

## WHERE TREES ARE FEWER: ATTITUDES ON FOREST DEVELOPMENT OF A FOREST DWELLING PEOPLE

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*Important to the success of any reforestation strategy will be the attitude towards reforestation of the people living in the area to be forested. (Such resident populations are the rule rather than the exception in Mindanao.) An inquiry made in Region X, Northern Mindanao, into the attitudes of a particular set of tribal minority people, utilizing a six-dimensional, likert-type approach to scaling, found these people aware of the hazards to their farms and livelihood of over-logging, and quite well disposed to acceptance of reforestation. However, they raised strong objection, apparently based upon their experience as a group, to the management or ownership of such reforestation projects by business agencies or persons.*

A basic principle of sociological exchange theory states that people repeat actions they have found rewarding in the past (Homans 1974: 11ff.). On this basis one might expect people who have found it helpful to cut down trees upon their own farm plots in order to plow their farm plots more freely, and who have obtained employment in logging operations neighboring upon their areas of residence, to manifest positive attitudes toward further logging operations in their vicinity and to be less favorable to forest development and especially reforestation projects. Such forest development might well interfere with their farming, circumscribe or prevent employment opportunities in logging operations, and terminate such advantages as roads into or near their home areas, built and maintained by logging companies as well as rides for selves or family members back and forth upon logging trucks to and from the National Highway.

Beyond the theoretical, an additional practical reason for interest in attitudes toward logging and toward forest development projects is the present Integrated Social Forestry Project of the national government. If the attitudes of people living in or near areas of potential forest development are negative to such development, the government should know of this as such a situation will require special efforts to provide forestry projects with a favorable reception.

An opportunity to assess such attitudes was offered recently when a sponsor of possible reforestation requested the Research Institute for Mindanao Culture to survey one of several sites in order to determine the potentialities of persons living within this particular place as a work force

for reforestation and their reactions to forest development projects proposed for implementation within their general neighborhood.

At this time, identification of the geographical coordinates of the site might jeopardize the usefulness of the site (squatters, etc.) as an area of potential reforestation. However, it can be said that the site is located in northeastern Mindanao, is approximately 12,900 hectares in area, and is situated on the bank of a large and potentially dangerous river which constitutes about 80 percent of the site's western boundary. This river, the mountainous, rugged nature of the place, and the almost complete lack of maintained interior roads make most of the area socially remote from more densely populated and more economically developed communities in that part of Mindanao, although physical distances in a straight line to nearby bustling towns and barrios are not great.

### Social Characteristics

Approximately 1,300 persons live within the area, so density is about 10 persons per square kilometer. More than 95 percent of these inhabitants belong to the same aboriginal ethnic minority which has inhabited this part of Mindanao from time immemorial. The great majority are married by the time they reach 20 years of age, and men outnumber the women. More than 49 percent of the population are children under 15 years of age, and the ratio of children under five to women 15 to 44 years of age is 1,101 per thousand women. Both these items indicate very high fertility.

At age 5, the number of males per hundred females is 129, that for children under 15 is 106, and that for the entire population is 110. These high sex ratios suggest the possibility of underinvestment, perhaps unconscious, in terms of food and medical care, in female members of the family. They also suggest the possibility of higher infant and child mortality among female children. However, questions upon sickness did not reveal greater morbidity reported for female household members. The computed infant mortality rate, 61.4 deaths per thousand live births, is probably too low, perhaps because of time frame or recall errors on the part of respondents.

The social status of these people as a group is low. More than 95 percent claimed ownership or partial ownership of their farms, but they live within the confines of the national forest. The government, of course, respects tribal claims to ancestral lands. This may not however ensure the rights of particular households to any specific plots of land. Although some households claim ownership of 20 hectares or more of land, the median area of their actually cultivated plots was only 1.2 hectares for their first kind of crop, and only one hectare for their second type of crop. Almost all households engage in farming to some extent, but many obtain additional income from various other activities like animal husbandry (including poultry) and such off-farm activities as home industries and businesses, working upon other people's farms, *tiendas*, rattan and firewood gathering, carpentry, hunting and fishing (in streams and ponds), and the like. Some are also employed in logging ventures, and other as cowboys on ranches.

Median annual cash income was low, even for a rural Philippine site, P2,290 in 1986 with first and third quartiles of P1,070 and P4,440, respectively. One can scarcely be surprised therefore to find that their homes are constructed of bamboo or roughly hewn boards, with nipa or straw (cogon) roofing. Most (83 percent) obtain their drinking water from a spring, 8.5 percent from a stream, pond, or river, and the rest from shallow wells, covered or uncovered. However, on the plus side, almost 60 percent have water-sealed toilets or access to water-sealed toilets, and most of the rest own open-pit types of toilet facilities.

Food crops consist mainly of tubers (camote, cassava, potatoes, etc.), corn, vegetables, and

bananas. Coffee and abaca are the main commercial crops, although food produced beyond the consumption needs of the family is also sold.

Educational levels are low by Philippine standards; 95 percent had completed no more than six grades, 65 percent had completed no more than four grades, and almost 20 percent had completed no school grades at all.

### Methods and Data

Systematic sampling was used to select households in each cluster of dwelling units. Few households lived outside such clusters. At first, every second household was interviewed, until it became evident that the area population was relatively small. Therefore, three of every four households were selected. Altogether, 130 of the 216 estimated households were enumerated. Population size was estimated at approximately 1,300 persons. A fixed-item interview schedule was used since the sponsor desired information upon a large number of topics.

The type of Likert scale used for the attitude questions proposed four levels of favorableness or unfavorableness to the psychological object proposed, as well as a neutral point in between. Respondents were also permitted not to respond, or to offer irrelevant answers in order to promote sense of greater ease and of greater permissiveness.

The reason for providing so many levels of attitude response was cultural. People in Mindanao often do not like to commit themselves strongly to a particular viewpoint. Perhaps this is because they hope thus to offend less those persons, like perhaps the researchers, who strongly espouse the other side of the question. By including "slightly favorable" or "moderately favorable," (or unfavorable) we attempted to make it more permissible in the mind of the respondent to take a stance on one or the other side of the strict neutrality. Hopefully, this would permit sufficient numbers to move from "neutral" to at least the "slightly" favorable or unfavorable side. At analysis time, this would permit the option of collapsing categories into favorable and unfavorable attitudes. This strategy appears to have been helpful.

Respondents were the male heads of households if available at time of interview. If

not available, the wife of the household head or the female head of household was to be interviewed. In fact, of the 130 respondents, 109 were male heads of household.

*Dimensions of Attitudes Towards  
Forest Development*

The reforestation literature and discussion suggested that an assessment upon six dimensions might provide a fairly clear-cut picture of how this resident population felt toward forest development projects and especially reforestation. Much of the ethnic literature suggested possibilities of misunderstanding on the part of ethnic peoples and of an aggrieved conservatism of their traditions. Thus a view reflecting small and local horizons, considerable self-centeredness, and hostility toward forest development projects in general and reforestation undertakings in particular seemed quite likely. Rather than simply measure the median or average aspect of this hostility or lack of hostility, it seemed also desirable to explore the extent of such feeling - to test the limits of feelings, so to speak.

The six dimensions chosen are the respondent's view of the: (1) desirability of further logging operations in the area under study, (2) present government (Bureau of Forest Development) regulations pertinent to watershed protection, (3) desirability of commercial reforestation within the respondent's locality of residence, (4) acceptability of personal employment, or employment of one of his/her family members, in a commercial reforestation project, (5) acceptability of a homesite or farmsite transfer (or of both) in favor of a reforestation project, and (6) participation of his/her household in some social services offered by the reforestation agency as a goodwill gesture to the area population.

