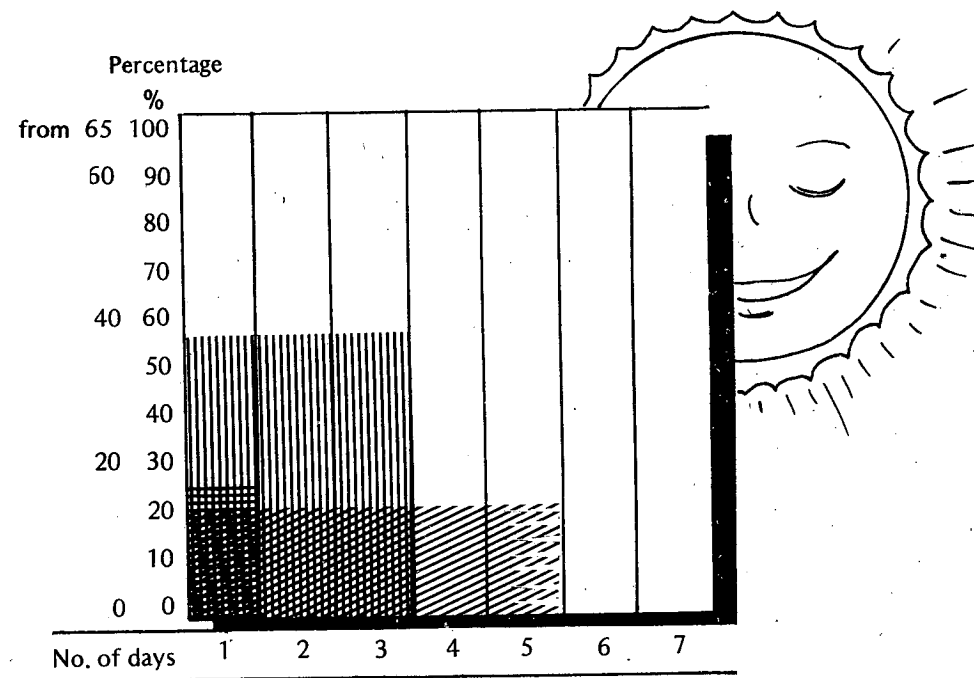


Figure 5. No. of storage days with bangus fry catchers.

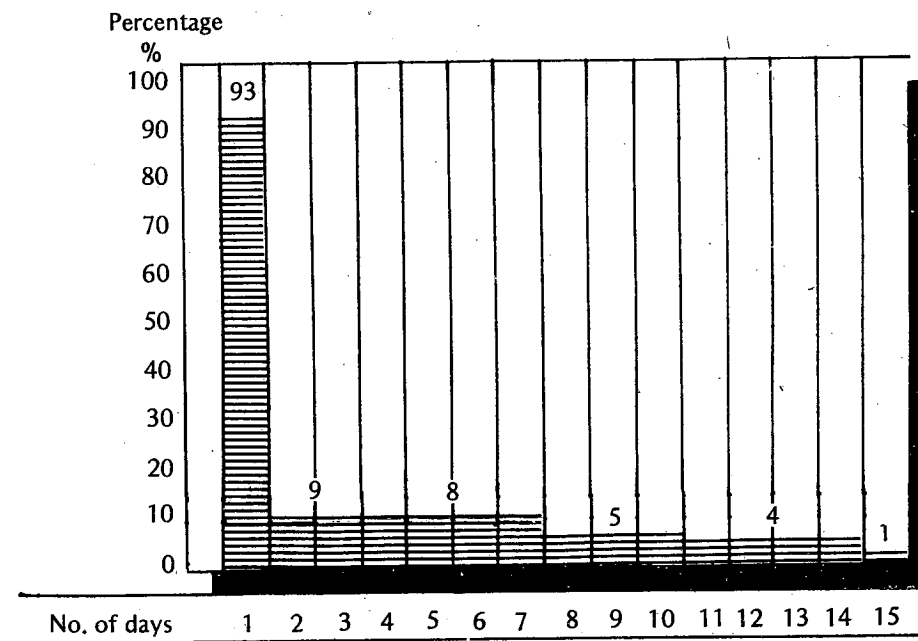


Figure 6. No. of storage days with direct buyers.

process that the bangus fry goes through, but then an improvement in the distribution system could expedite marketing, leaving lesser mortality among the fry.

