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WALKING ON TWO FEET: TAGBANWA ADAPTATION
TO PHILIPPINE SOCIETY

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF
THE UNIVERSITY OF HAWAII IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
IN ANTHROPOLOGY
AUGUST 1979

By
Katherine Warner

Dissertation Committee:

Alice G. Dewey, Chairman
Richard W. Lieban
P. Bion Griffin
William G. Solheim II
Walter F. Vella
ACKNOWLEDGEMENTS

The research on which this dissertation is based would not have been possible without the full support and cooperation of the Tagbanwa of Malandi. Food was weighed, rice yields measured, records kept, etc., meticulously and enthusiastically by numerous Tagbanwa families. My research assistant, Vernon Danglong, deserves special thanks since he was my constant companion for measuring fields and mapping, tasks which demanded hiking to the ends of the community, perching on steep hill-sides, and patience in the face of continual inquiries. The two families who lived nearest our house and assisted us in our research made Malandi a wonderful place to live. Awakening to the sounds of Limbuan and Pidad's and Rebrino and Arsenia's families gave each day a pleasant start. Our other assistants, Paking and Ming, enabled us to gain a perspective on what it was like to be a young couple in Tagbanwa society.

Special acknowledgements must also be made of the role played by the Population Institute at the East-West Center. The grant support I received enabled me to do 21 months of fieldwork in the Philippines as well as to complete my coursework and dissertation. And, of course, I must thank my spouse-colleague, John Raintree, for making each day in the field an adventure, and for our daughter, Jessica, who in her way has also contributed to this dissertation.
The conflict between the resource needs of national economies and the subsistence requirements of local communities is common throughout the world. In the Philippines the desire for industrialization and the resultant need for foreign currency to buy industrial machinery has led to policies which favor the exploitive industries (logging, mining, etc.), even when they are in conflict with the requirements of indigenous subsistence communities.

The focus of this dissertation is on the adaptation of a small subsistence community of tribal swiddeners, the Tagbanwa of Palawan Island in the Philippine archipelago, to the sudden influx of miners, loggers, and peasants in their ancestral area. It is not a study of victims, but one of people who are attempting to meet the challenge by "walking on two feet," one foot in the traditional way and the other in the continuously changing contemporary world.

The hypothesis is that the national policies and programs which favor extractive industries and indirectly create peasant migration into tribal areas encourage tribal assimilation into the larger society as either localized ethnic groups or as a landless undifferentiated labor force. It is further hypothesized that assimilation into the national
system is not a passive process, but rather the result of a mutual interaction in which the smaller community may be self-motivated to become, to some degree, a part of the dominant society.

The research on which this dissertation is based was carried out in the Tagbanwa community of Malandi on the west coast of Palawan during a 13 month period (February to February) in 1975-76. Preliminary research had been conducted in the same community during the 1973 agricultural cycle (January to August). Field methods and data consisted of: (1) survey of swidden practices following a modified form of Conklin's guidelines; (2) making a swidden; (3) land tenure survey; (4) intensive agricultural study of a random sample of 20 households; (5) food records of eight households from March 1975 to February 1976; (6) activity diaries of, depending on the season, up to 30 people; (7) semantic differential concerning male/female associations of household and agricultural chores; (8) rainfall data; (9) rice trade survey; (10) records of commercial activities; (11) census and genealogies; (12) litigation records; and (13) interviews with government officials, library research, and pooled ethnographic data collected by my spouse-colleague.

An ecological orientation is utilized for the presentation and analysis of the data. The theory of Margalef concerning the relationship between highly organized, complex systems and less organized ones serves as the framework for the analysis of the social and economic transactions between the Tagbanwa community and the dominant society. Since the study deals not only with the adaptation of a society to the stresses placed upon it, but also with the origin and rationale of
these stresses, it examines (1) the larger, more complex system and its
initiation of interaction with the smaller, less complex system; (2) the
smaller, less complex system and its adaptation to external natural
fluctuations; (3) the ecological, economic, and social relationships
that existed pre- and post-1970; (4) the new relationships that threaten
to undermine the autonomy of the smaller system; and (5) present inter-
relations, projections of future developments and suggestions of alterna-
tive, less exploitive, interrelations and policies. It is shown that
adaptive changes set in motion within the local ecosystem by contact
with the larger system is leading to the gradual assimilation of the
Tagbanwa into the national economy.
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LIST OF MEASUREMENTS USED

1 hectare = 10,000 sq. meters ($\text{m}^2$) = 2.41 acres

1 ganta palay (unhusked rice) = 1.72 kg
1 ganta cleaned rice = 2.30 kg
25 ganta = 1 cavan
1 cavan palay (unhusked rice) = 44 kg
1 cavan cleaned rice = 57.5 kg

In 1975: 7.0–7.5 pesos = $1.00 (U.S.)
CHAPTER I

INTRODUCTION

This dissertation is concerned with the adaptation of the traditional subsistence system of the Tagbanwa, a tribal swidden people on the island of Palawan in the Philippine archipelago, to the increasing external demand for resources needed for national development. The focus is on (1) the needs of the national economy and the policies created to satisfy them and (2) the adaptation of a subsistence economy to the local changes which have occurred in response to these policies.

My hypothesis is that Philippine national policies and programs concerning population and resources are creating a situation in subsistence communities, such as that of the Malandi Tagbanwa, which fosters their assimilation into the larger society as either a localized ethnic group or as an undifferentiated, socially and economically inferior labor force (see Kikuchi 1974). I further hypothesize that the integration of communities such as Malandi into a national system is not a one-way or passive process, but rather the result of mutual interactions in which the smaller community may be self-motivated to become, at least to some degree, a part of the dominant society.

The assumption is that a highly refined subsistence system like that of the Tagbanwa is the result of long-term adaptation of the society to its environment, an adaptation which has enabled the Tagbanwa to maintain themselves for centuries in a stable relationship with
other elements of their ecosystem. I shall argue that heavy external demand for resources in areas occupied by subsistence oriented societies will conflict with traditional adaptive mechanisms and that, in contact with external forces, such societies tend to become "simplified, disrupted, and weakened" (Nietschmann 1973:2; Rappaport 1971).

The conflict between the resource needs of the national economy and the subsistence requirements of local communities is not peculiar to the Philippines, but is rather a problem that occurs throughout the world. Governments, whether of dictators or elected representatives, must make some concession to the expressed needs of the populace. In countries such as the Philippines programs may be designed to appease the vocal populations of urban and other densely settled areas, even though these programs add to the problems of peripheral and politically less significant subsistence communities. Thus, government-sponsored internal migration became the primary--and popular--policy for dealing with overpopulation in the Philippines, in spite of the fact that it created problems in the target areas while failing to substantially relieve population pressures in the source areas (see Keyfitz 1971).

Implementation of government policies and programs depend to some extent on the personal decisions of individuals in the population. The government may sponsor a migration program, but it is the individual who decides whether or not to migrate. It is on the level of personal decisions, likewise, that assimilation of subsistence populations into the national economy can be hastened or retarded. Tagbanwa individuals voluntarily decided to enter into trading agreements with the various groups that have come to Palawan over the centuries. They desired the
goods being offered in trade and were not coerced into these trading relationships. As Murphy and Steward (1969) point out, it is the desire for foreign goods which is often the driving force for the continued relationship of subsistence communities with external economies. The Algonquin and Mundurucu of Murphy and Steward's study (1969), the Misquito in Nietschmann's (1973) study, and now the Tagbanwa, all want the products of the external manufacturing sector, and to obtain them they may be willing to radically change their lifestyles.

Given the nature of the research problem, an ecological orientation is most useful for the presentation and analysis of the data (Anderson 1973:180; Rappaport 1971:243). Ecological theory has explored the relationship between a highly organized, complex system and a less organized one. Margalef (1968:16) observes that when contact between such systems occurs:

There is some energy exchange between the two subsystems in the sense that the less organized system gives energy to the more organized, and, in the process of exchange, some information in the less organized is destroyed and some information gained by the already more organized.

In such a relationship it is the more organized system that typically gains in both energy and information and, rather than an equalization of the two systems, there tends to be an increase in the difference between them. As a rule, the less organized system always suffers a loss of organization, while the more organized system adds to its existing store of energy and information.

The Tagbanwa are in the position of being the less organized system in their relationship with the Philippine nation as a whole. This is not to imply that the ecosystem of which they are a part, the
tropical rainforest, is not complex. On the contrary, it is regarded by many as being the most complex natural ecosystem in the world (Richards 1972). But, Tagbanwa interactions with other elements of the natural ecosystem are more direct than those of an urban dweller in Manila, who is dependent upon a highly complex and attenuated system of interactions to provide him with food, housing, etc. Whereas the traditional Tagbanwa depends almost entirely on the local ecosystem, the urban dweller in Manila is dependent for his needs upon a network of exchanges which encompasses the entire global ecosystem (Darling and Dasmann 1976).

Representing the less complex system, societies such as that of the Tagbanwa must adapt to the intrusions of larger more complex systems and, in so doing, enter into "a period of intense rearrangement and restructuring of social and ecological relationships" (Nietschmann 1973: 8). This is not to imply that less complex societies are normally static and unchanging; for, all "life systems" are continually changing in adaptation to both external and internal forces (Clarke 1971:202). Traditional Tagbanwa society was constantly readjusting itself to these forces, yet remained in a stable relationship with the rest of its ecosystem. As Margalef (1968) argues, the crucial test of a system is its ability to persist in the face of change. Tagbanwa society has persisted precisely because of its ability to change in response to changing environmental and social conditions throughout its history.

Nevertheless, the forces that Tagbanwa society has had to deal with in the past, whether natural or social, were never as massive as those which it faces today. The Tagbanwa are now part of someone else's
frontier and are becoming surrounded by extractive industries which are blatantly uninterested in ecosystem management and by pioneers who perceive land as something to be used up now with no thought of maintenance for the future. The question is whether, under these new conditions, the Tagbanwa will be able to pass Margalef's test and persist.

Although it should not be assumed that someone coming to Malandi would observe a society in chaos, the process discussed by Nietschmann (1973), Murphy and Steward (1969), and Margalef (1968) is definitely occurring. Economic transactions with outside communities increased dramatically between 1973, when I began my research, and 1976, when it ended. Changes in legal authority, and medical practices continue to occur in response to outside contact. The Tagbanwa are aware of these changes and are feeling uneasy at finding themselves progressively more involved in peasant society, and yet their attitude is ambivalent toward the changes which, in many cases, they themselves are initiating. The overall adaptation is perhaps best summarized by the young man who said, "We are walking on two feet. One is on the old path, the other is on the new. We cannot walk only on the path of the new because it is slippery and we might fall."

Since my study deals not only with the adaptations of a society to the stresses placed upon it but also with the origin and rationale of these stresses, I will structure the study to (1) examine the larger, more complex system and its initiation of interaction with the smaller, less complex system; (2) examine in greater detail the smaller, less complex system and its adaptation to external natural fluctuations; (3) explore ecological, economic, and social relationships that existed
pre and post 1970; (4) describe the new ecological, economic, and social relationships that threaten to undermine the autonomy of the smaller system; and (5) analyze present interrelationships, project future developments, and suggest alternative, less exploitative interactions and policies. I will attempt to show that the adaptive changes that have been set in motion within the local ecosystem by contact with the larger system will, in themselves, lead to the gradual assimilation of the Tagbanwa into the national economy.

**Background and Methods**

The research upon which this dissertation is based was conducted in Palawan during the swidden cycle (January-August) of 1973 and the period of February 1975 to February 1976 in conjunction with the research of my husband, John B. Raintree, also an anthropologist. When I first began to design the initial research in 1973, I was primarily interested in studying a swidden society which was experiencing relatively recent population pressure, where one could theoretically expect an intensification of swidden practice in response to population pressure on resources. My husband-colleague was interested in studying the changes in religion and social control which could be expected to accompany the economic and ecological changes I wanted to study. We chose to work among the Tagbanwa, since not only were they experiencing the pressures which would be the focal point of my research but also an extensive ethnography of the central Tagbanwa had been written by Robert Fox (1954) which could serve as an excellent baseline for our research.

In addition to the very helpful letters of introduction which he
provided, we were extremely fortunate to be able to confer with Dr. Fox several times during the course of our fieldwork in 1973. This initial fieldwork provided the material for my master's thesis, *The Effects of Population Pressure on a Swidden Society: The Tagbanwa of Palawan* (Warner 1977).

In my doctoral research I chose to continue my investigation of the effects of population pressure on the subsistence adaptation of the Tagbanwa. In 1975, when my husband and I returned to Malandi, the site of our 1973 research, we found that radical changes had occurred during our 18 month absence. Not only were the peasant settlers continuing to move into the area, but logging companies had declared the Tagbanwa and new peasant communities to be within the boundaries of their government-granted forest concessions and were threatening to prosecute anyone who cut the trees. A school and a house for the new teachers, a married couple originally from the Visayas, were in the process of being built by the Malandi Tagbanwa. Also, economic activity between the Tagbanwa and the settlers had dramatically increased in the period of our absence.

In response to the stronger economic and social links to external communities, I expanded the focus of my original research proposal to include trade and wage labor conducted outside of Malandi. The field methods consisted of the following:

1. *Survey of swidden practices* following Conklin's (1961) comprehensive guidelines. In addition to asking general questions concerning swidden methods, I conducted a post-planting and post-harvest questionnaire survey of every individual in the community who made a swidden.
2. **Making a swidden.** I made a small swidden (0.1 hectare) so as to obtain information that might not be elicited in an interview situation. I did indeed get data that I would never have gotten otherwise, since so much concerning the swidden is not verbalized because it is assumed that everyone knows it. As a matter of fact, I did not always know what to do, or I found out too late what I should have done, but no one thought I would have to be told what to do, so I was not. As a result of such delay, maize (corn) was planted in my swidden too late, and the millet did not even germinate. Listening and contributing to the ribald banter of the workers while helping other swiddeners plant their fields (so that I would have reciprocal labor to plant my own), I experienced some of the most interesting and pleasurable moments of my fieldwork. Having a field made me "real" to the Tagbanwa like nothing else I could have done and certainly increased my sensitivity to the continual agricultural decisions that had to be made in the course of a swidden year.

3. **Intensive study of a random sample of households.** Twenty households were chosen in a random sample (weighted to reflect the percentage of households in each of the three major settlement areas within the Malandi area) and asked to keep day-to-day records of rice harvested, names of harvest helpers, and how much rice they received for their help, as well as the amount of rice traded, sold, or used to pay debts. These records were double checked with the records of several of the local rice traders and with interviews of the harvest helpers. Accompanied by a field assistant, I attempted to map every swidden in the sample; but, because of weather and the ill health of informants and
myself, three were not completed. For the others, the field was measured, slope recorded, each variety of rice mapped, and the location of other plants noted (see Chapter IV, Fig. 4 and 5 for examples). Although this mapping was extremely time consuming, it revealed information on variation in size of field, choice of crops, and differences between male and female fields that would not have been otherwise apparent. It also provided a situation in which I could sit down with an informant in his or her field and ask specific questions about methods, crop choices, etc.

4. Census and genealogical update. My husband and I updated the census we took in 1973. I also conducted a marriage and fertility survey of all ever-married women. Improved language ability and rapport enabled me to obtain more accurate data than I had collected in 1973. I cross-checked with the previously recorded genealogies gathered in 1973 and 1975 and information picked up in listening to the local gossip.

5. Land tenure survey. Land tenure information was gathered as part of the agricultural surveys in 1973 and 1975. Further interviews were conducted with farmers who loaned land to relatives, sold or bought land, or were "landless".

6. Litigation records. An assistant who was from a family of ginueus (legal arbitrators) and was himself a ginueu kept records for me of each legal case which occurred in the community in 1975. I conducted an in-depth analysis of each case with him. I was originally interested in litigation since I had hypothesized that land shortage might result in litigation over rights to land and, thus, serve as an
index of population pressure on resources (Warner 1972). However, because of the ease of traditional land redistribution in Malandi, there was not a single land dispute in 1975, nor, according to informants, had there ever been land litigation at any time in the past. Nevertheless, the legal case material revealed the existence, as well as the peaceful resolution, of tensions within an outwardly amiable community of kith and kin.

7. Food records. Two hanging scales, each optimally making a circuit of one week at each of four households every month from March 1975 to February 1976, were used to gather data on type and quantity of food consumed (see Chapter IV, Table 1 and Fig. 6). The eight families were chosen according to age of married couple, number of children, whether rich or poor by local standards, and ability of the woman (whose task it was) to keep records. Since I was curious about diet differences that could be expected to exist between coastal and interior families, one household was chosen to be part of the food weighing sample although it was located outside of Malandi proper.

8. Rice trade survey. In the post-harvest interviews I asked about the amount of rice received from helping with another's harvest, the amount of rice given to those who helped with the respondent's own harvest, the amount of rice going to the payment of debts and to whom, the amount traded and what it was traded for, and the amount to be kept for home consumption. The reported amount retained for home consumption was compared to the household's previous estimates of the amount needed for a year.
9. Records of commercial activities. I was fortunate in being able to copy the records of Alawi, a peasant trader who resided in Berong, of the debts still owed to him by Tagbanwas who now lived in Malandi, as well as his agent Madarag's records of the almaciga trade. I also obtained records from Tagbanwa storekeepers and the local school teachers (the main rice traders in Malandi) of how much rice they received in trade, debt repayment, etc., from individual Tagbanwas. I cross-checked what was recorded by the traders with what was reported by Tagbanwa informants. Two Tagbanwa storekeepers kept day-to-day records for me of each purchase, who made it, price, etc., which allowed me to study in some detail the flow of cash and credit within the community.

10. Diaries. Depending on the season, up to 30 people kept diaries of what they did every day (household tasks, agricultural activities, visiting, child care, etc.). These and all other records kept by informants were written in Tagbanwa, which proved to be a good way of learning Tagbanwa, since I was continually encountering new words and concepts.

11. Semantic differential. After harvest my assistants and I administered a semantic differential concerning male/female associations of household and agricultural chores to the 20 households in the agricultural sample, as well as to a few of our neighbors, to test if my observations as to which sex was responsible for what chores were ratified by majority opinion (with a few exceptions, they were).
12. **Rain data.** Using rain gauges and with the help of assistants, we kept records of the rainfall near our house, at a coastal hamlet which was a 20 minute walk from Malandi, and at another one which was two hours into the interior.

13. **Other sources of data.** My husband, whose research in 1975-76 was concerned with the process of agricultural innovation, and I used unisort data analysis cards to pool our general data and continually discussed our research projects, ideas, etc., with one another. As my research emphasis expanded to include not only the indigenous subsistence society but also the national economy and government policies and programs, I attempted, during our trips to Puerto Princesa and Manila, to interview officials in various government agencies. The discrepancies between the government's plans and what was actually occurring (or not occurring) and the problems created in the Malandi area by the lack of foresight in government planning led, on my return to Hawaii, to further library research on the Philippine economy and to the inclusion of a chapter on government policies and agencies.
CHAPTER II

PHILIPPINES: POPULATION AND ECONOMY

In this chapter the government's policies and programs to solve the economic problems of the Philippines are discussed. The first section is concerned with population growth and its effect on the national economy. The high population growth rate is perceived as threatening the government's attempts to increase agricultural productivity and to maintain, if not improve, the standard of living. The efficacy of internal migration to relieve population pressure in parts of the Philippines is questioned. The second section is an analysis of the Philippine economy and the development of the "import substitution" industrial sector. The third section deals with agricultural policy and how it relates to the migration programs that have been initiated since World War II. The fourth section analyzes the roles of natural resources, especially timber, in the economy, emphasizing the relation between the export of these resources and the "import substitution" industrialization. The concluding section is concerned with the ways in which government policies and programs initiated to deal with the national population and economic problems affect the environment and the tribal people who are living in the exploited areas.

Philippine Population

The Philippines is in the midst of explosive population growth. The period of high birth, high death rates has ended with the country
entering into a pattern of high though falling birth rate, low death rate. This change in the death rate translates into a situation of a rapidly growing population. The Philippines has one of the highest growth rates in the world. The 1960 census revealed that between 1948 and 1960 the average annual rate of growth was 3.18 percent (Huke 1963). By 1970 the rate of growth was estimated at 3.01 percent, a negligible decline, for a Philippine population of 37 million (National Census and Statistics Office 1974). The 1975 census appears to show a decline in the growth rate to 2.7 percent, with a population estimated at that time to be over 41 million (Census Newsletter 1976). The latest census results are taken as an encouraging sign that the long-awaited drop is occurring. However, since censuses were previously conducted only every ten years, the presidential decree ordering the 1975 census was unexpected. There were only a few months to organize the logistics of the census; on the west coast of Palawan, for example, the interviewers (primarily teachers) had difficulty in understanding the census forms and since school was in session they did not have the time to do a true house-to-house survey. It is therefore very likely that there are inaccuracies, especially in regards to underenumeration. The growth rate, which is based on the size of the total population, is in all probability slightly higher, at about 2.8 percent.

Even if the population growth rate continues at the lower estimate of 2.7 percent, the Philippines could theoretically have a population approaching 80 million by the year 2000 in a land area the size of Arizona (Wernstedt and Spencer 1967; Simkins and Wernstedt 1971). Within the same period there must be an increase in real production
comparable with the growth rate if the nation is to simply maintain its standard of living. In a country such as the Philippines this maintenance alone may be difficult to attain; however, there is also the need and the desire to increase the standard of living, especially in the area of health and nutrition. Currently, food consumption in the Philippines is poor in both quality and quantity. Intengan (1969) estimates that caloric intake is only 76 percent of what is required and protein consumption only 85 percent. To improve the diet of the existing population as well as to provide a good diet for the new children born every year may prove to be the most difficult task of the Philippine government. The primary question is whether the Philippines can even manage to cope with the increase in population, let alone produce enough to improve the living standard as well.

Until recently the response to population growth was the theory of redistribution. The problem was defined as one of distribution—that some areas had far too many people while other areas were almost "empty". Programs were created to assist the movement of population from high density to low density areas. It was hoped that migration would help stem the severe overcrowding of certain areas in the Philippines, and that from the newly settled areas new socio-economic patterns would emerge that would be reflected in a drop in the rate of population growth.

Yet even if the population was redistributed evenly throughout the Philippines, the population density would still be the highest for any country in Southeast Asia (Huke 1963). The land once available for resettlement has by this time been settled, so that no more relief from
population pressure on land in Luzon and the Visayan Islands through internal migration can be expected (Fryer 1970).

Nor has the expected drop in the rate of population growth occurred in the resettlement areas. Hackenberg (1971b) proposed that, as migrant farmers became more involved with cash cropping and mechanization on their large farms (larger farms than they had in their area of origin), children would be less valued and even an economic hindrance. A drop in the birth was supposed to appear. This does not seem to be occurring for several reasons. First, a very small percentage of migrants are able to get enough land to enable them to mechanize economically. Cash cropping with the use of mechanized labor requires both large farms and an outlay of considerable capital. As Sandoval (1957), Simkins and Wernstedt (1971), and Lewis (1971) have noted, there is a tendency in resettlement areas for the farmers to revert to tenancy again and for owners of large farms to have more and more tenants. A tenant will be less likely to mechanize. Secondly, Hackenberg seems to be projecting from a static situation, and the situation is anything but static. True, he foresees the drop in births to occur among the children of the migrants, rather than among the migrants themselves. But he fails to take into consideration that by the time the children are of age to reproduce the situation will not be of large farms with mechanization that will deter them from having economically unneeded children, but instead there will probably exist a situation not unlike that from which their parents came: one of small tenant farms primarily dependent upon family provided labor. (See Chapter VII for a discussion on Palawan migration.)
It appears then that resettlement will not solve the population problems of the Philippines and that other methods will have to be used.

The Philippine Economy

The Philippine economy is basically agrarian. The economy is based on the sale of agricultural and forest products (the top ten exports are all agricultural or timber), especially sugar, copra, and logs, to bring in foreign revenue, which is then spent on machinery and raw materials for the industrial sector.

The industrial sector of the economy is not based on the use of inexpensive labor for producing exports for competition on the world market, as in the case of Taiwan and other Southeast Asian nations. Instead, it is concerned with "import substitution"—the gradual phasing out of foreign consumer goods and their replacement by domestically manufactured ones (Garcia 1971; Golay 1968).

However, the goods are not entirely manufactured in the Philippines. The manufacturing policies encourage only the finishing stages of production. This has resulted in the packaging of imported material utilizing imported equipment rather than actual manufacture of the goods themselves. Perhaps, it would be more accurate to refer to it as a packaging rather than a manufacturing sector.

The packaging industry employs few people and produces products at a higher cost than would be incurred by purchasing the foreign consumer goods directly (Garcia 1971). The industrial sector, since it directs its marketing to the national rather than the international markets, cannot earn foreign currency in order to buy or replace its machinery. Therefore, in order to expand, the industrial sector has
to look for capital not within itself but from the agricultural-forest export sector.

Thus, schematically, the national economy is tied to the need for continual export from the agricultural and forest sector to finance a highly capitalized packaging industry that generates little foreign revenue. Even if changes within the industrial sector occur that would shift emphasis from import substitution to production using local material for export, the capital must come from the other sectors.

So the real basis of the economy is agriculture and natural resources (Agricultural Staff 1975a, 1975c; Castro 1973). If the economy of the Philippines is to keep up with population growth, it is on these sectors that the country must initially rely.

**Agricultural Goals, Policies, and Programs**

Interestingly, the primary agricultural goal is self-sufficiency in rice. The Philippines has imported rice every year since 1903, except for 1960 and 1962 (Tanco 1974; Mangahas and Librero 1973; Arcega 1970; Agricultural Staff 1975a). This goal developed out of the desire to (1) assure the urban consumer rice at an affordable price (it must be remembered that one-seventh of the population resides in Greater Manila) and (2) be independent of foreign imports. The first reason is primarily political; an urban riot creates much more of a disturbance than generalized rural unrest, and rice shortages can be the basis of intense anti-government demonstrations. It is not surprising that imported rice usually stays in Manila (Mangahas and Librero 1973).

The disinclination to rely on imports is understandable not only from the viewpoint of trying to avoid spending foreign currency,
but also taking into consideration what happened in 1972-73. During this period of pan-Asian drought, Thailand, on whom the Philippines relied for its rice, stopped exporting rice. The Philippines was 400,000 metric tons deficient in rice, a situation which necessitated rationing of rice and price controls and resulted in near famine conditions in the more distant rural areas, such as Palawan.

