

THE POLITICS OF SCARCE RESOURCES AMONG THE ATAN AN EXPERIENCE DERIVED FROM THEIR FARMING SYSTEMS DEVELOPMENT PROJECT

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Introduction

The problem of scarce resources is universal (Bernardo 1971; Borgstrom 1967; 1971; Green 1973; Little 1973). Among countries, the problem differs only by degrees. The greatest burden however, is felt by people from the Third World. This is aggravated by the synergistic effect of the absence of appropriate technology and the limited and rather sensitive resources to intensive human activities in this part of the world. Rapid population growth further complicates the problem.

In Third World countries, like the Philippines, the level of resource scarcity is felt in different degrees by people who come from different regions, localities and social classes. Relatively speaking, those coming from the upper class who reside in the economic and industrial centers of the country tend to live in an artificial state of abundance in contrast to those who come from other sectors of the country.

In the Philippines, upland communities are largely found to be the most advantaged locality on the basis of accessibility to facilities and resources that are essential to the residents' existence. Since most upland communities are government reserves, the occupants in these areas do not have legal tenure on the land. Hence, they are considered squatters.

Since land for private ownership is not available, consequently, the people in the uplands are technically landless. Considering the rugged terrain of the upland communities, lands in these areas are extremely sensitive to human activities usually bringing a rapid deterioration of the ecological balance in the area. As a result, agricultural production is below subsistence

level, which threatens the existence of local upland population. Its economic welfare declined coupled with already depressed benefits derived from the facilities that are only available in the lowland such as health, education and other services provided by both private and government sectors.

The native tribal populations are the ones extremely affected by the conditions in the upland communities. The resources that are essential to their survival given their technological capability have largely disappeared brought about by the increasing human activity in their upland environment. This is the result of the increasing competition with the lowland migrants who are making farms in the uplands. The absence of cash among the natives prevents them from utilizing the services and goods that are monetized. Resource scarcity has therefore reached its absolute level among most tribal population in the uplands.

The scenario just described represents today's living condition of the Ata. In the light of this context, the paper attempts to explore ways the Ata handle the problem of resource scarcity both on individual and social levels. The following questions are therefore investigated:

- (1) Do the Ata face problem of interpersonal conflicts in the allocation and distribution of scarce resources?
- (2) How does the loose sociopolitical system of the Ata operate in resolving conflicts of this nature?
- (3) How is the problem of scarce resources met?
- (4) Are there differences in conflict levels and in conflict resolution processes involving different consumable and capital resources?
- (5) What are the individual and societal resources to the problem of resource scarcity?

The problem of resource scarcity among the Ata is generally constant, interrupted only by a very brief period of availability in food during harvest time. Hence, the Ata problem of resource scarcity is largely a constant issue.

THEORETICAL FRAMEWORK

Goods or services that are either difficult or impossible to possess are considered as scarce resources. These resources can either be consumable or capital. Food is largely consumable while land and tools are capital resources. The population may differ in how these resources are perceived. For instance, food may be valued for its immediate use and satisfaction; while land on the other hand, may be valued for its long term productivity. Such perception differential of these types of resources could affect the way goods are valued and the kinds of responses people generate when conflict of ownership, distribution or allocation of a particular type of scarce resource would take place.

Such conflict may be resolved on different levels. It may be settled on an individual basis. Conflicting individuals over the allocation of a particular resource may find compromises that take various forms depending on what has been agreed between two contracting parties. The essence behind this resolution is the willingness of either party to give in some of one's demands in favor of one that is mutually acceptable. An element of sacrifice is involved to give priority to eroding conflict between persons and hence eventually re-established order.

However, when conflicting parties are not in a position to find compromise, an intervention from a neutral party may be required. Societal level of resolution will have to be established. The sociopolitical system will have to employ the processes of conflict resolution established by tradition. Whether the sociopolitical system is loosely or rigidly structured, the process requires the mobilization of personnel and the imposition of rules to adjudicate the conflict. Compromises may be arrived at if these are normally established after imposing the strength of the law either created by tradition or by constitutionally proved legislative procedure.

Competition over use of scarce resources increases when there is greater unpredictability in the societal environment (Chim 1981: 212; Weins 1977). This generally happens in a community consisting of multi-ethnic population or in a group that

is characterized by subgroupings having inconsistent concerns and persuasions. Individuals in a community who belong to two different subgroupings tend to compete in the use of resources. Since their societal loyalties are not parallel, conflict interests develop. When conflict of interest is brought to a societal level, more social cleavages and alliances are formed. This will incubate more competition within the community while it increases strong-ties and loyalties within one subgroup of the community. Hence, there is a strong positive relationship between intra-subgroup "we-feeling" and inter-subgroup "they-feeling." As the intra-subgroup "we-feeling" increases, inter-subgroup "they-feeling" concomitantly increases. This serves as the basis for more inter-subgroup conflict and competition over the use of resources within the community.