Through the first dimension we hoped to gauge the general acceptability of forest development and of reforestation to the respondent. The area has been already heavily damaged by the effects of deforestation and other resource-destructive activities which had produced landslides, destructive of roads and trails, and soil erosion. If he could accept all this while still endorsing further logging in the area, he would seem clearly hostile to forest

development and to reforestation. Perhaps he would see such forest development projects as external interference in his farm operations and as inimical to his general interests. An anthropologist who had lived many years with members of this same ethnic group thought that such hostility might well characterize the outlook of a majority of the membership.

The second dimension explores reasonableness to the small forest farmer of the government's law and regulations concerned with forest development. If these seem completely beyond all bounds and utterly unreasonable to him, the government can hardly hope without an appropriate campaign to shed favorable light upon these laws, for much cooperation in regard to their implementation. On the other hand, farmers who would spontaneously accept such regulations and cooperate with them, would hardly seem very hostile to forest development projects.

The third dimension attempts to test the limits of attitudes which might favor forest development. Respondents who might be favorable to forest development and reforestation projects could nevertheless well protest commercial sponsorship of such projects. For example, one frequently hears how a smooth-speaking businessman (or impersonation thereof) has tricked ethnic minority groups in some "sharp" transaction involving their land or their money. If respondents are in favor of forest development in general, would this favorable attitude extend so far as the acceptance of commercial sponsorship of forest development?

The fourth dimension explores degree of aversion to forest development projects. Widespread underemployment was expected in the area, as well as extensive off-farm unemployment. In view of this, unwillingness to accept employment in a commercial reforestation project might signal a deeply felt hostility to reforestation in the area. On the other hand, to be willing to work for a commercial reforestation group might indicate that hostility or unfavorableness was not very strong. It might even signal a positive attitude.

The fifth dimension explores the opposite side of the coin. If a respondent had manifested favorableness to forest development by his responses thus far, how far did this favorable

attitude extend? If employed in the reforestation project, how far would his goodwill toward reforestation go? If it were desirable for the reforestation project to acquire the land on which his house or his farm, or both, stood, would his concern for the good of the reforestation persuade him to be willing to accept the transfer? For many households, the head was living on the site which his father had occupied before him and he might be farming the same land as his father had cultivated. He may have been born and brought up there. He may have shared many happy experiences there with wife and family. Thus, if willing to make such a transfer for the good of reforestation, this would appear to show strong commitment to the goal of reforestation.

The sixth dimension inquires into the nature of hostility or unfavorableness to forest development by looking at the extent to which it will go. How many residents of the area would be so unfavorable or hostile to a reforestation project nearby that he or she would not personally, nor allow his/her children to, participate in a social project even though it would be beneficial to him or his children, which the company would set up at its own expense as a gesture of goodwill to the people? Unwillingness of the household head to participate or allow his children to participate in a social project truly beneficial to himself or the household might signal strongly hostile attitudes toward forest development. Of course, it might also signal only a very unfavorable attitude toward the particular project proposed, and this would have to be judged in terms of the general kind of reaction of the group.

It also appeared useful at the same time to explore openness to change on the part of the area people. The members of this ethnic group had lived, up to less than a hundred years ago, a semi-swidden form of economic and social life in the secondary forest of northeastern Mindanao, upon the fringe of the Spanish-governed regions of northern and eastern Mindanao. Among other things affecting their definition of situations, they had their own folk-medical traditions and practices. To a large extent, tradition had assigned disease to punishments inflicted by spirits or preternatural beings that lived in neighboring trees, rocks, and

fields. Detailed procedures of diagnostics and cures of diseases had been worked out, consisting mainly in divinations and ceremonial peace offerings to the offended spirits.

Accordingly, this people might find it difficult to accept such a modern epidemiological practice as vaccination against particular diseases. On the other hand, a Baptist medical team had been visiting this people over a period of perhaps 30 years. Among other things, they had been proposing vaccinations of children and had been giving such vaccinations at various times. Willingness to accept vaccination might therefore provide a measure of openness to change on the part of these people. Acceptance of vaccination from the reforestation agency at no cost or minimal cost would appear to indicate that unfavorableness to forest development was not very intense among those willing to accept vaccination of their children. On the other hand, refusal to accept might be ambiguous. It might signal strong hostility or reforestation or other forest development. Or it might be the result of a folk medical outlook at variance with vaccination.

## Results

We show for each dimension the item presented to the respondents, the statistical tabulation of their response, and their comments on the item as psychological object. The latter are often very many so the more typical and relevant will be presented.

### *Dimension One: Permissiveness Toward Further Logging*

The item was proposed thus:

*Logging companies want to cut more trees in this area and sell them. While this will give more jobs, it will destroy more soils and will cause landslides. In your opinion should the government allow loggers to cut more trees here or not?*

The spread of response was unusual for a Filipino population. Not only was it well distributed over the eight choices on either side of the neutral point, but very few chose the neutral response:

<u>Favorable</u>	<u>Percent</u>	<u>Unfavorable</u>	<u>Percent</u>
	17.0		81.5
Slightly in favor	8.5	Slightly unfavorable	8.5
Moderately in favor	2.3	Moderately unfavorable	14.6
Strongly in favor	3.1	Strongly unfavorable	9.2
<u>Very strongly in favor</u>	<u>3.1</u>	<u>Very unfavorable</u>	<u>49.2</u>
Undecided or No Opinion .....		1.5	
N = 130		100.0	

In addition, sociometric techniques had been used to identify informal leaders within the area. No informal leaders were found for the whole area, but within each household cluster we identified all chosen by mention of the respondents. We included the first two mentioned in each cluster at least, and in all, sixteen persons. Eleven of these informal leaders declared themselves to be very strongly opposed to further logging in the area under study. An additional leader was moderately opposed and another slightly opposed. On the other hand, two of these thought-leaders were very strongly in favor of permitting further logging, and a third was slightly in favor. About 81 percent of the informal leaders opposed further logging. About 19 percent were in favor. Thus the leaders and the rest of the group differed little in attitude upon this dimension. Completely spontaneous comments offered by any respondent (not just the leaders) upon this item were:

Unfavorable

I'm afraid we can in the future make no use of lumber. There will be no more trees for future use if we continue cutting them. The forest will be denuded. It is against the law to cut trees. The forest is getting further away; it is very difficult to get lumber for house construction. I'm afraid our coffee which is planted in the forest will be destroyed. Logging will destroy other trees (than those cut). It can destroy other plants. Trees give coolness to the place. Cutting of trees will destroy our crops like abaca because they use bulldozers. The loggers won't pay for any destruction (they cause). If logging is allowed, it will cause trouble

for farmers. It will cause soil erosion. The crops won't grow well. It can cause floods. Roads will be destroyed because the roots can no longer hold the soil. There will be less rain.

Favorable

Further logging will be advantageous to the community because the loggers give assistance to us like building roads, putting up a school building, or making a barangay hall. The loggers will pay taxes to the government. If the logger will give us salary, why not? Yes, in order to provide work so that we can earn for our families. For some people, logging is their only means of livelihood. The loggers will repair the barangay road. As long as they pay (taxes) for each tree they cut. They have already started to cut trees.