So that rice self-sufficiency can be attained, the government has three major policies for increasing productivity: (1) agrarian reform, (2) new agricultural methods, and (3) resettlement of population. The first two are being increasingly stressed since martial law (1972) with the third losing the prominence it had in previous administrations.

Agrarian reform has the goals not only of (1) increasing productivity, but also of (2) creating owner-operated family size farms to replace large estates owned by landlords and worked by tenants and of (3) encouraging the landlords to invest in the industrial sector (Estrella 1974). The reasons for agrarian reform are, therefore, (1) socio-political—-to defuse peasant unrest and create a separation of the tenant voter from the landlord, (2) equity—distribution of wealth, and (3) increased production—-it being assumed that owner-operators will invest in inputs (such as fertilizer) and take better care of the land than would a tenant (Harkin 1975).

Prior to martial law there had been a land reform code (R.A.3844) that created a program by which tenants would be able to become lessees. The difference between the two was that a tenant had to pay a proportion of his yield (70-30 being the legal division; however, 50-50 is nearer
the actual practice), whereas a lessee had to pay to the landlord a fixed rent every year, the amount being based on the three previous harvests and not to exceed 30 percent, with 25 percent being the government encouraged percentage. The code was weakened, however, by inadequate funding to assist in leasehold conversions and to enforce the rent ceiling (Harkin 1975; Takahashi 1972; Pahilanga-de los Reyes et al. 1972). The tenants who wished to convert to leasehold not only had to confront the problem of hostility from the landlord, who could ruin the tenant by charging for water, legal harassment, etc. (see Fegan 1972), but also the problem of obtaining loans for farm production. Both the tenant and lessees need capital to finance each crop and are dependent on loans (Tanco 1974; Fegan 1972). A tenant would be given an advance (usually at 8 percent interest) by his landlord and also, if needed, be given rice or an allowance for food (at 50 percent interest) until harvest. Without a landlord a farmer is dependent on a village moneylender (at least 50 percent interest) or a bank. Obtaining credit from banks, however, requires time and, until recently, collateral; and the banks have not had enough funds to fill all the requests for loans, nor do they give loans for household sustenance until harvest (Pahilanga-de los Reyes et al. 1972; de los Reyes 1972; Fegan 1972). Thus, a tenant who became a lessee had immediate credit problems since the landlord in many instances would no longer give a special interest rate and the banks would either have no money or would have it too late (Fegan 1972). The lessee was also constrained by the requirement to pay a fixed rate every year regardless of the yield. Fegan (1972) notes that there was a greater tendency to convert to
leasehold when the area which he farmed was one of little or no flooding, good irrigation, etc.; whereas in areas of high environmental uncertainty the farmer perceived it as risk minimizing to remain a tenant.

The post-martial law agrarian reform program is attempting to correct the shortcomings of previous reform efforts. However, it is applicable only to corn and rice lands—sugar and coconut plantations are exempt. The new program attempts to attain the goal of owner-operated farms by the transference of the land to the "existing farm management unit" (Harkin 1975). Since there are an estimated 956,000 tenants farming 1.5 million hectares, this program is extremely ambitious (Harkin 1975; see Takahashi 1972 and de los Reyes 1972 for the organization and number of personnel needed to transfer the land in post-war Japan). The farmer is to purchase land over a 15 year period. The farmer can only receive title to three hectares of padi or five hectares of dry field, with the landlord retaining up to seven hectares of his original acreage. The certificate given by the Land Bank (after the price is agreed upon, field measured, and a cooperative joined) can be used as collateral for loans by the farmer, while the Land Bank is the interim owner. To further reduce the farmers' dependency on the landlord, loans have been made easier to obtain with more appropriations for rural banks, and more banks are opening in the countryside. The former landlord cannot take the money received and reinvest it in land since the new farmer-owners cannot sell their land but only pass it on to one heir or to the government (by default). It is presumed that the landlord will invest his or her money in industry and provide a financial boost to domestic industrialization.
This program is an improvement over any that existed before, but the problem with it, as with the previous programs concerning land reform, is in implementation. The rural banks do not have enough money or still take too long to provide the farmer with the capital that he needs (Fegan 1972; Pahilanga-de los Reyes et al. 1972). The stipulations for joining (landlord-lessee agreement on price, field measured, and a cooperative membership) immediately exclude many farmers from the program. The tenants and lessees believe the government is not objective in dealing with themselves and the landlord, the latter being perceived as continuing to have far more influence in their communities and the government, a distrust resulting from past abuses (Fegan 1972; Golay 1968).

In its need for increased production, the government is assuming that the owner-operator will be more open to utilizing new methods, especially (1) improved seeds, fertilizer, and pesticides, (2) mechanization, and (3) conservation. This assumption is based on the belief that, since any increment in yield goes directly to him, the farmer will try to increase production and that there will be a consequent rise in productivity (de los Reyes 1972). However, there does not seem to be any empirical foundation for these assumptions of higher productivity resulting from a change in tenure status (Harkin 1975; Golay 1961; Burcroff 1972; Pahilanga-de los Reyes et al. 1972; de los Reyes 1972; Ruttan 1966; Christenson 1972). It has been suggested that production might actually decline in a response to the withdrawal of credit by the landlord for farm-operating expenses and the government's inability to provide loans to the lessee, especially the average lessee who
is perceived as a "poor risk" (Mangahas 1976; see Pahilanga-de los Reyes et al. 1972:47-48 for an analysis of the amount of government funds needed to provide loans).

Resettlement programs are being deemphasized as a solution to the population problem, although they are still mentioned as a method of increasing production by giving "land to the landless" (Estrella 1974; Bahrin 1967). The problem is, in part, the recruitment of the settlers. The landless are in many instances not accustomed to managing their own farms, nor are they prepared for the rigor of having to leave a treeless padi area to go to a forested resettlement area. The individuals who eventually get the land are in many instances professionals (doctors, teachers, etc.) who are not usually part of the resettlement scheme per se, but who have managerial skills and, perhaps more importantly, capital (Fernandez 1972; Jorgenson 1972). Thus, as mentioned above, it is not the original "landless" who obtain the land since tenancy reasserts itself as a few landholders acquire larger farm holdings with more and more tenants (Sandoval 1957; Simkins and Wernstedt 1971; Lewis 1971).

The resettlement projects have not only failed to achieve their goals, but in some areas (Mindanao) have exacerbated conflict between the indigenous people and the government since the original residents were disenfranchised of the land and not allowed to take part in the scheme (Laquian 1973). Even where the conflicts have not taken the form of violent confrontation, such as on Palawan between the indigenous Tagbanwa and the settlers, there has been disruption and in many cases forced dislocation of the native populations.
Nor has there been enough control maintained over the agricultural practices of the settlers. The settlers have tended to utilize in the new areas the same techniques that had degraded the land in their home provinces. In the National Resettlement and Rehabilitation Administration (NARRA) resettlement project on Palawan, forested areas that had supported 3,000-4,000 indigenous people (the Tagbanwa) and had experienced no previous discernible ecological degradation have, in a span of twenty years (1953-73), been turned into an imperata green desert with the watersheds destroyed. Consequently, the resettlement area can never achieve the prosperity originally envisioned by the planners (see Fernandez 1972; Warner 1977).

Land under export crops is not part of the agrarian reform scheme. Programs pertaining to cash crops are aimed at increasing production, especially of sugar and copra, the two most important cash crops (in 1974 sugar and coconuts accounted for almost one-half of the total export revenues [Tanco 1975]). The plight of the sugar worker, who experiences poverty worse than in any of the high tenancy areas of Central Luzon, is subject to "benign neglect" (Lynch 1970). This neglect has, in part, been due to the reluctance of the government to interfere in an industry so important to the national economy. As mentioned above, sugar and its derivatives bring into the country the money for the machinery and raw materials needed for industrialization.

Copra production has been erratic due to uncertain weather conditions (e.g., the drought of 1972-73) with production low because of poor agricultural practices and the failure to replace senile trees (Agricultural Staff 1975a). Sugar, which occupies one-third of the
total cultivated land with about one-fourth of the population directly dependent on it, has been experiencing decreasing yields per hectare, the result of marginal land being placed under production, the degradation of the land, and the deteriorating quality of sugarcane varieties (Agricultural Staff 1975a). The government, however, has given fertilizer priority to rice and is subsidizing its costs by charging a higher price to the sugar planters who in turn pass this off to the foreign consumers.

Natural Resources: Goals, Policy, and Programs

Income from forest products lead exports from 1966-71 as the highest contributor to foreign exchange earnings ($225 million in 1971 [Agricultural Staff 1975b]). Japan and the United States are the main buyers (Sicat 1969; Central Bank 1972; Leido 1975; Agricultural Staff 1975b; Viado 1975). The greater portion of this income has been through the sale of logs, i.e., unprocessed lumber. Marcos, however, imposed a gradual phasing out of log exports to be replaced by wood products, such as plywood, cut lumber, etc. (Agricultural Staff 1975b; Viado 1975). This will mean greater earnings for the nation and the creation of over 100,000 jobs (Viado 1975). However, there is a need for foreign earnings in order to buy the machinery to process the logs. Thus, the 1976 deadline for the end of log exportation has been postponed to 1978 and will probably have to be postponed still further (Viado 1975).

While there is a shift in emphasis to the exportation of wood products rather than logs, there has been no change in the practice of exploitation for the present with little regard for the future. A new Department of Forest Production has been created and the term of logging
concessions has been increased from the previous very short terms of three to five years to terms of up to twenty years. The length of time of the concession has been increased in order to encourage the replanting of trees, the rationale being that companies will replant so that they can obtain a new crop of trees during the period of their concession. Replanting programs for the national forests have also been developed.

Unfortunately, there has not been enough money set aside for the replanting of the national forests, nor is there enough personnel to inspect the concessionaires' replanting efforts (Agricultural Staff 1975a). The replanting failure, together with the practice of clearcutting and continuation of logging in areas where the watershed is already damaged, has resulted in flooding (Griffiths 1976) in the very areas where tremendous time and labor are being expended upon agrarian reform and the new "miracle" methods, thereby undermining the agricultural program with increased suffering to both producer and consumer. Clearcutting of vast areas can cause irrevocable damage since seedlings in these areas are easily washed away by the torrential tropical rains, making it very difficult to implement a successful reforestation program. It has been estimated that only about 5 percent of the seedlings survive a single year (Weidelt 1975).

**Analysis of the Programs**

The goal of both agricultural and resource policies is higher production for self-sufficiency in staples and to meet increasing demand for foreign exchange through increased exports. The programs
to achieve these goals are not, however, consistent with long-term maintenance, and there is conflict within and between the programs.

**Agricultural**

Although agrarian reform might fulfill socio-political and distributive goals, production increase does not seem to be a reasonable expectation since studies have shown that land tenure changes have little effect on productivity (Harkin 1975; Ruttan 1966; Pahilanga-de los Reyes et al. 1972). The payments to the landlords, however, might indeed stimulate greater investment in the non-agricultural sector. But how can the government continue to be the credit agency to the farmer when repayment in the most densely populated areas can fall as low as 60 percent due to flooding or crop disease (Tanco 1975)?

The programs involving new methods have inherent problems. Where will the fertilizer come from? Already there is scarcity, and in areas of environmental uncertainty is it really worth the cost to the farmer and the government? The new varieties need superb water control, and yet there is flooding due to watershed damage in even the recently settled areas of Palawan and Mindanao.

Concerning resettlement, the goal of land for the landless is not being achieved. Those with capital who arrive on their own rather than as part of a government project seem to end up with the land. Tenancy reasserts itself, and population growth does not decrease as planned. Environmental damage is an unforeseen problem which can result in entire settlements becoming untenable within twenty years (as in NARRA, Palawan).
In regards to the cash crops so necessary for the national economy, the emphasis is on increasing production without social reform. Lands under coconuts and sugar were exempt from the presidential decrees on agrarian reform so that the condition of the worker will not be helped by the government. No attention is being given to sustained yield production, rather the exploitation is directed to short-term gains.

Forest resources

It was a wise decision to phase out raw timber exports in favor of increased exportation of wood products. However, not enough is being done to prohibit destructive clear-cutting practices and to increase replanting efforts.

Conclusions

The conflict between agricultural and forest resource policies is clear. While the agricultural programs are attempting to increase production to meet the demands of a growing population, the resource policy is aimed at increasing production to obtain foreign exchange that can be spent on industrialization efforts. However, by increasing exploitation of forest products in what ever form, raw timber or finished lumber, havoc might result in all soros.

The problem defines a closed system of enormous destructive potential:

a. continuation of forest policy can cause

b. further destruction of the watersheds which in turn would lead to

c. increased uncertainty in the agricultural sector, thus inhibiting investment in costly new methods and resulting in lowered production leading to
d. lowered demand for "import substitutes" (because of the lower income for both producer and consumer with decreased production and high rice prices) whose capital needs depend heavily on the sale of 

e. forest products—which then leads to b, c, d, to return to a.

The Philippines is experiencing population pressure, here defined as: the condition of a human ecosystem which exists when the size of the population exceeds the ability of the resource base to support it at an expected standard of living with the existing system of land utilization without ecological degradation (Warner 1977). Rather than attempting to come to terms with environmental and resource degradation, government policies appear to opt for increasing production to satisfy immediate needs. The variables are so entwined that it is difficult to make corrections within the system; the system itself must to some degree be transformed.

While disregarding their synergistic effects on the national economy, the policies and programs initiated to fulfill the goals of the national government and economy have also been overlooking, or perhaps not even realizing, the effects of the policies on the local level, especially on self-sufficient communities with a subsistence-oriented economy. Such programs can force these communities to integrate into the national economy with all of its short-sightedness and to lose their local autonomy. Another possible outcome is the destruction of these communities by excluding them from their land and its resources. Viewing it from within the framework of what is occurring on the national level, the remainder of this dissertation will explore the effects of national policies and programs on a small tribal community on Palawan.
CHAPTER III

TAGBANWA: POPULATION AND SOCIETY

Location

The Tagbanwa are a tribal swidden people who reside on the island of Palawan, the long narrow westernmost island in the Philippine archipelago. Malandi, the Tagbanwa community on which this paper focuses, is located on the west coast of the island. The Tagbanwa traditionally inhabited areas along both the east and west coasts in the central portion of the island in response to their perception of the hinterland soil as unsuitable for agriculture. The east and west coast Tagbanwa lived within two different ecosystems. On the east coast there are relatively wide plains and valleys, deep coastal seas, and short dry season. The west coast Tagbanwa's natural environment is one of almost no level plains and valleys, shallow reef-strewn coastline, and a long dry season. All Tagbanwa practiced swidden cultivation with each area adapted to the seasonal variation in rainfall that determined their agricultural schedule and gathering activities. The interior of the island is extremely rugged, although the mountains are not particularly tall with the highest peak reaching 2073 meters in elevation. On the west coast the foothills reach the water's edge with the few valleys being very narrow and shallow. The east coast has relatively large areas of level to nearly level land which may reach about 10 kilometers inland, after which the mildly rolling terrain gives away to foothills
and then rising mountains. Aborlan, extending from north of the Inagawan River to the south of Panacan, is the largest valley-plain reaching 7-10 kilometers westward from the coast.

The mountains divide the island into two distinct climate zones: the western side of the mountains together with the northern region is characterized by two seasons, wet and dry, of about equal duration, while in the east the dry season is only about three months long and the rainfall more evenly distributed over the remainder of the year. However, the western and northern areas of Palawan receive more rain than does the southeastern area (254 centimeters compared to 177.8). The area from Puerto Princesa to Brookes Point is one of the driest in the Philippines.

Although the tropical soils of Palawan are popularly perceived as being rich and fertile, the soil is regarded by most authorities as being very poor and shallow. Only the alluvial soils and those weathered from a limestone base are considered to be of good agricultural quality while the upland clay soils are considered infertile. The portion of the island with alluvial or limestone derived soils is small, occurring primarily in the Aborlan-Brooke's Point areas on the east coast and in the area of Quezon on the west. The remainder of the island consists of infertile shallow soils, which raise questions as to the wisdom of permanent agriculture on this meager soil base (Bureau of Soils 1960).

Although its soil may be poor, Palawan has rich mineral resources. Manganese, chromite, quicksilver, copper, silica sand, and limestone have been mined for a number of years in varying degrees.
The discovery of nickel in the central mountain range is recent. Although other minerals have been mined for some time, the mining operations were small and employed few men; the nickel operation, if it resumes its operation, will be of larger scale and will have a greater impact on the Palawan economy. Offshore oil has been found to the west of Palawan. Puerto Princesa is serving as the base of operations for the oil companies, and there has been little effect felt in other areas of Palawan since it does not create employment for the local people.

Palawan is renown in the Philippines as a highly productive fishing area. Although the best fishing is off the north coast in the Calamians region, good fishing is possible along the Palawan coasts. On the west coasts fishing boats are a common sight, although the fish are declining because of the illegal trawling that has disrupted the reef ecology.

Transportation on Palawan is difficult. Sea travel is hazardous on the west coast because of the treacherous shallow inshore waters and coral reefs, although the east coast has protected bays and harbors. The best time for sea travel on both coasts is from April through June in the lull between the monsoons. On the west coast rough seas occur in July and August during the southwest monsoon, making sea travel even more hazardous and uncertain. If not by sea, then one must travel by overland road. Again, there appear the east-west differences. Although there is a road that goes down the greater part of the east coast, there are no roads other than those for logging on the west
coast. Those wishing to travel on the west coast must journey by foot if sea travel is impossible.

The Tagbanwa

The Malandi Tagbanwa, unlike many other groups in the literature, actually use the term Tagbanwa to refer to themselves. The Tagbanwa usage differs from that of outsiders, however, with respect to the inclusion and exclusion of other ethnic groups. The Malandi Tagbanwa would consider the Batak to the north as being a "type of Tagbanwa", whereas some anthropologists consider the two groups to be distinct on the basis of physiological and subsistence criteria. However, the use of the term for groups residing in the extreme north of Palawan, who are called Tagbanwa by peasants and missionaries, confused our informants. Locally, the term "Tagbanwa" is used as a geographical and linguistic category which normally refers to the indigenous population of central Palawan but which may be extended by some to include the Batak. The Palawanun to the south were never described by our informants as a "type of Tagbanwa". The Batak and Tagbanwa appear to have had deeper affinities which perhaps led to and/or resulted from relatively frequent intermarriage.

Traditionally, the Batak and Tagbanwa occupied different functional niches (Hardesty 1972). The Batak were hunters and gatherers who now practice some swidden agriculture (Eder 1978), whereas the Tagbanwa are primarily swiddeners, although they can sustain themselves by gathering after a poor agricultural season. The Palawanun, like the Tagbanwa, are swiddeners. Venturillo (1907), Beyer (1917), and Worcester (1914) made note of what they considered to be the many
similarities between the Tagbanwa and the Palawanun, and Fox (1954) reports that the languages are over 60 percent cognate. The traditional coolness of the interethnic relationship was perhaps due to the similarities in subsistence activities which might have led to competition for forest lands. This interpretation is especially applicable to the Malandi Tagbanwa who live on the boundary between traditional Tagbanwa and Palawanun territories. The traditional reserve was dissolving in 1975, however, and giving way to expressions of "pantribal" solidarity voiced by both Tagbanwa and Palawanun. They were both "tribos", both minorities who had to bear the brunt of the encroachment of peasant settlers on their ancestral lands. They expressed that they were similar and knew the ways and languages of one another, but the "Filipinos" (Tagbanwas never referred to themselves as Filipinos; "Filipino" was synonymous with Christian peasant), they said, were different and treated them as inferiors and made them feel shame (ya).

Social organization is based on kinship and community ties "with reciprocal exchange and sharing playing an important cohesive role" (Raintree 1978:11). The only fully corporate unit in Tagbanwa society is the nuclear family, which is regarded as being responsible for its own subsistence. This potentially atomistic orientation is tempered by the interdependence among households which results from the need for reciprocal labor exchange during planting and harvest, as well as by the continual flow of food and services within the community throughout the year.

The reciprocity between kin and the inability to refuse a request for food by someone within the community (though it is expected,
of course, that certain requests will never be made) makes it difficult for any household to amass enough wealth to be significantly better off than others in the community. This supports the ethos of egalitarianism that pervades Tagbanwa society. Although it is a "rank" society (Fried 1967), any authority that an individual may have is dependent not so much upon his rank as upon the respect that others may accord him personally. Political authority among Tagbanwas is limited to influencing decisions and providing noncoercive leadership, since no one within Tagbanwa society has any special control over access to productive resources.

This pattern of leadership by influence rather than coercion is most visible in the process of surugiden (litigation). Litigation provides a means for airing grievances before irreconcilable hostilities develop. In 1975 surugiden most frequently was concerned with divorce or friction between affines (usually a woman's parents and her husband). The ginuo, or legal expert, inherits his ginuo rank from either his father or mother. This inheritance pattern results in more and more classificatory ginuos in each generation, but, unless a ginuo can display eloquence, wisdom, and knowledge of legal precedents, no one will approach him to serve as their legal council and he will not gain a position of influence in the community. Although the ginuo's influence normally depends on his legal reputation, generosity can gain prestige for one not noted for special legal talents. Since everyone, no matter what his rank, is responsible for his own subsistence, a ginuo who wishes to gain prestige by means of his generosity must be a highly productive individual. A man can gain prestige as a ginuo by working
hard and having a "wide" swidden, so that he will be able to fulfill the expectations which the community places on those of ginuo rank.

This combination of knowledge and generosity in exchange for prestige places the would-be political leader in a position where, to gain influence, he must benefit the community which he serves.

Traditionally, those legal cases which could not be solved within the community were referred to the masicampo for final adjudication. An inherited position, the masicampo's decision was final in any case. However, the masicampo, like the ginuos, had no power to force his decision upon the litigants. If someone did not wish to pay a fine, there was no means by which he could be forced to do so. But an individual who did not comply with a legal decision would, in effect, place himself outside the law and hence beyond its protection. In no legal case during the time of my fieldwork did anyone choose not to pay a fine. If she or he had no money, then relatives would help make the payment. There is a strong desire throughout the community to preserve the integrity of the indigenous legal system, since it is realized that the harmony of the community depends upon its being able to resolve both the major transgressions and minor frictions of social life.

Complementing the legal system, which regulates the community's secular life, there are a number of religious roles and rituals which bring order to its spiritual life. The babalyan are the healers who, while in the state of trance, mediate between the patient and the spirits (see Fox 1954 for a vivid description and interpretation of Tagbanwa spirits and healers), diagnose the cause of the sickness
(usually one of the stricken person's souls is "out of place" and must be returned to its proper place in the body), and effect a cure. The babalyans are part-time specialists, often of ginuo rank, and in Malandi all but one was a woman.

The other important medical specialist was the panday or midwife. Since all but one of the pandays in the Malandi area were men, however, midwife may not be the most appropriate term. The panday could also be a babalyan but was usually a ginuo, especially the most respected pandays, since it was a sign of great personal power that an individual could ease the pains of labor. Usually, in tales of the great ginuos of the past, the ability to speak, to convince, to balance both sides in a legal dispute were mentioned but also often told was how "he had only to walk around the birth house to cut the pain."

While the ginuo, babalyan, and panday all were approached by individuals and carried out their duties on a one-to-one basis, there was one specialist who performed a ritual for the entire community or "banwa". This ritual, the lambay, is performed by the individual who inherits the duties of maglambay. The purpose of the lambay ceremony is to control the rains; there is a lambay to start the rains and one to end them. It is an expression of the sense anxiety over rain which pervades west coast Tagbanwa society; for, as discussed later in this chapter, rainfall is erratic and capricious. The lambay is for the entire community since the failure of the rains is failure for all within the banwa.

As Raintree (1978:17) notes, the lambay is "a rite of purification which attempts to insure the regularity of the rains by cleansing
the banwa of the taint of hidden 'banwa sins.' These sins are primarily sexual (incest and adultery) and those of transgression by humans of sacred areas (certain areas of the forest, etc.). The all pervasive spirits of the banwa show their displeasure at such sins by sending disease among the people or by causing the rains to fail. The lambay cleanses the banwa of these hidden sins and, in so doing, recreates the social and environmental order.

Population

In 1975 the Malandi community consisted of 106 families with a population of about 600. The Tagbanwa population manifests a pattern of high fertility and high mortality. As a result of the high fertility, it is a young population with 46.4 percent under the age of 15 (see Fig. 1). The age structure is similar to the national, although the Philippines is slightly older with 43.2 percent under 15 (see Fig. 2).

The average Tagbanwa woman married or ever married at the time of the research in 1975 had 4.6 children ever born. Yet mortality is high, for of these 4.6 children only 3.4 were surviving, 64.7 percent. Tagbanwa women who have reached the end of their childbearing years (45 or over) have had about 7.8 children with only a little over 48 percent of them surviving (3.8 children).

As a result of the age structure, the dependency ratio (population 0-4 + 55+)/population 15-54) is 1.07. Although comparable to the dependency ratio of 1.05 for the Philippines, this is a high ratio, for it means that every individual between 15 and 54 has to be productive enough to support either an aged adult or a child.
Tagbanwa Census, 1973—Total population 537

Fig. 1. Tagbanwa population.
Fig. 2. Philippine population.

Unlike most societies there are more males than females among the Tagbanwa, 52 percent and 48 percent respectively. However, among adults (15+ in age) the number of men compared to the number of women is rather high with a sex ration of 1210 (m/f x 1000). This high ratio may be attributed to three factors: (1) being a small population a few individuals can greatly influence the population composition; (2) outmarriage by females to peasant communities; and (3) the result of death by childbirth in the adult female population.

Of these three possible factors, the first and third were probably those having the most effect on the sex composition of the Tagbanwa population of Malandi. This is because, even if a Tagbanwa woman married a non-Tagbanwa man, it was expected that he would reside near his wife's parents; thus, she was not "lost" from the population. While the first factor might explain a part of the sex ratio, the dying of women in childbirth is, however, quite common and might be the greater cause. All but one widower in the area had lost his wife in childbirth, and in genealogical work death by naiyadi (relating to childbirth) continually appeared. The women appear to die either during the first childbirth or their fifth or sixth. Not surprisingly, childbirth is looked upon as dangerous, and the panday (midwife) is usually a respected leader in the community, being a man who is reputed to have personal power and skill not only with helping a woman in her labor but in settling disputes, etc. When tales are told of former great leaders, men of personal magnetism, their ability as panday is often stressed.

