

DAKLIS: A COLLABORATIVE FISHING TECHNIQUE

Ferdinan N. Cortez

Member, University Research Pool
University of Saint Louis
Tuguegarao City, Philippines

© 2014 The Author(s). **Open Access** - This article is under the CC BY license (<https://creativecommons.org/licenses/by/4.0/>).



Abstract— This study aimed at recording the daklis, a collaborative fishing technique in Buguey. This study made use of the qualitative-expository research method using key informants such as the members of the daklisan, municipal officials and barangay folks of Buguey. The daklisan are simple folks aspiring to earn honest living. With the income that they earn during the daklis season, they augment this when harvest time in the fields come. They are also farm hands, carpenters and plowers. Daklis is one of the most popular fishing techniques in Buguey and in Gonzaga. The peak season starts early in March, when the waters' color becomes tropic blue, and ends mid-May, when rains and thunderstorm would make the sea turbulent. It is also unique, because it involves a whole barangay in its peak season. From a crude concept of fishing come an organizational structure and sharing and the spirit of bayanihan therein. The terms however, signify Hispanic origin. The people listed above are not sufficient to pull the heavy net (plus the catch). The amo and the sobreamo have to employ pullmen and boatmen. Thus, a scheme of sharing was conceptualized.

Keywords— *Daklis, daklisan, local fishing technique, collaborative fishing*

INTRODUCTION

The Philippines, being an archipelagic country, is rich in coastal resources. It is comprised of more than 7,000 islands with a total coastline, longer than that of the United States, is over 18,000 km. Seventy percent (70%) of its 1,500 municipalities are located in coastal areas. Coastal fishing activities account for 40-60% of total fish catch with the fisheries sector accounting for about 4% of Gross National Product (2003 stat) and employing more than a million Filipinos. (AgriScope, 1997.) Fish and other marine products supply 70% of total animal protein intake and 30% of total protein intake (CRMP, 1999). Tourism is a growing industry in the coastal areas, and together with fisheries and other economic activities in coastal areas, contributes to a host of environmental, socioeconomic and institutional problems.

Fish is a very important commodity in the Philippines. It is the principal source of cheap animal protein in the country. Declining fish yields have affected both the nutrition and income of fishing communities. Scientific results indicated the need for fishing effort to be reduced by a factor of two for the fish populations to recover over a decade ago but conservation and rehabilitation efforts since then have not shown results that indicate significant recovery of habitats and stocks. (Pauly et al, 1989)

As people cannot do otherwise but to fish for game or income, safety measures were done by both government and environmentalists.

The high demand for exotic tropical marine products abroad which spurred a frenzy of unsustainable harvesting practices in the Philippines in the 1990's also contributed to the degradation of coastal resources. Uncontrolled harvesting of sharks, sea urchins, and sea horses used for food and medicinal values contributed to almost local extinction of these species in certain fishing grounds. Aquarium fish and certain high-value species of snappers and groupers that need to be exported live so that restaurateurs can display them alive (fresh) before cooking are harvested with the use of cyanide. Cyanide, when squirted into the water to stun the fish, kills coral reef organisms, and this practice has led to the surreptitious destruction of extensive areas of coral reefs (Erdmann and Pet-Soede, 1996).

About 27,000 sq km of coral reef area occur within the 20 m depth contour, but 70% of these coral reefs are in poor to fair condition and degradation is unabated (Gomez et al. 1981). Dynamite fishing and trawling, plus the destructive MURO AMI by subsistence as well as commercial fishers largely contributed to the leveling of coral reefs. MURO AMI is so prevalent in Visayas and Mindanao, while inshore and driftnets are in Cagayan Province of Luzon. MURO AMI is now prohibited in selected areas. The number of subsistence fishers is continuing to rise because of rapid population increases in coastal communities. Even if these fishers use benign fishing practices (e.g., simple hook and line), the sheer variation in techniques were seen to be man's example of being able to fish. (Malthusian overfishing) (Pauly et al. 1989).

Political, as well as socioeconomic structure and cultural values and characteristics, that is generally the same throughout the country but different to some extent by region, are also among the factors that have led to a common pattern of fishing for a living. This pattern involves a series of stages that include discovery of a resource, exploitation, over-exploitation, decrease in yield, depletion, then recognition of the need for management. As such, to protect the endangered species and the coral reefs, RA 8550, commonly known as Fisheries Code of the Philippines was enacted. In section 2, it says, "it shall be the primordial aim of any Local Chief Executive in the coastal area LGU to protect at all cost about to be extinct species and the coral reefs."