*Dimension Two: Government Regulations Regarding Watersheds*

The item chosen to tap this dimension read as follows:

*The Bureau of Forest Development wishes the government to forbid by law the cutting down of trees within 20 meters of running water, here in this place, because that causes floods in the lowlands during heavy rains. It may also cause the streams to dry up most of the time. In your opinion, should the government allow the cutting of trees within 20 meters of stream? Or should it forbid this by law?*

Again, the responses were widely spread although one-sided, and relatively very few chose the neutral escape. The responses were:

	<u>Percent</u>		<u>Percent</u>
Favors forbidding by law	94.7	Unfavorable to forbidding	3.8
Slightly Favorable	8.5	Slightly Unfavorable	1.5
Moderately Favorable	11.6	Moderately Unfavorable	0.0
Strongly in Favor	17.7	Strongly Unfavorable	1.5
<u>Very Strongly in Favor</u>	<u>56.9</u>	<u>Very Strongly Unfavorable</u>	<u>0.8</u>
Undecided or No Opinion .....		<u>1.5</u>	
N = 130		100.0	

The spread of the leaders was less skewed. Of the 16, fourteen favored a law forbidding cutting of trees within 20 meters of a watercourse and two moderately opposed such legislation. Thus 88 percent were in favor of the law as proposed, and 12 percent were opposed to it. As before, no leader took a neutral position.

Spontaneous comments in favor of such a law were as follows:

(Cutting such trees) will cause drying of the streams. It will cause soil erosion. It will cause shortage of water. There will be no more roots to hold the soil. (Such trees should be left) to prevent flood. It will destroy our plants. It will cause flooding.

One comment was offered in opposition to such a law:

It is the government that has the authority and their decision will be followed.

*Dimension Three: Commercial Reforestation*  
The item read:

*Some businesses would like to grow trees in this locality in order to give protection from landslides and to conserve the farm soil. They will employ many people to help them raise the trees. But then the government will not allow logging companies here. In your opinion, should the government allow these business to grow trees here?*

This item spread the responses fairly evenly between the pros and cons. Both the strong and the moderate opinions tended to reach fair balance on both sides of the question.

	<u>Percent</u>		<u>Percent</u>
Allow Commercial Reforestation	46.9	Do Not Allow Such Reforestation	52.3
Slightly in favor	6.9	Slightly unfavorable	5.4
Moderately in favor	6.1	Moderately unfavorable	7.7
Strongly in favor	8.5	Strongly unfavorable	11.5
<u>Very strongly in favor</u>	<u>25.4</u>	<u>Very strongly unfavorable</u>	<u>27.7</u>
Undecided, No Opinion .....		<u>0.8</u>	
N = 130		100.0	

The informal leaders were more in favor of commercial reforestation. Ten favored it, while six opposed it (62 vs. 38 percent). Seven of the 10 favoring his item were very strongly in favor, two were strongly in favor, and one was only slightly in favor. On the other hand, of the unfavorable disposed leaders, three were very strongly unfavorable, two were strongly unfavorable, and one was moderately unfavorable. Clearly, among both people and their informal leaders, there is a clear split in thinking regarding the desirability of commercial reforestation.

Reasons spontaneously offered present some reasons for these opposed attitudes. (As before, reasons are for all the people, not just the leaders.) The reasons in favor of commercial reforestation were:

It will be advantageous for the community, a dream for which we have been longing to come true. It will replace the cut trees and protect the soil from landslides. So that more trees will grow in our place. It will make the soil fertile. It will maintain the coolness of the place. People will be given the opportunity to work. It will help educate farmers by teaching them suitable trees to grow. Yes, if the reforestation project will be administered by the government. It depends upon the agreement (with the business). It will add more (tax) income for the government. As long as they will not use the land of the natives. As long as they will not plant on land already owned by the people. As long as they will not get our land. As long as they will not oppress the people. As long as the natives (members of the ethnic minority) will not be driven out (from the area), and the barangay will be given a good road.

Reasons offered against commercial reforestation were:

The business men might drive us into the forest. Our land is just enough for ourselves. I don't like that other people will enter the place. We don't

know the businessmen and their purpose. The businessmen will buy our lands and we will have no place to live. I'm afraid that we might lose our lands. It's dangerous if the businessmen will enter. The forest may be accidentally burned down. All the lands were owned by the people. The businessmen can't just drive the people away. If the government will supervise the project; otherwise we will be suspicious of their intentions. If the farmers are the ones who will plant the trees, and the loggers will not be involved (as the businessmen). I'm afraid the businessmen will oppress or take advantage of the natives. They will get our lands. Our lands are already planted to crops (so we don't want them planted to trees). Where will we live if this place is planted to trees? Our crops will be affected if surrounded by trees. Our family can survive even without the help of a group of businessmen. We know how to work. Let them plant on government land, not on the land which we own.

*Dimension Four: Employment in Commercial Reforestation*

The item was as follows:

*If that business offered you (your husband) a job in growing trees, would you (he) accept employment with them?*

The respondent primarily expected was the male head of household, as mentioned earlier. Since the wife would be the respondent in some cases, the alternative form, "would he, that is, the husband," was placed in the for use in such cases. The distribution was once again quite split, although this time the majority were favorable. A carryover from item 3, where businessmen were proposed as responsible directors of the project, had not sat well with respondents and this seems to have influenced the Dimension 4 response set as will be apparent from the spontaneous comment. The detailed distribution was:

	<u>Percent</u>		<u>Percent</u>
Favor Employment	55.4	Unfavorable to Employment	41.5
Slightly favorable	6.2	Slightly unfavorable	3.1
Moderately favorable	7.7	Moderately unfavorable	9.2
Strongly favorable	10.0	Strongly unfavorable	6.2
<u>Very strongly favorable</u>	<u>31.5</u>	<u>Very strongly unfavorable</u>	<u>23.0</u>
Undecided, No Opinion .....		3.1	
(N = 130)			

This item produced the largest number of undecided answers thus far, which seems to show the strength for the people of the arguments they perceive on both sides of the question.

Eleven of the informal leaders favored accepting employment and five did not. Thus they were more in favor of such work than the people at large.

The spontaneous remarks made illustrate the strength of the reasons pro and con felt by the people, and also reflect the suspicion of the good faith of the business people which appeared in the response to the previous item. The favorable response was:

It will be a of source income. Will help our livelihood. Will provide extra money. It can help us educate our children. Will help us buy food. If the wage is a good salary, it will be advantageous. If the working conditions are good. If the work is in the forest lands (and not here on my home or farm site). The salary rate will be higher. I'll accept the offer if their intention is good. I will agree if they will plant trees on my land. It will be for our benefit in the future. I will accept the offer, but only if the work is in this area/place. I will accept, if they will help us in time of need. As long as the work is good, why should we reject? If I can still manage to work. If my companions will (also) agree. I am too old to work.

Those unfavorably disposed said:

I am too old to work. I prefer to work upon my own farm only. I already have (sufficient) work. I want to cultivate my own land and don't want any businessmen cultivating trees here. We have

a lot of work. He can't accommodate the work of others. I don't want my work to be supervised. I prefer to work on my own farm; I don't want to be dominated and supervised. I am content with my own work; I can't accommodate work with others. I can't; too occupied with work on my own farm; I have lots of work to do. I don't want to give up my own work. I don't want to leave my own work, and the salary may be insufficient for my family. The government might come into conflict with these businessmen, and we will be affected. I disagree (with the idea of working for the commercial reforestation project); we don't know where this group (of businessmen) come from. I am not so sure of our security; we might be evicted. The project would not be owned by, nor operated by the government. The businessmen might drive us from our own land. I don't like that the businessmen will invest here, therefore I would refuse their offer. They might take possession of our land. It might be destructive of us if we accept the job. I prefer to plant trees myself, rather than the businessmen. I know that the salary will be delinquent. Let them plant the trees themselves.