When family planning was discussed on the radio, we were approached by several couples interested in contraceptives, and we were asked to give
a lecture concerning them at the next town meeting. I acted as a liaison with the family planning clinic in Quezon, which provided various forms of contraceptives free. The twelve couples who obtained contraceptives (all but one requested condoms) were, for the most part, in their thirties with several children surviving and concerned about the health of the wife.

Residence

The Tagbanwa are matrilocal, residing in small hamlets consisting of several consanguinely related households within calling distance to one another, similar to the Hanunoo of Mindoro (Conklin 1957:13-16). The house sites are not permanent. Families move to their swiddens and, if there is illness or pregnancy, to other hamlets to be near healers and midwives. However, in contrast to popular Filipino belief, they are not nomadic since individuals, especially women, may live their entire lives within a few square kilometers.

In 1973 Malandi was a rather large nucleated settlement similar to Fox's description of Tagbanwa residences in the Aborlan area (Fox 1954). This was not considered to be the traditional form of settlement by the people of Malandi, and it appears what Fox understood to be traditional might actually have been the result of a gradual retreat from the shore toward the mountains in reaction to peasant in-migration into the area. Malandi, as a result of similar pressures, was more like Fox's Baraki with its nucleated residences than the traditional small dispersed settlements. It consisted of 31 households in two small valleys, on the surrounding hillsides, and along the coast. There
were several other settlements within an hour's walk consisting of the traditional three or four related households.

Malandi then, because of its nucleation and size, was a new development on the west coast. However, the traditional pattern of consanguineal settlement was still being followed. Lamani proper in 1973 consisted of about 16 households (see Fig. 3), all but two of which were related consanguineally to one of five women, one of whom died that year, whose children have intermarried. Two of these women (Al and Gl) are sisters, while E is affinally linked to them since her daughter (Bl) is married to the nephew (and adopted son) of childless male A2. Household J was affinally linked through son-in-law P2 to household A. Thus, rather than being an example of a new settlement pattern, Lamani was an extension of the old one, although much larger with what would have been three or four traditional settlements now living in close proximity.

By 1975 Malandi proper had shrunk to the traditional hamlet. It consisted of household B, C (with new wife and child), E, K, and the recently widowed daughter of E who had been living about 15 minutes away. All but C were related to E, with C remaining in Malandi since he was the caretaker of the church. The other households dispersed and formed similar hamlets organized around the women but staying within a half hour walk of Malandi. The temporary nucleation that existed in 1973 served as a haven against the infringing miners and peasants. It was a traumatic experience for the Tagbanwa to have to leave the Berong area, and the large untraditional community helped them recover. Surrounded by kin, they felt safer and less vulnerable to the outside
forces. Once fields and trade were reestablished, there was a reversal to the traditional hamlet residences.

As can be seen from the diagram in Fig. 3, the settlement in Malandi in both years was matrilocal. Matrilocality had been strictly maintained until quite recently. Previous to the movement to Malandi, changes had been occurring in the marriage patterns. The changes were: (1) the end of arranged marriages and (2) a contraction of the geographical area from which the mates were chosen. Traditionally, marriages were arranged by the parents to reinforce a tie or extend their influence. Fox (1954) noted that on the east coast at the time of his study arranged marriage was no longer common. During my research a parent-arranged marriage was perceived as something of the past, although a few marriages were arranged at the request of the young man by his parents. By far, the most prevalent form of marriage was nasala. Nasala is when a couple is caught together or, in some cases, when they go to the ginuo (a person who is, among other things, a local legal authority) and ask him to request their parents to go through the formalities.

The second change, spouses being chosen from a geographically closer community, has been relatively recent. Traditionally, there was a higher tendency for women to marry men from outside the community. In the Malandi population in 1973 the percentage of areal endogamy, using natal village as the basis for classification, was 33.8 percent. Although it is difficult to reconstruct previous marriage patterns from genealogical data, it appears that in the past the percentage might have been even lower. It was expected that a young man would go to other communities to look for his bride. This was, in some situations, forced
upon the man since marriage with first, second, and third cousins was prohibited and the settlement in which he was raised would tend to be composed of *kaduguan* (consanguineal relatives). Hence, the chance of finding a suitable mate within his natal village was low (a glance of Fig. 3 typifies his problem).

However, the old marriage system, in which men were dispersed over a wide area, has now become inoperative since the constriction in Tagbanwa land within the past 20 years has made it impossible to continue. The endogamy of Malandi is still low, but this is because the figure is based on natal village. Population movement since World War II camouflages the fact that, although a couple might have been born in settlements far from each other, many of them were living with their parents and siblings in the same community at the time of the marriage. Also, since there was a higher number of Tagbanwa in closer proximity to each other, the man did not have to go so far to find a permissible spouse, and, because of the retreat from the settlers, it was not expected that he could go far afield in his search.

Although the Tagbanwa are matrilocal in residence, at first glance it might appear that the households are really neolocal. Young couples are expected to maintain their own homes and be economically independent from their parents. Yet, many newlyweds spend the first year or so in the home of the bride's parents, and, when they do build their own home, it is near the woman's family, since it is felt that a woman should be near her mother.

In 1973 land scarcity hindered the maintenance of matrilocality, a problem that the Tagbanwa never had to face before. Traditionally,
the Tagbanwa had access to about 30,000 hectares which they would have considered to be cultivable (excluding the infertile mountains, mangroves, etc.). Since they probably never numbered more than the present population estimate of about 8,400, it means that population density was quite low, being theoretically less than one person per hectare.

However, with the move to the recently settled Malandi and the subsequent enforcement of the kaingin laws (see Chapters IV and VI) which prohibited the cutting and burning of the primary forest because of little secondary growth, there was at the most 40 hectares of land available for cultivation. With the Malandi proper population of 268 at that time, with only 40 hectares available, the population density was over 1,700 per square kilometer, a density comparable to that of Ilocos Norte, one of the heaviest populated areas in the country which is experiencing severe population-resource stress.

Situations arose where a woman's parents bought or borrowed land in one place and the woman's husband had access to land in another. Land scarcity coupled with the continuing desire for matrilocality made it necessary that a new system be devised that would allow access to land, yet still fulfill the expectation of matrilocality. Since matrilocality was regarded as being one of the unassailable facets of Tagbanwa society, a straining for flexibility within the context of matrilocality arose. It was tacitly understood that, if a man bought land elsewhere than near his mother-in-law's residence, visiting would be frequent and during the slack agricultural season they might move to her hamlet. Thus, a semblance of matrilocality was maintained with
visiting being substituted for the full-time residence of the daughter and her husband.

Until recently matrilocality and cousin marriage taboo created male dispersal that formed a kin-based reciprocity network which acted as a back-up system in case of crop failure. Since the males were brought into a settlement upon marriage, when crops failed they could go back to their natal area or to any *kaduguan* dispersed along the coast and request food. It was (and is) impossible for a person's *kaduguan* or affines (in this case, sister's husbands) to refuse him if they had adequate food. When he returned to his wife and her family, he would have obligations to his affines, since he could not refuse their requests for food. The food was therefore dispersed from his *kaduguan* to himself and then to his wife's relatives who, in turn, were embedded in their own reciprocal networks. Thus, the dispersed male network operated to stabilize and maintain the population during fluctuations that the particular localities experienced and was thereby effective in population maintenance.

This was not the only function of matrilocality, for it had functions on the individual and ecosystemic levels as well. When asked about matrilocality rather than enter into a discussion of reciprocity networks, the Tagbanwa will reply that "a girl should be near her mother." The reason given for this is the tenuousness of marriage, especially when the girl is very young. Although they now marry in their middle to late teens, previously girls married at extremely young ages, in many instances before the beginning of menses. It is not considered that unusual for a man or woman to be married six or seven times during their
life. Divorces are especially frequent during a woman's adolescence, before any children are born. Once a child is born, both families will try to keep the couple together. Since the possibility of divorce is never completely ruled out by any couple, it is felt that a daughter should be near her mother, especially if she is young. For, if a woman marries and goes to a different area, who shall help her if her marriage does not go well?

Matrilocality not only had a function for the population and individual but the ecosystem as well. By dispersing males over the area into a reciprocity network, the ecosystem itself was stabilized. For, although the Tagbanwa occupied the swidden niche (see Hardesty 1972), they had some flexibility (as do most human populations) and could (and can) subsist on gathered foods for part of the year. However, the Tagbanwa population is too large to allow a complete swing back into year-round gathering, since they could potentially strip and ruin the diversity of the forest around them. Since an ecosystem that is more diverse is more stable (Clapham 1973), a decrease in the diversity of the forest would affect the stability of the ecosystem. Thus, the reciprocity network operated to avoid the over-utilization of the forest and distributed the stress felt within a localized area over the entire region, thereby stabilizing the ecosystem as a whole.

Regardless of government decree, by 1975 the Tagbanwa through forest clearing had doubled the amount of land available for fields, and the incidence of matrilocality increased in response to it. Nevertheless, with the contraction of the geographical area from which mates
were chosen, the far-flung network with all its functions shrunk as well. New means to subsist during hard times had to be developed.

**Productive Groups and Rights to the Means of Production**

The basic social and economic unit in Tagbanwa society is the nuclear family. Each family has its own residence and its own umas. Ideally, the nuclear family is self-sufficient in meeting its own labor needs and economic wants. Although there is an emphasis on self-sufficiency, each family is embedded in a system of reciprocity that disperses food (and to a lesser extent, goods and money). The basis of this dispersal system is the impossibility of refusing the requests of your kaduguan, and, if you are a man, your affines as well.

Until recently the land of the west coast Tagbanwa was for all practical purposes "infinite" as defined in Carneiro's model (1960), since there was far more land per capita than could be utilized, given the prevailing agricultural system. In response to this, the Tagbanwa looked upon land as a free good as have other long fallow swidden groups (Fox 1954; Frake 1955; Conklin 1957; Spencer 1965). Individuals perceived that there was no need to keep track of who was doing what to the land they had previously used since there was an abundance of accessible forest. Courtesy demanded that one ask a farmer's permission to use his/her fallowing field, if it was convenient to do so; yet, in reality such a request could never be refused. Thus, in traditional Tagbanwa society, where the forest was regarded as a free good, there were usufruct rights but no real form of "ownership". Bohannon (1963) suggests that in discussing such a system "farm rights" be substituted
for the idea of "land rights". This is a meaningful substitution, for in reality a Tagbanwa never had land rights, he only had rights to farm in an area. After the cultigens were harvested, rights were ended.

Thus, land tenure took the form of farming rights and rights to standing cultigens rather than "land rights". The farmer operating in such a system perceives labor as his/her limiting variable, not land. Since there is always more land than can be used in a year, there is more concern about having undisputed rights to the fruits of the labor. Traditional rights were organized around the pragmatic concept that everyone should have rights to the product of their labor rather than rights to any particular piece of ground. Thus, the two concepts behind traditional Tagbanwa land rights were (1) open access and (2) expenditure of labor, resulting in standing crops assured the laborer of rights to the harvest. Once cultigens were harvested, the fallowing field reentered the forest reserve.

Traditional rights to land and crops could not operate in Tagbanwa relations with the migrants and companies since true ownership of land was recognized by the non-Tagbanwa, and they preceded to buy land from the Tagbanwa. The mining company in 1972 bought most of the land they recognized as being Tagbanwa and forced the migration of the Tagbanwa from Berong. In 1973, when the Tagbanwa were hard pressed for land because of the enforcement of the kaingin laws, Marcos, in a presidential decree, declared that everyone who was a squatter (i.e., not have a legal title) should have their land, to a maximum of 5 hectares, registered in their name. The Tagbanwa dutifully went to Quezon to register land, but, because of the scarcity of cleared land, individuals
registered primary forest in their name. Although hesitant to clear it in 1973, by 1975 forest was being cleared and planted and was becoming part of the Tagbanwa "owned" land.

It was realized that eventually they would be stopped from continuing to clear the forest, if not by the government, then by the logging company that had a concession in the area, but they tried to clear as much as they could before any limits could be set. It was common in 1975 for a family who had registered primary forest to invite others, usually siblings, to use the registered land for their fields. Such borrowing did not entail giving a portion of the crop to the owner, rather the lender benefited since his land was being cleared far faster than he could do by himself. By such strategies, the land in secondary growth and fields around Malandi doubled in the two year period between 1973 and 1975.

In 1976 the logging company attempted by threatening prosecution to stop further clearing of the forest, but the barrio capitán, who was protecting the welfare of his peasant constituency as well, tried to dissuade the company from pressing charges against anyone. During the 1973-76 period the Tagbanwa attitude concerning their rights to the use of the forest changed from one of extreme fear of reprisal by the government or company to one of stubbornness. They realized that, even if arrested, it was not shameful since they were trying to provide for their families.
CHAPTER IV

ENVIRONMENT AND SUBSISTENCE

This chapter is in three sections. The first section is concerned with the natural environment. Palawan is described as a series of microenvironments each differing in rainfall, soil, sea resources, etc. The second section deals with the subsistence activities of the Tagbanwa. It explores the difference between male and female agricultural activities and the diversity of crops and subsistence strategies. The third section suggests that the diversity is an adaptation to ensure subsistence stability in a fluctuating environment.

The Environment

The west coast of Palawan is climatically characterized by having two distinct seasons, wet and dry of about equal duration. The two main prevailing winds of the province are the northeast monsoon and the southwest monsoon. Ideally, the northeast monsoon begins in October and continues until April. This is the "dry" monsoon since the winds lose their moisture before reaching the island. After a transition period of variable winds and calm, the northeast monsoon is followed by the southwest or summer monsoon. The summer "rainy" monsoon continues from June to October. The southwest winds bring much needed rain but with an uneven distribution in torrential storms. Erratic rainfall, not unusual in Palawan, is partially attributed to Palawan's removal from the major Philippine airstreams and the alignment of the landmass
to the direction of the monsoons which reduces the precipitation and works to heighten and lengthen the period of drought. This adds to the problems of the uncertainty of the monsoons themselves, for, as the distance from the equatorial zones increases, the reliability of the rain decreases (Wernstedt and Spencer 1967; Philippine Republic Industrial Development Center 1962).

Although the west coast is categorized as having a climate that consists of a six month dry season and a six month rainy season, the rainfall does not usually reflect this idealized seasonal pattern. Although the winter months (November and December) are supposed to be dry, rain may fall through January, while the rainy season can start in either April or May, pause in July or August, and then resume in September and continue until February. This is a reflection of the uncertain nature of the monsoons themselves since the rainy season consists of prolonged heavy rains, alternating with moderate rains, clear skies, and rainless weather (Thomas 1965; Beckinsale 1957). Watters (1971:7) comments that the problem of agricultural reliance on monsoons is that "the late arrival of the rainy season, rains lasting longer than normal, and protracted periods of drought can all influence considerably the size of the harvest, and sometimes destroy it." The experience of the Malandi community in 1972, when less than two inches of rain fell in 40 days during a mid-rainy season drought in July and August, is an example of the sorts of problems resulting in harvest failure that may occur in monsoon areas. However, inadequate rain, although the greatest worry, is not the only one, for the rains may come too early or there may be no dry season. Either of these situations will result in an inadequate
burn which in turn will result in unprepared soil, inadequate nutrients, and undestroyed weeds, thereby decreasing the yields and increasing the labor requirements.

Not only is there variability from year to year, but from one place to another along the coast; for, although the west coast and northern areas are regarded as forming one climatic area, within these broad boundaries there are many variations. In partial rainfall records provided by a mining company on the west coast, differential rainfall appears to be a function of altitude and distance from the shore. The station receiving the most rain was at 80 meters elevation; the station receiving the least rain was close to the shoreline and at only 4 meters, while the station experiencing intermediate rainfall was elevated 10 meters and was located between the two other stations. However, because the hills and mountains meet the sea with few valleys or plains, the distance from one place that is receiving adequate rainfall and another that is not may only be 6 or 8 kilometers.

This type of rainfall pattern, although in this case perhaps exaggerated by the alignment of the island to the monsoons and the topography of the area, is common in island and mountain areas (Porter 1965; Sahlins 1958; Zimmerman 1965). These local climatic deviations from the regional averages are termed by ecologists microclimates, or microenvironments. Microenvironments resulting from the variation of the rain are further differentiated by the localization of soils, sea resources, and forest products. The implication of this is that each settlement or hamlet has its own microenvironment with a unique constellation of soil types and resources. Thus, the west coast of Palawan
should not be considered as a uniform region but rather as a series of microenvironments distributed along the shores and in the valleys.

Each of these microenvironments experiences variations of rain with a capriciousness that disallows any security from year to year. Areas that had bumper crops one year might have total crop failure the next, or a settlement may experience a drought and subsequent harvest failure at the same time that a settlement 8 kilometers away has rain and an adequate harvest. In adapting to these fluctuations the Tagbanwa have developed agricultural methods and strategies to maintain subsistence stability.

Tagbanwa Swidden System

Swidden, also known as shifting cultivation, slash and burn, etc., may be defined as an agricultural system in which the fields are cleared (usually by fire) and cultivated for shorter periods than they are fallowed (Conklin 1957). Swidden is regarded by many experts as a very effective agricultural system for the tropics (Gourou 1966; Dobby 1946; Watters 1960). The crucial problem in tropical land utilization is the maintenance of soil fertility (Benneh 1972). Tropical soils are generally poor, the result of heavy rains and continuous heat that leach out the nutrients and prevent the accumulation of humus typical of temperate climate soils (Meggers 1960). A tropical forest maintains soil fertility by inhibiting run-off and erosion and by the action of deep roots in firming the soil and increasing its productivity (Kellogg 1963). By clearing his fields for an agricultural season and allowing them to return to forest, the long-fallow swiddener manages to obtain his harvests with little degradation of the soil. The burning
of the forest has been found to be an efficient means to increase soil fertility and decrease weeding. Burning, as Porter (1970:193) describes it, "raises the soil temperature, which results in the decomposition of the organic matter in the upper layer--releasing mineral nutrients; it provides charcoal . . . which affects pH levels; it influences run-off; and finally, it releases the mineral nutrients immobilized in the vegetation." The burnt forest provides calcium, phosphorus, and potash that could not be obtained in any other way, since these nutrients are immobilized in the trees by the action of the roots which reach to the subsoil and bring back whatever has been leached from the topsoil (Clark and Haswell 1970). Burning is, then, more than just a clearing technique; it is also a device for improving certain properties of the soil (Watters 1960) which provides for vigorous growth of crops planted immediately after burning.

The Tagbanwa practice what has been termed "integral" swidden since it stems "from a more traditional, year round, community wide, largely self-contained, and ritually sanctioned way of life" (Conklin 1957:2). Tagbanwa agricultural activities will be described from the perspective that integral swidden is a viable practice in the tropical forest. The research on which this paper is based was conducted in 1973 (January-August) and 1975-76 (February-February) during which time I observed and participated in two swidden cycles. The swidden methods of 1973 and 1975 differed markedly. In 1973 land scarcity, the result of forced migration from their ancestral area (a mining company obtained rights to their lands) and the government ban on cutting primary forest, necessitated a departure from traditional long-fallow methods. In 1975
the traditional methods were reestablished as more land became available for swiddens. My description of Tagbanwa swidden will include the methods described by informants and the procedures that I observed during my residence in Malandi.

Site selection and clearing

Each Tagbanwa man is expected to make his own uma. There is a similar expectation for women, unless a woman is pregnant or has a young infant or small child; then, it is up to the woman as to whether or not she will make a field. If she has older children who can help with child care, agricultural, and domestic tasks, she will probably, if in good health, decide to make her own field. Whereas the men will choose primary forest (giba) or mature secondary forest (bunglay) for their fields, the women will make their fields in the fallowing fields of their husbands or, in some instances, their male relatives. The woman is limited in field choice by her lack of training and skill in using the ax. An ax is necessary for clearing giba and bunglay, whereas the bolo (machete) is used for lomun (small bush or tree cover). (A field is classified as bunglay if an ax is necessary to clear it; lomun needs only a bolo.) In Tagbanwa society a girl is never trained in the use of an ax, nor a boy in making baskets and mats. In a society with little sexual division of labor, this is the only clear difference found between the skills taught to males and females. Thus, due to her lack of skill, to a great extent a woman's field choice is dependent upon the previous choices of her husband. Although the harvest of the men's and women's fields will be pooled together, in most families a distinction between the fields is made. In a random sample of 20
families (of the 106 in the community), every couple had two fields except for when they were newlyweds or when the woman was pregnant or ill (6 of the 20). When only one field was being made, it was perceived as belonging to both. A distinction is maintained since the men's and women's fields are perceived as fulfilling different functions. A woman's field is smaller, is burned, planted and harvested earlier, and contains not only the early maturing rice but also corn, millet, sweet potatoes, cassava, vegetables, etc. Her field is the tagudali, the term used of early maturing rice; the man's field is malandi, the longer maturing rice, and may contain only rice, perhaps with taro, which is said to do best in gába (see Fig. 4 and 5).

The total amount of land swiddened by a family is usually between 0.5 and 1 hectare, depending on the number of family members, larger families usually having larger fields. However, some large families who are willing to eat less rice might make smaller fields, whereas a smaller family wishing for the prestige might make a large uma. It should be noted here that few umas were larger than a hectare, with most being around 0.5 to 0.75 hectare, with some women's fields being smaller than 0.1 hectare. Rather than having a large uma in one place, there was a preference for two fields in different locations, facing different directions, and experiencing a different rainfall pattern.

Traditionally, the umas were contiguous, a result of both the autonomy of the individual farmer and the procedure of site selection. The separation of fields by forest helps stop the spread of insect pests and promotes forest regrowth (Janzen 1975). However, if a field was a
Woman's field

Field size approximately .2 hectares

vegetables planted but not shown: eggplant
cayena (Capsicum annuum)
tomato

Fig. 4. Woman's field.
Man's field

Fig. 5. Man's field.
great distance from the hamlet, there was a desire to have contiguous fields so that there will be companions for clearing, etc., and another family to share in guarding against faunal pests.

In the process of choosing a site (magagkat) a farmer looked for poisonous roots, as well as for snakes and braided vines. The latter were signs that a panya in (one of the forest spirits) inhabited the area. Those areas that had any of these overt signs were avoided for a swidden since, if they were used, it is believed that the owner would get sick or even die. If these signs were not present, then a potential site was further tested for the presence of a panya in by sticking a piece of bamboo into the ground. The next day, when the bamboo was pulled out, if there was dirt sticking inside it, it was said that it was a panya in's area and that sickness would come if it was planted. Interestingly, the test which showed the presence of the forest spirit on another level gave information on the texture and suitability of the soil. If the soil is hard and stays within the bamboo, it is not quite ready to be planted; whereas, if it is soft and fine textured, it will fall out, indicating not only the absence of a panya in but also the suitability of the soil for planting.

Traditionally, potential areas for swidden were always gibá or high bunglay. Gibá was the favorite since the forest soil was thought to be "fat" and good for the crops. Gibá selection usually requires that clearing starts the end of December or beginning of January since cutting the large trees takes time and skill. It is not unusual for a farmer, especially if he is young and inexperienced in the dangerous task of felling large buttressed trees, to hire men to cut the larger
more difficult trees. A field in bunglay can be started in January or February, while a field of lomun can be started as late as February. However, this schedule of clearing depends on the rains; for, if the rains continue into December, there is a reluctance to start cutting since the vegetation if wet will rot rather than dry and, therefore, will not burn well.

Burning and planting

Choosing the time to burn is difficult since it must be done before the rains come or there is the risk of wet vegetation and the need for a second burning which delays the planting. Yet, there is a reluctance to burn soon after clearing since the vegetation might not be dry enough (which would also necessitate a second burn) and the weeds might start establishing themselves in a burnt field which would mean a weeding before planting. Ideally, the fields should be burned shortly before the rains, so that little regrowth will appear before planting, when they are sufficiently dry so that a fine ash is produced. Since fields are usually not contiguous to others, burning is an individual decision. The husband will usually be responsible for burning both his field and his wife's; however, these are burned at different times ranging from a few days separation to several weeks. The woman's field is burned first; it usually is her decision as to when the burning will occur. By burning the fields at different times, the chances are increased that at least one burn will coincide with the optimum conditions. If it turns out that the woman's field was burned too long before the time of planting necessitating a preliminary weeding, less labor will be needed as it is smaller. If, on the other hand, the man's
field is not burned by the time the rains begin and a subsequent burn
(*durok*) is required, it is believed that having originally been *gība*
or *bunglay* the soil is more fertile and less dependent on ash than the
women's *lomun*, and that there will still be less subsequent weeding
than if it had been the women's *lomun*. In 1975 the burnings took place
during a four week period, with most of them occurring just prior to
the start of the rains.

The decision to start planting is a crucial one. As a result
of the burning, there is a layer of nutrients on the fields that will
rapidly wash away with the rains. Thus, there is a need to get the
fields planted quickly so that the plants can utilize these nutrients.
In Africa (Porter 1970) it was estimated that a week's delay in plant­
ing could result in the leaching of nutrients that follow the beginning
of the rainy season, and, to a lesser degree, the water shortages that
occur as the season progresses. The seeds planted when the ground is
dry will "put out extensive root systems, taking advantage of the
ephemeral presence of the large quantities of phosphorus and other min­
erals. Late planted crops developing in moist or saturated soil build
less extensive root systems, and are more vulnerable to drought, should
it occur later in the season" (Porter 1970:193).

In Malandi the decision is complicated still further by the
uncertainty as to whether the monsoon has indeed started or whether it
is simply a short period of rain that will be followed by another period
of drought. Thus, fields are planted at different times. The woman's
field is planted first, usually about two weeks earlier than the man's.
Her field is planted primarily with short-term rice (*tagudali*) although
there may also be long-term and glutinous varieties as well. Even before the rice has been planted the woman will plant corn, cassava, and perhaps taro. If a family has only one swidden, the tagudali will be planted earlier in part of the field. The exchange labor used in a man's field is not used in the tagudali field nor is a feast held as it is for the man's field. Planting is preferably done by planting parties based on reciprocal labor exchange (sobat) and feasting (kisig). If, as in 1973, there is no rice for feasting (and rice must be served to the planting party), then planting is done by the family and some relatives.