Both the BFCs and direct buyers use the *labador* or basin for fry storage. They found the *labador* to be spacious, sturdy and very well suited for the purpose. The BFCs also use pails and *kuron* (or clay pots), while the direct buyers, in addition, use plastic bags. However not frequently used, it was suggested that the best containers are tanks and clay pots, aside from the conventional *labador*. The unpopularity of tanks and clay pots, though, comes from being heavy and expensive for the BFCs to use.

88% of the time, BFCs do not feed the fry during storage. If feeding is done at all, eggs and bread crumbs are used in order to strengthen the fry.

On the other hand, all of the direct buyers feed the fries when storing them up, usually, with flour and egg yolk; sometimes with B-meg, Vitarich, milk, Milo, Tiki-tiki, baking powder or shrimps and green shells. Flour is said to take longer time before getting spoiled. Also, it does not make the water stale. Egg yolk is used, with no difficulty and no risks. It is widely used and known to strengthen fry. Vitarich and Tiki-tiki likewise strengthen the fry:

Most of the direct buyers provide packaging and transport materials to the BFCs. On the other hand, FPOs rarely do the same for the BFCs or their suppliers (dealers). We can readily see here that the direct buyers (or dealers) invest in packaging and transport which the BFCs could not readily afford, and the FPOs would not readily provide.

4. Pricing and Information on Prices

It became evident among the responses of all the BFCs, direct buyers and FPOs that the dealers/direct buyers most of the time determine the price they will pay for, and the price they will get from, trading bangus fry. A more favorable sign for us, however, is the growing participation of the BFCs themselves in price determination. Between BFC-direct buyer transactions, the BFCs are able to set the price more than one-third of the time.

Still, if we examine more closely, price is determined from external bases like Manila, Iloilo and Capiz prices, bidding rates, price agreements among major buyers, and the prevailing local prices. More noteworthy, too, is that the information regarding general price levels come mainly from the direct buyers/dealers. Only 10-21% of the time do the BFCs learn about price levels among themselves; the dealers, in all levels of transactions, are the source of information on prices for 67-73% of the time.

Price fluctuation is a problem for majority of the BFCs (75% of them) but it is also interesting to note the remedies suggested by the BFCs themselves are stopgap measures to supplement the lack of income, eg. find secondary jobs, double production level, "smuggle" fry, even stop catching fry, and borrow. Some 11% are resigned to not being able to do anything.

Automatic Allowance (Figure 7). A salient point for the discussion of pricing is the setting of an automatic allowance that will serve as a warranty against mortality