Hence, conflict and competition over the use of scarce resources may happen on two kinds of individuals in the community. First, it may happen between individuals who belong to the same group. Second, it may happen between individuals who come from two different subgroups. In the first, the potential for coming up with inter-personal compromise is great while in the second it is very slim or none at all. Therefore, resolution will have to be established on two levels. For the first, the individual level will be sufficient; for the second, the societal level is necessary.

Scarcity of resources is a crisis condition which requires responses from the population (Lee 1968). As a stimulus, behavioral responses to it are generated. Such responses may be carried on either individual or group basis.

Theoretically, eight possible behavioral resources may be identified. These are the following—employment of compensatory resources, exchange and trade, territorial invasion, population control, generalized sharing, technological shifts and development, reduction of consumption behavior, and mortgage of resources.

Resources that are limited or absent may be compensated for by another form which can generate products similar to the ones produced by the resource being replaced, for instance, farm-

ers who have insufficient lands may compensate for the lack of land by optimally tapping available household labor in the productive activities. Extra household labor may be traded in the market for wages from which food resources are drawn. In the absence of staple crops, other goods which have similar value with the former are consumed. For instance, root crops are generally taken as major source of carbohydrates in the absence of staple food, like rice and corn. In the face of increasing cost of textiles, the natives may go back to their tradition of using bark cloth if bark sources are still available. Man has been doing a lot of compensatory practices in the face of increasing resource scarcity.

Assuming that an individual still possesses some selected but limited resources, those he possessed but are not needed may be traded for goods he needs which he does not however, produce. This may involve individuals coming from different or similar localities or groups. Individuals coming from two different ethnic orientations may establish such kind of transaction. Goods with assumed equivalent values may be exchanged or traded (Sahlins 1975, 1965). Of course, this may involve cash as a counterpart for another goods in-kind.

Both capital and consumable resources may be traded in the same manner. Land may be traded for cash or tools may be exchanged with food resources. Costing of resources are generally determined by existing local practices. The process is generally legitimized and cemented by accepted tradition of the population involved.

In places characterized by multi-ethnic groups and where locality is rigidly defined by territorial boundaries and content of the scarcity of resources in a particular territory usually lead to an organized collective dispersal of military force to a territory perceived to have abundant supply of resources. Territorial acquisition through warfare may be employed (Chagnon 1977; Chagnon and Hames 1979). Such practice, in fact, could be embedded in the people's culture. Hence, religion and their world view may support such practice. Expertise in combat and stealth attributes to assure one's victory is a trait that may be highly valued.

may be expressed in rituals and magic designed to develop those expertise among the warriors. To keep the demographic structure of the population advantageous for warfare, the male children may be preferred over those female ones. Hence, female infanticide may be practiced.

Access and control over limited resources are therefore, achieved by overthrowing legitimate owners. The use of violence as a means of diminishing the negative effect of scarce resource in the economic system of the population is justified by tradition. Hence, it may become one of the ways of living of a population group.

There seems to be a universal understanding of the relationship between human population and the availability of resources. In the face of limited resource, the size of the human population is a factor that has been seriously reckoned by various population groups even those among what has been generally called as "primitive" population. Literature suggests (Dubland 1975) that population groups may employ either preventive or collective measures to bring a balance between people and resources.

Population groups may recognize the impending imbalance between resources and people. As such, the impending imbalance may be aborted by implementing what we might call as preventive measures. These are practices that try to deestablish a condition where the population exceeds the supply of resources. This may call as population control. Birth control, infanticide, abortion and gerontocide may constitute as some of the forms of population check. In birth control, fertilization of the egg is prevented by practices that are intentionally or unintentionally reproduced. The use of contraceptives such as herbal medicines are intentional while postpartum sexual taboos are non-intentional. The latter is generally defined by the moral tradition of the people but it has a population control effect. The problem of malnutrition among the people is not intentional but it has a limiting effect on procreation since it may suppress ovulation (Bomgaarts 1980). Prolonged lactation as a tradition, may also bring a biological depression of fertility (Bomgaarts 1980).

Infanticide and geronticide are considered crimes under our modern laws. But, according to the tradition of some people, infanticide and geronticide have been practiced in the face of impending economic difficulty (Turnbull 1972). Since the society has still low socioeconomic investment on the infants who are non-productive and the society can no longer draw economic benefits from the old, both the infants and the old are considered socioeconomic liabilities. Hence, some primitive societies murder them in the face of impending scarcity of resources.