Buguey, a coastal municipality, is a fishing community. This is due to the fact that it is surrounded by water, both brackish and sea, home for many varieties of fishes and aqua marine resources. The lagoon is home for prawns and crabs, shrimps and mollusks, while the sea is a breeding ground for tuna, lapu-lapu, sea urchins and anchovies. There are two types of fishing in Buguey: sea fishing and river fishing. As mandated by RA 8550, the sea fishermen have to follow the prescribed depth and distance from the shoreline.

One of the least notable but culturally aligned to bayanihan is the daklis (purse seine). It is a collaborative effort that includes whole barangay folks during summer, its peak season. Buguey's shoreline is different from other coastal areas. There are no coves or inshore islets, and it spawns kilometers upon kilometers to the Balintang Channel. Daklis is then very appropriate including trawlers and anglers.

One of the most valued traditions of Filipinos is bayanihan. However, due to the advancement of technology, seldom we see this practice already. While such is still in the books, seldom it is seen as the once extended collaboration for a certain task. Daklis, its procedure and the people involved would then be the core of this study.

Statement of the Problem

This study primarily was aimed at recording the daklis, a collaborative fishing technique in Buguey. Specifically, it answered and elaborated the following questions:

1. What is the historical development of the daklis?
2. What is the demographic profile of those engaged in the daklis in terms of
 - a. age
 - b. civil status
 - c. economic status
3. What are the practices of those engaged in the daklisan in terms of
 - a. sharing scheme
 - b. fishing technique
 - c. organization
4. What is the perceived value of the daklisan among the Bugueyanos?

Assumption

It is assumed that the daklis, its practices and its ways, is still valued by the Bugueyanos.

Significance of the Study

The Academe. In its role as builder of knowledge will be benefited by the results of the study.

Lovers of Culture. Scholars of anthropology will be benefited similarly for they may use the material for other salient studies.

The Bugueyanos: They will come to know about this way of fishing, one thing they had been practicing but had not known it through written account. It may not be remote, but

Buguey as a Tourist spot now may yet to include such a fishing technique in its must-see catalogues. Environmentalists may react, if and when it is found out that daklis contributes to the depletion of the coral reefs.

Literature Review

This case describes the experiences of the Establishment of Marine Reserves in Negros Oriental (EMRINO) project, which took place in central Philippines, from September 1994-December 1996 (Vogt and Schirm, 1994, 1995, 1996a, b, Vogt 1998). The study aims to protect selected parts of the coral reefs in order to allow over-exploited economically important food fish stocks to recover. This measure was expected to reverse the decline in fish catches for small-scale fisherfolk in areas near the new reserves. Since World War II, coral reefs in Negros Oriental have been subjected to the use of dynamite for fishing. This method, despite its dangers, is viewed by artisanal fishermen as more time and cost efficient than other fishing techniques. Unfortunately, explosives or 'blast fishing' also has devastating effects on the coral reefs, as the shock waves caused by explosions can reduce reefs to mere rubble zones. An estimated 5,000 km² of coral reefs have been destroyed by the use of explosives in the Philippines, (McAllister and Ansula, 1993). Coral reefs have very slow growth rates, and once a reef has been damaged by explosives, it may take many decades to recover to its previous state.

The consequences of this reef destruction with regard to the total size of the fish stocks are unknown, but the local fishermen are only too well aware of their declining catches. The local reefs are already being heavily over-fished using a wide range of fishing methods. Many of the fish now caught are still juveniles, and for some important target fish species, large adult specimens have become a rare sight. Fish aggregating devices have been placed in many offshore locations to attract fish, thus making fishing more time efficient for some fisherfolk. However, if the problems of habitat destruction and over-exploitation continue, the livelihoods of many coastal villagers will become even more uncertain. Already, large numbers of Filipinos choose to work overseas to support their families.

The changes which have led to the present levels of ownership and environmental awareness in Negros Oriental have developed around two themes, the delegation of legal powers from central government to local councils, and the willingness of local communities to grasp the opportunity this allowed to save their threatened resources.

Coastal fisheries tend to be common property resources. A major step towards limiting these open access fisheries to Philippines coral reefs was the delegation of central power to a municipal forum by the introduction of the Local Government Code of the Philippines (1991). This empowered municipal mayors with the right to issue permits to all fishermen

operating within municipal waters. This enabled restriction of fishing by outsiders, thus protecting the catches of fishermen living in the municipality (Christie and White, 1997).