*Dimension Five: Willingness to Transfer Homesite*  
The item was phrased as follows:

*If you are employed by that business, and they wish you to transfer your house and family to another good place, and if they are willing to provide land and pay for transferring your house and possessions, would you be willing to move to another good place?*

This item drew the largest number of responses unfavorable to forest development, and was only slightly less skewed than item two.

Favorable	<u>Percent</u>	Unfavorable to	<u>Percent</u>
	6.9		93.1
Slightly favorable	0.0	Slightly unfavorable	2.3
Moderately favorable	0.8	Moderately unfavorable	7.7
Strongly favorable	1.5	Strongly unfavorable	12.3
<u>Very strongly favorable</u>	<u>4.6</u>	<u>Very strongly unfavorable</u>	<u>70.8</u>
Undecided, No Opinion .....		<u>0.0</u>	
N = 130		<u>100.0</u>	



All of the informal leaders were unwilling to transfer their residences in favor of the reforestation project. Fourteen of them were very strongly unwilling, and the remaining two were strongly unwilling and moderately unwilling. Thus the leaders reflected very vividly the dominant thinking of the people - which is probably the reason why they are informal leaders.

The reactions of the farmers who were in some degree favorable to transfer were not entirely positive:

It depends (i.e., my willingness to transfer) upon the other place. If it is not good, I better stay here. If they are sincere in their offer (of free, good homesite land). If I can see that I will have a bright future in that place. I like it so that I won't have to hike here any more. Yes, so that my house will be made of hollow blocks.

The remarks of those not in favor were:

I was born here, and have sentimental reasons. I like this place. It's difficult for me; I am a teacher, and just can't transfer to any place at all. I don't like to leave this place. My farmland is situated here. It's difficult to start again (in a new place). No one will take care of our farm. I have already

planted my crop in the area. The business men might claim the land. I am used to this place. People who transfer do not have a bright future; they leave all they have invested. The place to relocate us might not be good. I can't leave the people here; I am content here. I am not sure of the sincerity of the businessmen. I will not agree unless we are told the real reason why we should be relocated. My work is here. I will not leave this place. We like to work upon our own land. It depends: if the place is good, or better than here; perhaps. I am not sure whether the (other) place is good. I am afraid we will be converted into communists. I don't like to be dictated to; I have my own land.

*Dimension Six: Participation in Proffered Social Services*

The item which was proposed, read as follows:

*If the government, that business, or some doctors want to give your children a free vaccination to prevent typhoid fever, malaria, or the measles, what would be your reaction?*

Again the response was strongly skewed, this time to the favorable side. Again, there were no answers in the "undecided" category.

	<u>Percent</u>		<u>Percent</u>
Favorable to Vaccination	6.9	Unfavorable to Vaccination	93.1
Slightly favorable	5.4	Slightly unfavorable	1.5
Moderately favorable	5.4	Moderately unfavorable	2.3
Strongly favorable	13.1	Strongly unfavorable	0.8
<u>Very strongly favorable</u>	<u>67.7</u>	<u>Very strongly unfavorable</u>	<u>3.8</u>
Undecided, No Opinion .....		0.0	
N = 130)			

All but one of the informal leaders favored the immunization of their children by a free vaccination. Fourteen of these fifteen were very strongly in favor of such immunization. And the fifteenth was strongly favorable. The one opposed leader said that he was moderately unwilling to let his children be vaccinated. A favorable comment was as follows:

The treatment will prevent sickness. It is free. We won't have to go to a health clinic (the distances are often great and the trails often arduous).

Transportation to the clinic is difficult. So that the children will be treated for their sickness. The intention is good. Free medicine. We are far from the clinic.

The comment of those not in favor of the vaccinations was:

We don't know the purpose of the vaccinating people. We have our own medicines that we will get from our own farms - free. We will go to the health clinics. We have our own herbal medicines.

### Discussion

These data shed light on several issues raised at the beginning of this paper. They furnish material, too, for views on particular aspects of forest development, and procedures for their implementation.

First, past employment of members of this group in logging, although it proved financially rewarding, has not rendered the group receptive to further logging operations, social exchange theory principles notwithstanding (Homans, 1974: 11ss., Blau, 1964: 92). Stimulus-response reactions may in fact operate in many types of habitual and semi-automatic types of response to situations. But the situation of this minority group has called for and apparently received a much more reflective and thoughtful type of response that seems more akin to a decision in the spirit of Parsonian voluntaristic social action (1973: 3-43; 727-730ss.) or "meaningful" social action as Weber envisioned its place in theory and research. Thus it becomes clear that while stimulus-response theory may account for perhaps a large segment of social exchanges, it clearly cannot satisfactorily account for certain truly crucial and highly important initial actions in social exchange.

Secondly, with regard to the practical problems of how cultural minorities, who dwell within the national forest confines with somewhat vaguely delineated rights to their ancestral territories, envision government formulations as to forest development and in particular reforestation, several confounding factors must be disentangled. However, the data from one small set of a single minority group inhabiting Northeastern Mindanao cannot possibly accomplish such a clarification in general. This would have to be the work of many separate studies such as the present investigation in many different parts of the Philippines. Hopefully, these may be forthcoming. This paper can only attempt the task of disentangling such factors in the group which was the object of its study.

#### *Attitudes Toward Forest Development and Reforestation*

There can be little doubt that the ethnic minority members inhabiting the area of potential reforestation studied in the present survey are positively disposed toward forest

development and reforestation. First, as a group they oppose further logging operations in their area, despite the favorable employment opportunities that further logging would offer to them. Further, in the reasons they present for their attitude, they stress ideas that show they have personally reflected about the matter and discussed it among themselves antecedently to the survey interview. They emphasize the increasingly treeless nature of the environment, the difficulty in finding lumber, the drying up of the streams, the erosion of topsoils, the destruction of roads, and the loss of the coolness provided by the shade of trees. None of these matters had been suggested to them in the first attitude item or in previous questionnaire material, as shown by their comments upon Item 1 which spoke only of the destruction of soils and of flooding.

Their overwhelming favorable response to Item 2 (almost 95 percent) which presented one of the Integrated Forest Development Regulations believed by Bureau of Forest Development officials to be one of their regulations most likely to be opposed by forest dwelling farmers seems to confirm their support of forest development revealed in Item 1.

Why then does this support (if it truly is support) flag so greatly from the high mark of Item 2 to the low backing for forest development that appears in Item 3, where only 47 percent were willing to endorse a reforestation project in their area? Is it because the first two items were only abstract endorsements without localization to their own area (and which as such did not "cost" them anything to endorse?) Or is it another reason?

Comparison of the three items shows that the abstractness of endorsement cannot be the reason since both Item 1 and Item 2 clearly located the application of its remarks to their own area, and would affect it to about the same degree, if not more, than Item 3. Rather, analysis of the three items, and especially of the comment spontaneously offered without prompting of any kind or even request for comment, on the part of the interviewer, indicate that in the third item, a further factor had intruded into their psychological perception of the object. Study of the remarks offered and attention to the change in favorability toward the object of the item, shows that this intruding factor was the commercial nature of the reforestation project

suggested by the item. On the basis of Item 1 and 2, the remarks about the entry of business men into the area seem to the present writer to be decisive. It is not reforestation or other forest development undertakings that this people are objecting to, and which is the reason for the decline in favorable attitudes toward reforestation as proposed in Item 3. It is control of the project by businessmen that is the stumbling block. In fact, several respondents fairly clearly express this idea in the comment and suggest that the government carry out the project itself. The attitude of fear and suspicion toward the businessmen stands out very clearly in the comments that accompanied their choice of categories of agreement or non-agreement with the proposition of commercial reforestation.