The men generally dibble while the women and children plant the rice, three to five seeds to a hole in a year of scarcity, five to eight in a more affluent year. As with many other chores in Tagbanwa society, there is little rigidity regarding the sex of the individual who performs the tasks. Thus, some men would plant and in some instances women dibble, depending on the sexual make-up of the planting party. The one task that only the wife can do (unless the farmer is a widower) is to prepare the rice seed. Women take care of the bi’ni (seed) throughout the year. When questioning a couple about varieties, it would be the woman who could identify the rice seed they had and describe others. In the Malandi area they knew of more than 140 varieties which they classified according to whether they were late or early maturing, glutinous or non-glutinous, and what their color, aroma, flavor, etc., were like. Both the man and woman may bring bi’ni with them into marriage, and, if they divorce, each will take his or her own. The tagudali is considered to be more of a woman's rice and malandi a
man's; yet, both will usually have at least one of the other. There is continual experimentation with rice varieties and a family's rice varieties change continually. Between 1973 and 1975, in a random sample of 20 households, 30-60 percent of the rice varieties planted by each household changed. As fields are shifted from one area to another, they are sometimes further inland, sometimes more coastal, sometimes on a northern slope, sometimes on a southern slope, etc.; so, it is not surprising that constant testing of rice to fit the different areas should be taking place. Rice varieties are abandoned if they do not grow well, and other varieties are adopted if they are perceived as doing better or having more flavor, storability, aroma, etc. A rice variety may be tried out of whimsy if it has a humorous name or a special characteristic, such as extremely small grains. Behind all of the experimentation is the desire to increase diversity so that a family has seeds that will grow well under various conditions. If, for example, one variety is susceptible to a blight or a particular insect infestation, another will prove resistant; or, if one does poorly during a period of drought, another will prove productive. Most families will plant on the average seven to twelve varieties with some having as many as 20. It is believed that the more varieties the better, since each variety has its own maturing period, water needs, etc. Thus, the more varieties the greater the chance will be that some will survive a wide range of extreme conditions. An upward limit on the number of varieties is set by the difficulty of storing the seed in separate protected containers. Thus, few families want to have more than 15 varieties.
Seeds are not difficult to acquire; they can be bought, traded, or requested. The most common methods of getting seeds is to ask for a particular variety when shares are being given to those who helped harvest, or to request any leftover seed after helping plant a field. Since the field owner has received labor, it is impossible for him or her to refuse such a request. The rice varieties are planted in separate sections of the field (bantal), marked off by logs; these are usually in strips going roughly north to south.

In summary, it can be seen that a family has many rice varieties (said to be the rice of the husband, wife, or one of the children) with two fields usually in different stages of growth, burned and planted at different times with different rice varieties, which are continually shifting in adaptation to new conditions.

Weeding and protecting

Weeding has long been recognized as one of the important determinants of agricultural yields in the tropics (Janzen 1973; Chang 1968). It has been estimated that effective weeding can increase yields in the tropics and sub-tropics as much as 100 percent or even more (Ashby and Pfieffer 1956). Thus, weeding, although a dull and monotonous task with none of the fun and comradeship of planting, is an essential one.

Among the Tagbanwa weeding is primarily a woman's task, although if a woman has small children or is pregnant her husband may help. However, the help that he gives is relatively minor since weeding coincides with the best fishing season, and, even if not fishing, men are reluctant weoders. It is common for fields for which men were responsible to remain unweeded. Since a field must be entirely weeded
two or three times, weeding can become a heavy burden for the wife; for, she is responsible not only for her uma but for her husband's as well. In 1975 none of the families that had fields totaling over a hectare were able to keep all of it adequately weeded. One woman, who, since she had a teenager daughter to take care of her six month old infant and help with the weeding, had the Tagbanwa ideal work situation, still could not keep the fields (see Fig. 4 and 5) clean and finally decided to allow two lines of rice in her husband's field to "drown" in the weeds (see Fig. 5, rice 1, 2, and 8). Since it may not be possible to maintain an entire field, early maturing or glutinous rice is usually planted on the periphery of the man's field, while the preferred table rice is planted in the center where it is less susceptible to weed infestation. This method of planting also protects the more highly valued varieties from the deprivations of pigs and monkeys. An entire field can "drown" if there is little or no weeding. This is not an uncommon occurrence if the woman is in late pregnancy or ill.

Tagbanwa women have high fertility and, thus, families often suffer reduced yields because the wife is pregnant. The problem is especially severe for young women who have no children old enough to help in the fields or with younger siblings. In these cases the family will rely more on cassava, which has a lower nutritional value, for much of its diet (see Table 1, households 2 and 3). Unlike many areas of the Philippines, kogon is uncommon in the Malandi area; the weeds in the fields were usually vines or bushes, the most ubiquitous being *agonoy*, a shrublike plant that can become an almost impenetrable thicket. *Agonoy* is perceived as being a mixed blessing since it prevents the establishment
TABLE 1.--Frequency of food consumption (percent of all meals) from March 1975 to March 1976 (based on records of food weighed).

<table>
<thead>
<tr>
<th>Household</th>
<th>Rice</th>
<th>Potato</th>
<th>Cassava</th>
<th>Yam</th>
<th>Banana</th>
<th>Corn</th>
<th>Taro</th>
<th>Millet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>62</td>
<td>12</td>
<td>9</td>
<td>2</td>
<td>12</td>
<td>1</td>
<td>1</td>
<td>...</td>
</tr>
<tr>
<td>2</td>
<td>49</td>
<td>12</td>
<td>32</td>
<td>...</td>
<td>7</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>3</td>
<td>52</td>
<td>6</td>
<td>18</td>
<td>1</td>
<td>22</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>4</td>
<td>81</td>
<td>8</td>
<td>5</td>
<td>...</td>
<td>3</td>
<td>&lt;1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>86</td>
<td>...</td>
<td>5</td>
<td>...</td>
<td>2</td>
<td>7</td>
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<tr>
<td>6</td>
<td>58</td>
<td>13</td>
<td>12</td>
<td>...</td>
<td>10</td>
<td>6</td>
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<tr>
<td>7</td>
<td>53</td>
<td>16</td>
<td>19</td>
<td>...</td>
<td>9</td>
<td>...</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>64</td>
<td>13</td>
<td>15</td>
<td>1</td>
<td>1</td>
<td>...</td>
<td>5</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Total av.</td>
<td>63</td>
<td>10</td>
<td>14</td>
<td>&lt;1</td>
<td>9</td>
<td>&lt;2</td>
<td>1</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>
of kogon, but is itself difficult to control. However, unlike kogon, it can be burned leaving a fair amount of ash and is slow to recover, not having the almost invulnerable root structure of kogon. It was agonoy that was the secondary growth on most of the fallowing fields of lomun before they were cut, since it is the first vegetation to establish itself in a harvested field. Weeding techniques vary according to whether the agonoy grows from the burnt stumps (tunas) or from the light windborne seeds. The tunas is cut close to the ground but not uprooted. The cut vegetation is spread around the rice to protect the soil from the sun and to provide mulching. The agonoy growing from the seeds is left alone since by the time it is high enough to be threatening the rice will be harvested, after which it will provide a covering for the soil and disallow the entry of kogon.

Burning is the crucial variable when it comes to the amount of weeding that will have to be done. If there is a good burn, especially in a field that had been giba, little weeding will be necessary. In 1973, following a drought that lasted over nine months, there were excellent hot burns which resulted in much less time being spent on weeding than would normally have been required. In one field, a little less than 0.2 hectare in size, that had originally been agonoy, fewer than 15 hours were spent on weeding.

When their umas are more than a short walk from home, the Tagbanwas (like many other swiddeners) build small field houses where they stay during periods of intensive weeding and guarding of the ripening harvest. Many families have their homes near the tagudali or woman's field and thus only need a field house for the malandi or man's
field. All members of the family take their turns at guarding the fields, although older children may be given most of the responsibility for this task. Monkeys can do severe damage to a crop since they eat the tender centers of the rice much as people eat the hearts of palms. Birds attack the crop after the grain has appeared and is maturing. The children make noises to scare away the pests and will occasionally "tree", kill, and eat monkeys. Traps may be constructed for monkeys and pigs. Feral pigs were not a problem in the Malandi area; however, in the ancestral lands to the north elaborate traps and fences had to be constructed to keep the pigs out.

**Harvesting and processing**

The time of harvest varies in response to the time of planting, which is, in turn, dependent on the burn and the onset of the rains. Usually rice harvest begins in late July and continues into September. Even before the rice is fully mature harvesting begins. Rice that is still green, referred to as *tianok*, is harvested, steamed, dried, pounded, and cooked. It is considered a delicacy since it is aromatic with an almost sweet flavor. A small amount of *tianok* might be carefully stored to be brought out for the New Year holidays. However, the extra labor and care it requires discourages the processing of great quantities. As each rice variety matures, it is harvested. When the larger *bantals* of *malandi* are ready, the word goes out that on a specific date people can come to help harvest. A family which has little rice of its own to harvest, because of illness, pregnancy, poor burn, pests, plant disease, etc., can get enough rice to make up the deficiency during this period since helpers earn a share, usually either a
third or large basket, of what they harvest. Women are usually the harvesters; thus, it is the women who will make the almost daily round to others' fields in order to get enough rice for their families. I have records of women whose harvest labor brought in rice equal to or surpassing the amount of rice harvested from their own fields. Rice can also be obtained during this period by asking (magpamari) to harvest a basket (about four kilograms) of rice for one's self with no other harvest labor expected. This request is usually made to relatives; yet, if a family is known to be in need, even a non relation will not refuse. There is also an obligation to give a small part of the harvest to those who helped in planting (binlad); the planter usually comes at harvest time and helps him- or herself to a basket of rice. Children can also help harvest, and a family with older children can obtain large quantities of rice. This is said to be one of the advantages of having children.

Each variety of rice is kept separate as it is harvested. After the malandi ripens, a thanksgiving ceremony is held, each family having its own although neighbors may attend.

The Tagbanwa cut just the "fruit" (the grainhead) using the kakayug, a triangular blade of metal set in wood or bamboo. The kakayug is held with the blade protruding between the first and second fingers. The rice is grasped with the first two fingers and pulled against the metal; the rice head is then transferred to the other hand. To hold the rice each harvester carries a small basket slung on her hip. When full, these baskets are emptied onto a mat. Traditionally, the rice was then put into larger baskets (some large enough to hold 50 kilograms);
but, today it is more likely to be put into a rice sack of synthetic material which is then carried home. When the weather permits, the \textit{palay} (unhusked rice) is threshed, dried, and stored until it is to be used, at which time it is pounded to remove the husk and winnowed. In this form it is called \textit{bigas}.

Conklin (1957) speaks of the husking and cleaning as being a time-consuming task, which it is; but, since small amounts are done on an almost daily basis, it is never too oppressive. The tasks are shared; for, although the women regard the processing of the rice as part of their domestic chores, it is one of the first tasks that children of both sexes learn, and men frequently help, especially with the pounding.

\textit{Other cultigens}

Reflecting the bias of the Tagbanwa, the description of swidden activities has focused on the cultivation of rice. While Tagbanwa informants were extremely articulate about rice, attempts to obtain comparable data on sweet potato, yams, cassava, bananas, or \textit{gulay} (vegetables) did not meet with the same fervor. Cassava, taro, corn, and various other vegetables are intercropped with rice in the umas (see Fig. 4). These are planted and harvested casually with none of the agricultural rituals that are associated with rice. Yet, the importance of these cultigens cannot be denied, for the root crops or corn will survive a drought that would kill the rice. So, although the Tagbanwa deprecate the sweet potato and cassava and expend more of their time and energy on their highly valued rice, it is the root crops--less susceptible to the erratic rainfall and faunal pests--that are really the relatively insured staple (Jones 1957).
Corn, planted either shortly before or after the rice in the tagudali area or woman's field, is harvested in June/July, the time when shortage of rice and sweet potato most frequently occurs. Cassava planted in March or April can be harvested in December but will remain edible for months if left in the ground. Sweet potato, more tasty and nutritious than cassava, is planted after the rice is harvested, usually in specific bantals in the woman's field, and is ready to eat in January. Bananas are planted in the fields and around the house.

As Table 1 and Fig. 6 show, these less desirable cultigens provide food throughout the year and with the rice give the Tagbanwa a stable if varied diet.

**Forest Gathering**

The gathering of forest staples (carbohydrates) is primarily done as a response to rice or root crop scarcity; however, wild green vegetables and fruits are regularly collected when in season. Since the gulay (vegetables) of the uma bear only during the rainy season, the wild plants provide nutrients which would otherwise be absent during other parts of the year.

When there is a scarcity of the staple cultigens, the men start gathering batbat (Philippine sago, *Palmaw Caryota*) and kudit (a poisonous tuber, *Dioscorea hispida*). Both of these demand hours of processing, and the end product is not highly regarded. However, in times of scarcity they can supplement the diet or completely sustain a family until cultigens are ready to harvest.
Fig. 6. Staples consumed by sample, 1975-1976.
Tagbanwa Adaptation

The purpose of a subsistence system is to adjust the population to its environment and to provide food with a low risk of hunger (Nietschmann 1973:9). Thus, the Tagbanwa goal is to attain nutritional stability without the destruction of their environment so that the population can continue to be supported and an entropic state avoided (Bennett 1976; Margalef 1968; Benneh 1972). An agricultural system is the product of the decisions made by the farmer to attain certain goals (Benneh 1972). Especially in the tropics, agriculture must not be seen as a separate system from the ecosystem of which it is a part; rather, it should be perceived as an agroecosystem if sustained yield is the goal. The management of an agroecosystem must take into consideration the local biology and attempt to disturb it as little as possible while permitting its periodic reestablishment (Janzen 1975:54). The Tagbanwa have evolved such an agroecosystem which produces nutritional stability without destroying the forest of which it is a part.

Stability should not be confused with a static condition, e.g., one that is unchanging, for there is always change within systems containing living populations (Clarke 1971). Rather, stability as used here can be defined as "the ability of the system to remain reasonably similar to itself in spite of [external] changes" (Margalef 1968:11). As diversity increases in a system, so does stability. The tropical rainforest is the most complete and complex ecosystem and probably the most stable (Margalef 1968; Richards 1952). Thus, it is not surprising that the Tagbanwa adaptation to climatic fluctuation in their environment is aimed at reproducing in their fields a semblance of the surrounding forest.
Diversity is the Tagbanwa response to the uncertainty of the rains. Ideally, every family has a variety of crops planted at different times in different places. By having two fields there is an increase in the chance of the coincidence of rice and rain. Even if the rains are off schedule, at least one field might have a good burn, leaving a fine ash and requiring little pre-planting clearing and less weeding. The possession of numerous rice varieties, each planted at a different time and suited to particular conditions, still further increases the chances that several varieties will survive all but the most severe drought. Weeding, so crucial in the tropics, has to be done at certain stages of crop development for good yields. If all the rice was at the same stage of development, the women could not possibly maintain the fields. The two stage planting thus spreads the labor over a longer period and enables each variety and each field to be tended in turn.

Even though rice, in all its variety, is the preferred staple, monocropping is not desired. Crop diversity is carefully planned. Cassava, taro, corn, millet, etc., are intercropped in the swidden along with the rice (see Fig. 4). These crops are purposely planted in a sequence which will result in their maturing at a time when they are most needed. In this way the swiddener insures that there will be a cultigen to eat no matter what season it is. During 1975 following an average harvest the year before, 37 percent of the meals consisted of a staple other than rice (see Table 1 and Fig. 6). However, this is an average figure; for within the sample some households consumed these other staples in as much as 50 percent of their meals.
Even if all cultigens are scarce or fail completely, a family can gather from the forest and sea enough to sustain it until the next harvest. This is precisely what occurred during 1973 following a drought and the eviction of the Malandi Tagbanwa from their ancestral lands by a mining company. During this year, while the newly planted swidden was maturing, the day-to-day subsistence pattern was based on gathering and fishing. Wild tubers and sago were gathered and processed, wild vegetables and fruits collected, and fishing pursued whenever the seas permitted. The forest is thus perceived by the Tagbanwa not only as the provider of future fields, but of famine foods as well. As such, the forest is an important part of the swidden system, supporting it even when it occasionally fails, thus integrating Tagbanwa agriculture into a stable agroecosystem.
CHAPTER V

PRE-1970 TRADE AND CONTACT

Traders and Raiders

The presence of Chinese pottery of various dynasties, brass gongs, remnants of batiks, etc., is physical evidence of centuries of contact and trade with the outside world. The Tagbanwas traded forest and sea products, and later agricultural products as well, for the foreign goods that came to play a central role in their social and religious life (Hutterer 1973; Fox 1954).

The traders of Chinese porcelain coming to Palawan were interested only in maintaining access to the "wild" goods that could not be gathered in populous China rather than in political control of the area. The Tagbanwa probably traded such gathered products as beeswax, turtle (tortoise shell), and almaciga (a resin collected from trees in the high altitude primary forest and utilized by the Tagbanwa as a fuel for light and as a blackening agent for baskets and wood carvings) for the Chinese jar and plates. The relationship between the traders and the Tagbanwa was essentially symbiotic in that it was a balanced relationship, mutually beneficial, which did not lead to the assimilation of one by the other but the maintenance of both of the indigenous systems (Baumann 1954).

The Tagbanwa relationship with the traders from the south who into this century provided them with gongs, betel boxes, batiks, etc.,
is more complex than the symbiotic relationship with the Chinese. The Filipine Moslems, referred to as Moros, were perceived by the Tagbanwa as being one ethnic group; yet, there were various southern Moslem groups engaged in widely different activities with the Tagbanwa. Some groups raided for slaves and loot (porcelain and brassware) and, although it has been generations since a slave raid has taken place, are still feared. Stories of the raids are still told with vivid descriptions of maiming, murder, and abduction. Even today an unknown boat appearing at dusk near the shore is met with uncertainty and fear.

Other Moros, such as the Tausog, conducted trade in the desired gongs, betel boxes, dyes, and cloth. Thus, a Moro ship on the horizon could mean either terror or the acquisition of prestige and ceremonial goods.

So with these outsiders there existed two relationships: (1) with the traders there was a continuance of the symbiotic relationship that had existed with the Chinese in which they traded not only forest products, but also rice, for the Moros goods; and (2) with the raiders the relationship was one of predation, an interaction in which one population attacks and kills (or, in this case, removes) members of another population, with the predators benefiting while the prey population is inhibited (Sutton and Harmon 1973). According to Fox (1954), it was in response to these raids that the east coast Tagbanwa moved further into the hinterlands. Informants on the west coast told of previously living further inland than they are now residing in order to escape from the raids. Jars and gongs were hidden in caves and the forest to escape the looting.
Resident Traders

When the United States took control of the Philippines, Berong Tagbanwa relations with the outside world changed. Soldiers, administrators, and schools all made an appearance, if not in Berong than in areas to the south or in Tagbanwa areas on the east coast. Timber concessions were given on the west coast and Filipino traders began to reside permanently in the Tagbanwa area. Coming during the thirties to manage a timber concession of a relative and remaining to manage an almaciga concession of his own was a lowland Filipino whom I shall call Alawi.

As mentioned above, almaciga, the resin known internationally as Manila copal used in the manufacture of varnish, has probably been traded out of Palawan for centuries. Yet, Alawi wanted more almaciga than had been casually collected in previous trading relationships. Alawi, unlike the Chinese and Moro traders, now had control of the resource and, for his needs, had to control the means of production as well, i.e., labor. His concession, obtained by paying taxes to the government, gave him the rights to all the almaciga collected in the proscribed area; but these rights were useless if the almaciga was not collected. Since almaciga collection meant a long trek by foot along narrow forest paths high into the mountains for one day or two days, to tap the trees and wait two days for enough of the resin to ooze and the day trip back carrying 20 to 35 or even 40 kilograms of almaciga along the same difficult paths, the Tagbanwas were not overly enthusiastic for frequent almaciga (which the Tagbanwa call bagtik) collection.
Traditionally, almaciga had been gathered during the dry season when the crops had been harvested, the seas were too rough for fishing, and before the new fields had to be cleared. This dry season collection did not compete for time and energy with subsistence activities.

Between the Tagbanwa and Alawi there arose a difference in needs and desires. The Tagbanwa were reluctant to be continually away from their families on collection trips into the forest and mountains, while Alawi wished to get as much almaciga collected as possible. The Tagbanwa had to be motivated to increase their collection of almaciga. Alawi created the motivation by requiring almaciga or cash for payment of the goods he had on hand to trade and by extending credit. Therefore, motivation was created out of the desire for trade goods and the need to pay debts.

**Trade and Debt**

There were two categories of goods traded at Alawi's: manufactured and agricultural (rice). Unlike the luxury or ceremonial goods traded by the Moro or Chinese, Alawi traded goods such as kerosene, matches, tobacco, cloth, etc., which were constantly in demand. The Tagbanwa could resist these manufactured goods and use traditional products rather than continually be purchasing and going into debt for such "consumable goods". But as Murphy and Steward (1968) note, when manufactured goods become available, there is usually a desire for them. No one has to force them on the indigenous people; generally, they want them and are willing to work for them. A running account of each family's purchases and debts was kept by Alawi in terms of a cash equivalent. Yet, cash rarely appeared in any transaction since a peso
equivalent was also assigned to the almaciga and would be entered as payment on the debt. If a family had no debt, purchasing rights at Alawi's store could be denied if almaciga was not collected.

Even if consumer temperance did exist, a ruined crop could initiate transactions with Alawi that could continue indefinitely. For, if because of illness, pests, pregnancy, etc., a family had a poor harvest and needed or wanted rice, Alawi would lend it to them on an agreement referred to as "change". Change agreements required that, for every sack of rice borrowed before harvest, two must be given in payment after harvest. If a debt was not completely repaid, then the remainder of the debt would double the next harvest. Several poor harvests in succession could place a family hopelessly in debt. This debt was to be paid by almaciga collection, rice, and perhaps by doing menial work for Alawi at his homestead and farms.

Alawi was enabled by the change agreement to keep a number of families always in debt and have enough rice after harvest to take care of his own needs as well to be able to provide rice for any who wished to borrow.

He would also buy rice if a family had more than it needed or, as was more often the case, if it wanted to make purchases at his store. Again, cash rarely appeared; rather, rice was exchanged at an expressed peso value for its equivalent in clothing, etc. Since the rice would usually be valued at less than what it could be sold for at the nearest market and since the goods for which they were traded were already marked up 50 to 100 percent higher than what he had paid for them, Alawi could trade eight pesos of clothing for 50 pesos worth of rice.
Many times families would sell or trade more rice than they could actually spare in order to make these purchases, only to buy rice or go into debt before the next crop was harvested. Swift (1964:141) notes that this situation can be perceived as "selling rice as borrowing," in that the difference between what they sell or trade their rice for and the higher price they pay for rice before the next harvest is an interest payment for the goods or money received. The Tagbanwa "selling as borrowing" paid an interest of 100 percent, higher interest than Swift (1964) implies was paid in Malaya. And the interest continued to compound each year. With this compounding interest, a debt of one sack (44 kilograms of unhusked rice or 25 gantas) could become a debt of eight sacks in three years. Considering that the first sack cost Alawi very little in obtain, the interest can be perceived as being extremely high. This change agreement was a source of bitterness for the Tagbanwa, especially since it meant that (1) the rice that was borrowed by them was originally theirs, (2) the debt would continue to compound if not paid promptly, and (3) their collection of almaciga would have to be increased.

**Almaciga Collection**

It can be seen from this brief description of trade and debt that Alawi was successful in encouraging the need among the Tagbanwa to increase their collection of almaciga. The size of their rice harvest, their debt, and the day-to-day needs of the family would determine the frequency of almaciga trips made during the year. Although the Tagbanwa admitted that the rainy season was actually the most productive time for almaciga collection, since the trees were easier to
"milk" and had more resin, they preferred to collect almaciga during the dry season when paths were dry and there were few subsistence activities. The rainy season was a difficult time to gather since the paths were muddy and slippery and there were critical subsistence activities to be done. However, the increase of debt to Alawi forced the extension of almaciga collection throughout the entire year.

Small groups of men would leave together with tapping gear obtained from Alawi and instructions of which areas to tap. Alawi had a Bureau of Forestry agent teach the Tagbanwa the best way to tap to get maximum yield without injury to the tree (*Agathis Philippinensis* Warb.). These groups of men would consist primarily of younger men who were married to related women, affines, relatives, and/or friends. A group consisting of men married to sisters and their brother-in-laws were common since their wives' mother's husband could and did pressure them to go in order to provide rice, goods, etc. It was a younger man's responsibility to collect almaciga since the older men were not perceived as being able to carry the heavy loads.

The men would travel for a day, sometimes two days if the weather was bad, from the coast up into the mountains. There they would spend the night in the shelters at the *kabagtikan* (place of *bagtik*). The men individually tapped the trees and collected their own almaciga. One informant estimated that between 10 to 15 trees, depending on the season and length of time from the last tapping, would have to be tapped to get the 30 kilograms that he could carry back to the coast. The gathering would take about two days with the group spending the nights together under the shelters. Then in the morning
they would start back to the coast, now carrying loads of 20 to 40 kilograms along the difficult forest paths.

A minimum of four days was needed to collect almaciga during which, if it was the rainy season, disruption of subsistence activities occurred, and in both seasons a great deal of physical energy was expended for rather meager results. A trip could result in the payment of little more than a bottle of kerosene, tobacco, sugar, and candy.

It was the potential competition of almaciga collection with subsistence activities which continually threatened to result in more dependency on Alawi. As mentioned in Chapter IV, the rainy season is the time of fishing, field protection, and weeding. Almaciga collection at this time meant little fishing during the prime fishing season, less time available for field protection, and less weeding. Although weeding is primarily a woman's task, she needs child care and freedom from everyday chores that the man usually provides, such as firewood collection, water, etc., in order to have the time to do the weeding. A decline in yields because of inadequate weeding could mean more debt. To satisfy their obligation to Alawi, some families not only had to make trips during all seasons of the year but also so often, in fact, that real interference began to appear with basic subsistence activities such as clearing as well as weeding. The Alawi interaction with the Tagbanwa was not the symbiotic or predator-prey relationship that had existed with previous contacts. It is an example of parasitism, an interaction in which Alawi nourished himself at the expense of the Tagbanwa. The interaction is necessary for the survival of the parasite
but may sometimes result in the death of the host, Tagbanwa (Sutton and Harmon 1973:197).