Staff from Silliman University in Dumaguete City, the provincial capital of Negros Oriental, was active in preventing blast fishing on reefs near the city as early as 1969. The campaign against blast fishing was soon extended to other areas of the province, and in 1972 such fishing was effectively banned in the entire province. Then in the early 1980s, the University actively involved the local fishing community of Apo Island, in the south of the province, in a marine reserve program. All destructive fishing methods were banned around the island, and within an agreed demarcated reserve area fishing was banned completely. Local fishermen did not fish within the reserve, and were active in preventing fishermen from other islands from so doing. The fishermen expected that fish stocks within the reserve would recover, and that fish catches in the adjacent areas would increase and be available for capture by local fishermen. Since then, the Apo Island marine reserve has received worldwide attention, and serves as a model for numerous other programs in many areas of the world. Finally, in the Central Visayas, the World Bank funded a coastal resource management program as part of the Central Visayas Regional Project I (CVRP-I). During the course of this program, several communities managed coral reef reserves were established in the project provinces.

After the termination of the CVRP-I phase in 1992, the Provincial Government of Negros Oriental created the Resource Management Division (RMD), which continued the CVRP program using provincial resources. The strength of the RMD lies in the close contact of its staff to the fishing communities. This has been made possible by the work of about 30 community organizers who regularly visit the villages. Although the RMD received strong support from the Governor and technical support from the German Development Service (GDS), more scientific expertise was needed.

This gap was filled by the project, the Establishment of Marine Reserves in Negros Oriental, EMRINO (1994-96). The project was funded by the Commission of the European Union, DG 1B, External Economic Relations, and administered by the University of Bremen, Germany. The main objective of EMRINO was to establish small marine reserves, in order to provide protection for sections of coral reefs where recovery of the fish populations could take place. The underlying principle was that successful reef conservation could only be achieved if the local fishing communities, as the main stakeholders, were in charge of selecting and managing the reserves. The project created a non-governmental organization (NGO) called the Center for the Establishment of Marine Reserves in Negros Oriental or CEMRINO, Inc. This NGO provided scientific, technical and logistical support to the provincial government and in particular to the RMD. A systematic survey of the entire coastline of the province was conducted, to locate and assess

the status of the coral reefs. Once detailed inventory studies had been completed, 14 sites were recommended to become marine reserves. These recommendations were made available to the RMD and the community Fishermen's Associations. The information was used to draft community ('Barangay') resolutions, which were presented in public hearings at a municipal and provincial level. The resolutions were converted into municipal ordinances, and became legally binding, once approved by the municipality and the provincial parliament.

The key institutional change which facilitated this project was the introduction of the Local Government Code. This code brought legal empowerment to the local communities, and together with the pioneering activities of Silliman University staff, the example of Apo Island, the Governor's support, the environmental awareness-building of CVRP and the RMD, and the scientific and logistical support of the EMRINO project, enabled the villagers to make informed choices regarding the future of their marine environment.

Fishermen have stated that the marine reserves have had a positive impact on their catches in areas near the reserves. The fishermen are encouraged to weigh and record their catches, as part of the fish catch monitoring program. Indeed, villages now compete with each other to produce the best quality data for RMD. These quantitative data are essential for the assessment of the economic benefits of the reserves. Another potential source of income for local communities may be small scale tourism on the protected reefs. While may make only a small contribution initially, in Apo Island Reserve, tourism has already contributed considerably to the income of the local community (Vogt, 1996).

The sustainability of these activities depends, in addition to the continued desires of the local coastal communities, on the continued existence of the RMD and the NGO CEMRINO. During the project, a media campaign was initiated to raise environmental awareness and the profile of the RMD. This has since become a well-known organization in the Central Philippines, with representatives from other organizations visiting their offices to learn from their experiences in Negros Oriental. As a result of its excellence, the RMD received the Galing-Pook Award from the Philippine President in 1995, for its outstanding environmental program. The institutional arrangements allowing its existence were made possible by the strong support from the governor of the province of Negros Oriental. The increased effectiveness of the RMD has, in turn, led to improved management of the coral reefs. Prior to the EMRINO Project only 10 reserves had been established, some of which were poorly managed. As a result of the EMRINO/RMD/GDS co-operation, numerous workshops were held in the villages. Fishermen became more aware of the benefits of reserves and supported their establishment. By the end of 1996, the number of reserves had been increased to 19, covering a total area of 177 ha. This means that about 7% of the total reef area in Negros Oriental is now protected by law.

The reserves are now clearly demarcated, and guardhouses are provided for each local fishing community, whose members enforce the reserves.

In the Philippines, coral reefs and their associated fish stocks have been in a state of decline throughout most of the archipelago. However, these processes can be arrested, if local and regional authorities collaborate effectively and involve the fishing communities in reef protection. The EMRINO project has shown that if additional catalytic support is provided at the right time, then community-supported environmental protection can be put in place, and fish stock regeneration can be achieved. Fishermen told the project review mission that they wanted their children to catch more fish than they were currently doing, and that they viewed this project as an entirely appropriate way to achieve this.

