

Conservation Education Campaign
For
**PENABLANCA PROTECTED LANDSCAPE
AND SEASCAPE**
Peñablanca, Cagayan, Philippines

Project Plan



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SITE SUMMARY

History

Penablanca Protected Landscape and Seascape is originally famous for having the most number of captivating limestone formations found in around 300 cave systems. They are also significant for hosting varied wildlife and for keeping the residual treasures of early civilizations. Outside the caves are equally fascinating wildlife located in intact limestone and evergreen forest, sparkling freshwater and productive marine area. Its most popular wildlife resident is the country's national symbol, the Philippine Eagle (*Pithechophaga jeffreyi*).

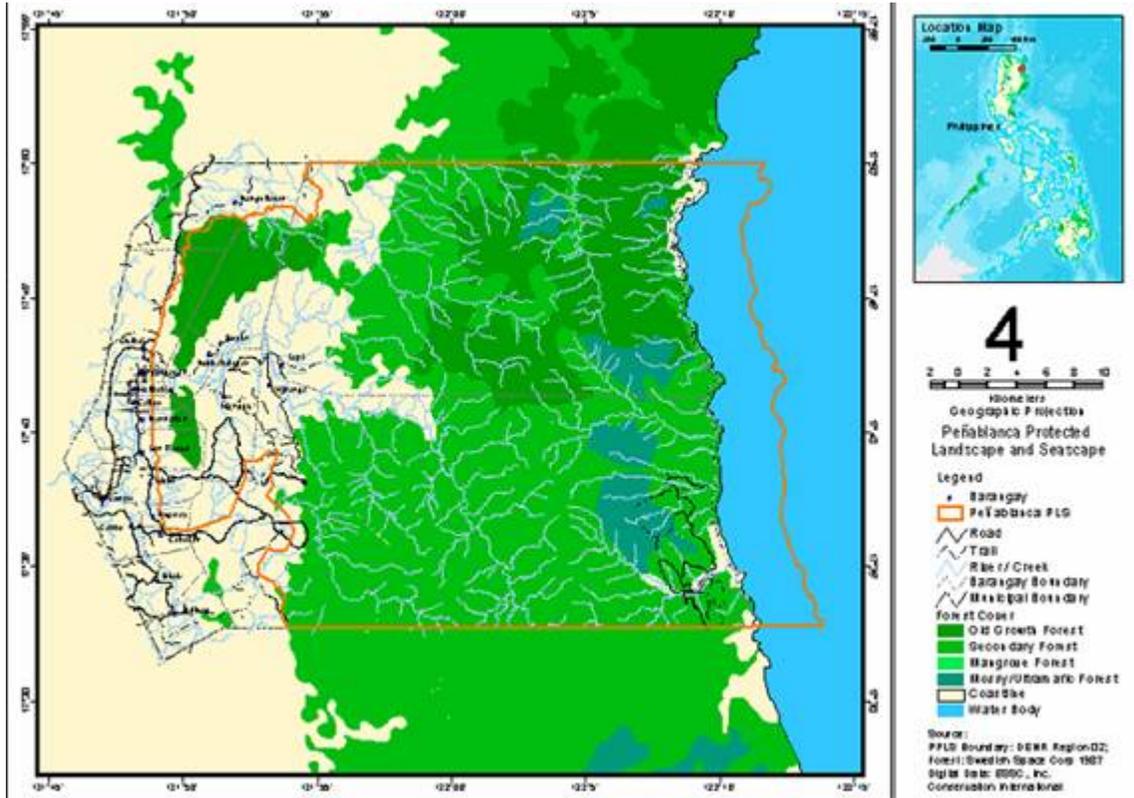
Peñablanca Protected Landscape and Seascape was originally proclaimed as an initial component of the National Integrated Protected Areas System (NIPAS) under the name of Penablanca Protected Landscape which embraces the 192-hectare Callao Caves National Park. The conservation of Callao Caves National Park was initiated by Theodore Roosevelt and his daughter Alice, out of fascination with the seven chambered Callao Caves (Davis, 1992). On July 16, 1935, Gov. Gen. Frank Murphy Roosevelt officially declared the area as "Callao Caves National Park" per Proclamation No. 827 with a total area of 192 hectares covering 4 barangays of Peñablanca, Cagayan. Callao Caves is named after the local bird named "Kalaw" or the Rufous Hornbill, which was then very abundant.

As new caves, important wildlife and fragile ecosystems uncovered, Callao Caves National Park was proclaimed as initial component of the National Integrated Protected Areas System (NIPAS) on June 29, 1994 by President Fidel Ramos per Proclamation No. 416. The area named "Peñablanca Protected Landscape (PPL)" embraces the 4 barangays of Callao Caves National Park and 7 more to cover a total area of 4,136 hectares.

Through the years, the people of Peñablanca, Cagayan have come to realize the need to cover areas outside the boundary of PPL to be included in a more systematic and rational biological conservation framework. They collectively worked for the expansion of the area together with the Local Government Unit of Peñablanca including other government agencies and interested organizations led by the Department of the Environment and Natural Resources (DENR) and Conservation International-Philippines (CIP), respectively.

To date the, PPLS contains a total area of 118,781.52 hectares and covers 18 barangays of Peñablanca, Cagayan.

Fig.1 Map of PPLS



Location

Penablanca Protected Landscape and Seascape (PPLS) located within the Municipality of Penablanca, Cagayan, can be found at the north-eastern tip of the Philippines. It is located 485 kilo meters north of Quezon City, the Capital City of the Philippines. The Municipality is the fourth largest municipality in the Cagayan Valley Region and the largest in the province in terms of land area covering 1,193.20 sq. kms (RDC 2004). It has a total population of 37,872 individuals. The municipality is accessible by air and land travel from Manila to Tuguegarao City. From Tuguegarao City is a 15-minutes jeepney ride to the protected area.

The protected area covers 18 barangays of the municipality of Penablanca, namely: Callao, San Roque, Nannarian, Malibabag, Agugaddan, Quibal, Nanguilattan, Lapi, Buyon, Nabbabalayan, Mangga, Minanga, Sisim, Bugatay, Cabbo, Bical, Baliuag and Cabasan. It has a total population of 26,308.

The protected area is located between 17° 32' 45" to 17° 50' 2" in the longitude and between 121° 48' 5" to 122° 13' 51" in the latitude.

Weather

The climate over the western side of PPLS falls under Type III (Coronas Classification) which is characterized by not very pronounced, relatively dry from November to April and wet during the rest of the year (DENR-PAMB 2004). Generally, it is cool during November to February with December to January as the coldest months, and warm during March to October with hottest period in May to June.

On the eastern side of the Sierra Madre, the prevailing climatic type is Type IV where rainfall is evenly distributed throughout the year. The coastal area is within the typhoon belt; eight typhoons occurred in year 2000 and again same number in year 2001 (CRMDP-Minanga 2003).

The People

There are two major cultural groups residing in Penablanca: the Ybanags and the Itawes. The Itawes constitute 78% while the Ybanags composed 13% of the total population of the protected area (CLUP 2001). Ilocanos and other groups composed the remaining 9% of the population. Inside the eighteen barangays of the protected area, there are 26,308 inhabitants. Majority of them are farmers. After the farming season, they engaged in hunting, fishing, timber cutting, firewood gathering and charcoal making to augment their income.

The *Agtas* are original inhabitants of Peñablanca, however due to their nomadic characters; they can be found more in nearby towns of Baggao and Gattaran. The *Agtas* and the *Dumagats* in the coastal area are usually fishers, hunters and farmers while the most common livelihood of the *Agtas* in the resettlement area are orchids and rattan gathering. In the coastal area, there are 86 individuals surveyed by the DENR and CIP.



Lakay Basilio of Sta. Marina, one of the trusted leaders of the Dumagats.

These indigenous groups are one of the best sources of information on the various rare and endemic species of flora and fauna found along the Sierra Madre mountain range.

The protected area is also rich with archaeological finds. Archaeologists unearthed from the chain of caves valuable artefacts that appear to be 250,000 years old. Other finds included flake tools, porcelain *Ming* bowls and burial jars (Dirain 1997). The other caves were used by the pre-historic settlers as houses, burial grounds, or ceremonial sites. Among the famous archaeological cave is the Musang Cave where experts retrieved the oldest needle in Asia (Ruña, et. al 2002).

Biological Importance

Flora

PPLS contains an impressive number of ecologically and economically important floral species. Based on the bio-assessment survey recently conducted by DENR and CIP, there are around 12 critically endangered species based on IUCN classification. They all belonging to family *Dipterocarpaceae* which is noted to have dominated the county's timber resources in the 1960's to the 80's (Heaney and Regalado 2002). There are also 3 endangered floral species, 21 vulnerable species and 5 near threatened species. All in all, there are 38 threatened floral species found in the protected area (DENR-CIP 2004).

Important floral species found in the area include: Narra (*Pterocarpus indicus*), Molave (*Vitex parviflora*), Agosip (*Symplocos ahermii*), Ipil-ipil (*Leucaena sp.*), Balete (*Ficus stipulosa*), Ipil (*Instsia bijuga*), Tindalo (*Azelia rhomboidea*), Anabiong (*Trema orientalis*) and other Dipterocarp-associated tree species. These biological richness is even more diverse for having been located with the Sierra Mountain range, which is home to 3,500 species of plants the highest known level of plant endemism in the Philippines.

The number of threatened plant species on the IUCN Red List of Threatened Species is 106 for the mountain range — or 42 percent of the total threatened Philippine flora species.

The Philippines has thirteen forest types. Out of which, eleven forest types can be found in the mountain range including the tropical evergreen rainforest, montane rainforests, limestone forest, beach forest, and wetlands. The Sierra Madre forest tropical rainforest is estimated to be 400,000 hectares contains 25% of the country's forest resources, 40% of which is the remaining old-growth rainforest.

Fauna



many endemic and non-endemic threatened Pygmy forest frog several species of frogs and one (Duya, et. al 2003). The *Calamaria bitorques* was also

ity (DENR-CIP 2003). considered by the IUCN include the (*Proopus cartilagonodus*), deers (*Cervus mariannus*) and avi-faunal species include bleeding heart (*Gallicomba*

luzonica). Other heavily hunted species present include Malay civet cat (*Paradoxurus haemophroditus*) and the locally known “koneho” (*Phloeomys pallidus*) as reported by the DENR and CIP. They also reported that the 83 avifaunal species are dominated by the Philippine Bulbul (*Hypsipetes philippinus*), common tailor bird (*Ortotomus derbians*), blue headed pitta, serpent eagle (*Spilornis halospilus*), Tarctic hornbill (*Penelopides panini*) and Braminy kite (*Haliastur Indus*). The presence of the Whiskered Pitta (*Pitta Kochi*) is likewise noted as vulnerable and with a probability of becoming extinct within 100 years (DENR-CIP 2003).

At least, 28 faunal species are threatened: 17 birds, including the Philippine Eagle (*Pithecophaga jefferyi*); 5 mammals, including the Golden-crowned flying fox (*Acerodon jubatus*); and 6 reptiles, including the Philippine crocodile (*Crocodylus mindorensis*) that can be found in the Sierra Madre Mountain Range.

The coastal water of the Penablanca, on the other hand, has several threatened marine life such as the whale shark, Giant clam, and various sea turtles (Duya, et al. 2003).

Other Habitat and Ecosystems

The protected area takes pride in having a total of 34,380.9 hectares of old growth forest, 14,890.4 hectares secondary forest and 6, 122.9 hectares of mossy forest (Acay 2004). These are important habitats for the wildlife and sources of other environmental services.

The mangrove stand and blocks of undisturbed coral reefs are found along the Pacific coastline. The marine resources harbor diverse marine resources in the absence of any commercial exploitation and ecotourism activities.