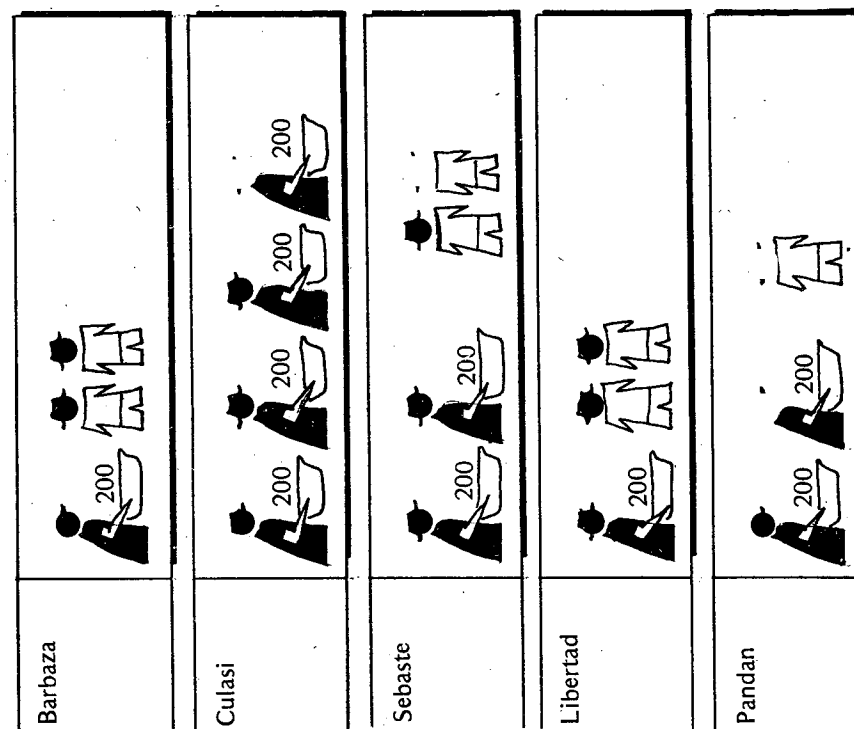
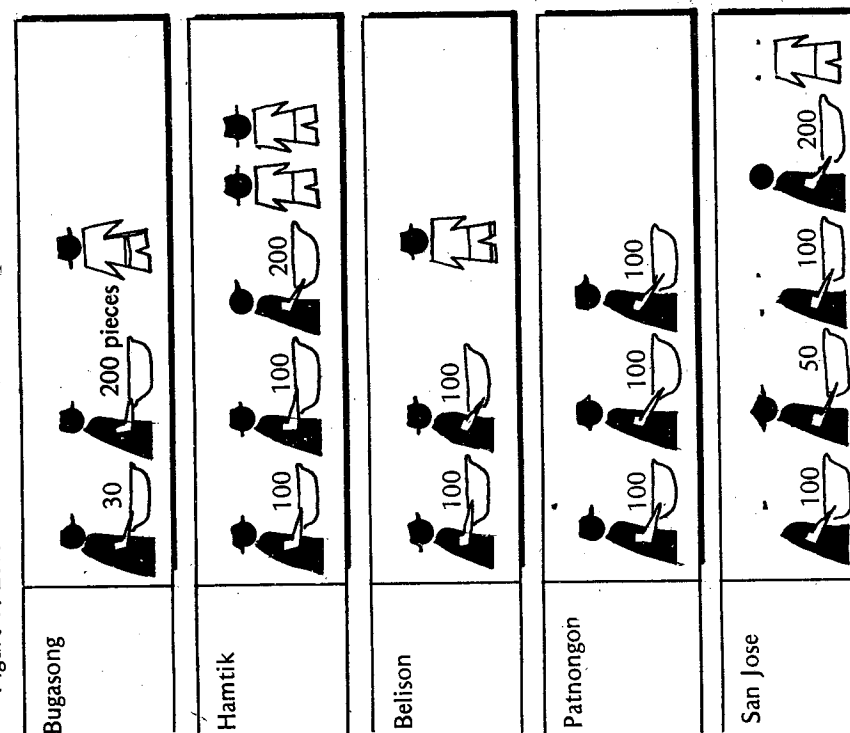


Figure 7. Level of automatic allowance is fair to those BFCs of:



which is most certain in every stock of fry. Only around 14% of the BFCs need not apply automatic allowance while the rest have to serve an automatic allowance range of 10 to 500 per thousand.

Three-fifths of those who give this allowance are rather satisfied, or at least think it fair, in giving so. Of this three-fifths, half find the automatic allowance fair if pegged at 200 pieces per thousand; over a third, at 100 pieces per thousand; and a measly eighth, at 30-50 per thousand.

27% of the total BFCs, on the other hand, suggested that a flat thousand per thousand should be the fair arrangement. Of those who are dissatisfied with the present allowance levels: 33% actually give 500 per thousand and are now suggesting 0-200 per thousand. 61% give 200 per thousand but they would rather give a flat rate. The rest of those dissatisfied, 6% of them, presently give 100 per thousand but think it fair to rather increase it to 200. (Fig. 8.)

If we place these side by side with the experience of the direct buyers with automatic allowances – 58% of whom receive so – we shall observe that there are slight differences. They are dissatisfied with receiving a 0-200 automatic allowance because they believe that such is not enough to cover mortality, therefore, resulting in net loss, income-wise. Only those receiving 500 pieces per thousand were satisfied.