Apparently, these remarks about the businessmen are based upon past experience, presumably mainly obtained from contracts with logging company executives, which has not reassured them of fair treatment at the hands of private business.

What has been this experience? Some twenty years ago the present writer attended a major confrontation between several logging companies and members of the same ethnic minority, held in a pleasant seashore barrio by the Ministry of Defense. At this meeting the native leaders chanted in their mother tongue their case against the loggers. These loggers, they declared, were destroying their livelihood. They were driving away the game from the forest upon which their hunting expeditions relied and their farm produce was being destroyed by the machines of the loggers. Recompense apparently was not being made by the logging companies, since the natives were threatening armed resistance to the extension of logging operations.

In fact, not long after this meeting, armed skirmishes did occur. People apparently were wounded or killed. Martial Law was declared some time after that and the affair slipped from the public consciousness.

Aside from the set of events, the particular ethnic minority has witnessed the devastation of whole segments of the national forest (or what used to be national forest and now is still within "national forest" confines but largely bereft of trees) by private businessmen in the role of logging executives. They have witnessed crops of coffee and the coffee trees themselves, as well

as other crops, ripped out of ground down under the bulldozer treads of the loggers, perhaps not deliberately, but without recompense nevertheless. They have had no way of equalizing the power position of the logging company owner in their dealing with his enterprise. In brief, they seem to have had good reason for taking a very wary stance toward commercial reforestation.

It would seem the part of the reason for government planners to take this attitude of the ethnic minority here reported upon into serious evidence in logging and plantation undertakings in northeastern Mindanao has not been exemplary for their manifestation of public spirit and benevolence for the common good. In the unbridled pursuit of profits, they have been willing to devastate the national forests to the point of destroying the ecological balance of vast segments of formerly virgin forest, and of clearing small farmers from the lands they had owned and occupied. When loggers have been ordered to cease operations by the government for the common good of the area, they have rarely continued to operate as before under one or another pretext, to the detriment of watertables and watersheds.

The present writer does not know the intentions of the government regarding implementation of reforestation. Eventually, substantial reforestation is a pressing necessity. Possibly, in view of the present economic crisis, the government lacks funds for anything but commercially directed and managed reforestation. However, in view of the possibility that such commercialization might make matters worse rather than better as far as providing equity for the small-scale ethnic or lowland farmer operating within national forest confines, and perhaps for the ecological balance as well, planners might consider the possibility of attempting to interest one or more foreign assistance agencies belonging to friendly states to set up a substantial reforestation project, and to manage it for at least five years before turning it over to commercial management. Perhaps, too, at the time of turnover, the government could set up a council or board for the project on which the small farmers belonging to the area could be well represented. This council or board could oversee the operations of the commercial organization, and report regularly to the government upon how the basic rights of the

local people and how the good of agriculture and of the ecological balance are being attended to in the area of reforestation.

The response and distribution of option on Item 4 supports the interpretation given to the results of the Item 3 choices. Respondents who opposed work for the businessmen verbalized their fear of loss of right in their response to the item, as has been seen previously. Those who said they would accept work, but who also verbalized such fears also revealed their fears and suspicions of the businessmen in their comments.

The responses to Item 5 and 6 do not modify these conclusions greatly. Item 5 seemed to express for the most part a not uncommon Filipino reaction to giving up one's present homesite, and perhaps farmsite too, in favor of the reforestation project. The people of North Mindanao become very attached to homes which they own. Especially is this true if the home was inherited from their parents. Even when they move to another city, like Manila or Cebu, they like to keep their old home, although they may rent it, and they like to return to it from time to time. Thus for them to accept transfer, even as a possibility, in connection with an abstractly possible reforestation project in their area of residence, would not very likely seem a reasonable choice to make. However, if they were actually working for a reforestation project, and could see a real need on the part of the project for their land, they might actually be more willing to transfer than they might seem on the basis of the present distribution of choices. Those who were willing to make a transfer appear, on the basis of their comments, to be those who had come more recently or were not satisfied with their present home, such as: "I like it so that I won't have to hike here any more." Or "... so that my house will be made of hollow blocks."

Item 6 did not manifest strong adherence to tradition or to outmoded ideas. A very few did speak of their folk-herbal remedies (which might in fact be helpful) but the great majority were very willing to accept a free vaccination for their children and looked upon it as a valuable benefit. Some showed their continuing suspicion of the business interests by stating that they would prefer to go to the public health clinics and pay for the shots themselves, "since we don't know the purpose of those giving the vaccinations."

## Conclusion

Summing up, the picture of this ethnic minority that emerges from the responses they have given is of a farm people with limited education who would like to obtain better education for their children, better health for their families, better opportunity for employment, and a better life in general.

While desirous of improving their condition, they wish by and large to remain living where they are. They would like their farms and homes protected by better forest cover, especially by a reforestation project that would give them better employment opportunities than they now possess.

They would like to see their topsoils better protected against the erosion that is now afflicting them. They would like to see their present watercourses protected. They want the government to call a decisive halt to the promiscuous logging that has gone on in their area. Reforestation in their area would be welcome if administered by the government or strictly regulated by it.

However, for them, commercial reforestation is a very different thing. They would not welcome it because of their fear that large businesses through their knowledge of how to exploit the law for the benefit of their businesses, would oppress them, take over their lands, and eventually find a way to drive them off into the forests. This possibility is not an unrealistic outcome in view of the history of the treatment of minority people in North Mindanao over the past 50 years.

They are a not ungenerous people, showing concern not only for themselves but for others who live in the same watershed but at lower levels, who would be the recipients of flood waters and debris from their farms and homes if more trees were cut down along the watercourses. They appear to sympathize with such people and wish them well, and want them to be protected from floods. They seem to realize and show concern for such people and to realize that they themselves have obligations with regard to these other people.

Our impressions of this people is of a warm and friendly group. Despite lack of education and poverty, they are an attractive and likeable set of people. They are making very real efforts to cope with the more advanced civilization

around them in order to take their rightful place in it. And they seem to be succeeding in a modest way. They may become a bridge between their more rustic ethnic relatives who live further out in the hinterlands, and the more progressive Bisayan lowland culture that characterizes the dominant society around them.

One can only hope that if reforestation does become sited in their area, and that if it is commercially managed, that it will be so administered as to build up their confidence and competence so that they some closer to the better life that they seek.

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## PHILIPPINE MUNICIPAL FISHERY RESOURCE, PRODUCTION AND RESEARCH: A SOCIAL PROFILE

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*The undeniable wealth of resources enriching Philippine waters and shores has always been observed and reported. Yet an equally undeniable and certainly distressing social paradox—the widespread poverty of the various communities of small fisherfolks—has been given less serious thought. Despite several empirical surveys of fishery households, gears, labor output and income, the present state of fishery research only underscores the compelling need for a more comprehensive and meaningful investigation into the appalling poverty of Filipino small fishers—the direct producers involved in a reportedly profitable fishing industry. This essay ventures to explore such an imperative. On a theoretical plane, it foregrounds a socioeconomic reality beyond the visible logic operative in fishing communities; an underlying logic through which men, women and their households can be viewed. On an empirical level, it renders a contradiction inherent in the gradual transformation of Philippine coastal communities to fishery markets, in a present cohabitation of fishery tradition and commerce, in the fishery relations between local fisherfolks and foreign sea investors.*

The Philippines' wealth of natural resources in general, and of marine resources in particular, has always lured foreign entrepreneurs and adventurers to our shores, and in fact, has influenced the "development" of the Philippine fisheries sector. A brief sketch of the transformation of the various small-scale fishery production activities into a national export-oriented enterprise renders an illustrative instance.