Another distinct characteristic of the municipality is the significant presence of limestone formation that is estimated to be around 77 square kilometres (DENR 2000).



The famous Callao Caves (©mbdirain)

In fact, it is where the municipality derived its name. Penablanca means “white rock” or “white stone”. It has an estimated 300 cave systems located on the western section of the municipality. These formations include delicate flower-like helictites, white straws, and flowstones, hanging curtains, icons and

other fascinating stalagmites and stalactites. The most famous of these caves are: the 7-chambered Callao Caves for having the naturally lighted altar, the Sierra Caves for its amazingly formations and loops, the Bat Cave with its 15-minute circadian flight of bats at dusk and the San Carlos Cave for an extremely challenging cave adventure. The Jackpot Cave is currently the second deepest cave in the Philippines. The Odessa-Tumbali Cave is currently the third longest cave in the Philippines and is currently undergoing validation to be promoted to the second place (DENR 2000).

The main river system that cuts across the protected area is the Pinacanauan River. It is a major tributary of Cagayan River, the longest river in the Philippines. It supplies the primary irrigation system for the whole of Peñablanca's agricultural lands. It also serves a venue for water recreation and washing for the local people. Aside from this river, there are also a number of springs which were tapped as source of potable water for barangays Sisim, Bugatay, San Roque and the three big ones were used by the Tuguegarao City Water District. There are also two fascinating water falls used by the local people as natural swimming pool and washing area. However, its greatest potential lies in using it as an eco-historical destination for concealing the Ibi Cave, used by the Japanese Imperial Army as refuge during the Second World War.

These characteristics contribute to the country's collective biodiversity. The Philippines is one of the world's richest in biodiversity and endemism. It is ranked 5th for having the most endemic land vertebrates, 4th for having the most number of endemic birds and 7th for endemic reptiles (Groombridge 1992). The Island of Luzon where the protected area can be located is also home to a great number of endemic bird species which can be traced from its continued isolation from the Asian mainland (Ecoregion Profile-WWF 2001). This isolation encouraged uniqueness and endemism.

Management of the Area

Peñablanca Protected Landscape and Seascapes was declared a conservation area by virtue of Presidential Proclamation No. 484 on October 6, 2004 covering an area of 118,000 hectares of land and water. The proclamation aims to designate this area under strict protection to conserve the different biological resources and threatened species through a wider and more effective environmental planning.

The proclamation for amendment carries with it the expansion of membership to Protected Area Management Board (PAMB) which is the legally mandated body to manage the protected Area (RA 7586). This makes the number of the members comprising the increased from sixteen (16) to twenty-six (26). It includes the 18 representatives of the barangays covering the Protected Area, the Local Government Unit of Peñablanca, and The Provincial Government of Cagayan, representatives from the Sierra Madre Outdoor Club, Conservation International-Philippines, Department of Tourism and Peñablanca Women's

Club. The regional Executive Director (RED) of DENR Region 02 serves as the *Ex Officio* Chairman.

The PAMB is the responsible body that enforces the laws of the NIPAS, manages the programs and activities, and issue policies and mechanisms that lead towards the effective management of PPLS. The board is assisted by the Protected Area Superintendent.

Aside from the protection and management of the area, the PAMB is also concerned with the passing of the legislative enactment of the protected area by Congress, which has the sole authority to give permanent land use designation of a particular area and in accordance with the NIPAS Act shall provide funds for its operation. The Presidential Proclamation, declared PPLS as a protected area and provides protection measures until such time as Congress shall have enacted a law declaring the area as part of NIPAS, which is a requirement for its congressional approval, and the last step in the establishment of NIPAS areas. Nonetheless, except for the provision of funds for its operation, the Presidential Proclamation provides enough legal basis for its conservation classification. The bill which is on its third reading was sponsored by Former Senator Loren Legarda-Leviste (Senate Bill No. 2369) and a counterpart House Bill No. 5826 sponsored by Representatives Manuel N. Mamba (Cagayan) and Eduardo K. Veloso.

Stakeholder's Meeting



STAKEHOLDER MATRIX

Melania B. Dirain; IMA-Cohort 4

The stakeholders were convened in a meeting to introduce the Pride Campaign, solicit their support for the Project and to obtain vital information and perspectives about the communities inside Penablanca Protected Landscape and Seascapes (PPLS), its natural resources and varied ecosystems that are essential in developing appropriate conservation education strategies.

No	Participant/ Stakeholder Organisation/A ffiliation	Name	Key Issues	Potential Contribution <i>(what participants bring to the meeting)</i>	Interest/Motive <i>(what the meeting can give to participant)</i>	Consequences
A. National Government						
1	Provincial Environment and Natural Resources Officer (PENRO)	Armando Bucad PENRO	National management of protected areas and biodiversity conservation, implementation of environment laws and regulations, policy making	Province wide DENR management support and initiatives, watershed management	Partnership and collaboration with local people, and other conservation groups, new perspectives in PA planning and implementation	Provide provincial DENR view and perspectives, provide inputs for PA planning and management, influence in policy decisions
2	Protected Areas and Wildlife Division-DENR	Restituta Antolin Division Chief	Regional management of protected areas and biodiversity conservation, Biodiversity Conservation programs	Social learning on PA management in the Region, DENR management support and initiatives, Conservation Education, allocation of government financial support	Partnership and collaboration with local communities and conservation groups, new perspectives in PA management and implementation	Provide DENR view s and perspectives, provide inputs for PA planning and management, influence in policy decisions, support for IEC Campaign
3	Protected Area Management Board (PAMB)	Tito Mangantulao Protected Area Superintendent	Knowledge on existing PA resources, local conditions, issues and problems in PA management	Local awareness on biodiversity conservation, lessons learned in PPLS management, law enforcement	Knowledge in PA management, issues and concerns in resource protection and local participation	Support in project implementation, build knowledge on biodiversity conservation, ensure local participation
4	Department of Tourism	Celso Turingan Supervising Tourism Ops. Officer	National Government Support on Ecotourism	Ecotourism support and development	Marketing and Conservation of Ecotourism sites, local investments	Provide government view and perspectives in Ecotourism, ensure national support for local capacity building in eco- tourism and provision of alternative livelihood
5	National Irrigation Administration	Engr. Edgar Catulin Manager	Knowledge on farmer –irrigators issues and water resources, local participation	Conservation of water catchment areas, knowledge on water issues	water sources for farming, issues and concerns of farmers	Ensure participation of farmer irrigators, build knowledge on water uses and conservation of catchment areas
B. Provincial and Local Government						
6	Local Government of Penablanca	Engr. Celso Diaz Municipal Planning and Development Officer	Local governance and management of environment and natural resources	Conservation and management of natural resources within their political jurisdiction	Local government support and initiatives, investments	Ensure community participation and local government support
	Participant/ Stakeholder	Name	Key Issues	Interest/Motive	Potential Contribution	Consequences

				<i>(what participants bring to the meeting)</i>	<i>(what the meeting can give to participant)</i>	
7	Local Government Council of Penablanca	Hon. Alex Sibbaluca Sangguniang Bayan Member	Local laws and ordinances on environment and Natural Resources, policy-making	Adoption of new local laws and ordinances on environment and natural resources, knowledge on local laws and their status of enforcement	New perspectives in understanding biodiversity conservation and support for local legislations	Ensure support for local legislations, participation in project implementation
8	Province of Cagayan	Apolonaria Geron Community Devt. Asst II	Provincial government conservation initiatives and support	Local government support, trend in tourist visitation and itinerary	Local participation in eco-tourism, expanding eco-tourism attraction and market, new perspectives in PA management	ensure enterprise involvement and support, provincial government support, help build awareness
C. Non-government Organizations						
9	Sierra Madre Outdoor Club	Olympio Munoz President	Eco-tourism, Tour Guiding, Caves Resources Conservation	NGO Support on Eco-tourism, cave management and community organizing	Partnership in marketing and conservation of eco-tourism areas	Ensure NGO participation in the conservation of the protected area, support in project implementation
10	Yakap-Kalikasan	Mary Aquino Member of the Board	NGO contribution in PA management and community organizing,	knowledge on environment and natural resources development	New perspectives in project planning, implementation and monitoring	Support and involvement in project planning, implementation and monitoring, build local knowledge on conservation
11	Conservation International	Juan Acay, Jr. Technical Assistant	knowledge about conservation, posses scientific, economic, awareness and policy tools	potential for international NGO buy in, collaboration in project implementation and sustainable funding support	new perspectives on project planning, implementation and monitoring, learning on PA establishment and management	ensure NGO participation, build local knowledge, ensure assistance for sustainable funding,
D. Youth, Women and Indigenous Peoples						
12	Penablanca Federation of Womens Club	Lariden Honorio President	knowledge of women empowerment program	knowledge on women's issues on access and use of resources, have skills and experience in community mobilization and empowerment	Development of project proposals for women, new perspectives on project planning and implementation	Ensure women and family participation, assistance for fund raising and project implementation
13	IP representative	Henry Salvino Tribal Leader	tribal regulation, cultural traditions and natural resources management	potential for villages buy in & support in project implementation; knowledge on village and the people's everyday live	information about threat & opportunities in natural resources management,	ensure village participation, support village in drafting regulation
14	Samahang Kabataan	Riky James Suyu Representative	Environment destruction/degradation, ENR awareness by the younger generations	knowledge in environment issues in the area, environment perspectives from young generation, potential collaboration for youth activities	ideas and design for youth activities, increase young generation role in nature conservation	ensure youth participation, build knowledge, raise interest of youngster to the project