Not only do BFCs have to give an automatic allowance. The direct buyers/dealers also have to give a mortality allowance to 80% of the FPOs when delivering bangus fry. However, the rates are much smaller than those which the BFCs give. The FPOs receive an automatic allowance ranging from 1-150 per thousand and averaging 53 pieces per thousand from their dealers. (The reasons for this discrepancy may be attributed to the lesser mortality that occurs when the fry reaches the fishpond. For one, those which were supposed to have died would already die while being stored and transported by the BFCs and the dealers for an average of 7-10 days, leaving the strongest and healthiest of the stock for the FPOs.)

5. Selection of Sellers and Buyers

All the direct buyers purchase fry from more than five catchers. They are informed about fry catches when the catchers bring their fry to the buyer or when the buyer or his agents visit the gathering area.

Half of the BFCs are neither satisfied nor dissatisfied in their relationship with the buyers but rather many of them also even gave a comment that they liked their buyers. About 14%, though, were quite dissatisfied with the present set of buyers. Dissatisfaction was due to the low price they were offered and because they (BFCs) were not given any "consideration." On the other hand, indifference stems from lack of acquaintance with their buyers – according to them, familiarity with buyers is not that important anyway – while satisfaction was due to prompt payment by the buyers and the favorable price they offer.

58% of the direct buyers/dealers have verbal agreements with their buyers (the FPOs, in our case), of whom half did not state what the coverage of those agreements