The success of the project in a number of villages in Negros Oriental suggests the possibility for wider dissemination of project activities to elsewhere in the province. Village meetings within the province to discuss legal resolutions to establish reef and fishing reserves were frequently visited by representatives of adjacent villages demanding similar project activities in their villages too. However, the possibility of extrapolating these methods elsewhere in the Philippines archipelago may not be so feasible. The Governor of Negros Oriental may be unique in his strong support for conservation issues, and in his appreciation of the need for sustainable coastal resource management. Unfortunately, some provinces are notorious for their continued use of dynamite fishing. Whether this is due to a lack of environmental awareness or a fishery of desperation is uncertain. This would need to be determined before further activities were undertaken. The legal framework is certainly available to support other provincial governors if they wished to initiate groups similar to the RMD, to raise local environmental awareness. Several other provinces have shown an interest in the methods used as a result of its proven successes. Another area of Replicability would be to consider environments other than coral reefs which are at risk. Recruitment to the adult stock of many economically important fish species relies heavily on juvenile survival in mangrove swamps or sea-grass beds. Awareness of these habitat requirements, and the wishes of local communities to preserve small areas of these as foci for breeding and juvenile sanctuaries, is being considered as an extension of the present EMRINO project.

With all these, considering the richness of aquamarine resources of the Philippines, laws were made to protect the coral reefs and other endangered species. However, responsible fishing like inshore fishing in the Northeastern Coast of Luzon is encouraged, notwithstanding the Taiwanese poachers in Calayan, for the law will deal with them. Further, cited literatures and study are related to the study at hand.

METHODS

The study made use of the qualitative-expository research method using key informants such as the members of the daklisan, municipal officials and barangay folks of Buguey.

The standard participant observer method was employed and unstructured interview technique was utilized to gather the data for this study. These are necessary inasmuch as the study is qualitative.

The study's setting was Buguey, a fourth class municipality situated between Sta. Teresita and Aparri in the coastal area of Northeastern Luzon. Buguey is a coastal municipality. Buguey is chosen as the venue of the study since there are still many daklis operating there. The members are also accessible. They come from Paddaya and Minanga and are easily reached by the researcher.

Subjects of the study are the members of the daklis, barangay folks of Paddaya and Minanga and local officials of Buguey. Personal experiences of the researcher (he is familiar with the daklis) will also be presented in the body of discussion.

Interview was the primary tool and camera was used to capture the events needed in the study. Since this study is qualitative in nature, convenience sampling was utilized. Moreover, no sampling technique was employed. Since it is quasi expository, the appropriate term of whoever will give the data is stakeholders. (Galuba, 2004)

Employing participant observer technique, the researcher sought information from key informants as to the history of daklis in Buguey, the process, and its relationship to bayanihan. As to the other specific questions, the researcher floated personally the questionnaire. Unstructured interview was also used. Field notes, listening to the narratives of the barangay folks and the use of camera was extensively used.

Upon writing down the facts gathered from the subjects and key informants, the researcher compared their statements with what he had in his field notes. Pictures were developed to coincide with the explanation and narrative in Chapter IV.

Finally, the researcher answered the specific questions on hand.

RESULTS AND DISCUSSION

Principal Fishing Techniques

There are three Principal Fishing Techniques.

Pots - this is a technique wherein the trap lies near the seabed. The bait is placed inside to attract target species. A line is left attached to a buoy at the surface and a vessel with large

winches pulls up the pots. This type of fishing is commonly employed in the Mediterranean. Similar to this in river fishing is the tallakeb. Only, the water is shallower.

Hook and Line - it could either be stationary (long line) or towed, (trolling) A long line reaches from the surface to the seabed (up to 150 fathoms) Troll lines can go down to ten fathoms.

Fishing Nets - there are four main types. A purse seine encircles fish, from the surface to ten fathoms. A midwater trawl is a towed net that can catch fish from the surface to the bottom. The bottom trawl can either be towed or used to encircle fish near the ocean floor. Gill nets are stationary, from the surface to the bottom (up to fifty fathoms).

The Daklis is a fishing net that encircles fish from the surface end eventually to the bottom.