No	Participant/ Stakeholder	Name	Key Issues	Interest/Motive	Potential Contribution	Consequences
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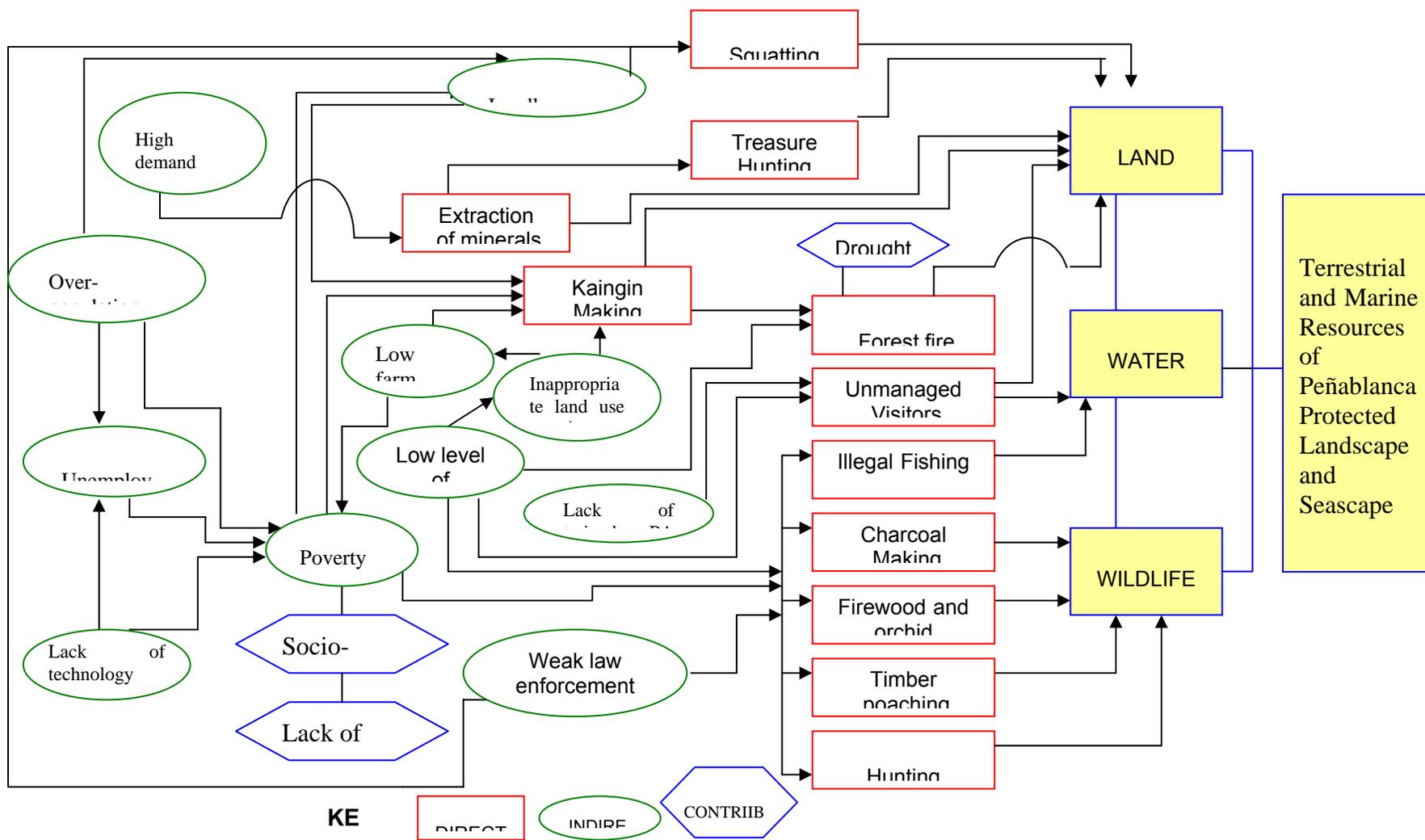
				(what participants bring to the meeting)	(what the meeting can give to participant)	
F. Local Community Leaders(representing the 18 barangays of the protected Area)						
15	Barangays- Cabbo, Cabasan, Baliwag, Sisim, Bugatay, Bical)	Francisco Bangayan Community Representative	Charcoal making, illegal extraction of forest products, utilization and marketing of value added products	market development of value added forest products and decorative stones, farmers issues and concerns	Conservation of biodiversity for production of forest based novelty items, new marketing tools and farming technology, support from tourism,	ensure local government and community support and participation, build knowledge on conservation issues and concerns
16	Barangays Quibal, and Nanguillattan	Fernando Danao Community Representative	Illegal extraction of timber and other forest products, swidden agriculture, low farm productivity	Knowledge on local conditions, farmer's issues and concerns, violations of PA laws and regulations, knowledge on variety and uses of PA resources,	New perspectives and support for conservation of watershed and other natural resources, understand political and social roles in the conservation and management of the PA	Ensure local government and community support and participation, build knowledge of community on conservation issues and concerns,
17	Barangays Agugaddan, Callao, Malibabag, San Roque, Nannarian)	Cleofa Quizzagan Community Representative	Illegal extraction of timber and other forest products, swidden agriculture, low farm productivity, forest fires	Knowledge on local conditions, farmer's issues and concerns, violations of PA laws and regulations, knowledge on variety and uses of PA resources,	New perspectives and support for conservation of watershed and other natural resources, understand political and social roles in the conservation and management of the PA	Ensure local government and community support and participation, build knowledge of community on conservation issues and concerns,
I. Law Enforcement						
18	Philippine National Police	Merwin Cuarteros Chief of Police, Penablanca	Law enforcement, peace and security situations	knowledge in security situations and law enforcement in the area,	support and cooperation in reducing infraction of environment laws and regulations through strict enforcement	provide legal perspectives and practices, ensure support of law enforcers, help build paralegal knowledge of community
M. Media						
19	Newspaper, TV and Radio	Lanie Perez DWPE	Participation of the tri-media practitioners in biodiversity conservation	Expertise in tri-media communications, experience in environmental education and social research	Integration of scientific information to build environmental awareness through the use of radio, tv and print media	Ensure media support for the project, assistance in the production of information materials
J. Education Sector						
20	Department of Education-High School	Felicidad Aragonas High School Administrator	Integration of environment issues in school curricula, production and distribution of conservation education materials, awareness of students on environment issues	Conditions of environmental education in secondary levels, knowledge on education materials suited for high school students, moral ascendancy to propagate conservation education to varied sectors, in a wider scale and in sustained period	Appropriate tools and methods for environment education in secondary curriculum, availability of quality education materials	Ensure integration of conservation education in secondary curriculum, ensure educational authority involvement and participation, conservation education that reaches a wider sector of society

No	Participant/ Stakeholder	Name	Key Issues	Interest/Motive	Potential Contribution	Consequences
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				<i>(what participants bring to the meeting)</i>	<i>(what the meeting can give to participant)</i>	
21	DE-Elementary	Clemente B. Tanguilan District Supervisor	Integration of environment issues in school curricula, production and distribution of conservation education materials, awareness of students on environment issues	Conditions of environmental education in elementary levels, knowledge on education materials suited for elementary pupils, moral ascendancy to propagate conservation education to varied sectors, in a wider scale and in sustained period	Appropriate tools and methods for environment education in elementary curriculum, availability of quality education materials	Ensure integration of conservation education in elementary curriculum, ensure educational authority involvement and participation
K. Local Business and other Resource Users						
22	Ecotourism Business Sector	Carol Tobias Cluster Coordinator	Increased tourist visitation and destination, harness business potential	Visitor management, marketing of eco-tourism sites, business opportunities	Protected areas as ecotourism destination, expanding market and variety of eco-tourism activities	Ensure enterprise involvement and local livelihood support
23	Penablanca Boat Operators	Frony Badajos President	Solid waste management along the River, trend of tourist visitation and itinerary, fare regulations	Ecotourism visitation and itinerary, ecotourism issues and concerns, community awareness on PA	New perspectives in ecotourism management, partnership with tourism organization and institutions	Build community awareness on nature-based tourism, community organizing
24	CBFM-PO	Pedro Tanguilan Chairman of the Board	Community-based extraction of timber and other natural resources, farmers issues and concerns, equitable sharing of natural resources	community based forest management, local investments, alternative livelihood opportunities	Integration of farmer issues and concerns, increased agricultural productivity, potential funding support from other agencies and organizations	Ensure farmer participation, build knowledge, adoption of sustainable harvesting practices
25	Upland Farmer	Refelito Ranay Upland Farmer	Problems of upland farming, farmers' issues and concerns, resource utilization of PA resources	Tenurial instrument for upland farmers, alternative livelihood opportunities	issues and concerns on upland farmers, agro-forestry techniques and other livelihood support, potential funding support from various sources	Ensure farmer participation, build knowledge, adoption of sustainable harvesting practices

- Attended the First Meeting
- Attended the Second Meeting
- Attended Both Meetings

INITIAL CONCEPT MODEL



Summary

Penablanca Protected Landscape and Seascape contains immense rich terrestrial and marine resources, more particularly characterized by thickly forested land, clear productive waters and a wide range of wild species of plants and animals.

These resources have been directly affected by utilization or extraction activities. Land resources are directly affected by squatting, treasure hunting, extraction of minerals like mining, quarrying and collection of cave resources, particularly stalagmites and stalactites. Extraction of minerals and treasure hunting occurs due to high demand from the urban centres. Squatting continues to impinge on the land primarily, due to increasing number of population and in-migration. The burgeoning population aggravates landlessness among the local people which drive them to open up portions of the protected area to build their houses or plant cash crops through *kaingin making* (slash and burn agriculture). *Kaingin making* causes fire that burns plantations and grasslands which affects valuable forested lands. Drought contributes significantly to the occurrence of grass and forest fires during hot summer seasons. Inappropriate land use practices worsen the occurrence of fire which is attributed to the low level of awareness of the farmers.

The farmers present in the meeting have admitted to the practice of burning as a way to produce fresh grass for their farm animals but agreed that this caused major impact on the fertility of the soil and its ability to absorb. This learning led many farmers to welcome agro-forestry trainings offered to them and cooperate with local authorities to minimise the occurrence of forest fires.

The majority of the population rely on farming and a great number of them look for other sources to augment their income, oftentimes, after the farming season. This poor majority are tenants or have farmlands producing not enough yields to feed their families. The latter situation drives the farmers to open up more areas to till through swidden agriculture or through illegal extractive activities that directly impact both water and wildlife resources.

Farmers and other unemployed residents of the municipality conduct fishing activities through prohibited methods like using fine nets, poisoning, dynamite or electric fishing. Charcoal making, firewood and orchid gathering, and timber poaching are other income augmenting activities conducted by the people that directly affect wildlife resources due to the degradation of their habitat. Continuous hunting of wildlife is also another income source for the local people that endanger protected faunal species.

Unmanaged visitors of the protected area are also directly affecting the diversity of wildlife in the area. This is caused by the lack of untrained protected area staff that results in weak enforcement of protected area laws, rules and regulations. In the same manner, poorly enforced regulations result in the proliferation of illegal

fishing, charcoal making, firewood and orchid gathering, hunting and timber poaching. Weak law enforcement among the protected area staff is brought about by the low level of awareness among protected area personnel.

Low level of awareness on the importance and values of the various terrestrial and marine resources of Penablanca Protected Landscape and Seascapes affected the economic situation of the local people. For the lack of soil conservation measures integrated during farming activities, the farmers had been harvesting very low produce. The continued indifference of the local people towards conservation of forest and wildlife resources particularly on the prohibition on timber poaching, hunting, and charcoal making prevailed in the community and insisted poverty as a justifying circumstance why they ignore the laws. On the law enforcement side, this situation had also been exploited by the violators to flee from the penalties imposed by law for the violations they committed. Some people depend on “dole-outs”, donations and free groceries or medicines from the government instead of working. These prevailing socio-cultural values and the lack of good governance are contributing to the worsening poverty situation.

The use of Conceptual Models as described in this document is based the work of Richard Margoluis and Nick Salafsky of Foundations of Success [FOS] and draws from their 1998 publication Measures of Success: Designing, Managing, and Monitoring Conservation Development Projects, published by Island Press. Their approach has been re-worked and re-tooled to fit the needs of Rare staff and local counterparts working on site assessments for projects supported by Rare. The development of concept models also includes a methodology known as “Brain-storming, Naming, Ordering” as an adaptation of the ToP (Technology of Participation) concept developed by Sherwood Shankland and the Institute of Cultural affairs.

SUMMARY RESULT OF QUESTIONNAIRE SURVEY

Data Collection Process

A community survey was conducted to gather information and opinion of the local people, validate the initial concept model, that served as basis for the construction of SMART objectives for the Pride Campaign at Penablanca Protected Landscape and Seascape, Penablanca, Cagayan in the Philippines. Specifically, the questionnaire survey involved 35 open-ended and multiple-choice questions to randomly selected respondents. The questions were structured to solicit information on the socio-economic profile of the respondents (age, education, occupation), level of knowledge on the protected area (PA), its resources and their uses, awareness on selected protected area laws and regulations, opinion and observation on the present threats of the protected area, media preferences and the potential flagship species for the campaign. At least 550 questionnaires were distributed to the eighteen (18) barangays of the PA and three (3) sitios located along the coastal area. The survey was conducted by the Protected Area Personnel and Staff of the Regional Office and the Community Environment and Natural Resources Office (CENRO), Tuguegarao City, 12 volunteers, and a representative from Conservation International- Philippines- Sierra Madre Biodiversity Conservation Program (CIP-SMBC).