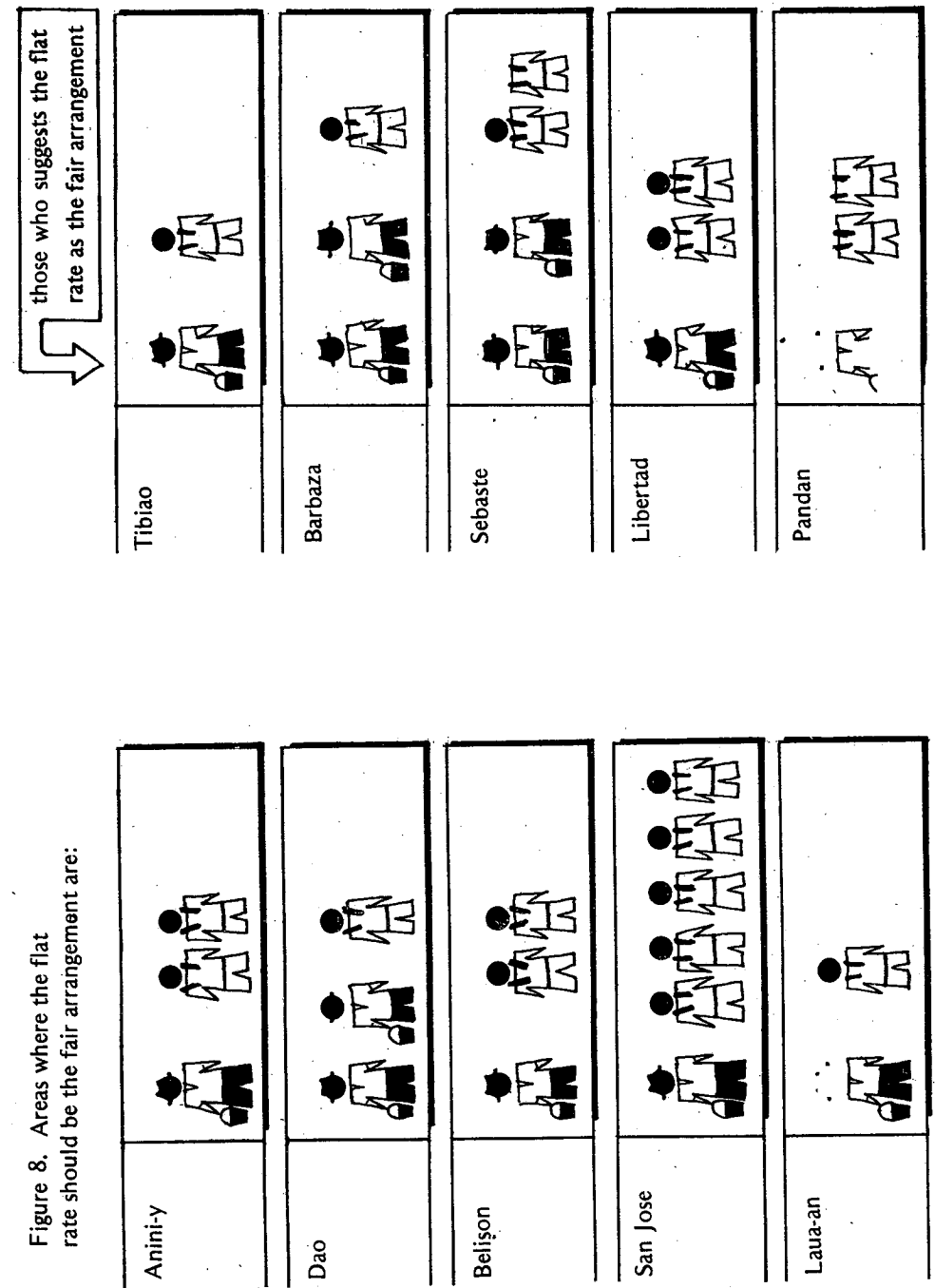


Figure 8. Areas where the flat rate should be the fair arrangement are:

was. Those who otherwise stated so, mutually agreed on guaranteed outlets for the dealers, guaranteed high price to be paid by the FPOs for the fry, and provision for labor for the dealers, too.

Other than the above benefits, another two-thirds of the dealers enumerated some more benefits which they derive from their relationship with the client-FPOs, among them: Priority is given to them over other suppliers; the FPOs opened other business prospects for the dealers; there are FPOs who take care of transporting the stock of fry; the FPOs give free accommodation to their dealers; their client-FPOs do not cheat; and some FPOs financed the building of bodegas and provided equipment. These benefits, evidently, are the source of satisfaction among the dealers of fry, and perhaps, can be considered as factors for establishing a more permanent dealer-buyer relationship.

Over 40% of the dealers have informal agreements with other buyers of fry: they do so in order to be able to strike bigger (or larger) deals with the FPOs who prefer to buy in bulk; to be able to plan areas of operations or outlets and expand to other selling locations (so as not to crowd in a single area and therefore create a glut); and to cooperate in transporting fry.

Roughly one-third of the dealers claimed there are alternative buyers that they do not serve, for different reasons: Usually, the price offered by these alternative buyers is low, while on top of the favorable price the present set of FPO-buyers give, they also offer special services. Besides, there are no business links with those alternative buyers and if so happened there are anyway, others are selling to those alternative buyers already.

Almost all dealers claim that there are no limitations regarding the sale of fry. If ever there are, time and distance *are* those limitations.

Most of the FPOs do not require a minimum quantity, below which they will not purchase fry, except for two of the respondents who require a minimum of 500,000 fry or more, e.g., Araneta and Siochi. Instead, the basis for choosing among the various dealers/suppliers were indicated as: a steady and reliable (always available) source of fry, and an assurance of good quality fry. Sometimes the FPOs have previous agreements to purchase from the same suppliers and so they don't have to look for others. Another factor for selecting a supplier is, of course, who can give a lower price among them, at a most convenient arrangement.

In sum, the criteria used for selecting clients and suppliers include levels of prices being offered, speed of payment, and goodwill ("consideration").

6. Terms of Payment

A large fraction of BFCs (84%) do not have problems with receivables: they get the full amount at the time of sale. Even so, only a very few — 6% — have contracts with their buyers. The dealers likewise generally pay the full amount at the time of purchase and get the full amount at the time of sale to FPOs.

Moreover, 10% of the BFCs are financed by the direct buyers, mostly in the form of loans which the direct buyers oftentimes charge to catch and sometimes get paid at the end of the season. Actually, 7 out of 10 dealers provide materials to BFCs, usually being promised with no guarantee, except perhaps, that the BFC should sell exclusively to them (although such guarantees are relatively rare to come by). Only 6 out of 10 BFCs who received financing are able to pay.

On the other hand, the FPOs generally neither finance their suppliers nor provide materials to BFCs.

OTHER BUSINESS PRACTICES AND RELATED PROBLEMS

Other problems that the BFCs tackled included, among others, the presence of purse seiners or big fishing boats which catch the mother *sabalo*; this being considered as a major, serious one. The alleged depletion of bangus fry supply is attributed to the indiscriminate catching of the *sabalo*.