Abortion, through the use of massage and herbal plants has been also reported. This is done to prevent the fetus from reaching its full term birth. Motivations of such practice have been reported to be varied such as health of mothers or impending economic difficulties.

However, in conditions where scarcity of resources has already taken place, corrective measures on population size may be implemented. This is generally done through the redistribution of people. By migration, people are redistributed. The migration stream will usually start from places of high level of scarcity to places of low scarcity. In this way, demographic pressure on scarce resources can be relaxed, thus increasing its availability to the local population.

Due to the seasonality of resources, seasonal migration may be implemented and in places where seasonal migration has been already patterned, cyclical migration may take place. In the latter case of migration, the population moves from one place to the next until they have completed one annual cycle culminating in their return to their own place of origin (Prothero and Chaman 1984).

When the problem of scarcity of resources takes place in a given community, its household population may experience varying degrees of difficulties caused by the household's developmental cycle stage. Due to their varying demographic constraints and opportunities some households will be in a relatively better economic condition compared to others (Cade 1985). Some may be considered as "haves" while some others

"have nots." Especially 'between those who are related by consanguinity or affinity, generalized sharing may take place among the "haves" and the "have nots." Such kind of sharing seems to limit its focus to assure survival among those who are closely related by blood or ceremony. This type of preference has a strong adaptive biological implication.

Due to the high social focussing effect of the process of generalized sharing, the behavior takes place within a particular ethnic group. However, in cases of inter-ethnic marriages, generalized sharing may also cross ethnic boundaries. Such ethnic boundary crossing is legitimized by the marriage ritual.

In other cases, extreme scarcity of resources may convert a social system into a complete anti-social one. Generalized sharing is stopped and a highly individualized system develops. There is a breakdown in fact, of the family as a basic social unit (Turnbull 1978). Infanticide and geronticide may be encouraged — the family as a social unit, is breaking apart because of extreme economic deprivation. Individualism breaks the procreative function and familial support of the domestic unit.

Technological shift or development is one of the achievements of man designed to improve the efficiency of resource use. In the process, man has increased his level of production to meet his increasing needs. On the other hand, technological shift or development assists man when conditions of resource scarcity take place. It allows man to exploit other available resources in the face of disappearing traditional ones. The disappearance of the forest and its component resources led forest dwellers such as the Negritos to domesticate crops and animals. Since their traditional hunting, collecting and fishing technologies are no longer economically practical under the context of disappearing forest, agricultural and animal husbandry have been recently adopted.

Technological development may involve fine tuning and perfection of techniques to increase its appropriateness under a condition of scarce resources. Such response enables the local population to improve their chances of getting the desired output from a given resource such as a piece of land. While land may be avail-

able, its capacity to support plant life could be a very scarce resource. This happens in a highly infertile or sub-fertile soil. Because of its very nature, soil fertility becomes a very scarce resource. Under this condition, various refinements in the agricultural techniques may be introduced such as soil conservation and improvement.

When consumable resources get scarce, the logical behavioral response is to limit consumption. Through the process of limiting consumption, the availability of a limited resource can be stretched to a certain extent both in time and the number of people served. For instance, food resources may be conserved for a longer period of time if the level of consumption is reduced. Clothing materials can be saved to clothe a larger number of people by allowing only a minimum covering for every individual.

Different groups of people have done in one way or another various ways of limiting consumption to handle the problem of resource scarcity. However, the act of limiting consumption may have a negative effect on the practitioner if it is practiced too far. For instance, when food consumption is reduced too much, this may lead to an irreversible negative effect on one's health. Such a response, therefore, cannot be implemented on an unlimited basis.

Assuming that the problem of resource scarcity is not too severe, some members of a community may, therefore, still possess some resources, although they may be limited. In the face of extreme need for other resources, an available existing limited resource may be mortgaged to individuals coming from similar or other ethnic groups. Such an arrangement could lead to eventual loss of the mortgagor's resource to the mortgagee. Such a response only provides a temporary state of handling the problem of resource scarcity since it requires a re-investment on the part of the mortgagor in order to get back the resource from the mortgagee. Otherwise, the mortgagor loses his limited resource contributing further to scarcity of resources.

The argument that we have just claimed, proposes that in the context of resource scarcity, the human population will have to respond to the problem of limited resources. Such a response is potential. However, in the process of adjusting one's behavior to the problem, conflict of individual and societal interests

may take place. This conflict stems from the inter-individual or inter-group competition over the use of scarce resource. To re-establish order in the society, such conflict will have to be resolved. Each package of human adaptation constitutes the people's policies in adjusting to the problem of scarce resource. The attempts at maintaining one's control and access over a scarce resource represent a process of power play and individual struggle for survival.