The survey was conducted smoothly and with the participation of the concerned local officials of the target barangays. This was made easier by the endorsement made by the members of the Protected Area Management Board (PAMB) in its April 1, 2004 meeting. Consultations and meetings were likewise conducted in the barangays to elicit information to serve as guide in structuring answers in multiple choice questions, which is further supported by secondary data.

A training was conducted to familiarize the enumerators on the questionnaires and how to carry out the survey properly. During the actual survey, the enumerators carry questionnaires translated in four dialects: *Ybanag*, *Itawes*, *Tagalog* and *Ilocano* aside from its English form. This is to facilitate understanding between and among the enumerators and the respondents.

Summary of Results

Q1: Which barangay do you live in?

(1) Which barangay do you live in?			
	Counts	Percents	Percents
			0 100
Lapi	51	9.6%	<input type="checkbox"/>
Agugaddan	45	8.5%	<input type="checkbox"/>
Quibal	44	8.3%	<input type="checkbox"/>
Mangga	33	6.2%	<input type="checkbox"/>
Baliuag	32	6.0%	<input type="checkbox"/>
Malibabag	31	5.8%	<input type="checkbox"/>
Nannarian	30	5.7%	<input type="checkbox"/>
Bical	29	5.5%	<input type="checkbox"/>
San Roque	29	5.5%	<input type="checkbox"/>
Callao	28	5.3%	<input type="checkbox"/>
Cabbo	27	5.1%	<input type="checkbox"/>
Minanga	26	4.9%	<input type="checkbox"/>
Sisim	24	4.5%	<input type="checkbox"/>
Nanguilattan	23	4.3%	<input type="checkbox"/>
Buyun	22	4.2%	<input type="checkbox"/>

Other	56	10.6%	<input type="checkbox"/>
Totals	530	100.0%	

The survey was conducted in the eighteen barangays of the protected area. The number of respondents is 530 which is 2% of the total population of the protected area communities.

Q2: Is this site inside Callao-Lagum-Coastal area?

(2) Is this site inside Callao-Lagum-Coastal area? (CHECK WITHOUT ASKING)			
	Counts	Percents	Percents
			0 100
Yes (inside C-L-C area)	530	100.0%	<input type="checkbox"/>
No (comparison area outside C-L-C area)	0	0.0%	<input type="checkbox"/>
Totals	530	100.0%	

This data is taken inside the project area. Callao-Coastal –Lagum area is cluster name for the three protected area barangays at the southern part of the protected area. Callao area covers the barangays of Callao, San Roque, Sisim, Bugatay, Cabasan, Nannarian, Malibabag, Agugaddan, Quibal and Nanguillattan. Lagum area covers Buyon, Nababalayan, Mangga, Minanga and Lapi. Although, not included in the group cluster of the Southern barangays included in the survey are Baliuag, Cabbo and Bical. Coastal sitios include Sta. Marina, Valley Cove and Baguio Point.

Q3: What dialect do you use at home ?

(3) What dialect do you use at home ?			
	Counts	Percents	Percents
			0 100
Itawes	402	75.8%	<input type="text"/>
Ybanag	63	11.9%	<input type="text"/>
Ilocano	52	9.8%	<input type="text"/>
Tagalog	13	2.5%	<input type="text"/>
Totals	530	100.0%	
Mean	--		

This coincides with the Municipal data which also presents that the major cultural group is the Itawes. This will be serve as basis in the production of fact sheets, posters and legislation booklets. However, since English is the medium of instruction in the secondary and primary levels. Some of the materials will also be produced in English.

Q4: Gender: (CHECK WITHOUT ASKING)

(4) Gender: (CHECK WITHOUT ASKING)			
	Counts	Percents	Percents
			0 100
Female	296	55.8%	<input type="text" value="--"/>
Male	234	44.2%	<input type="text" value="--"/>
Totals	530	100.0%	
Mean	--		

In the latest Municipal data (2001), the male population is slightly higher than females. However, DENR Census data taken in 2003 in communities inside the protected area reveals that there are more females than males. In this survey, the females are 5.8% higher than males. This could explain the fact that the males might have been out in the farm during the survey. But comparing to the DENR data which considered only those living in the protected area then the respondent population is almost identical with government data considering that the municipal data presents the population of the whole municipality.

Q5: Which age group are you in?(SHOW OR READ OUT)

(5) Which age group are you in?(SHOW OR READ OUT)			
	Counts	Percents	Percents
			0 100
15-19	48	9.1%	
20-24	54	10.2%	
25-29	66	12.5%	
30-34	77	14.5%	
35-39	69	13.0%	
40-44	41	7.7%	
45-49	45	8.5%	
50-54	45	8.5%	
55-59	24	4.5%	
60-64	23	4.3%	
65-69	17	3.2%	
70-74	14	2.6%	
75 and above	7	1.3%	
Totals	530	100.0%	
Mean	5.32		

In the Peñablanca Municipal data, the highest age group population belongs to age 30-34 and followed by age group 15-19 years. Comparing it to the age groups of the respondents of this survey, majority also belongs to age group 30-34. The reason for the low number of respondents for age group 15-19 is that they may be attending summer classes as this group usually belongs to the college level population.

Q6: What is your MAIN occupation?(READ ALL, CHECK ONE ONLY)

(6) What is your MAIN occupation?(READ ALL, CHECK ONE ONLY)			
	Counts	Percents	Percents
			0 100
Farmer	233	44.0%	<input type="checkbox"/>
Housewife	176	33.2%	<input type="checkbox"/>
Student	60	11.3%	<input type="checkbox"/>
Government Employee	15	2.8%	<input type="checkbox"/>
Unemployed	11	2.1%	<input type="checkbox"/>
Business person	11	2.1%	<input type="checkbox"/>
Transport Operator	6	1.1%	<input type="checkbox"/>
Barangay Health Worker	3	0.6%	<input type="checkbox"/>
Barangay Official	3	0.6%	<input type="checkbox"/>
Private School Teacher	3	0.6%	<input type="checkbox"/>
Boatmen	2	0.4%	<input type="checkbox"/>
Construction Worker	2	0.4%	<input type="checkbox"/>
Retired Employee	2	0.4%	<input type="checkbox"/>
Computer Operator	1	0.2%	<input type="checkbox"/>
Fishermen	1	0.2%	<input type="checkbox"/>
Other	1	0.2%	<input type="checkbox"/>
Totals	530	100.0%	
Mean	--		

This data is identical to the municipal data where farming is the major occupation for the majority of the

Penablanca population.

Q7: What is your FAMILY's main SOURCE OF INCOME?

(7) What is your FAMILY's main SOURCE OF INCOME? (CHECK ONE ONLY)

	Counts	Percents	Percents	
			0	100
Farming	442	83.4%	<input type="checkbox"/>	<input type="checkbox"/>
Business	21	4.0%	<input type="checkbox"/>	<input type="checkbox"/>
Government Employe	18	3.4%	<input type="checkbox"/>	<input type="checkbox"/>
Housewife	12	2.3%	<input type="checkbox"/>	<input type="checkbox"/>
Transport Operator	10	1.9%	<input type="checkbox"/>	<input type="checkbox"/>
Student	8	1.5%	<input type="checkbox"/>	<input type="checkbox"/>
Construction	4	0.8%	<input type="checkbox"/>	<input type="checkbox"/>
Brgy. Official	4	0.8%	<input type="checkbox"/>	<input type="checkbox"/>
Unemployed	3	0.6%	<input type="checkbox"/>	<input type="checkbox"/>
Private SchoolTeacher	2	0.4%	<input type="checkbox"/>	<input type="checkbox"/>
Boatmen	1	0.2%	<input type="checkbox"/>	<input type="checkbox"/>
Retired Employee	1	0.2%	<input type="checkbox"/>	<input type="checkbox"/>
Computer Operator	1	0.2%	<input type="checkbox"/>	<input type="checkbox"/>
Contract worker	1	0.2%	<input type="checkbox"/>	<input type="checkbox"/>
Fishing	1	0.2%	<input type="checkbox"/>	<input type="checkbox"/>
Other	1	0.2%	<input type="checkbox"/>	<input type="checkbox"/>
Totals	530	100.0%		
Mean		--		

This also reflects the socio-economic profile of the whole municipality of Peñablanca where majority of the people are involved in farming and earns them less than 20,000.00 pesos annually/hectare. There are only very few business dominated by the operation of a small store.

Q8: What is the highest level of education that you have completed?

(8) What is the highest level of education that you have completed? (CHECK ONE ONLY)

	Counts	Percents	Percents	
			0	100
Some Elementary	141	26.6%	<input type="checkbox"/>	<input type="checkbox"/>
Elementary Graduate	128	24.2%	<input type="checkbox"/>	<input type="checkbox"/>
Some High School	72	13.6%	<input type="checkbox"/>	<input type="checkbox"/>
High School Graduate	68	12.8%	<input type="checkbox"/>	<input type="checkbox"/>
Some College	47	8.9%	<input type="checkbox"/>	<input type="checkbox"/>
College Degree	45	8.5%	<input type="checkbox"/>	<input type="checkbox"/>
No schooling	14	2.6%	<input type="checkbox"/>	<input type="checkbox"/>
Vocational/Technical	8	1.5%	<input type="checkbox"/>	<input type="checkbox"/>
Post Graduate	6	1.1%	<input type="checkbox"/>	<input type="checkbox"/>
Other	1	0.2%	<input type="checkbox"/>	<input type="checkbox"/>
Totals	530	100.0%		

Q9: What is your most trusted source of LOCAL news and information ?

(9) What is your most trusted source of LOCAL news and information ?(CHECK ONE ONLY)			
	Counts	Percents	Percents
			0 100
Radio	361	68.1%	<input type="checkbox"/>
Television	151	28.5%	<input type="checkbox"/>
Newspaper	7	1.3%	<input type="checkbox"/>
Barangay Officials	4	0.8%	<input type="checkbox"/>
Friends/Family	3	0.6%	<input type="checkbox"/>
Magazine	1	0.2%	<input type="checkbox"/>
Local Cable TV	1	0.2%	<input type="checkbox"/>
Religious Leader	0	0.0%	<input type="checkbox"/>
Teacher	0	0.0%	<input type="checkbox"/>
Other	2	0.4%	<input type="checkbox"/>
Totals	530	100.0%	
Mean	--		

The radio is the most trusted source of local news for three reasons: 1.) it is affordable for majority of the local community, 2.) it has more extensive area coverage (in terms of relay) compared to television, and 3.) Majority of the upland barangays still do not have current supply. They operate their radios through the use of batteries.

Q10: If you read magazines, what is your favorite?

(10) If you read magazines, what is your favorite?(CHECK ONE ONLY)

	Counts	Percents	Percents
			0 100
Don't have favorite	386	72.8%	<input type="checkbox"/>
Lifestyle Magazine	42	7.9%	<input type="checkbox"/>
Free Press	28	5.3%	<input type="checkbox"/>
Comics	25	4.7%	<input type="checkbox"/>
Celebrity Magazine	15	2.8%	<input type="checkbox"/>
Liwawayway	15	2.8%	<input type="checkbox"/>
Bannawag	10	1.9%	<input type="checkbox"/>
balita	4	0.8%	<input type="checkbox"/>
Awake	2	0.4%	<input type="checkbox"/>
Bulletin	2	0.4%	<input type="checkbox"/>
Other	1	0.2%	<input type="checkbox"/>
Totals	530	100.0%	
Mean	--		

People would prefer to listen to radio rather than read. But this data shows that if they will be provided with free reading materials they would be very willing to read it. Interestingly, Awake is a religious publication of one of the major religious affiliation in the community. This makes sermon sheets appealing.

Q11: If you read the newspaper, what is your favorite?