They also complained about the lack of gear or materials, shortage of containers and the lack of adequate capital or financing. Solutions proposed were borrowing, to stop catching fry, asking from the association, and to improve materials and equipment. Least mentioned but no less important were problems such as: the unpaid debts of their buyers; the still existing concession system in some areas; the lack of, or need for, further education of the BFCs; the need for efficient administration of the PO; and the poisonous waters polluted by insecticides flowing from nearby ricefields.

From a random examination of the stated problems above, we can readily notice that the problems outlined by the BFCs refer mostly to the production aspect of the industry, thus, placing marketing aspect still as a secondary concern.

TRENDS IN THE PHILIPPINE BANGUS FRY INDUSTRY AND IMPLICATIONS ON ORGANIZING THRUSTS FOR THE BANGUS FRY CATCHERS

Laguna de Bay has been one of the, if not *the*, biggest market for bangus fry. Before a campaign to demolish illegal fishpens proliferating around and in the Lake, the area covered for bangus (and tilapia) culture ran to roughly 90,000 hectares. This would mean a bangus fry requirement of approximately 2.7 billion pieces a year, majority of which originate from Antique, the largest source of fry supply in the Philippines.

This trend would have continued if not for the vigilance of the Laguna Lake Development Authority and the small fishermen of Cavite, Laguna and Rizal, to demolish the massive illegal fishpens which used to prevent the small fishermen from engaging in freshwater fisheries. As of this date (mid-year 1987), only 20 to 30% of what used to be the fishpen area is retained, and this figure will likely to go further down toward the end of the year when the targeted area for retention will only be

10,000 hectares. By 1990, those fishpens will be phased out of the Lake to be taken over by the small fishermen as cooperative fishpen projects. This obviously means a displacement of 90,000 hectares of fishpens that might as well be recreated in various parts of the country, although most probably, will result in smaller aggregate acreage, and a widely distributed market for bangus fry.

Another trend of significance to this study is the recent advancement in artificial spawning. Taiwan is at present developing a technology of artificially propagating bangus under controlled conditions, one which the Philippines is trying to adapt in order to reduce dependence of fishpond operations on "wild" milkfish fry.¹⁸ Many fishpen owners in Laguna, Bulacan and Pampanga are venturing into hatcheries for a steady supply of fry for their fishponds. There are numerous bangus fry sellers around the Laguna de Bay area who offer about P0.18 per piece, way below the price being fetched in Antique. Although at very early stages of development, and further study is still needed to ascertain the success and viability of such endeavors, it is being realized that, yes, it is more economical to artificially hatch bangus fry instead of gathering transporting it from coastal areas.

SUMMARY

1. *Areas of BFC Exploitation*

There were three allegations regarding the exploitation of BFCs that we hope to have established as factual based on the results of the survey:

1. That middlemen systematically bar direct sale of bangus fry by the catchers to FPOs.

Our data on actual transactions undertaken by middlemen and FPOs show a chain length of at least one middleman/dealer from the BFC to the FPO, and at most three.

But from the same set of data we were able to gather, the first allegation could not be concluded. The middlemen are not organized at all, unlike some of the BFCs or some of the FPOs (e.g. CAFUA). There is no group of middlemen that we know of as yet and that the BFCs have to contend with. The middlemen (at least 43% of them), though, have certain informal arrangements with other dealers and direct buyers of bangus fry, the purpose of which is not really threatening to the BFCs because such is mainly for effective selling of fry, rather than for more effective purchasing (from BFCs).

The FPOs, however, have certain preferences, referring to the convenience they experience when dealing with middlemen. The fishpond owners would only be willing to buy directly from the BFCs if they agree on very lenient terms of payment, say, credit or installment. Supply of fry should also be steady, reliable, and always available, and delivered to the nursery ponds. Fry quality must always be assured, implying stricter measures of quality control to be done by the BFC-supplier. Finally, price of fry must be reasonable low.

What many of the FPOs are actually saying was that the elimination of middlemen from the marketing chain should not inconvenience them, but rather, should create improvements in the marketing and distribution system so that they continue to benefit from the business. This is to say, too, that if the FPOs are not willing to cooperate in developing this shorter-chain system, the BFCs have to take upon themselves not only the tasks of producing the fry but also the functions of middlemen.