THE ATAs: THEIR PRESENT SOCIOECONOMIC CONDITIONS

The Ata are presently agriculturalists trying to eke out a living from a completely deforested land site. Hunting and collecting are only occasionally practiced at present largely as a discretionary activity from their boring and unproductive farming results. Since hunting and collecting involve too much energy and far travel to reach distant patches of forest, these activities have only served as supplements to the products they derived from their farms.

A farm is generally cultivated by an Ata twice a year. During the first cropping season, he plants about one kilo to ten kilos of corn seeds. Major cropping takes place between the months of June to September. After harvest, the farm is cleared again for the second cropping in the months between September and December. In the second cropping, farms tend to be smaller compared to that of the first. In some agricultural years when the rains are still available in December, a third cropping may be introduced. However, third cropping is a very rare practice. During the cropping periods, corn is monotonously planted. Very limited crop, like camote (sweet potatoes) and cassava are planted. More so with vegetables.

Farms are cleared with the use of garden trowel to uproot the grasses and shrubs. In some cases, valleys are cultivated with the use of plow drawn by an ox or a carabao. Since farms are not given enough time to rest, soil fertility has gone down. Soil erosion has intensified as the human activities on the hills have increased. Hence, productive soil is a very scarce resource in the Ata community.

The farms of the 18 Ata families in Cangguhub, Mabina Negros Oriental (around 87 kilometers northwest of Dumaguete City), are characterized by rugged terrain accentuated by small valleys where soils are good and safe by erosion. In most instances however, a farm is situated on sloping grounds where only very thin top soil has remained. Through the use of rockwalls and big mass production along rockwalls, attempts are now made to restore the soil condition and improve soil fertility. Appropriate cropping systems are tried towards improving productivity level of the farms.

The Ata do not have any chance at all to expand their land possession. At present, the Ata families are confined within a 2 hectare plot which has been reserved for them through the intervention of Silliman University in a forest reserved area of the government. Considering the cultural community status of the Ata, the Bureau of Forest Development recognized the Ata occupation in the area as legitimate.

Given the land area available to the Ata and the size of the Ata population, the 18 families have only slightly over one hectare each to cultivate. Land is now a very scarce resource for the Ata. With the low fertility of the soil, farm production is usually below subsistence level. This has further created the problem of scarce resource among the Ata.

In order to augment the farm income, the Ata have resorted to sell their labor for wages either in cash or in kind. Especially during the post harvest period, wage labor is a daily activity of the Ata designed to tap the stored food of their lowland-migrant Cebuano neighbors. An Ata generally develops a special kind of relationship with a Cebuano for preferential labor-use by the Cebuano. This process secures the labor market for a particular Ata.

By tradition, the Ata do not have a rigid, highly structured sociopolitical system. Its leadership system traditionally consists of council of elders whose members have a special power of holding. At present, these kinds of people are no longer found in the community, hence their socio-political system is getting more loosely structured. With the increasing absorption of the Ata set

ment into the greater local barangay government, the Ata socio-political system has become a social fact whose functions are only minimally understood by its present members. Its leadership is now transferred to younger individual members whose qualifications are no longer based on their traditional healing capability but on traits such as aggressiveness, luquaciousness, and cosmopolitanism. This group of elders try to resolve interpersonal conflicts and assures order within the population.

The social sphere of the Ata has expanded at present as a result of intermarriage between the Cebuanos and the Ata. Such inter-ethnic social link has increased the Ata control on the use of resources not available within the Ata community. By crossing ethnic boundaries some of the Ata have succeeded in widening their economic environment from where scarce resources can be found.

DATA AND DISCUSSION OF FINDINGS

Although the 18 Ata families in Cangguhub belong to one ethnic group, they do not come from the same village unit. Two village units can be identified. One village unit consists of six families whose individual members were original settlers in the area of 21 hectares. They claimed that they were all born in Cangguhub.

The other village unit has 12 families, composed of individuals who moved into Cangguhub when the 21-hectare piece of land was opened for Negrito resettlement. The migrants generally came from similar neighboring community around 10 to 15 kilometers northwest of Cangguhub. Such group identification has remained to be loosely identified during normal condition and intensified when inter-personal conflict takes place between individuals coming from these two subgroups.

Conflict Resolution

One common problem in the Ata area involves stealing of domestic animals like chicken and farm crops such as corn and root crops. When an Ata from one group has his crop or livestock stol-

en, the accused is usually the Ata from another group. The Cebuanos are never accused by the Ata. Such accusation will always lead to a joint effort between each group to make and deny accusation. Threats are made like murder accompanied by brandishing weapons in public by the accused group against the accusing group. While it is true that stealing could have been done by one person, the accusation is generally hurled towards a collective unit. Since it is difficult to identify the individual culprit, the whole group is accused. This is based on the group's assumption that my own group will protect my own property. Hence, the victims never accuse one from his own group. It should be one coming from another group.