The Daklis

One of the most popular fishing techniques in Buguey and in Gonzaga is the Daklis. The peak season starts early in March, when the waters' color becomes tropic blue, and ends mid-May, when rains and thunderstorm would make the sea turbulent. It is also unique, because it involves a whole barangay in its peak season. The spirit of bayanihan is felt, as young and old participate in the pulling of the ropes and nets before the purse (bubo). The bubo contains the bulk of the catch. Sometimes it includes small sharks and stingrays. Most often, tons of dilis and anchovies trapped in the net or are contained in the purse become the fruit of the days effort. These are sold to waiting compradoras who would in turn sell it in Aparri or in Tuguegarao. Either Barangay folks who participated in the "pulling" could dry these anchovies in the sun (Daing), or they make them as the flavored bagoong. (Caviar). One recipe is cooked from an earthen jar, covering palmfuls of anchovies with banana leaves. Another is by just mixing salt, vinegar or calamansi and ginger. This is known as kilawen (eaten raw). The daklis is a fragmented whole. First, the officials are organized, then the boatmen and the netmen. This is the start of an organizational set up, starting from the amo to the bumbero (rope men).

The nets are formed in U shape, with the size of holes as quarter inch. Anchovies (munamon) measure 2.5 in. long and .75 cm. in width. The size of the net holes is ideal for this fish. The net is then attached to a rope more than 100 meters long (except the purse) by a pakawan. The pakawan is a sturdy, seasoned bamboo where the Y shaped rope holds the net in place. The whole assembly is deposited in a boat, supported by planks of wood fore and aft. The keel is flat, so it could contain the net and the men. In the early days, the boats were big. The boatmen even used oars (lapag) or sails (layag) as they scout for schools of fish. But as lumber and timber became scarce, and the use of motorboats in pulling the boat containing the net

became prevalent, the gargantuan boats became smaller. Still, the mast is not removed, for the person good in scouting the pangen (school of fish) has to stand elevated by this mast. The boats of the daklisan are elaborately painted, with names of the boat or owners on both sides. Barangay folks could then identify the owner by the color it uses. If there is a very big catch, they raise a flag, thus letting the people know either they could try casting nets again or stop for the day off. The daklisan can have at least three castings per day. The pull men (agguyod) would walk the shore to where the boatmen cast the net.

Origins of the Daklis

The use of boats had been natural to seafarers. The use of nets however has its origins from the pensionados who went to the Americas, observed the trawlers using long nets, and catch tons of fishes. Buguey, a fishing community, had been using gill nets, stationary nets used to trap tilapia, porong and bangus. Bugueyanos also use the tarik in the river.

The daklis was associated with the biray, as Samuel Tapat tells it, these are big boats used by the Ilokanos to reach the shores of Cagayan. The problem was there was no motorized bancas yet before to pull the boats. It was not a problem then. They used the oars and the sail. The problem was how to pull the net from the water. Combining enterprise and bayanihan, the daklis was formed, using human effort to pull the net from out of the sea.

Why Collaborative?

The net is heavy. Even though the amo has now identified the officials of the daklis, and plenty had already enlisted as part of it, they still need others to pull the heavy nets. These people who are not part of the daklis but who go there to help pull the net are called makipagguyod or makidaklis. They are rewarded with a share of the catch, but not money. They pull the rope up to the time the purse comes to shore.

It is just like the carrying of a house in bayanihan, where those who helped are rewarded by a sumptuous meal. Those who are termed as makipagguyod are given at least three or four kilos of anchovies after they (the officials) have sorted out the catch in a saludan (woven rattan container). One saludan could weight 50-100 kilos. Most of the times, one casting could have 10-20 saludan. If the catch is not bountiful, however, the sharing is lowered to a kilo or less.

A neophyte may not readily identify the regular members of the daklis, but a person who had been used to the daklisan can. The regulars have with them sikote, an instrument which is a combination of wood and rope used in pulling the rope and the net. The wood is shaped like a yoke (sangol) or patennged, only it is smaller and it is worn around the waist. This is convenient for the daklisan because the momentum to pull is greater when the force comes from the

waist. The sikote is placed around the waist while the end rope is attached to the main rope or net of the daklis. The pullmen then have to walk backwards, pulling the rope first, then the net. From time to time they have to stop momentarily, to wait for the current to subside. Sometimes the prowador sings in sync with their steps, thus filling the air with gay tune as everybody joins in the singing. Sometimes, when the current is so strong, the pullmen scramble towards the water, letting go of the rope before it will be strained.

Hierarchy in the Daklis

The following is the hierarchical system in a daklis:

Amo: owner of the daklis. Meaning, he financed all that is needed in the enterprise.

Sobreamo: the trusted one, very close to the amo.

Piloto: in charge of the boat. He sees to it that the nets are arranged so it will be easier to drop it at the side of the boat. Further, he is in charge of the timon (rudder)

Matador: this is the person who acts as a look out for school of fish. He stands at the mast of the boat which is normally elevated.