2. The catchers take very little, or no, part in making pricing decisions that will prove favorable for them.

True, the dealers of middlemen, for the most part, determine the price of fry (almost half of the time). Only over one-third of the BFCs set the price on their own, most probably, they will have to depend on the information (about price levels) that only the buyers/dealers could give (67-73% of the time).

The setting of automatic allowance levels is another area in pricing where exploitation of the BFC can occur. Although three-fourths of the total BFCs are satisfied with the automatic allowance levels, it shouldn't stop us from seeking fairer terms wherein they could be able to earn more.

Mortality rates are the bases for setting the automatic allowance. From the perspective of the direct buyers and FPOs, 50% allowance is most acceptable if only to cover for mortality costs. We do not discount their (the direct buyers and FPOs) experiences in mortality — even in fact, except for 16% of the BFCs, mortality incidences are not considered a major problem for them — but then the BFCs may be able to negotiate for lesser automatic allowances if they (the BFCs) could exercise control over some causes of mortality, namely: destructive catching gears, overcrowded containers, high salinity levels, carelessness in counting, and poisonous water flowing from nearby ricefields.

The BFCs do not suffer from unjust payment terms. Except in very few and isolated cases, the BFCs generally receive the full amount during the time of sale.

3. That a large percentage of the harvested bangus fry is lost in storage and transport.

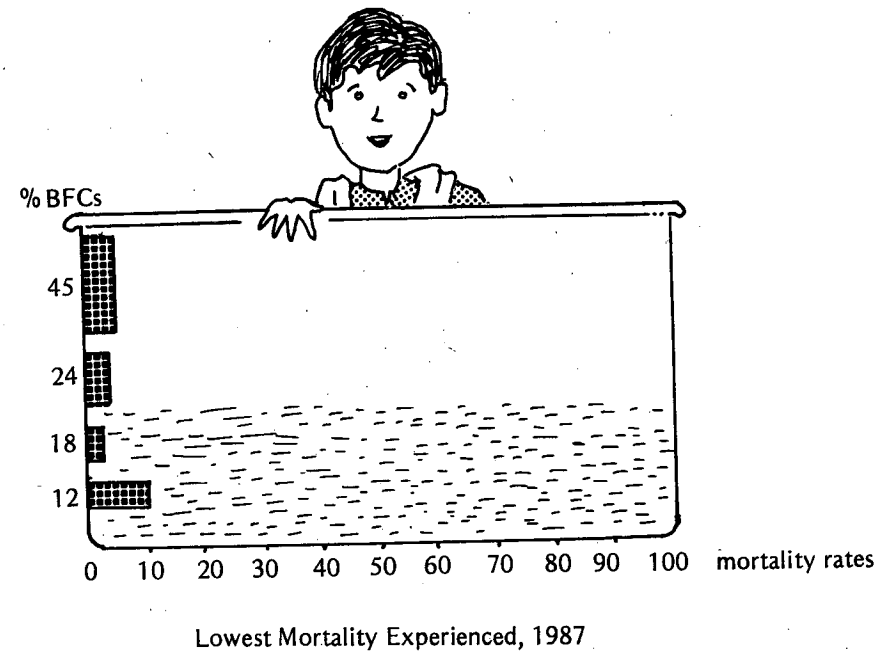
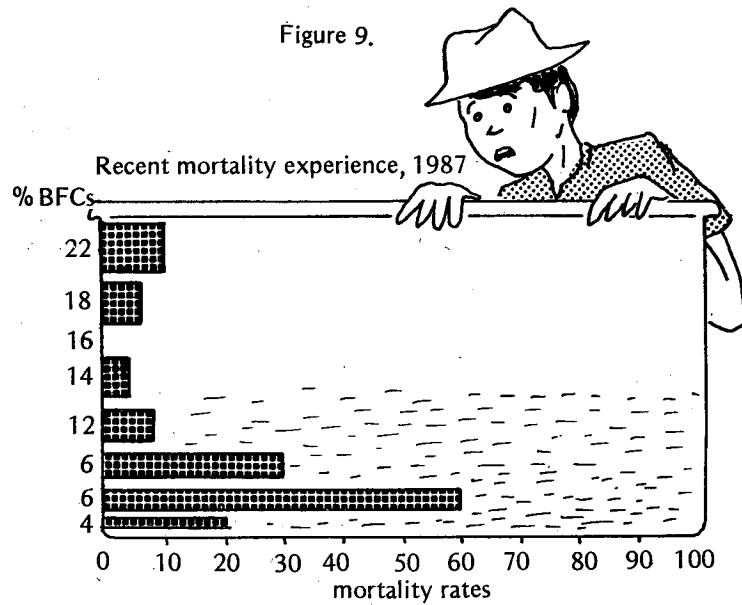
Most recent experiences of the BFCs attest that only 16% were able to sell as much as they have gathered, while one-third of them mildly suffered 2-5% mortality rate, and another third, 7-10% mortality. The alarming rates of 15-60% mortality hit 16% of the BFCs (Figure 9). Death of fry was due to debris, waves, catching gears, poisonous waters, predators, overcrowded containers, salty water, and carelessness during counting.