(11) If you read the newspaper, what is your favorite? (CHECK ONE ONLY)			
	Counts	Percents	Percents 0 100
Don't read newspaper	286	54.0%	
Philippine Daily Inquirer	107	20.2%	
Don't have favorites	96	18.1%	
Manila Bulletin	16	3.0%	
Philippine Star	12	2.3%	
Tempo	4	0.8%	
Tagumpay newspaper	3	0.6%	
People's Journal	2	0.4%	
Awake	1	0.2%	
Bulgar	1	0.2%	
Cagayan news	1	0.2%	
Frontpage	1	0.2%	
Northern Forum	0	0.0%	
Other	0	0.0%	
Totals	530	100.0%	
Mean	--		

Apparently, people don't read newspaper for reason that they cannot afford it. However, it is surprising that a national daily, the Philippine Daily Inquirer is read by at 20% of the local people.

Q12: If you listen to the radio, which one is your favorite radio station?

(12) If you listen to the radio, which one is your favorite radio station? (CHECK ONE ONLY)

	Counts	Percents	Percents	
			0	100
Bombo Radyo	199	37.5%	<input type="checkbox"/>	<input type="checkbox"/>
DZRH	180	34.0%	<input type="checkbox"/>	<input type="checkbox"/>
Bay Radio	31	5.8%	<input type="checkbox"/>	<input type="checkbox"/>
RJFM	22	4.2%	<input type="checkbox"/>	<input type="checkbox"/>
DZCV	22	4.2%	<input type="checkbox"/>	<input type="checkbox"/>
Campus Radio	18	3.4%	<input type="checkbox"/>	<input type="checkbox"/>
Don't listen to radio	16	3.0%	<input type="checkbox"/>	<input type="checkbox"/>
Don't have favorite	14	2.6%	<input type="checkbox"/>	<input type="checkbox"/>
DZTG	10	1.9%	<input type="checkbox"/>	<input type="checkbox"/>
DWPE	6	1.1%		
Star FM	6	1.1%		
DZYT	3	0.6%	<input type="checkbox"/>	<input type="checkbox"/>
Majic FM	2	0.4%	<input type="checkbox"/>	<input type="checkbox"/>
Other	1	0.2%	<input type="checkbox"/>	<input type="checkbox"/>
Totals	530	100.0%		
Mean		--		

Bombo Radyo is a local radio station while DZRH is a radio station with nationwide coverage. But this would also give us a great opportunity to give out information on areas which do not have relays for Bombo Radyo. But for obvious financial constraints more radio plugs and talks will be done over Bombo Radyo and in the government radio station, DWPE which is being patronized in the coastal areas.

Q13: What time do you usually listen to the radio?

(13) What time do you usually listen to the radio? (CAN ANSWER MORE THAN ONE)

	Counts	Percents	Percents	
			0	100
Between 6AM-9AM	244	46.7%	<input type="checkbox"/>	<input type="checkbox"/>
Between 9AM-12PM	138	26.4%	<input type="checkbox"/>	<input type="checkbox"/>
Between 3AM-6AM	57	10.9%	<input type="checkbox"/>	<input type="checkbox"/>
Between 6PM-9PM	49	9.4%	<input type="checkbox"/>	<input type="checkbox"/>
Between 12PM-3PM	33	6.3%	<input type="checkbox"/>	<input type="checkbox"/>
Between 3PM-6PM	26	5.0%	<input type="checkbox"/>	<input type="checkbox"/>
Between 9PM-12AM	18	3.4%	<input type="checkbox"/>	<input type="checkbox"/>
Between 12AM-3AM	5	1.0%	<input type="checkbox"/>	<input type="checkbox"/>
Totals	522	n/a		
Mean	--			

This table shows that people are listening to news and commentaries. This is the time when the news and commentaries are dominating the air waves and television, as well. This gives us an idea what kind of news and information people would like to hear about. Between 9AM-12PM people would now listen to radio drama and lifestyle shows over television.

Q14: Which is your favorite TV station?

(14) Which is your favorite TV station? (CHECK ONE ONLY)			
	Counts	Percents	Percents
			0 100
Don't watch TV	226	42.6%	<input type="checkbox"/>
GMA7	174	32.8%	<input type="checkbox"/>
ABS-CBN	88	16.6%	<input type="checkbox"/>
Don't have favorite	24	4.5%	<input type="checkbox"/>
don't have tv	7	1.3%	<input type="checkbox"/>
ABC5	6	1.1%	<input type="checkbox"/>
RBC-Cable	3	0.6%	<input type="checkbox"/>
Other	2	0.4%	<input type="checkbox"/>
Totals	530	100.0%	
Mean		--	

This result explains the fact that people do not have enough money to buy television sets and if ever they do have, they do not have electric power/current in their areas. GMA7 is also a national television network which we could also tap for a very limited airtime through their environment related tv shows.

Q15: In the past six months, what did you use the Penablanca's forest and natural resources for?

(15) In the past six months, what did you use the Penablanca's forest and natural resources for? [CHECK ONE OR MORE ANSWERS, READ OUT OPTIONS)

	Counts	Percents	Percents
			0 100
Farming	329	62.2%	<input type="checkbox"/>
Firewood gathering	265	50.1%	<input type="checkbox"/>
Fishing	60	11.3%	<input type="checkbox"/>
Water extraction	31	5.9%	<input type="checkbox"/>
Hunting wild pigs, Philippine deer or birds	27	5.1%	<input type="checkbox"/>
Charcoal Making	25	4.7%	<input type="checkbox"/>
Small-scale logging	14	2.6%	<input type="checkbox"/>
Collecting orchids and ornamental plants	14	2.6%	<input type="checkbox"/>
Rattan/bamboo collection	14	2.6%	<input type="checkbox"/>
Grazing	13	2.5%	<input type="checkbox"/>
Hiking/recreation	5	0.9%	<input type="checkbox"/>
Stone/rock collection	3	0.6%	<input type="checkbox"/>
did not go to the forest	3	0.6%	<input type="checkbox"/>
Spelunking	2	0.4%	<input type="checkbox"/>
Kayaking	2	0.4%	<input type="checkbox"/>
Other	2	0.4%	<input type="checkbox"/>
Totals	529	n/a	

Mean	--	
------	----	--

Activities highlighted in yellow are allowed in the protected area but under the strict supervision of the protected area management staff except for farming done in the lowland. This data also reinforces the fact that firewood gathering is being done by the local people for sale as it is the most commonly used fuel in the households. Fishing is also strictly regulated and under close monitoring and supervision of the barangay officials.

Q16: If you gathered any wild plants, animals, or other forest products in the past six months, for what purpose did you collect them?

(16) If you gathered any wild plants, animals, or other forest products in the past six months, for what purpose did you collect them? (CHECK ONE OR MORE)

	Counts	Percents	Percents	
			0	100
For personal use	427	80.6%	<input type="checkbox"/>	<input type="checkbox"/>
For sale or exchange of other goods and services	41	7.7%	<input type="checkbox"/>	<input type="checkbox"/>
For fun/recreation	29	5.5%	<input type="checkbox"/>	<input type="checkbox"/>
Did not collect any	26	4.9%	<input type="checkbox"/>	<input type="checkbox"/>
Don't know	24	4.5%	<input type="checkbox"/>	<input type="checkbox"/>
did not go to the forest	4	0.8%		
Other	0	0.0%	<input type="checkbox"/>	<input type="checkbox"/>
Totals	530	n/a		
Mean		--		

This is a revelation. For the past years, people have been hunting for sale in Tuguegarao City. Nonetheless, it would be useful to provide information on the various wildlife and their conservation status so people will not hunt and collect wildlife species which are endangered and threatened.

Q17: Do you think, it is important to have laws which protect the forests and wildlife?

(17) Do you think, it is important to have laws which protect the forests and wildlife?			
	Counts	Percents	Percents
			0 100
Very Important	272	51.3%	<input type="text"/>
Important	211	39.8%	<input type="text"/>
Somewhat important	25	4.7%	<input type="text"/>
Not important	13	2.5%	<input type="text"/>
Don't know	9	1.7%	<input type="text"/>
Totals	530	100.0%	
Mean	--		

People know how important laws are. Hence, it would not be difficult for them to understand the need to enforce them, on the one hand. On the other hand, it is also possible that people do not strictly observe the laws because they are not properly informed and its interpretations are left for them to understand. Usually interpretations are made towards their own benefit and not for the benefit of the protected area.

Q18: Do you think that your local forest resources are threatened or endangered?

(18) Do you think that your local forest resources are threatened or endangered?			
	Counts	Percents	Percents
			0 100
Yes, very threatened	342	64.5%	
Yes, a little threatened	69	13.0%	
Yes, somewhat threatened	58	10.9%	
Don't know	38	7.2%	
No, not threatened	23	4.3%	
Totals	530	100.0%	
Mean	--		

This also a very encouraging data as the people can already feel and see the difference of healthy and sustainable forest resources. This could reinforce our key messages together with their roles as partners in the protection and management of the protected area.

Q19: Do you live near or inside a protected area?

(19) Do you live near or inside a protected area?			
	Counts	Percents	Percents
			0 100
Yes	421	79.4%	<input type="text"/>
Don't know	82	15.5%	<input type="text"/>
No	27	5.1%	<input type="text"/>
Totals	530	100.0%	
Mean	--		

This data says that people are becoming aware of their environment. They may not be following all the laws of the protected area but their awareness of the protected status of their area will be something that we could build upon in terms of changing their attitudes and later will guide them in adopting sustainable practices.

Q20: If you live in or near a protected area, what is it called?

(20) If you live in or near a protected area, what is it called?				
	Counts	Percents	Percents	
			0	100
Penablanca Protected Landscape and Seascape	214	40.4%	<input type="text"/>	
No Answer	170	32.1%	<input type="text"/>	
Penablanca Protected Landscape	123	23.2%	<input type="text"/>	
Don't know	15	2.8%	<input type="text"/>	
Callao Caves Resort	6	1.1%		
Reforestation	1	0.2%	<input type="text"/>	
Sierra Madre Mountain	1	0.2%	<input type="text"/>	
Totals	530	100.0%		
Mean		--		

The protected area has just been expanded to Peñablanca Protected Landscape and Seascape only last year. Hence, this data shows that people actually know the protected area and may only be wondering what is its called now. This is something that the work plan should include as one of the objective.

Q21: FOR ENUMERATOR TO CHECK WITHOUT ASKING: The respondent named Penablanca Protected Landscape and Seascape.

(21) FOR ENUMERATOR TO CHECK WITHOUT ASKING: The respondent named Penablanca Protected Landscape and Seascape

	Counts	Percents	Percents	
			0	100
Incorrectly	313	59.1%	<input type="text"/>	
Correctly	217	40.9%	<input type="text"/>	
Totals	530	100.0%		
Mean	--			

This is related to the previous question and will be included as one of the objective of the project to increase the awareness of those people who can name their protected area. Please refer to the work plan.

Q22: In your opinion, what are the three most important problems affecting the forest in your area ?

(22) In your opinion, what are the three most important problems affecting the forest in your area? (LIST UP TO THREE THREATS)

	Counts	Percents	Percents	
			0	100
Logging	205	38.7%		
Kaingin	170	32.1%		
No Problem	91	17.2%		
Don't Know	78	14.7%		
lack of awareness	48	9.1%		
hunting	33	6.2%		
firewood gathering	29	5.5%		
charcoal making	24	4.5%		
Lack of alternative Livelihood	10	1.9%		
illegal fishing	5	0.9%		
forest fire	4	0.8%		
typhoon	3	0.6%		
Treasure Hunting	2	0.4%		
flood	1	0.2%		
Totals	530	n/a		
Mean		--		

The top 3 threats as perceived by DENR are highlighted in yellow: Logging, Firewood Gathering and Charcoal Making. It will be important to increase knowledge about these direct threats – see the work plan.