Comparison with Tappers and Trappers

The Tagbanwa situation was similar to that of the Mundurucu and Algonquin described by Murphy and Steward (1969). The Mundurucu and Algonquin also developed "a taste for non-traditional items" which they obtained by trading wild products: furs (Algonquin) and rubber (Mundurucu). Murphy and Steward describe the procedure by which each group is kept in debt by the trader and made more and more dependent on the traders for subsistence in response to the increasing time spent on collection of wild produce rather than on subsistence activities. They conclude with the hypothesis:

When the people of an unstratified native society barter wild products found in extensive distribution and obtained through individual effort the structure of the native culture will be destroyed, and the final culmination will be a culture type characterized by individual families having delimited rights to marketable resources and linked to the larger nation through trading centers [Murphy and Steward 1969:233].

In regards to the position of the families in relation to the nation, their hypothesis appears sound, but whether the "structure of the native culture will be destroyed" appears to depend on what the structure had been before contact, rather than as an inevitable result of the process. The Algonquin were organized as bands and the Mundurucu as corporate villages, both of which were destroyed when individual wild produce collection and payment arose. Yet, the Tagbanwa were always economically organized as nuclear families, albeit with strong reciprocal links to the other members of the matrilocal hamlet. The collection of almaciga did not destroy this. Almaciga collection was done by groups of
young men related through blood and marriage. Any individual difference in money received had nothing to do with the number of trees an individual tapped, etc., rather with how much a man could carry; and, this was determined by age and strength. There was no competition for resources as among the people of Murphy and Steward's study which could be said to initiate the shift in organization to that of the nuclear family. The Tagbanwa organization in which the older man had some degree of control over his daughters' husbands could have actually been strengthened since the older man now pressured the younger men to collect almaciga so that they could obtain the trade goods, especially tobacco.

Although the internal economic structure was not weakened or destroyed, certainly the Tagbanwa position in relation to the outside, i.e., "the larger nation", changed. Before Alawi the almaciga collected by the Tagbanwa was traded for non-subsistence goods (porcelain, cloth, gongs, etc.), items important to religious, ceremonial, and social life that could be sold in hard times for subsistence goods (see also Freeman 1970). However, the goods received from Alawi were items that could be consumed and needed on a day-to-day basis. Rice, the most favored of foods, proved a temptation when a family's rice was gone and harvest still months away. Whereas before they would have made use of less favored crops, now they could obtain rice even if it would later have to be repaid with 100 percent interest.

Murphy and Steward (1969) perceive a gradual increase in dependency as inevitably culminating in complete and irreversible reliance on the trader for subsistence needs. However, the complete dependence
which they hypothesize for the future of the Mundurucu and others was only a projection of a continuing process that had reached completion with the Algonquin, who had become totally dependent for subsistence on the traders. In considering the Algonquin dependency, it must not be overlooked that they were hunters and gatherers, not agriculturalists as the Mundurucu and Tagbanwa, and that with their relocation to the trading posts, the women could no longer gather. Although Murphy and Steward predict that the Amazon dwellers might eventually give up all their agricultural activities, they fail to take into consideration that the women, unlike their Algonquin counterparts, continue subsistence production, and that even before the rubber trade the men spent their time primarily engaged in nonsubsistence activities. The breakup of the matrilocal community into individual homesites and gardens made the agricultural tasks, once done by groups of kinsmen, more difficult to complete, especially for the young women with small children. But, it was not a certainty that all subsistence agricultural tasks would end nor could they cite any specific examples among the Mundurucu tappers in which this had occurred.

It is the importance of the women in the subsistence system that may decide the degree of dependency that will be created. Among the Algonquin the women were forced to become sedentary and unproductive; this shifted full responsibility for subsistence to the men's trapping and trading. In an agricultural society such as the Mundurucu where the women provide the bulk of subsistence, even if individual families become totally dependent upon the traders, the society as a whole might retain a degree of subsistence independence if agricultural
land remains available. What might arise is a situation such as Swift (1964) describes in Malaya where the men gather rubber and the women are the agriculturalists. Among the Tagbanwa the ability of the women to maintain the fields while the men were collecting almaciga prevented total dependency from developing.

Nevertheless, although Murphy and Steward's hypothesis (1969) might be incorrect in regard to the creation of total dependency upon the traders and the destruction of native culture, the final result does appear to be a "linkage with the larger nation." This linkage was the form of the introduction of the Tagbanwa to the modern market economy of the external world, a system larger than their own, which could absorb whatever they could produce and which could make demands on them which they never had to face before.

Other Stores

Beginning in the fifties other stores began to appear in the Berong area. These were stores owned by the migrant settlers and the teachers.

The settler-storeowners wanted to supplement their cash income and perhaps obtain more rice than they could produce themselves for sale to the external market. Since the settlers were capital poor, these stores contained little more than tobacco, sugar, salt, and kerosene. The stores would usually make only brief transitory appearances since the money from sales was not always used to purchase new stock.

With the opening of a small school with one or two teachers in 1950, a series of teachers began to arrive in Berong. To enroll the children the parents had to get cash to pay for the necessary school
fees, supplies, and clothes. The teacher(s), who needed a certain number of students enrolled to maintain their positions, would lend money to the parent and expect cash or, better still, rice after the harvest. Some actually ran small stores selling the usual trade goods as well as providing children's clothes for sale. They created a market for the clothing by strongly encouraging the parents to send the children to school dressed in western clothes rather than the traditional tapis (sarong) or ba'ag (loincloth). Records were kept of the rice equivalent of the fees and goods. Unlike Alawi, who would allow a bill to compound for years, the teachers wanted complete payment immediately after harvest and would confront the debtors if the rice was not brought promptly to them. As in their transactions with Alawi, what the Tagbanwa received for the rice was about half of what the rice would bring on an outside market.

The teachers and, to a lesser degree, the settlers, directly or indirectly, catalyzed the Tagbanwa to want more of lowland Christian material culture, especially clothing. Even though Alawi had traded with the Tagbanwa for years, he had not wanted them to become Filipinized; rather, he wanted them to continue as "primitives" and thus his inferiors. Still, the Tagbanwa, however, could never earn enough through almaciga collection or rice sales to buy the things they would have liked nor were the goods available. They remained by lowland standards poor, "different", and subject to ridicule.

Mining Company

As mentioned in Chapter III, Palawan is rich in mineral reserves, especially nickel. A mining company interested in nickel came to Berong
in 1967. Its entrance into the area had greater impact on the lives of the Tagbanwa than any of their previous contacts with people from the outside world. The mining company within two years bought land for an airstrip and then for a base camp. When, following an initial exploratory phase, it was discerned that the area was rich in commercial nickel, the company bought up all the land that it would need for mining operations, including land not only for the mines but also for roads, housing, etc. Logically, if someone wishes to buy land, there must be someone who has rights to sell it. The traditional Tagbanwa "rights to the means of production" were (1) open access to all resources either forest or aquatic and (2) expenditure of labor resulting in standing crops or marked trees guaranteed the laborer the rights to the harvest. Permanent land "ownership" concepts arose through contact with Filipino peasants and the mining company. Since the 1950s the Tagbanwa had been solicited by traders and peasants to sell land. Previously, the idea that a man might own land and sell it was not realized nor acted upon. This was, in part, due to the lack of a market for land but also, and perhaps of greater significance, since traditional rights had extended only to the cultigens, the lack of realization that an individual could permanently alienate the land from another.

The Tagbanwa had started planting tree crops, primarily coconuts, during the 1950s. They had done this in response to warnings by a respected schoolteacher (who, for a brief time, had been married to a Tagbanwa woman) who told them of the inevitable coming of settlers and explained that tree crops would be recognized as denoting "ownership". This was an extension of the Tagbanwa idea that cultigens
belonged to the farmer who planted them. However, in this case, the crop was coconuts rather than the favored tree crop of bananas. Although coconuts were slow to bear, they would last far longer than bananas. The schoolteacher's predictions were proven correct. A few settlers did come, and they did indeed perceive tree crops as denoting land ownership with some seeking to buy the land on which trees were standing. This did not preclude the possibility that the settlers would try to take advantage of the Tagbanwa in the land transactions or seek to dispossess them; but, in some instances, land was bought and mutually recognized ownership was transferred.

The transactions of the mining company were on a far larger scale than any that had taken place before. The mining company, which had mineral rights to the area, wished to buy all the Tagbanwa land in the area. They wanted the Tagbanwa to leave the area so that it would be open for settlement by mining employees and for the future agricultural plans of the company. They decided to import labor rather than hire the Tagbanwa (the employees were to come from the area of the Philippines where the company originated) and to create a more or less self-sufficient company town with a community speaking one language, with a hospital, schools, etc., and with agricultural projects providing rice, vegetables, and meat for consumption. The Tagbanwa were told to sell their land and leave, although belated offers of small parcels of land (3 hectares) on the periphery of the community were made at the final land transactions. The CNI (Commission on National Integration) supported the company (since the Tagbanwa had no legal ownership of land) and saw its role as being the overseer of the transactions to
make sure that everyone entitled received payment. A peso value was assigned to each tree (according to its age and type), perennial plants (such as pineapple), and land according to its stage of regrowth. Although the amount of money paid for land was considered extremely low in comparison to prices in the rest of the Philippines, it seemed like a great deal of money to the Tagbanwa. Before this the Tagbanwa had only gotten cash through wage labor as ore sample carriers for the mining company during its exploration phase (at 3 pesos a day) or by the collection and selling of almaciga to Alawi. The land payment, received in several lump sums, represented much more money than any Tagbanwa had ever possessed before. In the Malandi area, 43 percent of the men had received sums ranging from 300 to 7,792 pesos, the average being 2,384. It is interesting to note here that the men, not the married couple, were perceived as owning the land, although the CNI required the signature of the wife on the land transfer as well. This was because the men were the ones to clear the forest initially, even if it was later cultivated by the wife or other female kin or affines. Clearing was recognized by both Tagbanwa and lowlanders as the decisive act in which rights to land were gained.

The mining company's purchases reinforced the traditional Tagbanwa concepts of usufruct rights over an area and introduced a new one. They paid for each tree planted and all areas that a man had cleared within the last five years. Thus, they affirmed the traditional Tagbanwa concept of rights to land through cultigens and introduced a new idea, that of paying cash for land that had been cleared, thus paying for labor once expended. The introduction of payment for fields
in regrowth was accepted since the traditional recognition that labor expended entitled one to its products could be expanded to allow a cash payment to be perceived as another form of produce gleaned, as it were, from the fields.

After the land transactions the Tagbanwa had cash and the mining company had the land. Most of the Tagbanwa then moved south. They joined several families that had moved to Malandi after they sold their land to the mining company in 1969, which was to be used for the airstrip and base. Many still had land near Berong and thus could have stayed to farm the next year; however, once some people started leaving others followed in order to stay with kin. Young couples moved with parents, parentless siblings tried to keep together—a snowballing effect took place. The Tagbanwa who stayed behind in Berong were almost all linked to each other through marriage and descent, forming a smaller residential unit similar to that of Malandi. Those few in Berong who are not part of this kinship group are becoming acculturated into the lowland community. They are cash laborers and tenants.

It should not be presumed that the only reason the Tagbanwa moved was because of the land transactions and the subsequent land scarcity. If they had wanted to stay, there was land in Berong that some could have farmed which had been offered by the mining company. The reason given by them for leaving was that of incompatibility between themselves and the miners and settlers. Before they had left Berong many of the Tagbanwa families had withdrawn their children from the school, the same school that had opened in Berong in 1950 as a predominately Tagbanwa school, expressing fear for the safety of their
children and citing an incident of a miner yelling at the children as they were going to school. They also told of the womanless miners getting drunk and trying to enter Tagbanwa houses. Informants expressed extreme unease at trying to live with neighbors they did not understand, whose reaction to things a Tagbanwa would consider trivial bordered on the violent.

The move to Malandi, therefore, was the culmination of both social and economic forces—the requirement for land, the need to be with kin, and the desire to remain at a distance from the miners and settlers.

Alawi was against their moving, as he was against their selling of their land. He, as barrio capitan, tried to get the government, the CNI, or anyone to block the sale of the Tagbanwa land. He cited the extremely low price (less than a centavo per square meter), the CNI's seeming collusion with the mining company, the Tagbanwa's lack of information on their rights, etc. However, he could not stop the sale of the land. In the end, he sold some of his own land to the company and acted as a purchasing agent for supplies as well. Although he was to a degree co-opted by the company, he was nonetheless worried about the Tagbanwa sale of their land and their departure. He realized that with the Tagbanwa gone from Berong that he would lose his clients, both in the purchases at his store and in the collection of almaciga. Yet, the mining company was too large to stop, and he was powerless to hinder either the land sale or the exodus to the south.
Summary

The Berong Tagbanwa initially had symbiotic, mutually beneficial relations with the world beyond their territory. They traded gathered products for the Chinese manufactured goods that became an integral part of their religious and ceremonial life. Later, the Tagbanwa had a dual relationship with the Moros. Some Moro groups continued the symbiotic trade, while other groups were predators, raiding Tagbanwa settlements for slaves and booty.

After the United States took control, a new type of trader appeared, one who resided in the area and had rights to the almaciga (bagtik) that the Tagbanwa had traditionally sold to the outside. Now, the almaciga could be traded only to him for easily consumed items rather than the luxury goods of previous trading relations. Because of debt the Tagbanwa had to increase their collection beyond the preferred dry season to throughout the year and, in some instances, their subsistence activities might have been neglected. This relationship was essentially parasitic, with the trader "feeding" off the Tagbanwa.

The Tagbanwa, like the rubber-tapping Mundurucu of South America, gradually became more dependent upon the trader. It is unlikely, however, that Murphy and Steward's (1969) predicted complete irreversible subsistence dependency would have occurred since the women were able to maintain the agricultural fields, although perhaps not at optimum levels while the men were on almaciga trips.

The arrival of migrant settlers and teachers increased the Berong Tagbanwa's contact with lowland Filipino society and their acquisition of western products. The arrival of the mining company in
1967 initially provided the Tagbanwa with jobs as ore carriers as an alternative to almaciga collection. The company then decided to purchase the area and to create a community with people from the company's home region. After selling their land in 1972, the Tagbanwa moved south to Malandi.
CHAPTER VI

POST-1970 TRADE AND CONTACT

Relocation

Although the Berong Tagbanwa were joining relatives and friends, relocation was not easy. Not only did they have to leave behind their fields and crops, but the move to the south also took them away from the traders, shopkeepers, teachers, and mining company which had been the focus of their economic contact with the external market. They were in a new situation. Before, they had stores but no money. Now, they had money from their land sales, but it was useless in obtaining rice; and, there was no store within the community at which to spend it. Compared with the previous amounts they had received from almaciga and wage labor, the Tagbanwa received a great deal of money from the mining company. Forty-three percent of the families currently residing in Malandi received from the company a total of almost 87,000 pesos during 1972-73. The money was spent on (1) store purchases and payment of debts, (2) livestock, (3) land, (4) boats, and (5) food.

Store purchases and debt repayment

Before leaving Berong and after receiving the final payment while living in Malandi, old debts were paid to Alawi and others, and new purchases were made. Clothing, tools, etc., were favored purchases as well as such exotics as corned beef and canned fish. Also, at this
Livestock purchases were not a totally new form of investment for the Tagbanwa. Individuals had previously owned carabao and cattle (pigs will be discussed later in this chapter), but now more families bought them. They bought them to (1) stop the dispersal of their capital and (2) receive interest in the form of the livestock's offspring. Swift (1964) notes that this is not a quick way to make money on capital. There is always the chance of illness or accident which could result in death of the animal. Besides, there will be pressure to kill it for a celebration, in which case you lose all but the prestige. The Tagbanwa perceived the bull as the worst investment of the two sexes since it could not directly multiply, although payment would be expected for stud service.

Yet, what outweighed all these uncertainties was the certainty that to keep cash rather than buying livestock would result in its being spent on small unnecessary purchases or being given to kin in response to their requests. The difficulty of "liquidating" the capital invested in livestock could actually be a strong point since relatives needing money knew that a cow or carabao could not quickly be sold. And, there was always the hope that the female would bear young and that a male could earn a little through his services. A Tagbanwa buying carabao or cattle thus knew that it was an investment with potential dangers and that it would bring a slow rate of return, if one at all. Yet, there was also the realization that it was a means of
protection from the gradual dispersment of the money which would end with nothing to show for its spending. The pride that came from owning cattle or carabao was also a factor that cannot be ignored. The young boys whose task it was to care for them carried out their duties with cockiness and affection.

*Land*

As mentioned above, monetarization of land transactions between Tagbanwa began in 1973. The Tagbanwa who had lived and cleared land in the Malandi area for a number of years sold some of their land to those who had received payment for land in Berong. Those who had land benefited from the arrival of the Berong migrants with their payments which occurred in the same year as the first effective enforcement of the kaingin laws forbidding the cutting of the forest for swiddens. Since the Malandi area had only been settled for a short period of time and was, therefore, still predominately forest, this severely restricted the amount of land available for fields. The Tagbanwa who had land in Malandi, however, were not exploitive and the prices asked were low (usually less than 100 per hectare) with some individuals buying several hectares of land, while others just borrowed land on which to make their 1973 fields.

*Boats*

The Tagbanwa had traditionally used single outrigger canoes with square sails to travel along the coast. When motorized boats, called pomboats (because the engine was originally imported to pump water for irrigation), appeared, the sail was discontinued; and, an
attempt to find a seat on a pomboat would be made for any sea travel beyond a few kilometers (see Raintree 1978 for a more detailed discussion).

Now, with the money from the mining company a few families decided to buy pomboats. It was viewed as a practical purchase since the owners could charge others for riding in it and thus be able to afford to maintain it and perhaps to even make a profit. However, the boats proved to be unexpectedly expensive and difficult to repair. There was not enough demand by the Tagbanwa for pomboat travel to pay for the maintenance since there were too many pomboats for such a small community. Of the five families who bought boats in 1972, within a year only three were running and by early 1976 only one.

Food

Their moving immediately after a rice crop failure from their home and fields, where there were root crops, fruit trees, and gardens, to Malandi meant that they arrived with little, if anything, to eat until the new rice was ready to be harvested. They realized that "you cannot eat money" and wanted to purchase rice, but 1972-73 was famine year for rice. There was no place within a three hour walk that sold rice. Quezon, the largest town on the west coast, had only sporadic supplies of rice, and, by presidential decree, rice was rationed throughout the Philippines. Unfortunately, the decree made no provisions for those too far to make daily trips to the market. A person from Malandi would have had a full day's walk to Quezon and a full day's hike home for only one or two kilograms of rice. Those who managed to
get more than a few gantas of rice quickly lost it as relatives and neighbors came to ask for rice or to buy it.

The families who had resided in Malandi for a number of years gave what root crops they had to those that came; yet, there was not enough to feed so many. Trips were made to other Tagbanwa areas in the north to buy and magpamari (to ask for) food and seed rice.

New Economic Relations

As mentioned in the previous chapter, Alawi tried to prevent the Tagbanwa from selling their land and moving to the south, since their migration from Berong removed them from his influence. With so many families receiving cash and paying their debts, almaciga collection sharply declined since the men were not obligated to collect almaciga to pay their debts. In 1973 when rice was scarce, Alawi, even though he did not have rice for sale, did have rice for those who would collect almaciga for him. So men, whose families had no rice, even if they had money, would leave Malandi, go to Alawi, return home with the one or two gantas of rice he gave them as an advance, and then would leave the next day to collect almaciga. Eder (1978) hypothesizes that among the Batak of Palawan, who are involved in almaciga collection on the east coast north of Puerto Princesa, the calories gained from the rice purchased with the payment for almaciga are less than the calorific gain from wild produce (kodut) that could have been gathered in its place. This supports my intuitions that it appeared to be a great deal of work for such small returns. Yet, rice is the preferred food and is believed to give the body strength that root crops and the wild kodut
cannot equal. So, in order to satisfy this craving for rice, the collection of almaciga continued throughout 1973, even if not in the previous quantities (see Tables 2 and 3).

The distance from Alawi allowed the Malandi Tagbanwa to begin to place him in a new perspective. Alawi, when compared to the mining company with its trucks, airplanes, store, and seemingly unlimited money, no longer was the impressive figure he had been for so long. By hiring at one time or another almost every Tagbanwa male as an ore carrier, the mining company presented not only an economic alternative to almaciga collection but by paying in cash, even if the wages were very low by national standards (3 pesos a day compared to the 5 pesos that was standard nationally), also provided a model for a new type of economic interaction, i.e., wage labor. To be paid in cash, even if the wages were low, was perceived by the Tagbanwa as being better than to be paid by goods or by credit toward a debt.

Closer to Malandi than Alawi's, there were new stores in Aramayan where there were no old debts and obligations. In response to these factors, the Tagbanwa began to shift their focus away from Berong and toward Aramayan in the south. A phenomenon began to occur where the debts to Alawi began to be "forgotten" with the distance serving as a buffer from him. He rarely came to Malandi, especially during 1973 when the mining company was still in the process of setting up their operation. In addition to his work for the company, he had coconuts, which because of the drought were commanding a high price (more than double the usual), and was therefore willing to permit his relationship with the Tagbanwa to become deemphasized.
TABLE 2.--Amount of almaciga carried.

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<tr>
<td>December</td>
<td>7</td>
<td>165</td>
<td>...</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>364</td>
<td>41</td>
<td>1070</td>
</tr>
</tbody>
</table>

¢/kg rcd: 50 50 60 60
total $ rcd: 182 535 1316 358
<table>
<thead>
<tr>
<th>Months</th>
<th>1973 Av. kg/load</th>
<th>1974 Av. kg/load</th>
<th>1975 Av. kg/load</th>
<th>1976 Av. kg/load</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>22.88</td>
<td>13.72</td>
<td>22.88</td>
<td>13.72</td>
</tr>
<tr>
<td>February</td>
<td>23.00</td>
<td>13.80</td>
<td>23.00</td>
<td>13.80</td>
</tr>
<tr>
<td>March</td>
<td>23.90</td>
<td>11.96</td>
<td>37.00</td>
<td>22.20</td>
</tr>
<tr>
<td>April</td>
<td>26.89</td>
<td>13.44</td>
<td>37.00</td>
<td>22.20</td>
</tr>
<tr>
<td>May</td>
<td>28.30</td>
<td>14.15</td>
<td>28.30</td>
<td>14.15</td>
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<tr>
<td>June</td>
<td>26.89</td>
<td>13.44</td>
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<td>July</td>
<td>23.90</td>
<td>11.96</td>
<td>23.90</td>
<td>11.96</td>
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<tr>
<td>August</td>
<td>28.30</td>
<td>14.15</td>
<td>28.30</td>
<td>14.15</td>
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<tr>
<td>September</td>
<td>40.25</td>
<td>24.15</td>
<td>40.25</td>
<td>24.15</td>
</tr>
<tr>
<td>October</td>
<td>28.25</td>
<td>16.95</td>
<td>28.25</td>
<td>16.95</td>
</tr>
<tr>
<td>November</td>
<td>34.80</td>
<td>20.88</td>
<td>34.80</td>
<td>20.88</td>
</tr>
<tr>
<td>December</td>
<td>30.80</td>
<td>18.48</td>
<td>30.80</td>
<td>18.48</td>
</tr>
<tr>
<td>Av.</td>
<td>23.10</td>
<td>11.55</td>
<td>26.10</td>
<td>13.05</td>
</tr>
<tr>
<td>No. men who carried</td>
<td>14</td>
<td>23</td>
<td>27</td>
<td>18</td>
</tr>
<tr>
<td>No. loads carried</td>
<td>17</td>
<td>41</td>
<td>61</td>
<td>26</td>
</tr>
</tbody>
</table>
However, by 1975 the mining company, because of the low price of nickel on the foreign market, had closed their operations, copra prices were down, and Alawi had a labor shortage. He complained that there was not even enough people to keep his grounds clean or to process the copra. He began to have his Tagbanwa agent, Madarag, attempt to collect the debts still owed him for goods and rice. The Tagbanwa had been ignoring their debts, especially their rice debts, since they still had not fully recovered from their move and the subsequent famine. They now found themselves on a "debt" list. Some disavowed their debt (How could I owe so much? I don't remember borrowing any rice? His records are wrong!), and others panicked when they realized that their rice debt had multiplied so many times as to become virtually unpayable.

Madarag, Alawi's Tagbanwa agent, was an amiable man and certainly not the kind to brow-beat anyone concerning a debt. Yet, through kin ties and persuasion he managed to either get the cash debts partially paid or to have almaciga collection begun in payment. Thirty-one of the 106 families of Malandi found themselves to be in debt to Alawi. Twenty-four of these were old pre-1975 accounts that totaled over 58 cavans of rice and 113 pesos in merchandise. There were seven accounts started that year that totaled only P12.45 (one duly recorded debt was only 5 centavos). The new accounts were made by those who were collecting almaciga and got paid a bit more than their load was worth, usually because of Madarag's lack of change.

Almaciga collection increased in 1975 from its low of 1973 (see Tables 2 and 3) as a result of the attempt to repay debts and the interest of the young men in earning cash. These young men had not
been old enough to have had land or crops in Berong for which they could receive payments from the mines. The unmarried men lived, as all young men do, with their families and did not have control over the rice harvested from their fields. It is unusual for families to allow their unmarried children to dispose of their harvests as they wish. The majority of households pool their rice and then trade or sell a portion to obtain needed household items. A young man was apt to meet with resistance from his parents if he tried to sell or trade his rice in order to buy the bellbottom pants and wide belts that would allow him to appear as a peasant. So, the young men turned to almaciga collection. Their youthful enthusiasm is reflected in the increase of the weight of each load in 1975 and in the trips made even during the storms of December to February.

In the latter part of 1973 (the figures are based on the records of Madarag covering the period from August 1973 to February 1976), 14 men carried 17 loads of almaciga averaging 23.1 kilograms per load for a total of 364 kilograms, which at 50 centavos per kilogram earned about P11.55 per load. This is for four days work (two days travelling and two days collecting); so, it is the equivalent of P2.89 per day. In 1974 the Malandi Tagbanwa gathered 1,070 kilograms of almaciga with 23 men carrying 41 loads for P13.05 per load (see Tables 2 and 3).

In 1975 almost twice as much almaciga was collected than in the previous year. With 27 men carrying 61 loads, more trips were being made by the same individuals, who were also carrying heavier loads (an average of 36.1 kilograms compared to 26.1 the year before) at the higher price of 60 centavos a kilogram. The carriers made an average
of P21.70 per load, or more than 5 pesos a day. This compared favorably to the 3-5 pesos that could be earned at wage labor for the nearby settlers, especially since such work was difficult for a young man to find.