Once the steam of anger between groups has already diminished, order seems to be re-established. Each group leader tries to pacify its own group members usually resulting into a collective promise of inaction. The ax is buried and forgotten. Usually, the incident is recalled only when similar incident will happen in the future and a similar process will take place again.

Since members of each subgroup are generally linked by collateral affinal and consanguinal ties, the "we-feeling" with each subgroup is very strong and in fact, gets stronger when such "we-feeling" is threatened. Hence, individual conflict within a sub-group is not allowed to flourish, unlike between individuals coming from different subgroup identity.

This may be substantiated by an incident. The last Ata who died in 1971 had seven children. The third daughter got married to a mestizo Ata in 1969. The chief used to own a piece of land which he got back from a Cebuano land grabber through the intervention of the extension workers of Silliman University in 1969. When the chief died, his widow decided to sell the land for P2,000 to one of her married children. The third daughter, married to a mestizo Ata, was the only interested party and was willing to raise the amount. The arrangement was verbal and there was nothing that was signed by both parties to document the transaction. Negotiation like this in the Ata tradition is only covered by verbal agreements approved by their traditional legal system. It is a binding gentleman's agreement.

In 1986, one of the brothers murdered a Cebuano. He was arrested and sentenced from eight to 14 years in Muntinglupa after two years of imprisonment in Dumaguete City. While his case was still under investigation, his lawyer needed money. His mother had to raise the amount. Since his mother had difficulty in raising the fund, he finally asked his sister together with her mestizo husband to raise ₱2,000 for the land the couple had already bought in 1971. The murderer claimed that there was no document to support their transaction. Such act is an attempt to undermine their tradition by trying to invoke the present legal system of the government. Also, threats were made against his own sister and brother-in-law.

After a period of deliberation, the couple decided to give in to avoid trouble. "We do not want to break up the family," the couple claimed. Further, they justified the request by recognizing the difficulty the murderer was undergoing.

The conflict was resolved within the family without involving other members in the village. There is an apparent strong desire between individuals of this kind to hasten resolution to maintain peace within the extended family.

Another case involved conflict over farm boundaries between two Ata farmers coming from two different subgroups. One was accused by another for trespassing his farm boundary. While one was accusing, the other was denying. It almost led into a fight using bladed weapons (bolo). Through the intervention of another Ata, the fight was stopped. The individuals concerned were not in the position to resolve their own conflict personally.

The two cases of conflicts cited earlier involved scarce natural resources. The only difference between the two cases are the factors of the incidents. In the first, we have individuals who are related by blood and affinity and belong to the same subgroup. In the other, we have two unrelated individuals coming from two different groups. In the first, there was no tremendous outburst of anger. Instead there was an apparent strong indication of their desire to resolve between them the conflict amicably. In the second case, there was a tremendous outburst of anger that

can only be resolved by a third party. The cases suggest that the basic factor which determines how one can demonstrate his anger over a conflicting issue and how such conflict can be resolved is the identity of the persons involved. Basing on these incidents, we can hypothesize that conflicting individuals (over scarce capital resources) who come from two different subgroup identities tend to express conflict with outburst of anger which can only be resolved by the intervention of a third party. Otherwise, in cases that involved persons who come from similar subgroup identity, conflict is controlled without expressing anger and with a strong desire of persons involved to resolve conflict at the level of the conflicting individuals only.

When an Ata is accused of stealing by a Cebuano, another system of politics is demonstrated by the Ata. Two general patterns of responses can be discerned. First, all Ata, regardless of their subgroup identity would close rank and provide a solid front against the Cebuano. They would easily organize and arm themselves with sharp weapons to engage in an armed conflict with the Cebuano. This, however, has never led into an armed fight since nobody between the Cebuano and the Ata would fire the first salvo. Second, most of the Ata regardless of subgroup identity would close rank and provide a solid front against the Cebuano while few Ata (regardless of subgroup identity) would align with the Cebuano because of a close and special socioeconomic link with the Cebuano. Normally, the latter kind of response would simply keep quiet in the midst of anger and fury expressed by others. The special socioeconomic link between the few Ata and a Cebuano provides the former access to the resources owned by the latter. For this privilege, the few Ata have to keep quiet and show no support for the rest of the angered Ata.

Within the Ata context, this conflict is left to itself without resolution. The expressed anger is only left to dissipate by itself until the enthusiasm to fight out with the Cebuano dies down. At this point, such conflict is forgotten until another similar incident takes place.