Prowador: in charge of the rope, and the platoon of pullmen. He also sees to it that the catch is safely placed in the buyer's truck.

Cabesilla: the person in charge of selling the catch to the compradoras.

Guardian: look out, monitors the purse and the selling of the catch.

Tapwak: in charge of dropping the net to the water

Bumbero: he swims with the rope to the shore, especially if it is low tide. The boat follows the direction of the fish, and the bumbero swims to shore where he signals the pullmen to come to him.

From a crude concept of fishing come an organizational structure and sharing and the spirit of bayanihan therein. The terms however, signify Hispanic origin. The people listed above are not sufficient to pull the heavy net (plus the catch). The amo and the sobreamo have to employ pullmen and boatmen. Thus, a scheme of sharing was conceptualized.

The Sharing Scheme

The officials have the highest share in the enterprise. The total income in one season is divided by two. One half goes to the amo and the other half is divided between the officials and the members. This sharing is called ingguddua. In every season, the cabesilla sees to it that the members are all present; so as to be assured that everybody will be included in the sharing.

When asked how could they know the real amount of the income per season, one member answered the cabesilla always update them every after the pakat, when shares for those who helped (Nakipaggyud) and the catch were already sold.

When asked if they are happy with their job, they remarked: "Dayawen mi ti baybay ta adda ditoy ti sagot ti Dios kadakami. Naragsak kami ngamin, nu agtrabaho kami, kasla asideg kami kenkuana." (We praise God for giving us the sea with its gift, we are happy because when we work, we are really near him)

They are not ashamed in telling that they receive low income, though, and they even say "saan kami ngamin nga nakapag-adal." (We have no education)

How it Starts

As early as January, when the sea becomes calmer, men and women starts going to the amo or the sobreamo to be listed as a daklisan. Meaning, if they are listed as members of the enterprise, they will be included in the sharing for the whole season. The sharing is accumulated and is given to them after the end of the daklis season. Some would get payment in advance (vale).

The amo now designates positions like cabesilla and prowador, and a schedule is set for the netmen to fix the purse seine. This is the stage where they fix the big holes of the net. (agayuma). The netmen bring with them their gittay and they also attach missing gamaw or patapaw (buoys) to let the upper portion of the net to float, or attach missing buli (weights) to let the lower part of the seine submerge to the bottom of the water. The net is then stretched along the shore, where they build temporary shelters covered with coconut palms. The ayuma starts. The netmen are paid by the amo per day.

The Basbas

One practice, which is being observed by the daklisan, is the basbas. The net is raised on top of the mast of the boat and they butcher pig, the blood of which is poured into the bubo. According to Manolo Macutay, who had spent his life with the daklis, this is a ritual asking the anitos for a good catch. The meat of the pig is cooked, but there are no spices. Members of the daklis and the visitors bring salt. Plenty of wine is offered, while the panglakayen offers wine during his incantation. Atang is then served beneath the raised net. In the olden days, old men would recite dallot while the celebration is going on. The celebration usually lasts up to the wee hours of the morning.

Most members of the daklis have an annual income of 6,000-8,000 pesos annually. The amo is the most moneyed, having financed the whole enterprise. Most of them are Ibanags who claim to have been born in Buguey. During lean months, they endeavor in farming. Others venture into other fishing techniques.

Most of the daklisan are from Paddaya in Buguey, near the boundary in Aparri in the west. Some are from Minanga. The

shoreline from Centro West to Paddaya is the common target fishing ground of the daklisan. As to date, there are only three surviving daklisan in Buguey. The original daklis, the REMEDIOS and the VIERNES had switched to trawling and buli buli, other offshore fishing characterized by big motorized boats and is operating within the restricted zones near the Balintang Channel. The daklis is an inshore fishing enterprise, which cast their nets at 250 to 300 meters from the beach. The bigger ones before go as far as 500 meters to 1 kilometer before casting.

Butch Pagador, a key informant who works at the Mayor's Office said the daklisan today are already smaller. This could be attributed to the fact that many of the daklisan are now venturing on trawling, going as far as the seas near Camiguin to hook blue marlin and Dorado. Engr. Benjie Upano however said it is because of the irrigation project that is now operating in Balza Creek, which provides water to the rice fields in Paddaya, most sea fishers are now in farming, which is more lucrative than the seasonal daklis. There are some setbacks of the irrigation, however. Because of the Magapit Irrigation Pumping Station, the brackish water of the Cagayan River is choked at the Balza Creek. (Mondejar, 2004) Buguey suffered from Flash flood during the typhoon Igme.