Because of the need of the young men for cash, Alawi's agent Madarag readily reestablished the almaciga trade, but now money rather than goods was the medium of exchange. The almaciga was brought to Madarag and payment was received at that time (or whenever Madarag was given money by Alawi). Alawi in his capacity as barrio capitan had to spend increasing amounts of time away from Berong attending government seminars, etc., while his wife moved to be near their children who were attending school in Puerto Princesa. The all-encompassing predator-prey relationship between Alawi and the Tagbanwa appeared to be ending.

The debts that they owed to him, however, would continue (see Table 4). The old debts had not been made by the young men, rather they were those of men in their thirties or older. Many could not remember the inception of the rice debt; yet, three of the 13 made payments on their debt, with two paying in full. Two families paid their cash/merchandise debt. One, who owed P37.30, did so by almaciga collection; and the other, a storekeeper, had no difficulty in paying the P4.45 owed. It was clear that the feeling of obligation for repayment was weakened by their distance from Alawi. There were new debts to traders nearby whom one saw often if not daily. Proximity, rather than size or duration of the debt, became the basis of repayment.

Relations with the Other Traders

After their move to Malandi, the Tagbanwa needed stores to provide them with their everyday needs, especially tobacco and kerosene.
<table>
<thead>
<tr>
<th>Debt and payments</th>
<th>Rice</th>
<th>No. of families</th>
<th>Cash merchandise</th>
<th>No. of families</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-1975 debt</td>
<td>58 cavans 3 ganta</td>
<td>13</td>
<td>₱113.61</td>
<td>11</td>
</tr>
<tr>
<td>New 1975 debt</td>
<td>...</td>
<td>...</td>
<td>₱12.45</td>
<td>7</td>
</tr>
<tr>
<td>1975 payment on old debt</td>
<td>7 cavans 1 ganta</td>
<td>3</td>
<td>₱41.78</td>
<td>2</td>
</tr>
<tr>
<td>Payment on new debt</td>
<td>...</td>
<td>...</td>
<td>₱0.40</td>
<td>1</td>
</tr>
<tr>
<td>Post-harvest old debt</td>
<td>51 cavans 2 ganta</td>
<td>11</td>
<td>₱71.83</td>
<td>9</td>
</tr>
<tr>
<td>Post-harvest new debt</td>
<td>...</td>
<td>...</td>
<td>₱12.05</td>
<td>6</td>
</tr>
</tbody>
</table>
They gradually made contact with the several traders in the Aramayan area. These relations intensified as both sides grew to know one another and as attachments were formed, based on purchases and debts. Since the lack of capital prevented one trader from becoming the focus of all the Tagbanwa trade, there were several who became deeply involved in Tagbanwa trade. The Tagbanwa want a relationship with a trader who will (1) allow them to borrow rice in time of need, (2) give them preference if there is aldawan (daily wage labor), and (3) treat them fairly and with a degree of respect.

The Tagbanwa relationship with a trader, whom I will call Frank, typified what was desired. In 1973 the nearest stores to Malandi were several hours walk away. Frank's store, although not the nearest, became the one most frequented by Tagbanwa. By 1974 he gave rice to families before their harvest in a "change" agreement; he hired Tagbanwas to do clearing, cutting, and weeding in his fields; and he was perceived as socially accepting them as "friends", if not exactly as equals. This latter point cannot be overemphasized. In the search for new traders, the Tagbanwa, because of previous contacts with outsiders, especially the miners, were extremely sensitive to social slights. The Tagbanwa are viewed by peasants as being unknowledgeable primitives ("like children" is a favorite peasant description) and, besides being the brunt of ridicule, are expected to occupy the inferior position in the superior-inferior distinctions of the peasant world. The Tagbanwa thus feel more at ease with someone who will sit down, as Frank did, and talk in a jovial manner to them as a friend.
In 1975 Frank received in trade 18.5 per cent (14.5 cavans) of the rice the Tagbanwa traded to outsiders. Of this, 11.5 cavans were from debt repayment and 3 cavans were from bartering trade goods. He had become the most important peasant trader, valued by the Tagbanwa for the availability of rice from him (see Table 5).

Teachers

A school was built by the Tagbanwas and opened in Malandi in 1975. The teachers that arrived had previously taught in the Berong school when the Tagbanwa still resided there. They knew the families and the children and were not hesitant to continue prodding the parents to become more peasant-like, to improve their children's clothing, to stop teen marriages, to keep the girls virtuous, etc. They were pushing for cultural assimilation and provided the goods for the Tagbanwa, especially the children, to appear as peasants. By trading goods, they received more rice in post-harvest 1975 than any of the traders. However, they did not perceive themselves as traders but as providers of the goods of civilization. Nevertheless, their trading provided a much needed supplement to their salaries. Socially, the teachers continually placed the Tagbanwa in the inferior position and treated them almost as if they were "children", even if the individuals involved were old and grizzled. The teachers had no doubts that their role was to bring civilization to the Tagbanwa and to make them over in the peasant image. The Tagbanwa, especially the young Tagbanwa, wanted the clothes the teachers were trading and made the venture a successful one.

The teachers' heavy handed approach and misconceptions, however, met with Tagbanwa amusement. Rather than being insulted, the Tagbanwa
TABLE 5.—Rice received by Tagbanwa and diwan traders.

<table>
<thead>
<tr>
<th>Traders</th>
<th>Rice traded*</th>
<th>Rice bought</th>
<th>Rice debt</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diwan traders</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>15.5</td>
<td>4.5</td>
<td>3.0</td>
<td>23.0</td>
</tr>
<tr>
<td>Frank</td>
<td>3.0</td>
<td>. .</td>
<td>11.5</td>
<td>14.5</td>
</tr>
<tr>
<td>Alawi</td>
<td>. .</td>
<td>. .</td>
<td>7.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Others (11)</td>
<td>14.0</td>
<td>9.0</td>
<td>11.5</td>
<td>34.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>32.5</td>
<td>13.5</td>
<td>33.0</td>
<td>79.0</td>
</tr>
<tr>
<td><strong>Percent</strong></td>
<td>41.0%</td>
<td>17.1%</td>
<td>41.8%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

| **Tagbanwa traders** |              |             |           |       |
| Badio           | 12.0         | 2.5         | . .        | 14.5  |
| Juan            | 2.0          | . .         | 1.0       | 3.0   |
| Botero          | 4.5          | . .         | 0.5       | 5.0   |
| Others (17)     | 8.5          | 3.5         | 5.5       | 17.5  |
| **Total**       | 27.0         | 6.0         | 7.0       | 40.0  |
| **Percent**     | 67.5%        | 15.0%       | 17.5%     | 100.0%|

*rounded to nearest 0.5 cavan
would find the teachers to be an endless source of humor and would wonder out lou! at how anyone could live among them for so long and still understand them so little.

Tagbanwa Traders

In 1973 even though there was an expressed need, there were no stores owned by Tagbanwas in Malandi. When questioned about this, the reaction was that a "Tagbanwa cannot have a store," the implication being that lack of skill, contacts, and capital prevented a store being started. Yet, when, after an 18 month absence, we returned to Malandi, we found two Tagbanwa-owned stores flourishing; and, when harvest approached, another started operating as well. These three were each in a different area of Malandi, although their clientele overlapped to a great degree.

In Malandi proper the most successful store was owned by Badio and his wife Makuria. He had been born on the east coast and migrated as an adolescent with his mother, siblings, grandmother, and other relatives to Berong after the east coast Tagbanwa areas had been subsumed by the resettlement project. He moved in the mid-1960s to the Malandi area and married Berong-born Makuria in 1968. Badio was an extrovert who appeared at ease with peasants and could talk to anyone. (Once while marooned with him and several other Tagbanwas in a boat that had run out of fuel, I observed him charmingly talking a Filipino boatman out of a few precious gallons of scarce gas.) He was in his late twenties and much admired by the young (unmarried) men for his style and success. Whereas the young felt shy with outsiders and feared ridicule, Badio, with his outgoing personality, would take
command of any encounter. The young men perceived him as a model for
clothing as well, appearance being very important to them since they
did not want to be inappropriately dressed when in a settler community.
Badio knew what was fashionable in such detail that he could precisely
order the correct width of the pants legs of his bellbottoms. Although
far from tailors, he tried to dress as if he had just come from Manila.
Although he did not have many clothes, the ones he did have were the
latest style. Thus, in personality and appearance he presented an im-
portant model of a Tagbanwa who could deal successfully with the out-
side world.

His store's success depended on his ability to make contacts
and contracts with the peasants to obtain supplies. The store carried
the standard items (tobacco, kerosene, soap, candy, paper, pens, etc.).
Although Badio was the one to obtain the goods, his wife Makuria was
the shopkeeper. She kept the accounts of debts and payments and tried
to keep the number of unpaid accounts small. She carefully managed
the income from the store so that, unlike so many other ventures of
this type, there would be money to buy more stock. She was very aware,
as well, that to operate a little store in the midst of relatives was
difficult. She was a member of the largest family in Malandi. Her
mother had eleven children living of which Makuria was the third eld-
est, and her stepfather had five children by his previous marriages.
Badio had a brother, who lived in Malandi with his family, and two
other brothers who lived in Quezon but would visit throughout the year.
His mother and grandmothers, uncles and aunts all lived in Malandi as
well. Makuria insisted that her siblings, if not her mother, pay for
what they bought and complained in private that Badio's brother never paid. The store records showed this to be true. Badio took care of his brother and was more generous with him than Makuria was to her siblings. Pragmatically, they could not have given to her relatives as he gave to his brother (there were too many of them); yet, Makuria would have preferred to not give so much, not only in trade goods but also in rice, to her brother-in-law.

They started trading after the harvest of 1973 with some goods from a peasant trader on which they received a commission. By 1975 they had become independent, trading goods which were theirs, except for a small amount of clothing on consignment from another trader after harvest. While Badio made the purchasing trips, Makuria stayed home with their three children under five years of age, minding the store. Even though during 1975 she was pregnant and then with a small infant, she managed not only the store but the care of the swiddens after they were cleared as well. Men were hired to help or worked to pay off their debts in the clearing of the umas (they had two, one giba and the other lomun), and both men and women to weed. Makuria was displeased during harvest; she perceived that the people who came to help harvested too little and wanted too much, so she discontinued the traditional rice sharing arrangements. She paid those who harvested the fields with tobacco. Although Badio helped clear and did a few days of weeding, they hired labor to take over most of the tasks in the fields. While other families might pay for a few large trees to be cut down or for someone to help weed, especially if the wife was pregnant, they were the only family to rely so heavily on wage labor for
their agricultural tasks. By hiring labor they were able to have larger fields than they could have made by themselves. These larger fields resulted in larger rice harvests; they had one of the largest in Malandi in 1975, which enabled them to sell more of the rice they obtained in trade rather than divert it to home consumption. Their diet approached the Tagbanwa ideal with 86 percent of all their meals in 1975 consisting of rice (see household 5, Table 1, Chapter IV), the highest percentage in the study.

The two other Tagbanwa stores were not as large as Badio's. Whereas Badio's store was on the beach, Juan's store was a 15 or 20 minute walk from the coast. Older than Badio, Juan had a larger number of children (seven in 1975), two of whom, ages 15 and 12, had umas of their own. Unlike Badio, who had not sold any land to the mining company or peasant settlers, Juan had sold land to one of the mine's medical employees. Although he was to receive 5,000 pesos in cash or goods, there was still more than 800 pesos outstanding by June 1975. The payments for the land were used to buy a pomboat (no longer working) and to stock the store. Juan, a son of a prominent Tagbanwa who had been barrio capitan, a guino and a panday when he died a few years before, was neither extroverted nor stylish. He was closer to forty than to thirty, had buried his three eldest children, had a family that kept growing (his wife gave birth again after we left in 1976), and was tubercular. Uneasy with lowlanders, his trips to get supplies were more business than pleasure.

Sumloda, his wife, took care of the day-to-day store transactions, the record of debts, etc. Their store had a less businesslike
appearance than Badio's. Unlike Badio's where the store was a little ground-level room, with a counter over which the items sold were handed to the customers, attached to their house which only Badio or Makuria could enter, Juan and Sumloda's store was the front part of their one room house. A customer had to climb up into the house and sit on the slat floor of the large room while Sumloda chatted and took the items off the shelf.

Since two of their sons had their own umas, and Sumloda had a small child, they themselves made one uma together, rather than one each. They paid for 1 1/2 days help in clearing their giba and later hired two men for a day to help with the secondary clearing after the burn (the field was burned after the rains began). They did not employ as much wage labor as did Badio, nor did they have people work for them as payment for their debts. By Tagbanwa standards they ate no better than most, with only 53 percent of their meals being of rice (see Table 1, household /).

The third Tagbanwa store was the furthest from Malandi proper, in a settlement to the south on the most accessible beach by boat in the area. Botero, the storekeeper, had a pomboat given to him by his father, that was still working most of the time. It was the ideal arrangement; his traveling expenses to and from Quezon for supplies were lower than Juan's or Badio's since he could take paying passengers (including Juan and Badio) who would pay for the cost of his gas. He also blended into the peasant community, but by appearing average rather than having the flair of Badio. His trade in 1974 was much smaller than Badio's or Juan's, with 4 cayans received rather than 24 or 28
respectively. The smaller amount of trade was probably due to the location of the store, on the edge of the Tagbanwa community rather than at the center like Badio's and Juan's.

Two other Tagbanwas had stores between 1973 and 1975, neither of which lasted more than a harvest season. Both failed because money from sales was not reinvested in stock. One of these stores was started by a pomboat owner who planned on an operation similar to Botero's in which he could go to Quezon when he needed supplies. But the pomboat, with its constant need for costly repairs and parts, kept consuming the store's money until it reached the point where there was no money for stock and the pomboat was not running. The other store, operated by Badio's brother, ended quickly when both the stock and money were gone.

An Overall View of the Rice Trade in the Malandi Area

From the above description of the main traders it should not be presumed that only a few families engaged in trade. After the harvest in 1975 there were 34 traders involved in buying or bartering rice or receiving rice in payment of previous debts (based on reports of trade by all households). Of the 34, 14 were non-Tagbanwa (including non-specific Quezon traders) and 20 were Tagbanwa. The non-Tagbanwa or diwan traders resided in Malandi, Berong, Aramyan, and Quezon. They obtained 79 sacks of the 119 sacks of rice reported traded by informants or about two-thirds (66.4 percent) of the total trade (see Table 5). The three primary diwan traders (Alawi, the teachers, and Frank) obtained 55.7 percent (44.5 cavans) of the rice traded to outsiders of which the teachers received 23 cavans.
The 20 Tagbanwas, except for the three shopkeepers, were engaged in small scale trade, usually receiving 0.5 to 2 cavans in exchange for tobacco, fish, gagoong (fish or shrimp paste), or in repayment for a debt of either cash or rice. The three Tagbanwa shopkeepers received 22.5 cavans of the 40 cavans (56.3 percent) that initially was traded to Tagbanwas of which Badio received 14.5 cavans. Whereas the non-shopkeepers would keep the rice they received, the three storekeepers would sell to the peasant traders or in Quezon 15.5 cavans of the 22.5 cavans that they received (based on the amount already sold by December 1975 and projections of future sales).

Thus, of the 119 cavans exchanged, 79 cavans initially received by diwan and another 15.5 cavans obtained by Tagbanwas would eventually be traded or sold to the outside as well for a total of 94.5 cavans or 79.4 percent. At first glance, it would appear that this 79.4 percent was channeled to the outside world and out of the system, and indeed all but a few sacks were. However, some rice was kept by the peasant trader for home consumption and some for trade in the pre-harvest "change" agreement. The Tagbanwa would, therefore, receive a small portion of the rice traded to be repaid double after their 1976 harvest.

Based on a random sample of 20 families who measured and reported their daily harvest and the people who helped them, it appears that a family averaged 14.7 cavans from their fields. Of this, 3.1 cavans (20.8 percent) would be given to those who helped harvest, leaving a family about 11.6 cavans. As mentioned in Chapter IV, helping others harvest their fields is a strategy for obtaining rice when one's
rice yield is insufficient. Because of this, there is not an equal flow of rice away from and into a family's rice supply through harvesting; rather, a family with a large fruitful field would have far more harvesters and give proportionally far more rice than a family with a small or unproductive field.

Using the sample as a basis, it can be estimated that the 104 families that had umas in 1975 produced about 1,529 cavans of rice of which 322 were given to the harvesters (see Fig. 7). From this total 119 cavans were traded or about 7.8 percent. Of these 119 cavans, 94.5 cavans (6.2 percent of the total rice harvested) were traded to outsiders with an estimated 10 to 12 cavans (0.7 to 0.8 percent) eventually returning for Tagbanwa consumption under the "change" agreement.

1975: A "Normal" Year

Tagbanwa stores began in response to the need for a nearby store where one could buy household and personal items that were continually being used. Tagbanwa storekeepers obtained enough capital to start their stores either by selling land or by acting as agents for peasant traders. These stores were more ambitious than previous attempts and three did well enough to stay in business for more than a harvest season. In 1974 these three obtained 52 sacks of rice in trade, 40 of which (76.9 percent) they sold to the outside. By December 1975, however, they only received in trade 22.5 sacks of rice from that harvest, less than half of the year before. Why? There are two main reasons: (1) the arrival of the teachers and their trade goods and (2) a decrease in the total amount of rice traded.
Fig. 7. Movement of rice within Malandi and to external markets.
The teachers, who came to Malandi in 1975, were as convenient in location as the Tagbanwa stores. They primarily traded clothing, although they sometimes had the same everyday stock as the Tagbanwa stores (tobacco, kerosene, matches, etc.). They obtained 22.5 cavans of rice: 15 cavans from barter, 4.5 cavans by purchase, and 3 cavans from debt repayment. This is equal to the total amount of rice received by the three main Tagbanwa traders. Since the teachers had more capital, they were able to keep their store better stocked; and, unlike their Tagbanwa counterparts, they exerted pressure for quick payment for goods traded. There was little that the Tagbanwa traders, with their lack of capital, could do to compete with the teachers, who had, by Tagbanwa standards, large monthly incomes which could be used to buy stock for their stores.

In 1975 less rice was available for trade. The decline in the amount of rice for trade was not because of a decline in yields, but is rather a reflection of the increase of cash and goods among the Tagbanwa. The cash was from the missionary who arrived shortly before harvest. He built a house next to Badio's, who acted as the foreman in its construction. The house was quite palatial and stylistically Western although built from local materials. It was on stilts and, unlike the one room Tagbanwa house, it consisted of living room, kitchen, three bedrooms, study, and pantry. The wages were 8 pesos a day, quite high by local if not national standards, and over a hundred men worked at least one day and/or sold materials for it; 75 men came from Malandi with the remainder coming from nearby communities. Eight thousand pesos were paid during a three month construction period. The money
was far less than the 86,000 pesos the same families received from the mines in 1972-73. But it was enough to buy the items for which rice would have been traded after harvest. The coincidence of money with the traditional purchasing period (September to December) meant that cash rather than rice was received by traders for many of the purchases. This was especially true of Juan and Botero whose stock was primarily inexpensive items used daily rather than expensive clothes. Rather than trade one ganta or rice for 1 peso worth of fish paste, the peso would now be paid. Like Alawi, all the traders make their largest profits on rice transactions since a ganta of rice would be sold for 1.60 to 2.0 pesos in 1975. Thus, any flow of cash into the area undermined their rice business.

During the period of our research 600 pesos were paid a month (150 pesos each for four part-time assistants) for fieldworkers. My colleague periodically hired men and women to work on his projects, while I paid those that kept diet records, harvest records, and store records in goods worth about 30 to 40 pesos each month. The goods received probably decreased the demand for local goods, though half facetiously we decided that the demand for sarongs and tobacco was insatiable.

Niches

It was the convenience of the Tagbanwa stores that enabled them to do as so well in 1974. However, in 1975 they had to compete with the teachers, who had monthly salaries which could be used for capital, as well as the more distant peasant storekeeper, Frank, who had a large farm and a thriving business with peasant and Tagbanwa clientele.
The Tagbanwa were hindered by a lack of capital since, unlike the teachers or Frank, they had little or no income beyond that of their stores.

A comparison between the three main Tagbanwa and non-Tagbanwa traders (see Table 5) shows that the amount traded was equal to 18.5 cavans for each. This would imply that the Tagbanwa could successfully compete with the peasant traders in bartering goods for rice. The Tagbanwa goods were of a different nature than those of the diwan, being primarily tobacco, kerosene, sugar, etc., rather than clothes or cloth; yet, the worth of them was about the same, so the amount of rice traded was equal. What differs is the amount bought and sold. Whereas the bartered goods equaled 82.2 percent of the Tagbanwa trade, it was only 41.6 percent of the peasant. The peasants bought rice, but their primary means of obtaining rice was through Tagbanwa repayment of their "change" obligation. Capital is needed both for the buying and the lending of rice; thus, the Tagbanwas were unable to fulfill this need.

As mentioned above, access to rice is one of the main concerns in forming a relationship with a peasant trader. The trader in return is fairly assured of getting twice the rice he lent, besides the sale of household items and the bartering of rice for cloth and clothing. The Tagbanwa stores, because of their lack of capital, were not able to lend rice. The different stores, however, were not really competing; rather, different niches were formed.

The Tagbanwa stores became the convenient little store where kerosene, tobacco, etc., were purchased usually by cash or by short-term
credit and where small quantities of rice would be bartered. The teach­
ers, although they had some household items, specialized in clothing
for barter and in rice purchasing. Frank was the primary rice lender
with some barter, whereas Alawi was concentrating on the repayment of
debts from previous years. The Tagbanwa community needed this variety
of stores with the different services that they provided. The Tagbanwa
stores, therefore, might not be able to trade as much rice as the did
in 1974. The decline in rice bartering meant that their profits were
less (since rice was always sold for a higher amount than its cash
equivalent in a sale); however, the quantity of merchandise they han­
dled remained stable or increased. The Tagbanwa stores by 1975 had
become self-reliant with their own merchandise rather than being out­
lets for the peasant traders. It appeared by the beginning of 1976
that both Tagbanwa and peasant stores, fulfilling different needs,
would remain.

*New Economic Activities*

*Pigs*

In the year preceding the 1975 harvest pig raising provided as
much cash income as wage labor for the families of Malandi. It was a
fairly new means of earning money. Traditionally, feral pigs were
hunted rather than domestic pigs being raised. It was peasant influ­
ence in Loren that started the Tagbanwa interest in pig raising. Even
after many families started keeping pigs, many Tagbanwas over forty
would not consider eating domestic pig, which they claimed was "dirty"
and not as tasty as wild pig. There was also a widely held reluctance
to eat one's own pig since it was regarded as a pet, and it was common
to exchange one's pig for another's if it was to be slaughtered.

Pig raising is easy to start but difficult to maintain. There
are four ways to obtain a pig: (1) gift, (2) purchase, (3) exchange,
and (4) partida.

Gift

One can ask for or simply be given a piglet as a gift if a
sibling or parent had a sow (referred to as a "mother pig") and her.
litter of pigs. In some cases one might be asked or might offer to pay
a nominal amount.

Purchase

One can purchase a pig. The price would vary with the degree
of relationship, with a close relative or neighbor paying less than
someone who was not related. Prices are low but increasing; a piglet
cost a Tagbanwa about 15 pesos in 1973, 25 to 50 pesos in 1975. A
diwan would pay about double what a Tagbanwa would pay.

Exchange

One can exchange (tiukar) an item or labor for a pig. Usually
the item traded would be worth more in pesos at the time of the exchange
than the pig, but the exchange was deemed fair since the pig would grow
and in time be worth more than the item for which it was exchanged.
Items such as sakayan (outrigger canoe), petromaxes, fish nets, etc.,
might be traded.
Partida

One can get a pig without cash or trade items by entering a partida arrangement with a pig owner. In a partida contract the pig would be given to someone who would be responsible for feeding and caring for it. If it was a female pig, when it gave birth, half the piglets would go to the owner and half to the caretaker. If the sow was small when taken by the caretaker, when she was sold, the money would be divided equally. If she was already grown, then it would go to the owner. If it was a male pig, when it was slaughtered or sold, the amount received would be divided equally. When a pig is given in partida, the caretaker rather than the owner refers to it as being her/his pig. In this sense, the pig is really given to the caretaker, with the owner retaining and sharing some economic rights in the pig.

Through one of these four ways anyone can obtain a pig. However, it was primarily families and single women rather than single men who raised pigs. This is because of the day-to-day needs of a pig. The pigs in Malandi were primarily fed cassava supplemented with leftovers, papaya, and rice bran. Everyday the cassava had to be gathered, cleaned, and cooked with two or three meals being prepared for the pigs. Taking care of the pigs was perceived as being a woman's task. Thus, a woman would be gathering and cooking not only for her family but for the pigs as well. This could and, in many instances did, become a burden, especially when the cassava field was more than 15 or 20 minutes away. One family in 1975 that had five pigs (they owned the largest number of pigs in Malandi) had no cassava of their own and had to ask permission from relatives to gather from their fields. In this case,
the older children would have to make roundtrips of 45 to 60 minutes to a relative's field and carry the heavy loads home, where it still had to be cleaned and cooked.

This brief description illustrates the relative ease with which pigs could be obtained and the difficulty of maintaining them. Yet, it was an attractive way of earning income since it depended primarily on women's labor; and, there were few other ways in Tagbanwa society that a woman could earn cash. Thus, women, especially single women, perceived pig raising as a good way to earn cash.