Before the American colonial period, fishing was an economic activity characteristic of coastal life in the archipelago. Immediately after the organization of the Philippine Commission—a consequence of the American occupation in 1900—an office designated to supervise over fishing matters was created and implemented in 1907. For 18 months, the American research vessel *Albatross* surveyed Philippine aquatic resources and initiated endeavors geared towards further exploring the local marine potentials. The year 1920 witnessed the organization of a Division of Fisheries and the implementation of legislative Act 4003 which compiled all laws related to Philippine aquatic resources and set aside funds for the encouragement of further fishing activities. The Division of Fisheries was soon expanded and renamed Fish and Game Administration. In 1939, the Fish and Game Administration became a special component of the Department of Agriculture and Commerce. The Administration was converted into a bureau in 1947; in 1963, it was reconstituted into a Fishery Commission.

At the end of World War II, another intensive survey of Philippine waters was sanctioned by the Philippine Fisheries Program of the US Rehabilitation Act and undertaken by the US Fish and Wildlife Service. The *M/V Spencer F. Baird* collected hydrographic and biological information about the local resources which led to continued surveys done this time by the 30-ton research vessel *M/V David Starr Jordan*. A school of fisheries was then created and later, several vocational fishery schools were established throughout the archipelago. In 1957, a College of Fisheries was instituted at the University of the Philippines.

On 20 March 1963, the fifth Congress of the Republic of the Philippines promulgated Republic Act No. 3512 and declared a national policy which encouraged, promoted and conserved national fishery resources for the stabilization of the national economy. In addition, the Philippine Fisheries Commission (replacing the then Bureau of Fisheries) was created and placed under the direct supervision of the Secretary of Agriculture and Natural Resources. Later, however, under the Integrated Reorganization Plan of the national government, the Philippine Fisheries Commission was again reverted back to the Bureau of Fisheries maintaining the same duties and function as stipulated in Republic Act No. 3512. Evidently acknowledging the wealth and potentials of Philippine municipal waters, and presumably, the productive capacities of numerous fisherfolks, Presidential Decree No. 43 and after, Presidential Decree 704—an

integrated fisheries development policy or better known as the Fishery Decree of 1975 — once again revised and consolidated all laws and decrees affecting Philippine fisheries. It declared that the "policy of the State (is) to accelerate and promote the integrated development of the fishery industry and to keep the resources of the country in optimum productive condition through proper conservation and protection".

Philippine fishery industry was likewise held up as a pioneering project of the Board of Investments (BOI) through which the government aimed to "promote diversification of export products and markets to enable the fishing industry to contribute positively to the growth. . . of the national economy." The government then instituted the Fishery Industry Development Council (FIDC), provided it with the functions of a policy-making and implementing body and with a composition made up of the Minister of Agriculture and Natural Resources, Director of Fisheries, Chairperson of the Development Bank of the Philippines, President of the Philippine National Bank, Chairperson of the Board of Investment and two private sector representatives from the fishpond operators and Deepsea Fishing Association. The Bureau of Fisheries and Aquatic Resources (BFAR) was made to serve as the research, advisory and executive arm of the FIDC.

### Fishery Production

Philippine fishery industry currently consists of capture or culture, as well as industrial and service activities, which includes fishery-product catching, processing, manufacturing and trading of fishery produce. It has likewise been reported to have produced two types of fishery products: (a) "capture" which includes fresh fish (e.g. sardines, mackerel, tuna, *bangus*, herrings), crustaceans (e.g. crabs, lobsters, shrimps, prawns), mollusks (e.g. oysters, mussels, clams, octopus, squids), aquatic invertebrates (e.g. pearls, shells, corals, sponges), other marine products like marine turtles, reptiles skins, sea urchins, sharkfin and (b) "industrial" which includes processed and fishery products such as *tuyo* (dried fish), *tinapa* (smoked fish), *bagoong* (wet-salted fish/shrimp), *patis* (fish sauce), canned sardines and mackerel, and fish meal

(animal feed). Various estimates of the national fishery production from all fishing and aquaculture sectors have rendered a positive production output placed within a 1.4 - 1.8 million metric ton range. The Food and Agriculture Organization, for instance, has reported that in 1978 the Philippine fishery industry produced 1.71 million metric tons valued at more than P8 billion, increased its production to 1.75 million metric tons in 1981 and to 1.9 million metric tons valued at P15 billion in 1982 (Rabanal 1985).

But while the wealth of resources making up Philippine seas and shores will always remain undeniable, the widespread poverty in the countryside, of the coastal communities, of the small fishers involved in the fishery industry can likewise be pointed to as a distressing social paradox. The average annual household income, for instance, of municipal fisherfolks has been reported to amount to about P4,410—less than one half of the 1978 poverty threshold of P10,261 (Ibon Facts and Figures 1981)—and has consequently compelled these fishery producers to engage in other income-generating activities such as carpentry, palay farming, retail store, buy and sell. Moreover, surveys of the National Census and Statistics Office (NCSO 1980) have already classified small-scale fisherfolks and their families as subsistence or household fishers occupying the second lowest rung of the national poverty ladder, or next only to the landless farmers and seasonal rural workers, presently labelled as the "poorest of the poor" in Philippine society.

It has been consistently observed and cogently reported that the Philippine fishery industry has become an enterprise under intense, competitive conditions. A fast, modernizing, export-oriented business venture had inevitably shaped and influenced the rapid deterioration of the local marine ecology and appalling poverty of the producers mobilized for each industry. And the fact that only the big businessmen, which include both members of the local government bureaucracy and the foreign capital-equipped investors, largely benefit from the fishery products and fishers' labor seems to remain an unshakeable prospect, if not a natural phenomenon.

### Fishery Regulation

Philippine decrees regulating fisheries

production provide the most explicit documents which support of the contention that big business, much more than local fishery households, has profited from our marine resources. The coverage of these decrees range from investment, fishery grounds and competition in the markets.

The Investment Incentive Act (Republic Act No. 5186), for example, as amended by Presidential Decree No. 92, clearly renders a major concern for the investors and businessmen involved in the fishery industry. It purports to "bring about greater economic stability" by encouraging Filipino and foreign investments in various projects to develop Philippine industries such as the local fisheries. It likewise stresses, however, that it should "welcome and encourage foreign capital to establish pioneer enterprises that are capital intensive" and stipulates a variety of rights and incentives apparently for enterprising non-producers but certainly not for the laboring fishery producers. In addition, the Fisheries Decree of 1975 (Presidential Decree No. 704) provides more support to commercial fishery investors than to the small fisherfolks. It justifies, for instance, the foreign entrepreneurs' exploitation of the municipal waters. Section 29 of such decree states that

... the highest qualified bidder may obtain exclusive rights to the construction and operations of fish corrals, oyster bed culture, or the gathering of milkfish fry or the fry of other species in municipal waters.

Lacking sufficient capital, majority of the municipal fishers are expectedly eased out in the commercial fishery bids. And naturally, BFAR and the municipal leadership — usually comprised of the economically and politically privileged — has sanctioned the fishery activities of commercial baby trawlers of three gross tons in the municipal waters.