Q23: Which of the following animals would you like to see protected the most?

(23) Which of the following animals would you like to see protected the most? (CHECK ONE ONLY, SHOW PICTURES)

	Counts	Percents	Percents	
			0	100
Philippine Eagle	229	43.2%	<input type="checkbox"/>	<input type="checkbox"/>
Rufous Hornbill	200	37.7%	<input type="checkbox"/>	<input type="checkbox"/>
Pygmy Fruit Bat	56	10.6%	<input type="checkbox"/>	<input type="checkbox"/>
Wild Pigs	11	2.1%	<input type="checkbox"/>	<input type="checkbox"/>
wild chicken	7	1.3%	<input type="checkbox"/>	<input type="checkbox"/>
Philippine crocodile	6	1.1%	<input type="checkbox"/>	<input type="checkbox"/>
Monkey	5	0.9%	<input type="checkbox"/>	<input type="checkbox"/>
wild cat	5	0.9%	<input type="checkbox"/>	<input type="checkbox"/>
Luzon Bleeding Heart	4	0.8%	<input type="checkbox"/>	<input type="checkbox"/>
Deer	3	0.6%	<input type="checkbox"/>	<input type="checkbox"/>
Isabela Oriole	1	0.2%	<input type="checkbox"/>	<input type="checkbox"/>
dont have interest	1	0.2%	<input type="checkbox"/>	<input type="checkbox"/>
dove	1	0.2%	<input type="checkbox"/>	<input type="checkbox"/>
Other	1	0.2%	<input type="checkbox"/>	<input type="checkbox"/>
Totals	530	100.0%		
Mean		--		

The Philippine Eagle is the national bird for the Philippines and it would not be surprising that people would like to see it protected. Nonetheless, the Philippine Eagle is more associated with Davao, in the Southern Philippines. Hence, the stakeholders have chosen the second animal which garnered the second highest votes and for other important considerations. First, the Rufous Hornbill or locally named *Kalaw* is the symbol of conservation for the Municipality of Peñablanca. People could easily associate Penablanca with the bird *KALAW (Callao)* where the famous Callao Caves got its name and another barangay of the municipality, named Callao. Moreover, in terms of habitat protection, the rufous hornbill, like the Philippine Eagle is also living in big trees and using crevices of big dead or living trees as breeding nest. Therefore, the stakeholder's believed that Rufous hornbill can also represent the concerns of the Philippine Eagle while adopting local culture and indigenous practices that reflects the grandeur and richness of the municipality.

Q25: How strongly do you agree or disagree with the following statements? Cutting trees threaten the animals that live in the forest.

(25) How strongly do you agree or disagree with the following statements? Cutting trees threaten the animals that live in the forest.			
	Counts	Percents	Percents
			0 100
Agree strongly	352	66.4%	
Disagree	102	19.2%	
Agree somewhat	69	13.0%	
Don't know	6	1.1%	
Disagree strongly	1	0.2%	
Totals	530	100.0%	
Mean	--		

The local people as reflected in this data are not totally alien to concerns of the protected area. They know a lot about the area but this knowledge has to be enhanced to be able to change attitudes and lifestyle.

Q26: There is a need to penalize (by law) anybody cutting trees in Peñablanca's forests.

(26) There is a need to penalize (by law) anybody cutting trees in Peñablanca's forests.			
	Counts	Percents	Percents
			0 100
Agree strongly	388	73.2%	
Agree somewhat	105	19.8%	
Disagree	27	5.1%	
Don't know	10	1.9%	
Disagree strongly	0	0.0%	
Totals	530	100.0%	
Mean	--		

Interestingly, people have very positive perception about laws of the protected area that conserves Penablanca forest. However, in the presence of violations inside the PA, this means that more focus should be given to alternatives.

Q27: Which is the following activities are permitted inside Penablanca Protected Landscape and Seascape

(27) Which is the following activities are permitted inside Penablanca Protected Landscape and Seascape? (CAN CHECK ONE OR MORE)

	Counts	Percents	Percents
			0 100
Firewood gathering *	290	54.7%	<input type="checkbox"/>
lowland farming	281	53.0%	<input type="checkbox"/>
Fishing **	132	24.9%	<input type="checkbox"/>
Hiking/recreation	58	10.9%	<input type="checkbox"/>
Water extraction	52	9.8%	<input type="checkbox"/>
Charcoal making	38	7.2%	<input type="checkbox"/>
Grazing	32	6.0%	<input type="checkbox"/>
Hunting wild pigs or birds	24	4.5%	<input type="checkbox"/>
Spelunking (caving)	24	4.5%	<input type="checkbox"/>
Collecting orchids and ornamental plants	17	3.2%	<input type="checkbox"/>
Cutting trees	10	1.9%	<input type="checkbox"/>
Stone collection	9	1.7%	<input type="checkbox"/>
Kayaking	6	1.1%	<input type="checkbox"/>
bamboo/rattan gathering ***	5	0.9%	<input type="checkbox"/>
Other	0	0.0%	<input type="checkbox"/>
Totals	530	n/a	
Mean	--		

The correct answer, is that the activities highlighted in yellow ARE permitted, with the following restrictions:

* Firewood gathering is only permitted on a small scale – for personal use. The figure shown of 54.7 % is much higher than what would be expected if it were for personal use only, therefore much of the firewood collected is used, illegally, for commercial purposes. An objective will be set to try and reduce this activity.

**Fishing is permitted – so long as people follow the guidelines of the protected area regarding species, size of fish caught and method used.

*** Bamboo/rattan gathering is only permitted with a permit.

This shows that there are 5 other main types of activity carried out illegally – including Charcoal making, hunting, orchid and ornamental plant harvesting, tree-cutting and stone collection.

Charcoal production, hunting, cutting trees and collection of plants is common. However -the data here shows that knowledge is good, on activities permitted (and not permitted) within the protected area. The general public are high up on the scale of “Knowledge, Attitude, Practice (KAP)” regarding this issue. The conservation education campaign does not need to focus so much on giving this information – but rather seek to find out what the barriers are which are stopping people from actually following the regulations that they know about.

A possible barrier to people following the regulations they know about, is a lack of specific knowledge about the fines for, for example, cutting trees and hunting. See next graph (question 28). Therefore this barrier can be reduced by the conservation education campaign.

Q28: Do you think , there is a fine for cutting trees and hunting wildlife inside Penablanca's protected Landscape and Seascape ?

(28) Do you think , there is a fine for cutting trees and hunting wildlife inside Penablanca's protected forest? if so, what is it? (CHECK ONE ONLY)

	Counts	Percents	Percents
			0 100
No fine	188	35.5%	<input type="checkbox"/>
Don't know	136	25.7%	<input type="checkbox"/>
less than 5,000	110	20.8%	<input type="checkbox"/>
between 5,000 and 500,000	75	14.2%	<input checked="" type="checkbox"/>
no fine for personal use	10	1.9%	<input type="checkbox"/>
imprisonment	7	1.3%	<input type="checkbox"/>
between 50,001 and 1,000,000	3	0.6%	<input type="checkbox"/>
more than 1,000,000	1	0.2%	<input type="checkbox"/>
Other	0	0.0%	<input type="checkbox"/>
Totals	530	100.0%	
Mean		--	

The correct answer is highlighted in yellow – the fine is between 5,000 and 00,000 pesos.

The data shows that only 14 % of people know the true level of fine, and most people think the fine is much lower – or non-existent. An objective will be set to increase knowledge here – see the Workplan.

Q29: In your opinion, what should be the fine for cutting trees and hunting wildlife inside Penabablanca's protected forest ?

(29) In your opinion, what should be the fine for cutting trees and hunting wildlife inside Penablanca's protected forest?
(CHECK ONE ONLY)

	Counts	Percents	Percents	
			0	100
less than 5,000	136	25.7%	<input type="checkbox"/>	<input type="checkbox"/>
No fine	124	23.4%	<input type="checkbox"/>	<input type="checkbox"/>
Don't know	119	22.5%	<input type="checkbox"/>	<input type="checkbox"/>
between 5,000 and 500,000	105	19.8%	<input type="checkbox"/>	<input type="checkbox"/>
more than 1,000,000	21	4.0%	<input type="checkbox"/>	<input type="checkbox"/>
Depends on the quantity of logs or woods they gather	13	2.5%	<input type="checkbox"/>	<input type="checkbox"/>
between 50,001 and 1,000,000	4	0.8%	<input type="checkbox"/>	<input type="checkbox"/>
between 15,000-19,999	2	0.4%	<input type="checkbox"/>	<input type="checkbox"/>
Imprisonment	2	0.4%	<input type="checkbox"/>	<input type="checkbox"/>
1st offense 1,000- 2nd offense 2,000- 3rd offense 5,000 with imprisonment	1	0.2%	<input type="checkbox"/>	<input type="checkbox"/>
200.00	1	0.2%	<input type="checkbox"/>	<input type="checkbox"/>
between P500- P1000	1	0.2%	<input type="checkbox"/>	<input type="checkbox"/>
Gadget confiscation	1	0.2%	<input type="checkbox"/>	<input type="checkbox"/>
Other	0	0.0%	<input type="checkbox"/>	<input type="checkbox"/>
Totals	530	100.0%		
Mean		--		

This maybe one of the reason why people keep on doing the prohibited activities, they are not aware of the penalties imposed by law. This suggestion also reflects their economic status. People believed that they should be exempted because they are very poor and do not have any stable income.

Q30: Do you think that the people working to protect Peñablanca’s forests are doing an important job ?

(30) Do you think that the people working to protect Penablanca's forests are doing an important job?			
	Counts	Percents	Percents
			0 100
Very Important	266	50.2%	<input type="text"/>
Important	217	40.9%	<input type="text"/>
Somewhat important	26	4.9%	<input type="text"/>
Not important	13	2.5%	<input type="text"/>
Don't know	8	1.5%	<input type="text"/>
Totals	530	100.0%	
Mean	--		

People know how valuable their resources is, this is why they believed that the protection and conservation of PPLS is also very important. This data could be a moral booster on the part of the DENR. This situation can be used to ask for the support of the local people.

Q31: Can you think of any environmental effects of cutting trees?

(31) Can you think of any environmental effects of cutting trees?(LIST THREE MAJOR EFFECTS)				
	Counts	Percents	Percents	
			0	100
Flood	290	54.7%		
soil erosion	158	29.8%		
Water Shortage	137	25.8%		
Loss of Wildlife Habitat	93	17.5%		
Don't Know	62	11.7%		
Drought	21	4.0%		
No Effect	11	2.1%		
forest degradation	4	0.8%		
Totals	530	n/a		
Mean		--		

Radio and television are really valuable media in disseminating information. There had never been great floods that happen in the area but in Leyte ten years ago and in Baggao in June 2004, floods claimed thousands of lives. This must have been the reason why people think that flooding is the most destructive impact of cutting trees. The next two other impacts (highlighted in yellow) are already occurring in the area. Hence, this should also be targeted in the work plan.

Q32: In the past six months, have you been involved in any conservation activities? If so, what

(32) In the past six months, have you been involved in any conservation activities? If so, what ? (CHECK ONE OR MORE)			
	Counts	Percents	Percents 0 100
Tree Planting	296	55.8%	<input type="checkbox"/>
Community Clean Up Drive	220	41.5%	<input type="checkbox"/>
No	103	19.4%	<input type="checkbox"/>
Joined a Conservation Group	40	7.5%	<input type="checkbox"/>
Don't know	29	5.5%	<input type="checkbox"/>
Reported an Illegal Activity	9	1.7%	<input type="checkbox"/>
Donated Money for Conservation	3	0.6%	<input type="checkbox"/>
no activity conducted	1	0.2%	<input type="checkbox"/>
Other	0	0.0%	<input type="checkbox"/>
Totals	530	n/a	
Mean		--	

Tree planting and Community Clean up are two popular activities that will easily get people's support. However, reporting an illegal activity should be given emphasis to really protect the area. This is being targeted in the workplan. Besides, local people believed that they cannot stop illegal activities. Hence, the project would like to tell them they can and there would be no other people more concerned that the local people themselves.