An example of a single woman earning money by pig raising would be Pitoya, the sister of Badio's wife, Makuria. In 1969 Pitoya bought a female pig for 15 pesos from a Visayan married to a Tagbanwa woman. A young widow with a small child, she was able to earn 215 pesos from her mother pig's offspring and in 1974 sold her for 120 pesos, earning a total of 330 pesos. She also gave two piglets to her mother, one to her mother-in-law, four in kororosan (stud fee), and kept three for herself. After her remarriage she continued to raise pigs with a female offspring of her original pig and in 1974-75 from two litters earned 150 pesos and a cavan of rice. She also exchanged a piglet for a small piece of land, gave pigs in partida, gave two piglets for kororosan, and kept two for herself (see Fig. 8). In total, from 1969-75, excluding those that died before weaning, Pitoya received 34 offspring from her original pig, which earned 480 pesos, land, and rice. She was regarded as being an exceptional woman in her ability to raise pigs, have an uma, etc., all by herself; yet, other single women did it also, if not as successfully.
First pig--1969
for ₱15
5 litters
31 piglets sold in
1974 for ₱120

4 kororosan (stud fee)
10 died (1 then eaten)
3 given (2 mo; 2 mo-law)
3 kept
1 female from 1974 had
2 litters
13 piglets
1 exchanged for another
pig
9 sold to Tagbanwa ₱180
1 sold to diwan ₱30

2 kororosan
2 partida
1 died
1 exchanged for land
1 exchanged for land
2 kept
4 sold to Tagbanwa ₱100 and 1 cavan
1 sold to diwan ₱50

Fig. 8. Pitoya's pig trade.
Although it is hard work to keep a pig fed, it is becoming increasingly more profitable. Whereas in 1973 a piglet would be sold for 15 to 25 pesos to another Tagbanwa, by 1975 the price had increased to 25 to 50 (the price varying in the closeness of the relationship and the perceived wealth of the buyer). The increased demand for pigs pushed up the prices.

In 1973 there were 32 pigs owned by 22 families (22.4 percent of the 98 families) with each of these families having on the average 1.45 pigs. This increased to 85 pigs owned by 55 families (51.9 percent of the 106 families, the increase in families resulting from marriage, divorce, and migration) with each family having on the average 1.55 pigs. This is an increase of over 266 percent in a two year period with 33 of these 55 families not having pigs in 1973. This increase was motivated by the correct perception that there was a market for pigs. There was such a demand that piglets could be sold "in utero", a transaction that the Tagbanwas refer to as tagnip. The interested buyer would pay a smaller amount, usually half, than if he bought it after birth; but, since he gave the payment to the owner many weeks ahead of the birth (and gave them use of the money during this period), it was deemed a fair practice. An increasing number of buyers were paying tagnip in order to be certain to procure rights to a piglet.

Of the 85 pigs in 1975, 27 were sadili, that is initially owned by the families, usually by it being the offspring of one of their pigs (see Table 6). The other 58 pigs were obtained primarily by the four methods outlined above, the exceptions being two pigs received as kororosan (stud fee) and one received in partial payment for a debt.
TABLE 6.—Pigs owned and sold.

<table>
<thead>
<tr>
<th>Pigs owned and how they were obtained</th>
<th>Pigs sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of families having pigs</td>
<td>55</td>
</tr>
<tr>
<td>Own</td>
<td>27</td>
</tr>
<tr>
<td>Tagbanwa</td>
<td>27</td>
</tr>
<tr>
<td>Given</td>
<td>13</td>
</tr>
<tr>
<td>Partida</td>
<td>15</td>
</tr>
<tr>
<td>Kororosan (stud)</td>
<td>2</td>
</tr>
<tr>
<td>Bought</td>
<td>15</td>
</tr>
<tr>
<td>Traded</td>
<td>12</td>
</tr>
<tr>
<td>Utang (debt)</td>
<td>1</td>
</tr>
<tr>
<td>Total pigs owned</td>
<td>85</td>
</tr>
</tbody>
</table>
Since larger pigs were more difficult to sell among Tagbanwas, it was to the diwan that most of the larger pigs were sold. In 1975 33 pigs were sold by 18 families. Of these 15, or 45.5 percent, were sold to the diwan and 18, or 54.5 percent, were sold to the Tagbanwa. In total, 2,590 pesos were received or about 79 pesos a pig. The diwan had to pay more for the pigs, about twice as much for the same pig as a Tagbanwa (see Table 6). This meant that, on the average, a pig bought by a Tagbanwa cost 45 pesos and one by a diwan 118 pesos. Some of the difference is due to the diwan purchasing larger pigs for fiestas, etc. (lechon, a peasant delicacy, requires a half-grown pig), but even for a piglet a diwan had to pay 50 pesos while most Tagbanwa paid only 25 pesos. The difference in price was regarded as fair by both Tagbanwa and diwan since the concept of "one price to all" is not recognized in economic dealings by peasant or Tagbanwa. Both recognize that relatives, neighbors, etc., will never pay as much as an outsider. Besides, the Tagbanwa pigs are still less expensive than their peasant counterpart and are considered a bargain by the diwan.

It is the outside market that provides the motivation for pig raising. It is hoped that one's pig will be bought for a fiesta, or, better still, that one can make even more money by slaughtering the pig and selling it for meat to the peasants. As a result of the profits, Tagbanwa families would like to raise more pigs. But, they are hindered by the demands of the pigs for food that must be planted, collected, and prepared. Rather than selling when piglets, partida is becoming an increasingly popular arrangement since a family can continue to profit from a pig without carring for it. Pitoya, for the first
time in late 1975, gave two pigs in *partida* to a family (see Fig. 8). She could only manage the care of the four pigs she had from previous litters, yet did not want to sell the two as piglets. The *partida* relation lifted the day-to-day chores from her while preserving her rights to half the piglets.

The pig boom was not without a price. Let out of their pens during the day to forage, pigs roamed everywhere, destroying gardens, fouling paths, eating everything that dropped to the ground (innumerable pens and pencils were lost during fieldwork when they fell through the slat floors and were gobbled by a pig before I could reach them), and shaking the houses as they scratched their backs on the houseposts. People complained about the pigs and their owners who let them forage during the day. The complaints culminated in a decision at a town meeting that all pigs were to be penned at all times. After this one rarely saw a pig out of its pen, except for the bouncing piglets which were impossible to fence in or out of anything, unless it was being played with by its owner in the yard. The stopping of pig foraging, however, meant that more time had to be spent on collecting more food and preparing it.

Wage Labor and Rattan Collection

Tagbanwa men, and to a lesser extent women, could earn money by performing agricultural tasks or gathering rattan. For the year prior to the 1975 harvest 61 percent of the families in Malandi reported wage labor or collection of rattan. Wage labor, done by 71 percent of these families, was the more prevalent way of earning an income.
Of these 83 percent were primarily done by men for Visayans or other diwan. As mentioned above, one of the criteria for forming a relationship with a storekeeper was the potential of wage labor. Frank was therefore not only the primary trader but also the most frequent employer of Tagbanwa. The labor that he and other Visayans offered was agricultural: clearing, cleaning the fields, maintaining the area around the house sites, etc. Wages were paid either for daily (ornal) labor or for a certain amount of piecework completed (pakiao). Oral wages varied from 3 to 5 pesos depending on the employer, the employee, and the meal arrangement. If the tasks were one of many performed for an employer, i.e., a fairly long lasting working relationship, or if the worker was older and more experienced, then wages might be higher. A meal was included if the wages were only 3 pesos; however, if a person was being paid 5 pesos, it would not include the meal.

Pakiao was usually for a defined amount of work, such as an area to be cleared or weeded. When the work was completed, regardless of the time spent, an amount agreed upon at the beginning was paid. This arrangement was rarely utilized by the Visayans, who preferred to control the time spent on a task as well as the wages paid. Some Visayans, such as Frank, had practically all their agricultural work done by wage labor.

A few women worked for the diwan, primarily for planting and weeding. The women who did so were widows, divorcees, or wives of poor providers. Tagbanwa women felt ill at ease working outside the Tagbanwa community and, unless forced by hardship, did not seek employment with the diwan. An exception to this were women who accompanied their
husbands to help the diwan plant or harvest. Wages for women were lower than men, none reported getting more than 3 pesos.

Only 17 percent of the wage labor reported were done for other Tagbanwa, these employers being mainly the storekeepers or our field assistants. Those employed were usually close friends or relatives of the employer and were paid only 3 pesos a day. It was expected that employment be offered first to relatives and then to neighbors, with the lower wage being the result of different expectations placed on Tagbanwa and diwan employers. A Tagbanwa, especially if related to his employer, would not expect as much in wages but would expect preference in hiring and more flexibility in working schedules, etc. The Tagbanwa employer, for his or her part, could not require a standard working day as would a Visayan counterpart. Because of this, pakiao was favored by the Tagbanwa, especially for such tasks as clearing and weeding, where completion of the task, rather than a rigid time schedule, was important. The Tagbanwa employer, realizing that he could not control the schedule, attempted to ensure that a task would be fully completed before payment would have to be made. None of the employment by Tagbanwas, unlike the Visayans, was for the entire agricultural task, i.e., all the weeding, clearing, etc.; rather, it was supplementary labor to help the Tagbanwa employer complete his or her agricultural work.

Rattan collection and processing provided income for 31 percent (20) of the households earning money (the percentage equals more than 100 since some families did both wage labor and rattan collection). It is in many instances a family enterprise, with the man collecting the
rattan in the forest and then his wife and/or parents helping to process it. Older men and women who could not do wage labor or rattan collection could still process the rattan into the long thin strips that would be sold. The buyers, such as Frank, have marketing concessions for an area and purchase the materials in lots of 100 from the collectors and processors which they then sell to the outside.

A family could make up to 10 pesos for a day's processing if several members worked continually. However, it was usual for it to be done more casually, with earnings averaging 1 to 3 pesos for a day's processing. Since this income excludes the time spent in collection, the returns are low. But, once gathered, the rattan can be processed when rain prohibits agricultural work or fishing; and, unlike wage labor, it can be done at home at one's convenience, even if the money earned is less.

Other Forms of Income

A few families earn a small income through selling carubuan (woven goods such as mats or baskets made by women), fish, bananas, and coconuts.

Since all but a few women know how to make baskets, etc., there were few occasions where carubuan could be sold within the Tagbanwa community. A few widowers or young men might buy them, but the price was low since the purchaser would usually be a close relative. In 1974 a timber company started operations to the south. The employees of the company and the migrants who followed provided a market for Tagbanwa sleeping mats. In the timber company a mat could be sold at a peso per handspan of width, about twice what it would fetch in Malandi. The
problem was in getting the mats to the timber town, Balintong. It was a little under a half day’s walk from Malandi, most of which would be through the settler area. Most Tagbanwa women are shy around outsiders and reluctant to leave their community. Nevertheless, they wanted to sell their goods rather than send their husbands; so little expeditions of three or four women would go to Balintong to sell their mats and make purchases at the stores.

Considering the expended time and labor, the income earned from a mat or basket was small. For a mat, the material (primarily pandanus) had to be collected and processed before the weaving was begun. Since Tagbanwa mats are multicolored, different dyes had to be purchased and processed as well. The weaving itself would take 20 or more hours depending on the intricacy of the design. When all labor and materials were included, the mats would earn less than 2 pesos per day. However, rather than earning money outside the community, like the processing of rattan, carubuatan could be made at home in the midst of children and chores; and, there was the artistic satisfaction of producing something lovely and unique.

Several men, especially those with panti (gill nets), would occasionally sell a few fish to the Tagbanwa storekeepers, neighbors, or to the peasants in Berong. Bananas were sold to the Visayans, many of whom did not plant any, for about 1.5 pesos a bunch. Tagbanwas would sell their bananas when approached by the diwan; but, except for a few trips to Balintong, they were not carried to market. Coconuts were sold within the community for food and for planting. Since only a few families who had moved to Malandi prior to 1972 had trees that
had begun bearing, it was not until 1974 that copra and coconuts were produced for sale.

The income from the sale of carubuatan and fish was small, usually not more than 15 or 20 pesos for the year. Copra production was increasing as the trees matured, and late in 1975 some families earned up to 50 pesos.
CHAPTER VII

MIGRANTS AND COMPANIES

This chapter is in two sections. The first section is concerned with the migrants who came to Palawan and the role of the government in initiating migration. Also discussed in this section will be (1) the population composition data reported in the 1970 government census of Palawan with special attention paid to ethnicity and its role in migration, (2) the effect of the migrants on the environment, and (3) the relationship between the peasant migrants and the Tagbanwa.

The second part of the chapter describes the presence of the timber company and analyzes its impact upon the Tagbanwa and the environment.

Migrants: Newcomers to the "Last Frontier"

Palawan is labeled by the media as the "Last Frontier" and is designated by the government as a prime area to receive the overflow of people from the other provinces. It has become a target of migration since it has the lowest population density in the country with only 15.9 people per square kilometer. The population of Palawan, estimated at 236,635 in 1970, had increased by 45.5 percent in the 10 year period from the previous census. Since the total Philippine population increased by 35.4 percent, it can assumed that the 10.1 percent difference was the result of migration into the island, rather than the result of
internal growth. The growth rate for Palawan is therefore higher, 3.74 percent per year compared to 3.01 percent, than the rate for the rest of the Philippines.

Although Palawan until this century was primarily inhabited only by the indigenous tribal populations, there is a history of a seasonal migration from Cuyo, a small densely populated island to the northeast. Residents of Cuyo would go to Palawan, make their swiddens, and return to their homes after harvest. This still continues today, although many families have left Cuyo permanently in order to make their homes on Palawan. Permanent Christian Filipino migration has been a relatively late phenomena and, until recently, occurred only in small numbers. This is primarily because of the infamous reputation the island had (and still has) as a result of the presence of a penal colony and tales concerning the malaria (which were well founded).

The penal colony was founded in 1904 in Iwahig, a Tagbanwa area south of Puerto Princesa. The first Christian Filipino settlers came to Puerto Princesa, the capital of the province, and from there moved gradually down the east coast into the Aborlan area. From an estimated 35,696 in 1903, the population grew to 106,269 by 1948, almost 200 percent (National Census and Statistics Office 1974). During this same period the population of the Philippines, on the whole, increased by 152 percent (Huke 1963).

The population of the Aborlan area grew gradually reaching about 6,351 in 1948. A tremendous rise in population began with the start of a government resettlement project, NARRA (National Resettlement and Rehabilitation Administration), in 1954. The project admitted more than
2,666 families to the Panacan area from its inception until 1960. In 1960 the census reported 17,530 residents, an increase of 176 percent in a 12 year period. This was more than triple the rate at which the province grew (53.1 percent) and greater still than the increase for the entire Philippines (42.7 percent [National Census and Statistics Office 1974; Huke 1963]). From 1960 to 1970 the population of the Aborlan-Narra area had grown to 27,429, an increase of a little under 10,000 for the period. This was an increase in population of 56.47 percent, compared to 45.47 percent for the island as a whole. Thus, although the migration was continuing at a higher than average amount for the island, compared to the growth rate of 1948-60 of 176 percent, the rate of growth for the area was sharply decreasing. The flood of migrants was over.

Government sponsored and private initiative migration

As with so many resettlement projects, NARRA served as a catalyst for unassisted migration to Palawan. Although relatively few migrants to Palawan were part of the government projects, information from the migrants and media back to the home provinces and familial ties with the settlers sponsored by the government served to draw people to the new site. What can be referred to as an extended community (Simkins and Wernstedt 1971) was created by the ties between the resettlement area and the home area. The extended community is not a place; rather, it consists of the interactions between the original site members and the migrants, as well as the information that enters the place of origin from business and governmental sources. This information flow allays the fears about migration. There are enough friends
in the area to make it seem like home, with relations on which to rely upon for help through the first months until a migrant can become established. It is the creation of the extended community which makes private initiative migration more successful than the government-sponsored projects.

Thus, although the process of migration may be initiated by the government resettlement programs, private migration, as a result of the communication within the extended community between the settler area and the home site, provides the majority of the migrants. A new community is formed in the resettlement area of people from the same geographical background with pre-existing ties of family and friendship.

This is antithetical to the purpose of the resettlement projects. The government-sponsored migration programs theoretically do not draw people from the same communities or areas. Purposively, the migrants were to be picked from various provinces and language groups out of fear of dominance from one area. In actuality, this is not exactly what occurred. The regional background of the president in office at the time has been said to be favored in migrant selection. Fernandez (1972:178) notes that "during the Magsaysay administration the majority of the settlers came from the central Luzon provinces . . . . The Visayans were given top priority during the Garcia administration (1957 - 1961); just as the Macapagal administration gave preference to settler applicants from Pampanga and Pangasinan. Today the Ilocano and Northern Luzon applicants are said to be the top priority settlers."

Since the government-sponsored resettlement scheme also serves indirectly as a basis for private migrants from the same areas as the
original migrants, distinct ethnic communities are created in the settler areas. Narra, in the 1970 census, had three ethno-linguistic groups of about equal size making up about 72 percent of the population: Hiligaynon (Visayas), Iloco, and Tagalog. More than nine other ethno-linguistic groups made up the remainder.

It was non-government migration that initiated the settlement of other areas of Palawan. This indeed is one of the goals of any resettlement scheme, that the region would become more developed, i.e., populated as a result. Migration into Quezon municipality increased dramatically between 1960 and 1970. Settlers had been moving into Quezon since the thirties, but prior to 1960 the migration had been gradual. The population grew from 11,756 in 1960 to 18,735 in 1970. This is a population increase of 59.37 percent, 23.97 percent more than the Philippine growth rate and 13.87 percent more than that of Palawan. Thus, even within the province of Palawan, Quezon was one of the areas to receive more than its share of migrants. In 1970, 26.4 percent (based on a 5 percent sample of the population residing in Quezon municipality) had been born elsewhere and 21.2 percent of the population over the age of 10 years had resided in a different province or municipality in 1960 (National Census and Statistics Office 1974).

The town of Quezon served as a funnel through which migrants came and then moved to other parts of the municipality. The settlers, although they included professionals, fishermen, and merchants, were, and still are, primarily farmers. They came to Quezon for access to land. The west coast with its low population density (7.7 per square
kilometer) was extremely inviting (Bureau of the Census and Statistics 1971; National Census and Statistics Office 1974).

Quezon "townsite" is now the site of an extensive coconut plantation (owned by one Christian Filipino extended family), a few shops, a government clinic, and the municipal government. Interestingly, Quezon is a predominately Hiligaynon area. It has more than twice as many Hiligaynon speakers than Tagalogs and just a few Ilokanos. This could be a result of the extended community phenomena in which initial migration by earlier pioneers encourages larger numbers of later settlers from the same region. Although it is outside of the focus of the present study, it would be interesting to research the reasons behind the monopolization of the area so completely by just one ethno-linguistic group.

Migration into Quezon continued from 1970 to 1975 at an even greater rate. Settlers moving north from Quezon townside had reached Aramayan in small numbers shortly after 1970. The population of Aramayan increased from 595 in 1970 to 1,265 in 1975, an increase of 113 percent (National Census and Statistics Office 1974; National Census and Statistics Office, Palawan, 1975). Aramayan, which used to be a border settlement containing only Palawanun and Tagbanwa, now is a barrio with three other ethnic groups, of which the peasant Hiligaynon speakers comprise 53 percent. The Tagbanwa generic term for peasant is "Visayan"; and, it appears to be correct since the great majority of the outsiders or diwan with whom they come in contact are indeed from the Western Visayas.
There was a decrease in population in one area of the municipality between 1970 and 1975. As mentioned above, the Tagbanwa had to leave Berong in 1972 after their land was purchased by a mining company. It was planned at that time that a self-sufficient mining town with its own agricultural fields and medical facilities would be developed. Berong attracted non-mining personnel who came as settlers, casual labor, or suppliers for the operation. However, by 1975 the mining company had reduced its personnel to a skeleton crew when the current low price of nickel on the world market discouraged the development of the mineral area. The postponement of the mining operation coupled with the majority of Tagbanwa leaving the area meant that Berong declined from a population of 792 in 1970, which was before the majority of the mining personnel came, to one of 558 in 1975 (National Census and Statistics Office 1974; National Census and Statistics Office, Palawan, 1975).

Environmental effects of migration

That a resettlement project should be started in the Panacan-Aborlan area is not surprising. As discussed above, it is the largest plain on the island and climatically does not suffer from an extended dry season. Moreover, since it was only occupied by a tribal population, it was not considered properly "settled" by the government.

The primary goal of the resettlement project was that "the average settler coming to Narra should be an independent owner-operator by the end of his tenth year in the settlement" (Fernandez 1972:177). The government hoped by resettlement not only to redistribute the population but also to ease agrarian unrest and, through the
owner-operator farm, to increase production. Increased production is the underlying goal of much of the agrarian planning, since, as noted in Chapter II, the Philippines is plagued by low production and must import rice and other food.

However, what the planners of the project did not consider were the aptitudes of the settlers for dealing with this kind of environment. As Fernandez (1972) notes, the settlers came from areas where there were no forests nor had there probably been any for years. When they arrived in Panacan, they found themselves in an area of primary forest. Since they did not know how to clear tall forests, accidents resulting from their inept attempts to fell large trees prompted them to seek help from the local Tagbanwa. After the forests were cleared, they did not understand how to treat the land, being, as Fernandez (1972:180) describes, "relatively sophisticated lowland-rice agriculturalists, having worked irrigated, perhaps even mechanized, farms employing modern technology." They made serious errors which caused the physical deterioration of the environment. They plowed the soil and cropped it two or more years without the benefit of irrigation, thus causing widespread deforestation, leaching of the soils, and the invasion of kogon (imperata) grass. This would have been devastation enough, but abandoning their ruined fields and utilizing these same practices they moved into the foothills, thereby destroying the watershed and confining the potential for irrigation to small pockets. A statistical breakdown of the land allocated to the settlers shows that 60 percent is kogonal (imperata wasteland), 20 percent is still forested, with only the remaining 20 percent classified as productive with
8 percent in irrigation (Fernandez 1972). This is the same area that Fox (personal communication 1973) described as densely forested with small parklike clearings only 20 years before.

By 1967 30 percent of the settlers in the government resettlement project had abandoned their farms (abandonment being defined as "non-cultivation of farms for the last two cropping seasons" except those farms verified to be actually occupied by the allocatees themselves [Fernandez 1972:181]). Of this 30 percent (815 settlers out of 2,666), 61 percent were living in the settlement but were either engaged in non-agricultural activities or they were using borrowed land for their farms or were tenants on others' agricultural lands. Thus, even if their own lands were ruined, they could still find some means of making a living in the area. In connection with the abandonment of the farms, Fernandez (1972) notes that, even though the goal of the government was owner-operated farms--"landownership for the landless", to the settlers what was more important was access to land--"land for the landless". If they could obtain land, it made little difference whether it was by borrowing or tenancy rather than government-sponsored land which they could eventually own. In fact, before it could legally be theirs, i.e., title awarded, all the debts that the settler owed the government for transportation, housing materials, animals, seed, etc., would have to be repaid. This repayment requirement served as a disincentive for acquiring title to the land. In the history of the project, less than 5 percent of the farm lots have been formally transferred to their settler-owners (Fernandez 1972:183).
What of the 39 percent (315) settlers who were no longer in the area? Given the in-migration into Quezon, one might reasonably expect that some had come from Narra to the west coast. This appears to be the case. Although it was not possible to extend my research into the peasant community of Aramayan, the barrio captain was interviewed as well as several other settlers concerning their past moves and those of their neighbors. According to the barrio captain, many of the more than 650 Visayans in Aramayan, including himself, had previously lived in Narra or other areas of the province. Citing the deterioration of the land on the east coast and the resultant low productivity, he explained that it was for the fresh land that he and the others had left the resettlement area and had come to Aramayan. Others mentioned their resettlement debts to the government as an added reason for leaving the government-sponsored program.

Whatever the reason for the abandonment of their land on the east coast, they did not abandon their agricultural methods on reaching the west coast. Flying along the coast from Quezon to Aramayan, the identity of the occupants of an area is revealed by their different cropping patterns. Like their counterparts on the east coast, the Aramayan settlers do complete clearing of the fields; no logs, standing trees, or brush remain. They favor large expanses of contiguous fields and monocropping. They have taken the flattest land that has some potential for irrigation; however, because of the undependability of the Aramayan River as a source of water in the absence of continual rain, it is uncertain whether or not an irrigation system would be worth the effort. Even when Tagbanwa fields are contiguous, such areas are small,
the fields are not completely cleared, nor are they monocropped. It is these differences in cropping and clearing patterns that make the settlers' fields so much more susceptible to the encroachment of kogon and the transformation of their fields into "green wastelands" (Conklin 1957).

The cropping pattern and the two or three dryfield plowings a year that are being done in Aramayan bode ill for the future. Although these same methods have destroyed the east coast, they were still being utilized in the new settlement area. Moreover, they were becoming the model of agricultural intensification for the Tagbanwa.

Migrants' relationship with Tagbanwa

The founding of the penal colony in Iwahig, a Tagbanwa area south of Puerto Princesa, in 1904 was really the first effective contact the Tagbanwa had with the outside (Philippine Republic 1962). It meant that they had to leave the penal colony area and to resettle elsewhere. The Iwahig Tagbanwa dispersed; some moved to the north, some to the south, and others as far as the west coast. This retreat in the face of intrusion would continually reoccur whenever the Tagbanwa came into contact with the Christian Filipino. This withdrawal is not peculiar to the Tagbanwa; Frake (1955) wrote of the Subanun following a similar pattern of retreat from the Christian settlers in Mindanao.

The Tagbanwa continued their gradual withdrawal as the settlers moved down the east coast. Even before the NARRA project began, Fox (1954) commented that "most of the material culture of the west coast Tagbanwa is indistinguishable at present from that of their Christian neighbors." The east coast Tagbanwa had adopted the dress, tools, and
crockery of the dominant Filipino culture even if their indigenous religion and agricultural methods were still being practiced.

NARRA settled Christian Filipinos on land that had been inhabited by Tagbanwa and Palawanuns. Having no legal recourse to combat the alienation of their lands and not being allowed to become members of the resettlement project, the Tagbanwa retreated to the hinterland and to the west coast. In Malundi in 1973 28 percent of the married adult population had been born in Aborlan or Panacan (now known as Narra) and had moved since the beginning of the project, citing lack of land on the east coast as the primary reason for their migration.

Although until recently the west coast was too isolated to become a target area for migration, the west coast Tagbanwa were not totally cut off from contact with Christian settlers. There had been traders in the area since the thirties, with a few settlers coming in the fifties. These settlers, however, were pioneers who adopted the Tagbanwa pattern of agriculture, sometimes married Tagbanwa women, and blended into the community (see Spencer 1965 for an interesting discussion of this pioneer phenomena).

The west coast Tagbanwa's first large-scale contact actually occurred indirectly, as the Tagbanwa who migrated from the east coast to the west were absorbed in the west coast community. Their inclusion into the community was not difficult. The Aborlan-Panacan Tagbanwa could activate kin ties, as could the Tagbanwa from the north who were experiencing pressure from loggers, and become part of the Berong community. This was another instance where the practice of matrilocality
enabled individuals through its formation of a far-flung kin network to find help in a period of crisis.