The sizes of the daklis today are now smaller than before. The boat they used before could contain around forty men, working with the oars. The net is also inside the boat. Today, though the net is still the same in shape, the boats are smaller. It could only contain the officials, around ten of them, and it is towed by a motorized banca.

The first amos to venture into this fishing enterprise were the Macutays in Paddaya, the Talozas in Minanga and the Viernes family in Centro. During those times, big game offshore fishing in the seas was not yet known in Buguey. Buli buli and muro ami were not yet introduced. Small driftnets used by small boats and squid anglers were the techniques used before, together with the daklis.

As to how many are involved in a daklis, the officials those who have enlisted and those who are there to help pull the nets are involved.

The net when dry weighs 300 kilos. It would weigh triple when it is wet and the catch is big. The whole of the officials, the enlisted pullmen and the barangay folks are thus included in this venture. It is then viewed as a bayanihan when culturally aligned.

The Daklisan

The daklisan are simple folks aspiring to earn honest living. With the income that they earn during the daklis season, they augment this when harvest time in the fields come. They are also farm hands, carpenters and plowers. During planting

season, they are employed as tagasekka and tagaraep. Though they prioritize daklis, they are jack-of-all-trades. They are also friendly and jolly. In barrio fiestas, they are very cooperative. They are thrifty and they know to save for the rainy day. They have a stock of daing and inasinan for the year round. They have also rice, for they participate during harvest time. They are used to the rough sea, for they live near the shoreline. They are skilled swimmers and are adept with the use of cast net (Tabukol). They also dig holes in the fields, which they call rama, trapping catfish, mudfish (dalag) and eel. They live with adequate money savings, though they are way below the poverty line.

The Pakat

The pakat is the actual operation of the daklis. When the sobreamo notices that the sea is already calm (nalinak), he sends notice to the members of the daklis. The day before, the net was already checked by the netmen. The net is already stored in the boat. The officials, boatmen and pullmen assemble as early as 5:00 in the morning. They have to push the boat to the water. The trawl that will pull the boat to where the net will be cast stands by. With the help of two round logs placed below the keel of the boat, they push it to the water's edge. The pullmen and other members start to walk eastward. The officials and the matador board the mast of the boat, which is to be towed to where they will scout for the pangen. Daklis is a combination of pulling and walking. They have with them their kalupi, where lunch is placed inside a tube made of cleaned plastic containers of motor oil. They have tomatoes and salt. They also bring containers of water. They do not bother bringing viands. They can cook fish from the catch.

When the matador or prowador shouts pointing at the direction of the pangen, everybody goes to the assignment. The tapwak gives the rope to the bumbero, who is accompanied by another skilled swimmer. The boat then traverses to the direction the fish had taken so the net can trap them. The tapwak drops the net to the water.

Meantime, as the bumbero reaches the shore, they have to hold the rope attached to the pakawan, while waiting for the pullmen and other barangay folks to arrive. They follow the direction of the current. If the current goes to the west, they pull westside. If it goes eastside, they go that direction. On the other side, as the boat drops anchor, the second set of pullmen goes there, where the other set of rope attached to the pakawan holding the net is waiting. The pulling and bayanihan begins, for barangay folks soon will join them.

CONCLUSION

The Daklis is a unique collaborative effort that paves way to a cohesive community. From the crude concept of bayanihan, it has evolved as a catalyst to put people of different cultures together, binding them through an enterprise. While

the hierarchy is there, it is to be noted that it is for the purpose of sharing, thus giving what is due to others. Fish is a very important commodity in the Philippines. It is the principal source of cheap animal protein in the country. Declining fish yields have affected both the nutrition and income of fishing communities. It could be concluded that the Daklis is a representation of Political, as well as socioeconomic structure and cultural values and characteristics, that is generally the same throughout the country but different to some extent by region, are also among the factors that have led to a common pattern of fishing for a living.