When opportunities, like assistance activities are provided to the Ata, these are usually channelled through the local leadership system. Experiences show that the leader will always see to it that all members of his own subgroup have been taken care of first. Then this is followed by those who come from another group. In fact, among those who come from another subgroup, they seemed to be graded by the leader according to his degree of closeness to the other individuals. Those with closest social relations with the leader usually get priority in attention and those otherwise usually get the last attention. Such process of allocating opportunities has never been protested by the affected subgroup. It appears that there is an agreement among members concerning this arrangement. By virtue of the role of a leader, he has the prerogative to choose his own system of resource distribution. In like manner, the leader does not have such control over his own people under such a loosely structured sociopolitical system. It is through this manner of governance that the Ata enjoy a sense of freedom under all the changes they have to face today.

The household is the smallest social unit of the Ata for production and consumption. Possible consumers of the household products are graded according to the degree of biological or social closeness, regardless of subgroup or even ethnic identity. Because of inter-ethnic marriages now taking place among the Ata, biological or social closeness may cross ethnic boundaries. The definition of possible consumer of a household product gradually tapers off to those who have no biological or social closeness to EGO (meaning the speaker or spokesman of the household). Given these politics of resource distribution, EGO will have a low chance of survival if he has established a wider and closer network within and outside the community. In fact, such concerns have already been expressed by some Ata when they aligned with their ethnic group even when their own members were socially backed by another ethnic unit as we saw earlier.

Considering the low fertility rates of couples (Cadelina 1980: 111-115), an Ata household is on the average, distinctly smaller compared to their Cebuano neighborly counterpart. Hence, during peak seasons in one agricultural cycle, the Ata lacks the necessary labor force to do the work on time.

This is usually compensated by pooled labor. A number of A may agree to work on each other's farm in sequence. The polit of selecting participating members requires that all members a closely related to EGO preferably by consanguinity or affini Thus, pooled labor group generally consists of parents marr children, and sons or daughters-in-law. They claimed that und such composition, the working group is easily managed by EG This arrangement appears to be a preventive measure toward conflict development. Prevention is a cheaper system of managi conflict than correction when conflict has already taken pla Similar principle seems to be employed when EGO harvests farm products. Participating harvesters are generally screen and the basis employed for screening is similar to those used pooling labor. It is a focused form of altruism designed to incre the genetic survival chances of one's gene pool. As a behavior form of adjustment, it apparently has two social and biolog implications. First, it allows the household to manage competit and conflict economically. Second, it improves the survival chan of one's genetic resource. The second which has an evolutionis implication requires further testing in the future.

The data reveal that the Ata handle the problem of conf and competition on two levels. First, preventive measures are plemented. This is practiced on conditions where EGO has opportunity to make his own choice for his transactors. W perceived competition and conflict of interest anticipated to t place under a condition of scarce resource, EGO may decide select his own transactors who have the least potential for dev oping conflict and competition with EGO. In this case, EGO ticipates the conflict and employs means to abort the developm of an anticipated problem.

Second, when conflict and competition have been already curred, a resolution has to be implemented. Between persns have social or biological links and are having similar subgr identity, both or either persons work willingly to arrive at a cert compromise between themselves. For persons who are not in way related and come from different subgroup identity, a t neutral party has to intervene to resolve the issue. This involve the use of local traditional system.

When the conflict is between Ata and another ethnic group, the problem is simply solved by allowing each other's anger to die out. In due time, such conflict is forgotten. Under this circumstance, few Ata may maintain alliance or alignment with the other ethnic group for personal interest.

Processes of Handling The Problem of Resource Scarcity

On the basis of our field data, the following have been implemented by the Ata in handling their problem of scarcity of resources: compensatory measures; exchange and trade; population control; generalized sharing; technological shifts and development; redirection of consumption; and mortgage of resources.

Compensatory Measures: The land available to the Ata is limited. At present, 18 families occupy a 21-hectare piece of land. This land is surrounded by lowland Cebuano occupants. Hence, the Ata have no leg room for expansion. Each Ata family has to make a living out of a slightly over one hectare farm. As an Ata family matures, new labor in the household may be added. The need for more land is pressing but due to the absence of available lands such urgent demand is unattainable.

The inadequacy of land supply against surplus labor is met by utilizing the latter in other productive activities such as wage labor. To prevent immediate involution of land use caused by overconcentration of surplus household labor in a small piece of land, this manpower is designed to other farms for wage work. This, of course, will contribute to further scarcity of resources since return from wage labor is usually far below compared to what is usually derived from one's farm.

For consumable resources, compensation is done by substitution. In the absence of commercial textile materials, the Ata use bark cloth. In the absence of cereals like corn, the Ata purely subsist on root crops. While corn is considered the Ata as their staple food, its low production does not allow for a sufficient supply. They have to subsist on root crops during the wet months of the year.