Q33: Would you be willing to support nature conservation in your area? If so, how?

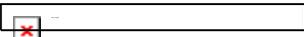
(33) Would you be willing to support nature conservation in your area? If so, how? (CHECK ONE OR MORE, READ OUT ALL OPTIONS)

	Counts	Percents	0	100
Tree Planting	324	61.1%	<input type="checkbox"/>	<input type="checkbox"/>
Community Clean Up Drive	203	38.3%	<input type="checkbox"/>	<input type="checkbox"/>
Joined a Conservation Group	171	32.3%	<input type="checkbox"/>	<input type="checkbox"/>
Reported an Illegal Activity	37	7.0%	<input type="checkbox"/>	<input type="checkbox"/>
Don't know	30	5.7%	<input type="checkbox"/>	<input type="checkbox"/>
No, I do not support it	16	3.0%	<input type="checkbox"/>	<input type="checkbox"/>
Stop Kaingin practice	13	2.5%	<input type="checkbox"/>	<input type="checkbox"/>
Donated Money for Conservation	6	1.1%	<input type="checkbox"/>	<input type="checkbox"/>
Other	0	0.0%	<input type="checkbox"/>	<input type="checkbox"/>
Totals	530	n/a		
Mean		--		

As shown, people will not report any illegal activity. But once, the local community are aware of their responsibilities to take care of these resources for their children’s future, people will be encouraged to report any activities that will degrade their legacy to the next generations. Culturally, Filipinos tend to save to leave something to their children as inheritance. Along this argument, the protected area resources can be the parents’ inheritance and legacy to their children.

Q35: How strongly do you agree or disagree with the following statement: "I support the expansion of Penablanca Protected Forest."

(35) How strongly do you agree or disagree with the following statement: "I support the expansion of Penablanca protected forest."

	Counts	Percents	Percents	
			0	100
Agree strongly	482	90.9%		
Agree somewhat	35	6.6%		
Don't know	9	1.7%		
Disagree	4	0.8%		
Disagree strongly	0	0.0%		
Totals	530	100.0%		
Mean		--		

Veering away from the top down approach of proclaiming the protected area, the DENR and CI conducted intensive campaign and consultation if only to integrate the concerns of the people and their rights are protected, as well. This data shows how deeply involved the people are in the expansion of the protected area. Comparing, it with the forthcoming campaign, the people will join conservation efforts if their informed, consulted and involved from its conception up to implementation.

Cross Tabulation of Survey Results

Most trusted source of information based on gender (n=530)

	Gender: (CHECK WITHOUT ASKING)	
	Female 296	Male 234
(9) What is your most trusted source of LOCAL news and information Radio	68.9%; 204	67.1%; 157
Newspaper	1.0%; 3	1.7%; 4
Television	27.7%; 82	29.5%; 69
Friends/Family	0.3%; 1	0.9%; 2
Barangay Officials	0.7%; 2	0.9%; 2
Other	1.4%; 4	0.0%; 0
Totals	100.0%; 296	100.0%; 234

Figure 6:

This table shows that for men and women the radio is the most trusted source of information. This reveals that in disseminating the key messages the radio will be the most appropriate media to reach both gender and educate them

Uses of the Penablanca Forest based on Gender (n=530)

	Gender: (CHECK WITHOUT ASKING)	
	Female 55.8%, 296	Male 44.2%, 234
In the past six months, what did you use the Penablanca's forest and natural resources for?		
Farming	60.5%; 179	64.4%; 150
Hunting wild pigs, Philippine deer or birds	3.7%; 11	6.9%; 16
Spelunking	0.3%; 1	0.4%; 1
Firewood gathering	51.0%; 151	48.9%; 114
Small-scale logging	3.0%; 9	2.1%; 5
Collecting orchids and ornamental plants	3.4%; 10	1.7%; 4
Water extraction	6.8%; 20	4.7%; 11
Kayaking	0.3%; 1	0.4%; 1
Stone/rock collection	0.3%; 1	0.9%; 2
Fishing	10.8%; 32	12.0%; 28
Charcoal Making	5.7%; 17	3.4%; 8
Grazing	2.4%; 7	2.6%; 6
Hiking/recreation	1.0%; 3	0.9%; 2
Rattan/bamboo collection	3.4%; 10	1.7%; 4
did not go to the forest	0.7%; 2	0.4%; 1
Other	0.0%; 0	0.9%; 2
Totals	*. * ,	*. * ,



This table shows that farming is the most popular land use of the protected area. This is followed by firewood gathering and fishing. But among women, firewood gathering is their next major activity and followed by charcoal making and water extraction. Interestingly, these activities are the immediate needs of the family. On the other hand, the men evidently complement their income from farming and fishing with hunting.

I

Threats of the PA based on main occupation (n=530)

	In your opinion, what are the three most important problems affecting the forest in your area? (LIST UP TO THREE THREATS)								
	logging 29.2%, 205	Kaingin 24.2%, 170	No Problem 12.9%, 91	Don't Know 11.1%, 78	lack of awareness 6.8%, 48	hunting 4.7%, 33	firewood gathering 4.1%, 29	charcoal making 3.4%, 24	Other 3.6%, 25
(6) What is your MAIN occupation) Farmer	34.6%; 71	41.2%; 70	45.1%; 41	46.2%; 36	79.2%; 38	27.3%; 9	27.6%; 8	37.5%; 9	44.0%; 11
Housewife	37.1%; 76	31.8%; 54	30.8%; 28	35.9%; 28	12.5%; 6	21.2%; 7	41.4%; 12	29.2%; 7	32.0%; 8
Student	17.6%; 36	10.0%; 17	9.9%; 9	7.7%; 6	4.2%; 2	24.2%; 8	10.3%; 3	16.7%; 4	12.0%; 3
Government Employee	2.4%; 5	6.5%; 11	1.1%; 1	0.0%; 0	0.0%; 0	12.1%; 4	6.9%; 2	8.3%; 2	8.0%; 2
Unemployed	1.5%; 3	3.5%; 6	1.1%; 1	3.8%; 3	0.0%; 0	0.0%; 0	0.0%; 0	4.2%; 1	0.0%; 0
Business person	1.5%; 3	3.5%; 6	4.4%; 4	1.3%; 1	0.0%; 0	3.0%; 1	10.3%; 3	4.2%; 1	0.0%; 0
Transport Operator	1.5%; 3	0.6%; 1	1.1%; 1	1.3%; 1	4.2%; 2	0.0%; 0	0.0%; 0	0.0%; 0	0.0%; 0
Other	3.9%; 8	2.9%; 5	6.6%; 6	3.8%; 3	0.0%; 0	12.1%; 4	3.4%; 1	0.0%; 0	4.0%; 1
Totals	100.0%; 205	100.0%; 170	100.0%; 91	100.0%; 78	100.0%; 48	100.0%; 33	100.0%; 29	100.0%; 24	100.0%; 25

This table augurs well with the stakeholders identified top three threats namely: logging, kaingin, firewood gathering and charcoal making. Interestingly, lack of awareness comes first in the list for the farmers. This reflects the fact that the farmers are affected with the current environmental effects of these threats. Among women, it is logging that comes number one in their list because obviously the women's activities (refer to previous table) are immediately affected by logging like water shortage. This data presents a unique set of understanding on the present economic state of the Municipality. While they know what are the threats of the PA, the people do not have any alternative but to look at the forest as source of instant cash.

**Environmental effects of cutting trees
based on main occupation (n=350)**

	What is your MAIN occupation?(READ ALL, CHECK ONE ONLY)					
	Farmer 44.0%, 233	Housewife 33.2%, 176	Student 11.3%, 60	Government Employee 2.8%, 15	Unemployed 2.1%, 11	Other 6.6%, 35
(31) Can you think of any environmental effects of cutting trees? Flood	53.6%; 125	52.8%; 93	68.3%; 41	66.7%; 10	72.7%; 8	37.1%; 13
soil erosion	25.8%; 60	27.8%; 49	31.7%; 19	60.0%; 9	36.4%; 4	48.6%; 17
Water Shortage	27.5%; 64	30.7%; 54	10.0%; 6	26.7%; 4	18.2%; 2	20.0%; 7
Loss of Wildlife Habitat	19.3%; 45	13.6%; 24	18.3%; 11	20.0%; 3	18.2%; 2	22.9%; 8
Don't Know	11.6%; 27	10.8%; 19	11.7%; 7	6.7%; 1	18.2%; 2	17.1%; 6
Drought	4.3%; 10	5.1%; 9	0.0%; 0	13.3%; 2	0.0%; 0	0.0%; 0
No Effect	2.1%; 5	2.8%; 5	0.0%; 0	0.0%; 0	0.0%; 0	2.9%; 1
forest degradation	0.0%; 0	1.7%; 3	1.7%; 1	0.0%; 0	0.0%; 0	0.0%; 0
Totals	*, *	*, *	*, *	*, *	*, *	*, *

Figure 22:

Across all sectors, flood is the most popular among the impacts because this is already experienced in the country and lately in the province. This data reflects the effectiveness of broadcast media in disseminating information and not practically based on experience. Nonetheless, this should be a good argument to be able to win the sympathy of the local people and cater them towards conservation.

**Present rate of fine for cutting trees
based on 5 major occupation (n=530)**

	What is your MAIN occupation?(READ ALL, CHECK ONE ONLY)					
	Farmer 44.0%, 233	Housewife 33.2%, 176	Student 11.3%, 60	Government Employee 2.8%, 15	Unemployed 2.1%, 11	Other 6.6%, 35
(28) Do you think , there is a fine for cutting trees and hunting wildlife inside Penablanca's protected forest? if so, what is it? No fine	42.9%; 100	31.3%; 55	33.3%; 20	20.0%; 3	18.2%; 2	22.9%; 8
Don't know	23.6%; 55	29.0%; 51	15.0%; 9	20.0%; 3	36.4%; 4	40.0%; 14
less than 5,000	17.2%; 40	23.9%; 42	25.0%; 15	20.0%; 3	36.4%; 4	17.1%; 6
between 5,000 and 500,000	11.2%; 26	13.6%; 24	21.7%; 13	40.0%; 6	9.1%; 1	14.3%; 5
no fine for personal use	2.1%; 5	1.7%; 3	1.7%; 1	0.0%; 0	0.0%; 0	2.9%; 1
imprisonment	2.6%; 6	0.6%; 1	0.0%; 0	0.0%; 0	0.0%; 0	0.0%; 0
between 50,001 and 1,000,000	0.4%; 1	0.0%; 0	1.7%; 1	0.0%; 0	0.0%; 0	2.9%; 1
Other	0.0%; 0	0.0%; 0	1.7%; 1	0.0%; 0	0.0%; 0	0.0%; 0
Totals	100.0%; 233	100.0%; 176	100.0%; 60	100.0%; 15	100.0%; 11	100.0%; 35

Figure 28:

Obviously, the government employees must know the laws more than the rest of the respondents as they are responsible in enforcing them. The students are the second group of respondents who gave the correct answer. For the farmers and their wives the present knowledge is too low to be ignored as laws keep the peace and secure the biological diversity of the area.