Furthermore, the members belonging to the Federation of Fishing Association (FFA), have recently noted the decline of the market prices of fish which they attribute to the current liberalization of fish importation. Cheaper imports, which enter the country duty free, pose unfair competition against the local fishery catch. Hence, a recent three-month survey which the Bureau of Agricultural Economics (BAEcon 1987) undertook showed that the prices of the most popular locally caught fish in the Metro Manila markets dropped by as much as 25 to 46 percent

late last March 1987 and early April compared to the January 1987 levels. Some of the more popular fish and their corresponding price movements between January and March - April 1987 are as follows:

1. *Galunggong* (Big bodied round scad, *decapterus macrosoma*), a decline from P28 to P15 per kilo;

2. *Alumahan* (Striped mackerel, *Raстрolliger chrysozonus*), a drop from P35 to P24 per kilo;

3. *Bisugo* (Long tailed nemipterid, *Nemipterus japonicus* and ribbon finned nemipterid, *Nemipterus taenipterus*), a decline from P40 to P30 per kilo;

4. *Dalagang Bukid* (Red caesio, *Pinjato typus*), a drop from P35 to P26 per kilo;

5. *Dilis* (Long jawed anchovy, *Stolephorus comersonii*), from P24 to P18 per kilo; and

6. *Sapsap* (Common slipmouth, *Leiognathus eguulus*), from P35 to P30 per kilo

The commercialization of Philippine municipal waters, fisheries and fisherfolks has never been a purely domestic phenomenon. It was an orientation towards modernization shaped by historical, economic, political and international relations between developed and developing countries, a government-supported project wrought by its need for foreign exchange and the demand of other nations for raw materials, a government decision and policy in which the United States, and most currently, Japan, have been most influential in their conception and implementation. And it has therefore been an inevitable political exchange of wealth and resources marked by the infusion of foreign resources such as American and Japanese financial, technical assistance into Philippine fishery development efforts. Japan presently stands out as the biggest contributor to worldwide fishery catch as well as the largest importer of fish. More than half of its \$US4 billion fish imports recorded in 1982 had been taken from Asian countries (Penaranda 1985). And while the United States may not necessarily be a fish-consuming nation, it has always managed to maintain good relations with Japan as a prime market for its fishery exports. Stressing the need for more intensified fishery production activities and profitable output for foreign markets, both countries then have to lobby for a relaxation of restrictions on foreign investments and exploitation of fishery resources in the Philippines. They therefore dangle foreign



loans and development aid purportedly for the benefit of the local fishery industry. Thus, in 1973, for example, the World Bank (which together with the Asian Development Bank are controlled by US and Japan through huge fund subscription) through the DBP provided two credit loans amounting to \$US11.6 and \$US12 million under a condition that all fishery vessels less than 70 gross tons (45 gross tons for the second loan) — in more explicit terms, the small fisherfolks' boats — had to be excluded from such credit services. And, as had been foregrounded earlier in the essay, foreign corporations were encouraged and permitted to exploit the natural resources in Philippine waters with a variety of incentives and rights protecting their economic interests. But actually, with the ratification of the 1982 Convention of the Law of the Sea which declared a 200-mile exclusive economic zone, the government had already legitimized such encroachment of foreign investors upon the national fishery resources.

#### *Collective Protest*

The small fisherfolks have always constituted key forces in the social exchange of labor and produce inherent in the gradual transformation of local fishery activities into a national export-oriented industry and in the concomitant coexistence of subsistence and commercial fishery practices. They have been operating within a mode of labor division and compensation where the relationship between fishery producers (the small fishers) and non-producers (currently a mixture of local fishery outfit owners and foreign sea investors) has sharpened a distressing contradiction between profit and poverty in the coastal fishery communities.

Philippine fishery life has actually been marked simultaneously by historical, economic, political and cultural forces and processes presently directed towards a resolution of social contradictions generated, of the insistent query regarding the effective control of municipal waters and fishery resources, of the social imperative to install the rightful "owners" of the seas. And it will certainly be a restive process involving the fishery producers — more resolute and redundant in their fundamental struggle and claim for the municipal waters. The concerns and lives of the small fishery producers have been eloquently articulated in several manifestos

which fishers' organizations have been currently drawing out. In one particular manifesto (Lamlatlaya 1984), fishers decried the deteriorating condition of both small fisherfolks and their fishing grounds, a state attributable to Philippine government actions and legislations. In an attempt to "modernize" the fishery sector, the government had taken the stance to develop the industry for the export market and to induce capital-intensive fishery technologies. In such a myopic drive towards "modernization", the small fishers have been squeezed out of the fishery grounds. Programs like the *Biyayang Dagat* (lit., benefits from the sea) aimed to extend credit to small fishers and instead benefited but fewer than 10 percent of the target group. The fishpen Project in Laguna Bay had profited influential people and big businessman. Moreover, "pollution from hundreds of factories near bodies of water, mines that empty their toxic wastes into rivers, run-off and leaching from fertilizers and pesticides" had undermined the fishery resources. Furthermore, the use of trawls and purse seine fishing boats has been "wasteful because even the smallest of fishes are not spared" thereby reducing the catch of small fishers and endangering future fishery resources. Small fisherfolks in various areas of the archipelago have therefore organized themselves to counter and militate against the anti-small fishers forces. And it may therefore simply be a reiteration to stress that the fisherfolks' perennial deprivation of effective control over the municipal waters has undoubtedly generated feelings of insecurity and vulnerability among them - the producers directly involved in the national fishery industry and always held hostage not only to the vagaries of nature but more crucially, to the dictates of non-producing owners and state legislation that has long been geared towards the interests of business and foreign entrepreneurs.

#### **Municipal Fishery Research: A Social Discourse**

Research into the various dimensions - socioeconomic, political, cultural - comprising Philippine municipal fishery life has still been scanty. And it is certainly a dearth of research that has generated unfortunate consequences. From an academic perspective, little contribution

has been made to the much needed theorizing about the peasantry, its fishery and village life. The marked exclusion of fishery communities from the dominantly accepted definition of peasant life must be given serious thought considering the fact that fisherfolks actually comprise a majority of those engaged in fishery production in developing societies. Furthermore, inadequate research on fishery communities has necessarily crucial implications for fishery policies, particularly since, it may be recalled, the declaration of the 200-nautical-mile jurisdictional limit under the Law of the Sea has shaped international interest in local marine affairs and inevitably justified the appropriation of national fishery resources for the international market transactions (Sider 1986). Governments, therefore, uninformed about the real conditions of their different fishery constituents can "bargain away the patrimony of the small scale fishers" (Ruddle and Akinichi 1984:5) to gain favorable conditions from the world fishery markets.

#### *Fishery Economics*

David Szanton's study (1971) of change and development in Estancia, Iloilo, may have rendered a initial undertaking geared towards a more meaningful understanding of socioeconomic processes operative in Philippine municipal fisheries. Szanton's study and others which soon followed (e.g., South China Sea Fisheries Development and Coordinating Programme, 1976; Jocano and Veloro, 1976) have suggested several issues important for the conception and implementation of meaningful policies and programs for the small fisherfolks. The differences noted, for example, between fishery and agricultural production (a major subject of research for years), point to various aspects specific to what can be underscored as "fishery economy". Some general observations may be illustrative: while both agriculture and fishery production are seasonal activities, the former is characterized by long gaps of waiting during which no direct yield is earned and the latter provides the fisher with income from daily but usually smaller increments. Unlike a farmer who harvests crops in one bulk at a time, a fisher gains daily but irregular income. In addition, the fishing activity is always performed within, the fluctuations of a particular ecological milieu. Tools of the trade such as boats, net, raft are

always liable to sudden damage, if not, loss. Moreover, the storage of the fishery catch requires more labor and financial outlay for preservation and equipment. A fisher, therefore, plans life, as it were, in a scheme different from that which a farmer takes. Raymond Firth (1946) has cogently noted that a fisher saves in smaller increments since he/she cannot set aside in bulk and divide for daily consumption the remainder into appropriate fractions. Hence, like a farmer, a fisher abstains in order to save. But unlike a farmer, who "abstains from drawing on a store already there", a fisher abstains in order "to accumulate a store" (Firth 1946:3).