In the absence of protein supply from domestic animals and commercial goods, the Ata have utilized animals found in the limited tertiary forest cover. These are wild cats and monkeys. Also, lizards and birds. These are hunted during occasional collective hunting activity.

Exchange and Trade: The Ata no longer confine economic activities in their own locality. They now have to take goods coming from the outside. Such necessity has to be met through economic transaction with the outside world using monetary currency.

Through trade, the Ata derive cash from their products from local middlemen. Such transaction is generally characterized by deliberate attempts on the part of the middlemen to underprice the goods sold by the Ata and to overprice the goods bought by the middlemen. This practice has further increased the scarcity of resources among the Ata. Because of their innocence they are exploited.

Through networking, some of the Ata have succeeded in having fair dealings with the middlemen. Until this time, however, this is still an exception rather than the rule. Through a network, an Ata may have his own products exchanged with another having approximately equal value. Root crops may be exchanged with salt, soap, salted fish, kerosene and many more.

Exchange or trade among the Ata takes place only between two different ethnic groups. Since the Ata generally have similar category or nature of products, inter-Ata exchange trade cannot happen. The Ata have to seek other ethnic groups whose resources are different from what the former has. What has been exchanged, however, should not be considered as surplus product. Production is still on a subsistence level. Through exchange and trade, the Ata are able to bring products into their own locality which they do not produce locally. Since the production works on the basis of replacement and not by addition, exchange or trade, therefore, has no role in increasing absolute production of the Ata.

Population Control: To establish the link between population and scarcity of resources among the Ata is difficult. Likewise, to claim that the Ata are deliberately controlling their population in order to yield their present fertility level is impossible. In short, we cannot make absolute statement at this point that the Ata are deliberately keeping their present population size to enable them to handle their problem of resource scarcity.

At best we can make inferences from the present fertility data of the Ata in relation to their attempts at handling the problem of scarce resources. We can therefore hypothesize that by keeping their fertility down, the problem of scarce resource must have affected their food supply so that their nutrition is heavily affected bringing sub-fecundity to mothers.

In an earlier study (Cadelina 1983:112-113), it was concluded that the pure Ata couples have rather low marital fertility ratio compared to mixed marriages. Such findings are still true at present. It was noted that for every 100 mothers aged 15-49, only 25 babies are born compared to 750 among mixed Ata couples. Such depressed fertility of the pure Ata couples is only open for populations.

First, it is possible that the Ata are facing the problem of tremendous scarcity of resources so that attempts at controlling birth are deliberately followed such as postpartum sexual taboos, prolonged lactation and traditional contraception.

Second, the problem of food scarcity among the Ata might have severely affected their reproductive capability so that a good number of the Ata mothers become infertile. This is not intentional but its implication on resource scarcity problem is still the same if controls were intentionally made.

Dispersion of the population through migration has not yet been documented among the Ata. The problem of deterioration and lack of available land sites somewhere else prevented them from expanding elsewhere. Hence, they have to keep their present residence. Under this condition, the only option they have is fertility

Generalized Sharing: Giving for the sake of altruistic concern is still being observed among the Ata. It is a process of sharing goods and resources without any expectation for a return. It is given like a gift (Sahlins 1965).

Generalized sharing usually involves food which are either processed or unprocessed. A consumable good is usually given to another person as an expression of good will. It may also be given as a recognition of another person's economic difficulties which would therefore not require any reciprocation. Relatives who have sickly members and cannot work for an indefinite number of days are usually the objects of such kindness. The process disperses the resource from the "have" to the "have-not" households.

This process of moving scarce resource from one household to another is highly diffused. It is only confined between closely related individuals. Hence, we expect this process to happen mostly within the Ata population or within a subgroup of the Ata. In cases where inter-ethnic marriages have taken place, this form of sharing consumable resources crosses ethnic boundary lines.

Diffused sharing of scarce resources has important adaptive and evolutionistic implications. Adaptively, it provides effective management of scarce resources since within this level of related individuals, there is an intensified form of generalized sharing. Hence, interhousehold flow of food resources is high, improving one's chance of becoming a giver and a receiver under a reciprocal transaction. There is a good possibility that the act of giving can be approximately compensated for by what one will receive in the whole cycle of giving and receiving. There may be no net loss but in time of difficulty, one is able to survive through. Households that are most of the time in deficit can be helped by other households under a relatively more advantageous economic system until such time that the former improves its economic status. This is expected since a household is a dynamic social unit that constantly changes its constraints and opportunities over time (Cadenhead 1983).