Actual death of fry is only part of the total mortality cost that the BFC has to shoulder. The automatic allowance is also the other fraction that the BFC has to give up to cover probable mortality incidence once the fry leaves his hands.

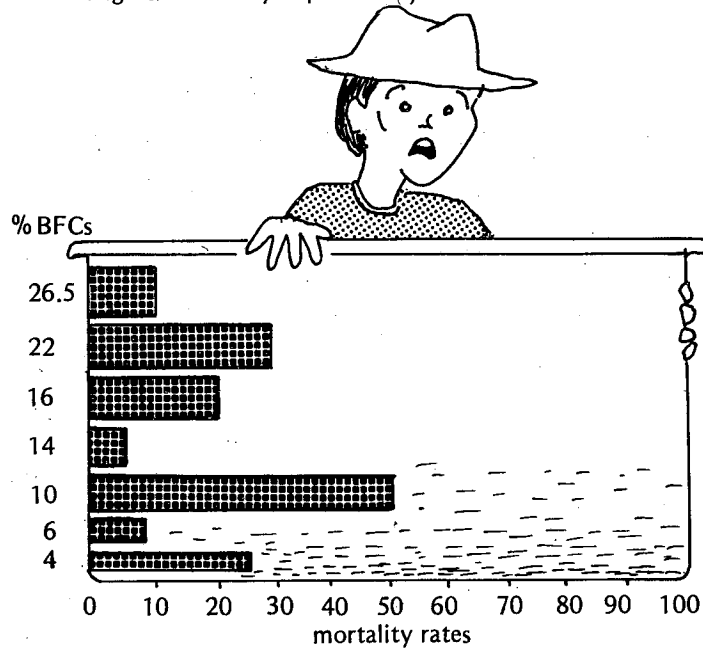
CONCLUSION

With now an enhanced knowledge of the structure, operations and performance

Figure 9.



Highest mortality experienced, 1987



of the marketing system of the bangus fry industry in Antique, the BFCs may be able to set their marketing targets as an organized force.

Points for Further Discussion of Recommendation for Action: Sounding Off the BFCs for Interpretation, Analysis and Conclusion from their Perspective

1. Are the BFCs being exploited by the middlemen and FPOs? If they are, what are the areas of exploitation and what can BFCs, as an organized force, do to eliminate exploitation? If they are not, however, what can the BFCs do to build up their capability in order to be able to be at par with other market components, and therefore, participate actively in the operations of the marketing system?
2. If the middlemen are to be eliminated from the marketing chain, what are the preparations, tasks and responsibilities that the BFCs have to take in order to systematize, and further improve, the distribution system wherein the BFCs and FPOS alike benefit optimally?
3. What are the linkages that the BFCs have to build in order to develop contacts with the FPOs?
4. Based on the trends of the bangus industry in general, what should be the short-, medium-, and long-term thrusts for organizing the BFCs?

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NOTES:

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15. *Ibid.*, p. xiii.
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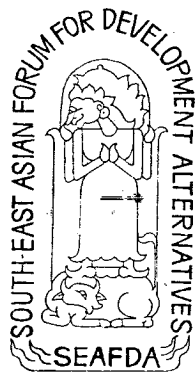


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