REFERENCES

- Abregana, B.P.G.; Barber, M. M.; Sanders, P. and VanderZwaag, D. (1996). *Legal challenges for local management of marine resources: a philippine study*. Environment and Resource Management Project (ERMP) Philippines, Halifax, Nova Scotia, Canada and College, Laguna, Philippines.
- Alcala, A.C.; Dy-Liaco, M. S.; and Alcala, L.C. (1991). *Benthic lifeform composition of two coral reef sites in the central visayas, philippines*. Proceedings of the Regional Symposium on Living Resources and Coastal Areas. Marine Science Institute, University of the Philippines, Manila, Philippines.
- Eleazar, F. and Castro, C. (1999). *Community-based resource management program*. Presentation given during a Workshop on the Development of ICM Course for Local Government Units. Philippine Council for Aquatic and Marine Research and Development, Los Baños, Philippines.
- Corrales, R. A. (1999). *Red tide outbreaks and their management in the philippines*. Elsevier Publishing Co.
- Ferrer, E. M. (1992). *Learning and working together towards a community-based coastal resources management*. Research and Extension for Development Office, College of Social Work and Community Development, University of the Philippines, Diliman, Quezon City.
- Gomez, E.D.; Alcala, A. C.; and San Diego, A.C. (1981). *Status of philippine coral reef*. Birkeland, R.W.
- Buddemeier, R.E. Johannes, J.A. and R.T. Tsuda (Eds) (1981). *The reef and man*. Proceedings of the Fourth International Coral Reef Symposium. Marine Sciences Center, University of the Philippines, Manila, Philippines.
- Licuanan, W. Y. (1991). *Temporal changes in the cover of life forms in puerto galera, mindoro island, and western philippines*: Proceedings of the Regional Symposium on Living Resources and Coastal Areas. Marine Science Institute, University of the Philippines, Manila, Philippines.
- Pajaro, M.; Olano, F.; and San Juan, B. (1999). *Documentation and review of marine protected areas in the philippines: a preliminary report*. Haribon Foundation for the Conservation of Natural Resources, Manila, Philippines.
- Pauly, D.; Silvestre, G.; and Smith, I. R. (1989). *On development, fisheries and dynamite: a brief review of tropical fisheries management. nat. resource. modeling*.
- Pomeroy, R.S.; Pollnac, R.B.; Predo, C.D.; and Katon, B.M. (1996). Impact evaluation of community-based coastal resource management projects in the philippines. *ICLARM Quarterly* 19(4), 9-12.
- Rivera, R. and Newkirk, G. F. (1997). *Power from the people: a documentation of non-governmental organizations experience in community-based coastal resource management in the philippines*. Manila: Ocean and Coastal Management.
- Vallejo, B. Jr. (1999). *An overview of the philippine marine aquarium fish industry. international center for living aquatic resources management, Makati City, Philippines*.
- R. Dahuri and Dutton, I. M. (2000). *Integrated coastal and marine management enters a new era in management*. Indonesia.
- Suharsono and Purnomohadi, N. (2001). *International coral reef initiative country report: indonesia*. Presented at the Regional ICRI Workshop for East Asia, Cebu, Philippines, April 2, 2001.
- Hopley, D. and Suharsono (2000). *The status of coral reefs in eastern Indonesia*. Townsville, Australia: Global Coral Reef Monitoring Network.
- Pet-Soede, L.; Cesar, H.; and Pet, J. (1999). *Blasting Away: The Economics of Blast Fishing on Indonesian Coral Reefs*, in H. Cesar, (ed)., *Collected Essays on the Economics of Coral Reefs*, pp. 77-84;
- Cesar, H. (1996). *Economic analysis of indonesian coral reefs*. Working Paper Series, Washington, DC: World Bank
- Holmes, D. (2000). *Deforestation in indonesia: a review of the situation in 1999*. Jakarta, Indonesia: World Bank
- Vogt R.F; Edinger, R. N. et al (1998) Reef degradation and coral biodiversity in indonesia: effects of land-based pollution, destructive fishing practices and changes over time, *Marine Pollution Bulletin* 36, 8, 627-630.
- Wilkinson, C. R., et al (1993): Status of Coral Reefs in Southeast Asia: Threats and Responses, in R.N. Ginsburg, ed., *Global Aspects of Coral Reefs: Health, Hazards, and History*, Miami, Florida: University of Miami.
- Crawford, B. R.; Pollnac, R.B.; and Sukmara, A. (2000). *Community-based coastal resources management: an interim assessment of implementation actions in proyek pesisir field sites in north sulawesi, indonesia, technical report*, Narragansett: University of Rhode Island, Coastal Resources Center.
- Coastal Resources Management Program (1997). *Legal and jurisdictional guidebook for coastal resource management in the Philippines*. Department of Environment and Natural Resources; Department of Interior and Local Government; Department of Agriculture-Bureau of Fisheries and Aquatic Resources; and Coastal Resources Management Project (CRMP), Philippines.
- Coastal Resources Management Program (1999). *An endangered coastal environment*. Retrieved from www.oneocean.org/about_crmp/where_we_are.html
- Department of Environment and Natural Resources (1992). *NIPAS Act implementing rules and regulations. Protected Areas and Wildlife Bureau, DENR, Quezon City, Philippines*. 38 p.