The chances for survival of the genetic pool of the transacting individuals under generalized sharing will be higher compared to other non-transacting individuals. However, since every household has its own unit of extended families, various subunits of households establishing generalized sharing are formed.

Technological Shifts: The disappearance of the forest and the accompanying minor resources has forced the Ata to partially abandon hunting and collecting. What has been abandoned is replaced by farming. At present, around 99 percent of their household product has been drawn from farming and wage labor and the rest from occasional hunting and gathering. Lizards and wild cats are hunted at present, while honey is also occasionally gathered.

Before, the Ata employed slash-and-burn agriculture. This was characterized by regular shifting of sites allowing the fields to rest. At present, the Ata have gone into intensive garden agriculture without fallowing. Every year, a farm is cultivated, at least once a year, and planted with crops like corn and root crops as we saw earlier.

As a response to intensive soil erosion, the Ata have now improved their agricultural practices through the assistance of Silliman University Research Action Development Program In The Highlands. Such improvement consists of the introduction of proper land management and appropriate cropping system. Soil erosion control measures are now put up on their farms designed to reduce soil, control soil erosion and improve soil fertility. As part of the improvement of cropping systems, fruit trees, fuelwood and lumber trees are now introduced in their farms to improve crop production and ecological balance in the area. Mixed cropping is now encouraged between corn and leguminous crops such as mung beans, soy beans, peanut and others.

These are fine developments taking place in the Ata agricultural system. These changes are designed to cope with the problem of increasing scarcity of soil and soil fertility. As we saw earlier, while the Ata are facing the problem of scarcity of land to till, they are also facing the problem of scarcity of fertilizer on the lands they own at present.

Reduction of Consumption: The Ata have seen the connection between the availability of consumable resources and their consumption pattern. By restricting consumption, the Ata have handled their problem of food scarcity. Normally, the Ata take three meals a day. During harvest season, the Ata (both children and adults) are observed to take three meals, at least, in a day. In some cases, snacks between meals are even served.

During post harvest period, when harvested crops are already consumed, the Ata are observed reducing the number of meals they eat. Likewise, the children are observed to have reduced consumption. However, the Ata give food preference to the younger children. During lean months, adults are observed to have taken only one meal while the children may have, once in a while, two meals. Nevertheless, single meal becomes the rule during lean months for both children and adults. While the number of meals per day has been reduced, the quantity of food served in a meal is also diminished. This, of course, as we mentioned earlier, may have an irreversible negative effect on their health. Impressionistic observation on the Ata physique shows more bodily fat accumulation during harvest season and a reduction of this during lean months. They tend to be lethargic during post harvest season when food intake is limited. Thus, most bodily activities have been affected by food consumption reduction.

Mortgage of Resources: Emergency needs for cash have led to mortgages of the Ata limited capital resources for even land clearing. For instance, the procurement of planting seed materials is their usual annual problem. Due to the absence of cash to purchase costly seeds during planting season, the Ata mortgage part of their land clearing for one cropping to another ethnic group like the Cebuano. After the cropping, the land clearing goes back to the Ata. Generally, mortgages are made in such a way that the Ata do not have to pay at maturity. It is a precautionary measure against the possibility of foreclosure.

S U M M A R Y

Competition over the use of limited resources, usually leads to inter-Ata conflict. This may involve capital and consumable resources. Conflict over these limited resources are resolved

an interpersonal level or via the traditional loose community leadership structure. Conflict between individuals who are related either by consanguinity or affinity is generally resolved on an interpersonal level. On the other hand, conflict between unrelated individuals coming from two different subgroups usually requires the intervention of a neutral third party usually represented by the loose sociopolitical system of the Ata.

Cebuano-Ata conflict is generally left unresolved until such a system is remembered. This is usually forgotten when similar incidents take place. While conflicts of this nature may lead into an expression of anger on the part of the Ata, this normally does not lead into an open fight since neither of the Ata nor the Cebuano would start the physical confrontation. It is simply a public demonstration of ill-feeling which only dies down later.

Generalized sharing of resources is largely handled by diffusing the transaction to limited households whose members are related either by consanguinity or affinity. It is a preventive measure of measure against possible development of conflict in the case of scarce resources.

In handling their problem concerning scarcity of resources, the Ata have implemented seven measures: (1) compensatory measures; (2) exchange and trade; (3) population control; (4) generalized sharing; (5) technological shifts and development; (6) reduction of consumption; and (7) mortgage of resources.

For extension implication, the distribution of resources or opportunities should not be directly channelled through the local leadership system of the Ata. Since subgroup identity is very strong, most likely local leaders would favorably extend all benefits to his own subgroup. Hence, assistance program should directly handle (only with the assistance of local leadership) in sending benefits to the Ata. The reverse, which is ideal, should be followed for this particular native population.

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