Furthermore, the marked distance usually underlying the seeming isolation of fishery communities from mainstream society, as it were, highlights the "autonomy" with which fishery villages have always been associated. And it is an "autonomy" rooted in the fisherfolks' particular resource base. The sea, unlike land, has been upheld as a common property, an open-resource exempt from taxation, enclosure or alienation. Paradoxically, however, like land, it has been a resource that most fishers have been deprived of an access. The "autonomy" of fishery communities actually lies in such a resource base which importantly refers not simply to the sea, land and their products but primarily points to specific social relationships which provides fisherfolks access to these productive resources and bring their products to the village households. Hence, fishery households have managed to gain access to both sea and land through a series of credit arrangements with the local merchants and landlords mostly based in local infrastructures they have been compelled to anchor their lives on — the town proper or the nearby cities. They have likewise integrated themselves into a labor-and-fish or land or livestock-sharing system where landless fishers and workers could manage, harvest, or avail themselves of the crop — fish, rice or livestock — for protected harvesting rights and a share in the fruits of the productive resource.

Fishery production in coastal communities normally involves the kin-based households, usually of changing composition and fortune, making up the village working groups. It therefore recruits the labor of the whole village where community production is well pronounced. It is only through a participation

in and of a particular coastal community that any fisher gain access to the important requirements for fishing: skills to build and repair boats, the local knowledge about the different fishery instruments, resources, grounds, strategies and kinship-based groups willing to assist each other during the frequent moments of distress characteristic of village social life. The community production, however, as had been noted earlier, only earns the village fishery households a bare subsistence. And it is a subsistence return apparently and partly mediated by the market. Fishery households, for example, allocate small portions of the value they have created in their fishery catch in such forms as food, clothes, medicine, gasoline, gears but only within the constraints which the price of fish and supplies necessary for the sustenance of the household would set at the market. And it is certainly a subsistence practice which delineates the fact that fisherfolks, though seemingly alienated from the "bigger" society, are fully part of a world market system from which transactions for fish and other household supplies are derived but not controlled by the fisher households since under such system cash is "formed at a distance" (Sider 1986:192).

#### Research and the social construction of fisherfolks

"Fishery socioeconomics" has presently become a popular code in development research. It is a trend indicative of significant research endeavors and likewise an orientation which still must be subjected to critical evaluation if productive and relevant results must be reaped from efforts aimed at primarily understanding and assisting majority of the poverty-stricken fishery producers.

Two types of theoretical tendencies characterize extant fishery research. On the one hand, a marginal perspective has remained evident. Proceeding from an assumption regarding human behavior as essentially a relationship between ends and scarce means which have alternate uses, this point of view portrays fisherfolks as producers solely engaged in the accumulation of material wealth. Discussion of production, for instance, is latched on a prior assumption about the household as a unit of consumption maximizing satisfaction.

Thus, the distribution of scarce resources between alternative ends, the maximization of individual or group profit in competition within a society are given more prominence. On the other hand, a "substantive" view of fishers has likewise prevailed. It renders fishery socioeconomics as mainly constituted by forms or production, distribution and circulation of the material produce which energize a specific community. While extant fishery research elaborated within these theoretical frames must be commended for their contribution to a dearth of information about Philippine fishery lifeways, their inherent inadequacies as analytical constructs which should yield deeper insights into a variety of complex theoretical and empirical issues about municipal fishers must be noted. Socioeconomic fishery studies, on the whole, have been "unwilling to state what 'should be' and instead limit themselves to descriptions of 'what is'" (Smith and others 1980:47). Szanton (1971) must have posited an important claim when he stressed that the usual "grocery-list" approach to socioeconomic research is inevitably incomplete and may insufficiently emphasize links between the different aspects comprising municipal fishery production. The prevalent empirical research which insist to work on "facts", on spontaneous manifestations and forms of socioeconomic relationships, on phenomena as they appear "raw" before the researcher's eye and which consequently (and expectedly) conclude that such and such wages comprise the fisher's labor compensation, or that such value of fish derives itself from such cost of work, can actually be illusory and problematic. Far from strictly corresponding to the socioeconomic reality of the fisherfolks, these "facts", these appearances, usually with particular ideas corresponding to them, conceal an invisible, underlying reality only aspects, if not, the contrary of which may be revealed by its immediately visible representations. Studies, for example, mainly confined to an analysis of fishery production as market economics may be of interest for a brief discussion. Within the rural communities, the coexistence of two types of "economy" can be posited. One type finds its regulation through traditional mechanisms of exchange and reciprocity (Szanton 1972) and is given articulation through the fisherfolks' dependence on kinship - consanguineal, affinal and ritual

relationships (Polo 1986). Another type apparently operates through an institutionalized yet dislocated, as it were, from the political, religious and kinship components of the coastal community - the commissioned fishery market. The complex variation and functions of these "economies" cohabiting in the concrete, historical, social conditions of the different coastal communities will certainly elude the most meticulous empirical research operationalizing any of the two theoretical frames noted earlier.

The code "socioeconomic" should apparently connote a reality beyond the visible logic operative in fishery communities under study, beyond an inventory of fishery households, gears and income since it actually points to an underlying logic through which men, women, their households and the processes involved in fishery production can be viewed more comprehensively and profoundly. It is therefore a social reality which requires to be reconstructed in thought, to be reproduced in the process of a theory and a particular corresponding application and which involves a reciprocal relationship between history, economics, politics and culture inscribed within the municipal fisherfolks' daily production.

In a review of research on Philippine municipal fishery resources, Smith and others (1980:22) delineated the "extreme poverty of municipal fishers whose recurrent concern is providing the family's daily food intake" as a major issues requiring immediate investigation and action. And indeed, it is only when research can address the more fundamental issue of poverty that the various studies made the courses of action taken to improve the plight of the perennially poor fisherfolks can become more relevant. But it is an undertaking which should only foreground the imperative for any serious researcher or scholar on Philippine municipal fisheries to rethink the various assumptions or theoretical construct around which research will revolve. Research into the small fisherfolks life and communities actually involves an act of participation in the creation of truth or falsehood, depending not only on how the researcher is positioned but likewise on how the latter's social position can affect the subject of research or even institutionalize the research done. It then should be of relevance to underscore that knowledge, as Pierre Bourdieu (1974:2) has succinctly remarked,

... done not merely depend, as an elementary relativism teaches, on the particular standpoint an observer "situated in space and time" takes up on the object. 'The knowing subject', as the idealist tradition rightly calls him, inflicts on practice a much more fundamental and pernicious alteration which, being a constituent condition of the cognitive operation, is bound to pass unnoticed: in taking up a point of view on the action, withdrawing from it in order to observe it from above and from a distance, he constitutes practical activity as an object of observation and analysis, a representation (Bourdieu 1972:2).

Any form of research, therefore, is never simply a casual undertaking nor a purely academic issue. It will always be a socioeconomic, political, cultural issue as knowledge had always been. Much of a researcher's ensemble of analytic categories are actually not mere components drawn up for the analytic description of human surroundings but are essentially concepts comprising a dynamic process which simply reproduces the researcher's social form.

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