The east coast Tagbanwa were more "modernized" than their Berong relatives, having been in contact with lowland culture for a much longer time and with their material culture being much more Filipinized for decades. They were noticeably different from the west coast Tagbanwa. They had more lowland Filipino clothes and put more emphasis on dress, their Tagalog was better, their house styles untraditional, and they attempted to look like peasants. Badio was from the east coast and utilized his knowledge of lowland culture to become a successful trader. As mentioned above, it was his familiarity and ease of interaction with the outside that made him the model for the young Tagbanwa men. Interestingly, it was also a Tagbanwa from the east who was starting to use a plow, with fields of incipient, if irregular, rows, unlike the chaotic appearing swidden fields of the other Tagbanwa.

The Berong Tagbanwa's main contact with lowland culture has been the coming of the mining company in 1967 to their traditional area. Before this, there had been the few settlers, a small number of teachers, and the traders. The peasant settlers had integrated into the Tagbanwa community; even a teacher had intermarried. The traders, especially Alawi, did not want the Tagbanwa to become more peasantlike; for, their economic relationship depended on the Tagbanwa remaining as they were. The Tagbanwa migration from Berong to Malandi temporarily removed them from their previous almost daily contact with the miners and other company personnel. However, the settlers moving north from
Quezon into the Aramayan area initiated a different relationship between Tagbanwa and outsiders.

The Tagbanwa, leaving their community to the north and being met by peasant settlers moving up the coast from the south, realized that there was really nowhere else for them to go. They could no longer continue to retreat from contact; there was no area to which they could escape. They were in a vulnerable position and knew it.

Diwans, coming expressly for agricultural purposes, had different expectations of the Tagbanwa than had their previous contacts. Like the miners, they were intolerant of Tagbanwa traditions, dress, etc. There was pressure through ridicule placed on the Tagbanwa to assume a more peasant style of dress, especially when in a peasant area. Even if not traveling outside the Tagbanwa community, dress changed between 1973 and 1975, especially among the women. Whereas until recently most of the adult women, especially if they were nursing a child, would go barebreasted with a sarong demurely reaching their ankles; now, they are wearing narrow-strapped T-shirts with their sarongs or dresses that cover their chest but only come to below the knee. Men wearing the traditional ba'ag were rare, and these were gently smiled at by their fellow Tagbanwa. Women going into Balintang to sell their mats would travel in their traditional sarongs and change into their peasant garb on the outskirts of town. Men, before entering the town, would hide their Tagbanwa backpacks in the bushes along with their bolos (machetes) and change into fresh clothes. If someone did not have a peasant dress or trousers, there was a reluctance to go outside the Tagbanwa community.
When they were in a peasant town or community where they were not known, rather than speak Tagbanwa they would speak Tagalog. In a pioneer town in Palawan Tagalog is the lingua franca because of the numerous languages spoken. No one, other than a native Tagalog speaker, really speaks it well; therefore, to speak it imperfectly is not unusual. A Tagbanwa if properly dressed and speaking Tagalog was able to pass as a settler.

Everyone wanted to "pass" for a peasant when on the outside, or at least not to be an object of ridicule. The "tribos" were regarded by the peasant to be inferior in a way not unlike that of an Indian by a white settler in the American west. Unlike his Indian counterpart, however, the Tagbanwa can more easily "pass" since they look very similar to the peasants. Yet, the social stigma of being a Tagbanwa is difficult for them to deal with, and they have accepted to some degree the diwan's prejudice concerning themselves. There is a feeling of inferiority that surfaces in conversations concerning the outside. This sense of inferiority is not surprising since the rules of the game are made by the diwan, and the Tagbanwa must learn by experience, even if the experiences are humiliating or costly. They must conform to the peasant standard, a standard that measures them in terms of peasantization. This means that relations with the diwan can be personally devastating and almost always filled with uncertainty.

Yet, the communities are economically interdependent. The peasants want the Tagbanwa's labor and agricultural/gathered products. The Tagbanwa want the goods that the diwan community offers. The goods that the Tagbanwa trade for and buy are those that will allow them to
appear more peasantlike: clothes, plastic utensils, cookware, etc. Their economic dealings are, therefore, motivated by the desire to conform to the peasant expectations of dress and behavior.

Economically, the Tagbanwa-settler relationship is not the exploitive parasitic one that occurred with Alawi nor the predator-prey one that occurred with the raiding Moros. It is a symbiotic economic relationship in which both benefit and neither are harmed (Clarke 1954). The Tagbanwa perform wage labor, sell their pigs, trade their rice, and purchase peasant goods. The settlers, for their part, hire Tagbanwa laborers, buy their pigs, forest products, etc., and sell them clothes, kerosene, tobacco, etc., in return. If the Tagbanwa disappear, the settlers could continue; and, if the peasants disappear, the Tagbanwa could continue; neither have become totally or partially dependent on the presence of the other. However, both sides perceive themselves as benefiting from the other. The Tagbanwa like the availability of wage labor, a market for their pigs and rattan, and perceive the goods that they buy as improving their lives. It could be argued that the goods are bought to fulfill the peasant expectations of behavior; yet, it should not be overlooked that the Tagbanwa like the products that they are purchasing. They appreciate a jacket (telling tales of huddling around a fire in cold weather "before"); they like trousers, blouses, hats, etc., and they value the sturdiness of plastic. Although the initial motivation to purchase many of these items might have been to placate the peasants, they now have become an integral part of the material culture of the Tagbanwa and are desired for their own sake.
This desire for conformity and goods is gradually erasing the visual differences between a Tagbanwa and a settler community. The differences are at this time still plainly manifested, but they are decreasing. The houses are becoming "Visayanized" and even food preferences are changing (bagoong, a fish or shrimp paste, has become accepted with gusto). What could eventually occur is the transformation of the Tagbanwa community into just another ethno-linguistic group in the area with no visible differences between it and other communities in the region.

However, no matter what changes occur in lifestyle, it remains to be seen whether there will be similar changes made in their agricultural methods. As mentioned above, there are quickly discernible differences between a Tagbanwa and a settler field. The settler area with its clearcutting, monocropped fields differs markedly from the Tagbanwa with its logs and standing trees and variety of crops. The major difference, however, is that one is plowed and another dilled. The settler is presenting a model of agricultural intensification to the Tagbanwa. Since it has been so environmentally disastrous, it would be best if they did not adopt such methods as dry field plowing. The deciding factor might not be the model of the peasants, but the access to land so that their swidden system can be maintained. The settlers are presenting no real competition for the land that the Tagbanwa need; however, the advent of the timber company into the area might prove to be as influential to the Tagbanwa as did the mining company.
The Companies

As mentioned in Chapter IV, the mining company came to Berong in 1967 and by 1972 had purchased the land of the majority of the Tagbanwa residing in the valley. During this period they worked for the company as wage laborers, had more access to certain goods (clothes, cookware, etc.), and had their first direct contact with the outside world. However, the company was not able to maintain its operation in Berong and by 1975, rather than the thriving mining community that had been envisioned in 1973, there was only a skeleton crew. But even though the mining company faded away, a new company appeared to the south.

When we left Malandi in August of 1973, the coast line south until the vast coconut plantation of a prominent family outside of Quezon was only occasionally dotted with a dwelling. However, on our return less than 18 months later, there was a boom town halfway between Malandi and Quezon. What fueled the growth of this town was timber. A timber company had moved into the area, setting up a base camp on the coast and cutting lumber from the seashore to the foothills and into the mountains. It was a sophisticated operation with an airfield, docks, sawmill, etc. The timber was being sent directly to Japan on barges that docked at the town.

As it does throughout the Philippines, the clearing done by the company attracted settlers and merchants who came to provide goods and services for both settlers and loggers. The loggers and new settlers of the timber town, Balintang, provided a market for both peasant and Tagbanwa. The Visayan settlers of Aramayan, the nearest settlement to
Balintang, sold vegetables, rice, chickens, and pigs (some of which was originally from the Tagbanwa community) to the loggers, while the Tagbanwa sold fruit, a few chickens, and mats. The Tagbanwa also benefited indirectly since they were hired to do agricultural wage labor in response to the need for agricultural supplies, especially fresh food, in Balintang.

The increase in demand for agricultural goods, however, had a negative effect on the land. Visayan farmers were pushing their production without regard to the degradation of their holdings. This is not surprising since many of them had previously ruined the agricultural potential of the east coast by the same profligate use of the land.

However, the greatest effect that the timber company could potentially have is the alienation of Tagbanwa land. As mentioned above, one of the problems in the Philippines is the lack of coordination between agencies and the lack of integration of policy. At this point in time, the timber and mining companies appear to have greater rights to the resources in response to the national needs than do the agricultural community. Thus, even though the west coast has been settled by migrants, to say nothing of the indigenous Tagbanwa, the companies can claim areas for timber or mining that are already settled.

Part of the problem lies in the fact that only land declared "open" by the government is to be utilized for agricultural settlement. However, the cadastral maps of these areas are hopelessly out of date and do not reflect the existence of the indigenous "tribos". Thus, the government maps of the Aramayan area do not show it as being approved
for agricultural settlements, even though it is settled by peasants and, predating them, the tribos.

This official lack of recognition of an existing settlement simplifies the tasks of the government agencies involved. Even though it has an established agricultural community if it is not an official agricultural area, timber and mining interests can have precedent rights to the resources. It is a situation in which government agencies unofficially recognize the existence of the farmers, but one in which the farmers have no legal rights to be there. The Tagbanwa were told that the sale of their land in 1972-73 was to be voluntary, but tremendous pressure was exerted upon them to sell and move. The large companies are aware of their rights and know they have the support of the government.

During the end of 1975 and the beginning of 1976 the timber company began to assert its concession rights to the area that the Tagbanwa had registered in 1973. According to the company, the Tagbanwa should not be clearing the forested land, even though it was registered in the individual's name. Registration is not ownership, and, in order to obtain a title, a prohibitively expensive survey would be required. Even if surveying was done, it is not clear whether a title would be valid if a timber company was given rights to the area.

The timber company, therefore, felt within its rights to order that the forest not be cut and burned, irregardless of the hardship that would be caused by such an injunction. The Tagbanwa still needed to continue to clear land for at least another five or six years so that there would be enough land under their control to maintain the
swidden cycle. As it was with the mining company before, the situation was one in which both the Tagbanwa and the timber company wanted the same resource, the land and/or what was growing on it.

This is a classic example of a competitive relationship. As Odum (1966:93) notes, "'competition' denotes a striving for the same thing. At the ecological level competition becomes important when two organisms strive for something that is not in adequate supply for both of them." Competition can result in several outcomes: (1) one of the species may be eliminated completely or forced into another niche or geographical area or (2) the species involved may be able to live together at reduced density by sharing the resources and reach a sort of equilibrium (Odum 1966:95). The principle governing the first solution to competition is commonly known as the Competitive Exclusion Principle which states that one species or population will be "excluded" from the area or resource either through death or by changing its needs (niche) or moving (Sutton and Harmon 1973; Kormandy 1969; Odum 1966).

Moving was the solution that ended the competition with the mining company. However, this same solution is not possible now. There is nowhere to go. There is still the possibility of changing their niche, i.e., for the Tagbanwa to stop needing the land for their livelihood and become wage laborers for the settlers, etc. This is not, however, a realistic expectation since they could not subsist on the jobs available in the area, and the Visayan settlers themselves are having problems over jurisdiction with the timber company and might cease to be a source of employment for the Tagbanwa.
It is the competitive relationship with the companies for the land that makes the company have the greatest impact on a community such as the Tagbanwas. No other relationship that they have been involved in with outsiders in this century has threatened to so completely destroy their means of livelihood. Whereas the parasitism of Alawi sapped them and the symbiotic relationship with the settlers implied further integration into the peasant society, the competition for the land with the companies could only end in their exclusion from that resource. The Tagbanwa-company situation is a manifestation of the government's past uncertainty as to what to do with the frontier areas and the indigenous people who inhabit them. Were they to be integrated into the national economy and society as was occurring with the Tagbanwa and the settlers, or were they to be excluded from the resources on which they depended so that the companies could extract from the area what they needed, whether trees or minerals, without having to deal with the "tribos" populations? Currently, however, the uncertainty appears to have been resolved, with the government supporting the policy that the companies be given a free hand in their operations, with the local populations being taken out of the area and relocated. This is symbolized in the change that has occurred in the government agency that has jurisdiction over the minorities. Prior to 1975 it was called the CNI (Commission on National Integration) and supported the gradual inclusion of the minorities into mainstream Filipino life. Now, however, the agency has become Panamin, which takes the "tribos" in many instances out of their traditional area and relocates them in centralized
villages, leaving their previous home open to exploitation by the timber and mining companies.

Summary

Palawan was the last of the provinces of the Philippines to be settled by migrants from the other islands. Settlers began to come after the turn of the century with the major migration taking place after World War II when the government began a resettlement project on the east coast in the Aborlan-Panacan area. By government sponsored and private initiative migration the population in this area increased dramatically during the 1948-60 period. Although the population in the resettlement area continued to grow at a higher rate than the province as a whole during 1960-70, by 1970 the high point of the migration was over. Settlers who had originally been in the resettlement community started coming along with other migrants to the Quezon area and by 1973 had reached the outskirts of the Tagbanwa area on the west coast.

The settlers from the east coast left behind them a "green wasteland" of kogon land and continued their devastating agricultural practices on the west coast. Their relationship with the Tagbanwa was one of economic interdependence, but social disparity. They felt themselves to be superior to the "tribos" and exerted various types of pressure upon the Tagbanwa to make them conform to their values.

The large companies, however, had, and potentially continue to have, the greatest impact on Tagbanwa life. Competing for the same resource area as the Tagbanwa, they have the power to exclude them from the area, although whether they will do so remains to be seen.
Prior to this century, even though there was trade for prestige and ritual goods, the Tagbanwa had a classic subsistence economy since immediate consumption needs were satisfied from local production without any or with few intermediaries or exchanges (Wharton 1969). Except for the food that was shared with other communities during years of low agricultural productivity, food and labor were kept within the community. Fig. 9 is a diagram based on the flow of energy in traditional pre-resident trader Tagbanwa society. It can be seen that forest and sea resources provided for the maintenance of the population, with other Tagbanwa communities serving as reserves of food in times of famine as well as donors and receivers of mates.

Even though their day-to-day subsistence continues to depend upon their own agricultural fields, the present situation is very different from what previously existed. As Fig. 10 shows, the Tagbanwa are now intimately linked to the external world. From the Tagbanwa community flow food, gathered forest products, and labor, while clothes, food, and manufactured goods flow into the community from outside. Although the Tagbanwa might be still considered to be subsistence based, they are becoming increasingly more involved in the market economy. This has meant that more time has to be spent on economic activities so that more can be purchased from the external manufacturing sector.
Fig. 9. Energy diagram for subsistence economy of Tagbanwa prior to contact with lowland traders (based on H. Odum 1971:105-113).
Fig. 10. Energy diagram of contemporary Tagbanwa economy (based on H. Odum 1971:105-113).
Thus, the number of pigs raised for cash has increased dramatically, but at the expense of time and labor expended for planting, gathering, and processing extra feed for them. Money earned from wage labor is used in many cases not to meet the subsistence needs of the family but to purchase the goods that the family wishes in order to make life more interesting. As mentioned above, these goods are not forced upon the Tagbanwa; they like the variety and newness of the goods for which they are working and consider the time and labor expended for them well worth it. The desire for such goods is understandable considering that not only are they valued as ends in themselves, but they also serve as camouflage. The Tagbanwa, so often ridiculed by the peasant for their shabby dress, etc., perceive the new clothes and other trappings of peasant culture as a means of escaping the scorn of the settler. Since assimilation is understood in terms of superficial appearance, the settlers are less likely to treat the Tagbanwa as "children" (a favorite term of the peasants in describing the Tagbanwa).

Yet, true assimilation may mean the abandonment of Tagbanwa swidden practices for the farming methods of the settlers, and this raises the question of stability. The west coast Tagbanwa, in a region of fluctuating rainfall with a potential for disastrous crop failure, have evolved an agroecosystem based on long fallow swidden which has enabled them to maintain nutritional and environmental stability. Their multifield, multicrop, multiphase swidden system has made it possible for the population to maintain itself in a stable relationship with other elements of the ecosystem. The forest, as provider of
famine foods and future fields, is the beginning and end of the swidden cycle and, as such, is an integral part of the agroecosystem.

The traditional agroecosystem stands in marked contrast to the agricultural system being introduced into the Tagbanwa area by peasant immigrants from other islands. The immigrant practice of no fallowed, monocrop, dryfield plow agriculture is devastating to the environment and providing a poor model for agricultural modernization. Unfortunately, the immigrants, along with the timber and mining interests, are appropriating the land and forest and may well bring an end to the conservationist Tagbanwa system and establish in its place the exploitative system responsible for widespread deforestation, flooding, and aridity in other parts of the Philippines. If present trends continue, the forests of Palawan, once capable of sustaining a Tagbanwa population indefinitely, will be replaced by a kogonal wasteland capable of sustaining no one.

The Tagbanwa response to the constraints imposed upon them has been to maximize the number of options open to them. When the anti-kaingin laws were enforced in 1972-73 and the Tagbanwa were ordered to register land, many families illegally registered what was at that time primary forest. This proved to be a successful strategy since, when law enforcement waned, they were able to clear the registered forest with the help of relatives. By 1976 they had cleared almost all of their registered land.

The 1972 forced move from Berong created hardship in requiring the Tagbanwa to leave root and tree crops behind in a year of widespread rice crop failure when nationwide shortage made it impossible
to buy rice. By 1975, however, the relocation was perceived as a positive contribution to the community's long-term well being. This positive reevaluation came with the realization that, when they left Berong, they were also leaving Alawi, the trader, and by doing so they were able to free themselves from debt bondage and his forceful demands for repayment in kind or by almaciga collection. The Tagbanwa storekeepers were quick to respond to the need for local suppliers of the everyday needs of the community and were also able to fulfill, to some extent, the credit requirements as well. Their lack of capital and overabundance of familial obligations prevented them from completely filling the credit void created by Alawi's absence, however; and this enabled the teachers and peasant traders in nearby communities to reestablish the Tagbanwa debtor-peasant creditor relationship. Nevertheless, the diversity of both the means of making money and creditors probably will not allow one individual to so totally control the lives of Tagbanwa as Alawi did in Berong.

The adaptiveness of the Malandi Tagbanwa's response to new income opportunities can be appreciated when looking at Fig. 10. They are now raising pigs for sale, selling a portion of their rice crop and gathering forest products for sale while maintaining their traditional subsistence economy. This has meant more cash flowing both into and out of the community and the appearance of manufactured clothing, purchased food (especially bagaong, canned fish, mung beans, and Chinese noodles), as well as the ubiquitous luxury goods (watches, radios, and even a phonograph). There is tremendous pride in being able to give parties similar to those given by the peasants in which the host family
wears new western clothing, purchased food is served, and plates (preferably plastic) and utensils are offered to the most important guests.

In 1976, with one foot on the new path and the other on the old, the Tagbanwa appeared to have struck a middle way. They had been able to retain those aspects of their former life which they had valued (the legal system, matrilocality, non-violence, and, to some extent, the traditional agroecosystem) while still being able to acquire the desired consumer goods and to manipulate outside relationships somewhat to their advantage.

It should not be overlooked, however, that they continue to be vulnerable to the forces which set this adaptation in motion. They cannot resist the settlers nor the companies. They are able to maintain the system that has developed by residing in homogenous communities and keeping control of a small area of forest and cleared land. Land is the key to this adaptation; for, if they are disenfranchised, they will be left without a resource base. They will be forced to either move to other areas (an almost non-existent alternative since most of the west coast is now claimed by either other Tagbanwa communities, settlers, and/or companies) or be assimilated into the peasant communities, probably as landless tenants and laborers.

There is no guarantee that such disenfranchisement will not occur. The Philippine government, like most, is too fragmented and unsystemic for there to be integration of the various policies, programs, and goals of the many agencies and departments (E. Odum 1976). Since there is no overall planning, the overlapping jurisdiction among government agencies has led to situations, such as have occurred on
Palawan, where rights to the same parcel of land have been given to miners, loggers, and farmers. The danger in such lack of coordination is not only in the social problems that may result but also in the threat to the resource base, since, as E. Odum (1976:35) notes, "there is no effective mechanism whereby negative feedback signals can be received and acted on before there has been a serious overshoot." Overshoot can result in irreversible environmental damage that can undermine the productivity and stability of an area.

Since it depends upon the actions of the companies, migrants, and government, the present situation in which the Tagbanwa grow their subsistence food, sell or trade rice, pigs, and labor, and perceive themselves as becoming more "peasant-like" may be a temporary one.

In one view, integration into the national economy and the loss of tribal autonomy is seen as a positive development in a country composed of many ethnolinguistic groups, attempting to weld itself into a unified nation. It can be argued, however, that the chance of the Tagbanwa being integrated into the nation as an equal rather than an inferior group is small given the prejudices of the local peasants and the government agencies.

Would the nation be strengthened by the creation of yet another disenfranchised ethnic group? Or, would the nation benefit more from Tagbanwa retention of their land and community? If the degree of autonomy that the Tagbanwa have at present could be preserved, they could continue to contribute to the national economy by providing agricultural and forest products as well as a market for Philippine manufactured goods, while their agroecosystem maintained the integrity of the physical environment.
The Tagbanwa do not wish to return to the lifestyle and values they had before the past decade of intense interaction with the lowlanders. As long as the manufactured goods are available, they will increase their production and labor in order to obtain them. Even if the incentive to imitate the appearance of the peasant was initiated by fear of ridicule, the clothes, food, and luxury goods are becoming ends in their own right, especially among the young adults. The Tagbanwa will become assimilated; the question that remains is what form the integration will take-- ethnic enclave or landless laborer. That will depend upon decisions made not only in Malandi but in cities far away.
EPILOGUE

Although the Tagbanwa may be adapting rapidly to the social and economic pressures placed upon them, it would not be out of place to examine the long-term implications of their assimilation into the Philippine nation. The question can be raised as to whether the state of the national economy warrants absorbing even more people into it. In some ways, the Tagbanwa economy is in the same relationship to the Philippine national economy as the latter is to the world market. Like the Tagbanwa who sells crops and forest products to obtain manufactured goods, the Philippines sells its natural resources and borrows money at interest rates which at times may approach those of the peasant trader in Palawan. The national economy needs infusions of foreign capital to enable it to continue to borrow money and purchase industrial products from the same foreign governments who make the original loans (see Frank 1967 for further discussion of the flow of money between industrialized and less industrialized nations). Such an economy cannot continue on its present course. Debts will have to be repaid, and how will they be repaid when the natural resources, so profligately exploited, are gone?

Coupled with the need of the national economy for infusions of foreign capital is the government's focus on industrialization and urbanization. As mentioned in Chapter II, urban communities are in many ways more vulnerable to dysfunction than are smaller local ecosystems since they are dependent on a global ecosystem (Darling and Dasmann
1976). It seems almost unethical to attempt to integrate self-sufficient communities into systems such as the Philippines where one out of every seven citizens reside in Manila and where the urban population receives preference for food and goods during times of scarcity.

However, as Rappaport (1971:14) observes, the problem is ultimately not an ethical one; rather, "it is one of biological viability." He questions whether "worldwide human organization" can continue to exist as ecological diversity declines and the stability of the "ecological foundations" decreases (Rappaport 1971:14). The fear of what might result from continuing simplification of ecological systems is shared by many ecologists and social scientists (Nietschmann 1973; E. Odum 1976; H. Odum, 1971; Margalef 1968). The simplification of ecosystems has been man's means to survival. A swiddener, by burning the forest, returns the area to a simpler stage, but one from which he can reap more energy in the form of food (H. Odum 1971). Since the swiddener allows the fields to return to forest, however, a pulsating stability is reached. Although there is a loss of some nutrients stored in the trees during burning, most of them remain in the ash to be absorbed into the soil and plants. In traditional Tagbanwa harvest methods, only the fruit is removed from the fields; the rest of the plant is left behind, and its nutrients eventually return to the soil.

But the new forms of exploitation in the forest regions do not follow the conservationism of the traditional swiddeners. Nutrients are taken from where they are produced to places far away, thereby depriving the local area of the nutrients which it needs. This results in one ecosystem becoming impoverished, while another is enriched and
perhaps polluted (Smith 1976:25). This is precisely what is done with logging, where the trees and what nutrients they contain are lost forever when they are cut and shipped to foreign lands, leaving the area from which they came nutritionally poorer and prone to erosion as well.

It is this kind of exchange which typifies the problem to which Margalef (1968) referred in describing the relationship between a less organized and a more organized system (the less organized gives up energy and organization to the more organized system). It is the appetite of the more organized system which leads it into conflict with the stability and organization of the less organized system.

Now that the Tagbanwa have reached an uneasy stability in their relationship with their new neighbors, is it inevitable that this stability will be destroyed by external forces? Not necessarily, if basic changes are made in government organization and policy. There must be:

1. development of long-term policies which recognize the fragility of tropical ecosystems and the finitude of national resources, policies which foster careful long-term sustained-yield utilization rather than short run and destructive exploitation; 
2. emphasis on conservation in agriculture, both in staple and cash cropping; such methods as dry field plowing, which resulted in 90 percent soil erosion in Cebu with one-third of the topsoil entirely gone (Wernstedt and Spencer 1967) and led to increased migration and repetition of the disaster on other islands, must be discouraged; 
3. reevaluation of the present integration of agricultural, forest, and industrial sectors; a change in the role of industry from absorber to producer of foreign revenue (backward integration and export promotion [Garcia 1971]), while making use of local
raw materials, would decrease the pressure on resources, which in turn would aid in the protection of watersheds and the replanting of forests, to the benefit of the agricultural sector and the consumer; and (4) efforts in family planning must be continued and strengthened by increased appropriations and personnel. As Sicat (1974), Estrella (1974), Leido (1975), and others have pointed out, without a decline in population growth there will be pressure for piecemeal "here and now" attempts at solutions rather than long-term planning.

If such planning was carried out, with its emphasis on conservation of forests and fields, restructuring of the industrial sector, and family planning, the pressure felt by the Tagbanwa would be decreased and the country as a whole would be in much sounder condition in the long term than if present policies were continued. If such planning is not forthcoming and the government continues to favor short-term productivity over long-term stability, population and industrial pressures may result in the destruction of the resource base and the inability of the Philippines to support its population in the future.
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