Participation of the barangay residents to any conservation activity (n=530)

In the past six months, have you been involved in any conservation activities? If so, what ? (CHECK ONE OR MORE)									
	Tree Planting 42.2%, 296	Community Clean Up Drive 31.4%, 220	No 14.7%, 103	Joined a Conservation Group 5.7%, 40	Don't know 4.1%, 29	Reported an Illegal Activity 1.3%, 9	Donated Money for Conservation 0.4%, 3	no activity conducted 0.1%, 1	Other 0.0%, 0
Which barangay do you live in? Lapi	11.1%; 33	3.2%; 7	11.7%; 12	15.0%; 6	10.3%; 3	11.1%; 1	0.0%; 0	0.0%; 0	-; 0
Agugaddan	7.1%; 21	8.6%; 19	10.7%; 11	10.0%; 4	3.4%; 1	0.0%; 0	33.3%; 1	0.0%; 0	-; 0
Quibal	7.4%; 22	9.1%; 20	10.7%; 11	0.0%; 0	3.4%; 1	22.2%; 2	0.0%; 0	0.0%; 0	-; 0
Mangga	6.1%; 18	3.2%; 7	8.7%; 9	0.0%; 0	6.9%; 2	0.0%; 0	0.0%; 0	0.0%; 0	-; 0
Baliuag	5.4%; 16	6.8%; 15	8.7%; 9	5.0%; 2	6.9%; 2	11.1%; 1	0.0%; 0	0.0%; 0	-; 0
Malibabag	5.1%; 15	9.5%; 21	0.0%; 0	12.5%; 5	3.4%; 1	0.0%; 0	0.0%; 0	0.0%; 0	-; 0
Nannarian	4.7%; 14	6.4%; 14	5.8%; 6	0.0%; 0	0.0%; 0	0.0%; 0	33.3%; 1	0.0%; 0	-; 0
Bical	6.1%; 18	8.2%; 18	2.9%; 3	12.5%; 5	3.4%; 1	0.0%; 0	33.3%; 1	0.0%; 0	-; 0
San Roque	6.4%; 19	10.0%; 22	1.0%; 1	2.5%; 1	0.0%; 0	44.4%; 4	0.0%; 0	0.0%; 0	-; 0
Callao	4.4%; 13	5.5%; 12	6.8%; 7	5.0%; 2	24.1%; 7	0.0%; 0	0.0%; 0	0.0%; 0	-; 0
Cabbo	6.8%; 20	5.9%; 13	3.9%; 4	0.0%; 0	3.4%; 1	0.0%; 0	0.0%; 0	0.0%; 0	-; 0
Minanga	4.4%; 13	5.0%; 11	6.8%; 7	12.5%; 5	0.0%; 0	11.1%; 1	0.0%; 0	0.0%; 0	-; 0
Sisim	6.1%; 18	6.8%; 15	1.0%; 1	0.0%; 0	0.0%; 0	0.0%; 0	0.0%; 0	0.0%; 0	-; 0
Nanguilattan	3.0%; 9	1.8%; 4	6.8%; 7	10.0%; 4	6.9%; 2	0.0%; 0	0.0%; 0	100.0%; 1	-; 0
Buyun	2.7%; 8	0.9%; 2	7.8%; 8	5.0%; 2	13.8%; 4	0.0%; 0	0.0%; 0	0.0%; 0	-; 0
Bugatay	5.7%; 17	5.5%; 12	2.9%; 3	7.5%; 3	0.0%; 0	0.0%; 0	0.0%; 0	0.0%; 0	-; 0
Nabbabalayan	4.1%; 12	1.4%; 3	2.9%; 3	2.5%; 1	10.3%; 3	0.0%; 0	0.0%; 0	0.0%; 0	-; 0

Cabasan	3.4%; 10	2.3%; 5	1.0%; 1	0.0%; 0	3.4%; 1	0.0%; 0	0.0%; 0	0.0%; 0	-; 0
Totals	100.0%; 296	100.0%; 220	100.0%; 103	100.0%; 40	100.0%; 29	100.0%; 9	100.0%; 3	100.0%; 1	%; 0

Figure 31:

This table presents which one of the eighteen barangays are the most active in the conservation of the Protected area. Lapi has the most number of residents who joined tree planting and joined a conservation organization. It is important that the program must know which of the different activities are preferred by the people get to involve with.

Generally, the local people believed that it is important to have laws which protect the forests and wildlife. However, this learning or knowledge is not clearly manifested or translated into their compliance with these laws. This is reflected in their continued defiance for the laws that protect the PPLS and continue doing the prohibited acts such as logging and firewood gathering.

Respondent's perception on the Three Most Important Threats by Gender

Gender: (CHECK WITHOUT ASKING)	
Female 55.8%, 296	Male 44.2%, 234

Figure 41:

Based from the result of the survey, the same threats are cross tabulated to segregate or measure the difference in responses among the men and the women. Apparently, there's not much difference in their perceptions. Hence, targeting them separately is not required but rather it would be more ideal if they involve them together in one conservation activity and encourage them to share their ideas in on particular conservation initiative.

SPECIES SUMMARY



RUFOUS HORNBILL (*Buceros hydrocorax*)

Taxonomy:

Kingdom: Animalia
Phylum: Chordata
Sub-phylum: Vertebra
Class: Aves
Order: Bucerotiformes

Common Name: Kalaw

Distribution

Endemic to Luzon and Marinduque

Description:

Among all the hornbills found in the Philippines, the Rufous hornbill is the largest (Kennedy 2000). The female and male hornbill is alike; the races vary in size, colour and shape of the casque. The adult hornbill has a trim surrounding bill including upper throat black. Its band on lower throat buff is white, top of head, neck, and upper breast rufous back and wings are dark brown. Its tail is cinnamon, buff often stained darker. The breast and upper belly is black while the lower belly and thighs buff to light rufous. The young or immature hornbill, vary with age but generally have buff white heads and underparts. The wings are colored black and light brown with broad buff white margins to feathers. The tail is brown with terminal white.

The bill is red with large flat casque extending to a point towards tip of bill; eye pale blue; skin around eyes varies from yellow to black; legs burnt orange.

Biology:

Hornbills are the only birds in which two vertebrae (the axis and the atlas) are fused together (Earthlife website 2004). They are also the only bird with a two-lobed kidney- all other birds having a three lobed kidney.

Hornbills are omnivorous with a range of diets from almost wholly carnivorous to almost wholly frugivorous (fruit eating). The Rufous hornbill being a forest dweller is predominantly frugivorous (Earthlife Website 2004). Few hornbill species appear to need water to drink, majority gain all the moisture they need from their food. Like most animals, food taken by hornbills varies throughout the year depending on what is available. They have long bills which help them to collect food items from extremities which they would not otherwise be able to reach and short, broad, rounded wings which are good for short bouts but not for extended periods of flight.

The casque is probably important as an indication of the age, sex and status of an individual bird.

All hornbills that were already studied are monogamous pairs. They all breed in existing holes or crevices, normally naturally occurring ones either in trees during the months of April, July, August, and November. Interestingly, the female seals herself up inside the cavity and then proceeds to moult all her flight feathers in one go while she is incubating the eggs. In some cases the males help seal the female in. The female cemented into the cavity with only an opening to pass food to her. The hole is made up of mud, and sealed with food and faeces to help protect the female and the young from predation. She will break out of the chamber after the single nestling is partially grown. Both adult and immature are reported to help feed the female and the nestling. This is the highest occurrence of cooperative breeding in any order of birds.

The number of young which survive will depend on the number of helpers and/or on the amount of food available. Incubation of the egg ranges between 23 to 46 days. The larger the species, the longer the incubation period.

Voice: Loud call is 1 or more deep resonating *kaaww* or *aww* given either

Max. Size

male, L- 940 cm (37"); W 430; T 315; B 237; t 63
female L-890 cm (35"); W 380; T 295; B 205; t 58

Males are larger than females being up to 17% heavier and with up to 21% greater wingspan.

Ecology:

The hornbill traverses in small, apparently family groups in forests from sea level to about 1500m. They are often seen foraging or resting in the canopy and flying, alternately gliding and flapping across valleys and along mountain slopes. While they live in wide range of habitats, they prefer mature forests.

Importance:

Generally, birds perform different functions that help maintain the health and diversity of the surrounding environment. They can act as pollinators and agents for seed dispersals. They help control or decrease the population of insects. They also add a lot to the aesthetic value of the area. But most of all, birds can determine the productivity or status of one area or forest. The hornbills, for example, need large expanse of forests with a number of old trees for nesting, in order to live and maintain a viable breeding population. With the big trees being cut for timber, firewood and charcoal inside Peñablanca, the future for the hornbill and other large residents like the Philippine Eagle will not survive. The diminishing population of the hornbills defines the prevailing forest destruction in its habitat.

The presence of these large trees are not only dwelling or nesting ground for the hornbill; they perform many ecological functions that maintain the life support system like watershed, air shed and source of food and medicines.

Hornbills for one have been known to mankind for a long period of time. This bird is a feature to behold in many ancient customs and myths. The casques especially of the Rufous hornbills were used as head gear by many tribal groups along the Sierra Madre.

Present status: Near Threatened (IUCN 2004)

Cultural Significance

The Rufous hornbill or “Kalaw” in the local Ybanag word, is not an ordinary bird for the local people as it represents their love for the environment and pride for their unique natural treasures. The “Kalaw” had been chosen by the community to represent their vision for a healthy and sustainable environment for having been their loyal companion, dependable clock and regal torch bearer.

It is where the famous Callao Caves National Park, the prime tourist spot in the province of Cagayan since the early 60's (Davis 1992) took its name. The Rufous Hornbill is culturally attached to the people of Peñablanca being their symbol of conservation giving the well deserved honour and beauty to their municipal logo. The hornbill does not only lend its name to the cave but to another barangay as well.

Many people can still remember the voice of the Kalaw as their alarm clock signalling the top of the hour more particularly at 6 o'clock in the morning, twelve noon, and two o'clock in the afternoon and six o'clock in the evening. They have noted the unique characteristics of the bird that reflects their community—loyalty, unity and cooperation. The cooperative spirit of the hornbill in feeding their young and the seemingly close knit relationship among them are very typical in an Ytawes family. To their chagrin, the people of Callao could no longer hear or see them because they have moved further to the mountains for threshold.

The local communities have noted its dwindling population or inadequate data to account for the productive population of the Rufous hornbill. Hence, the stakeholders have chosen the Rufous hornbill to be the symbol of their support for the protection PPLS and to emphasize their honour and pride for the Rufous hornbill for its strange attractiveness and family orientation. Truly... HOME is where the KALAW is.

Work Plan

GOAL: To protect and conserve the biological resources of Peñablanca Protected Landscape and Seascape (PPLS) for the beneficial use of the present and future generations.

Objective 1

To increase knowledge amongst the general public on the major threats to PPLS as follows: Logging or timber poaching from 39 % up to 60%, kaingin or slash and burn farming- from 32% to 65%, and Firewood Gathering from 5 % up to 25 % by August 2005.(Reference Question No 22)

Factor/s In Conceptual Model Targeted by the Objective: Direct factors affecting wildlife such as: forest based extraction (logging, firewood gathering, charcoal making), hunting, forest fires and kaingin making; low level of awareness on the effects of these factors

Project Assumptions

1. The two stakeholders' meeting and the result of the community survey revealed that majority of the people are engaged in forest based activities such as logging, firewood gathering, and charcoal making as an alternative livelihood and open up more areas to plant cash crops through slash and burn. The community believes that only the forest can alleviate their impoverished state through cutting trees for timber, charcoal and firewood or clearing it for upland farming.
2. By providing them with appropriate information about the forest and its functions and the benefits of protecting them, the people will come to understand its importance that will eventually lead to a significant change in knowledge of those people exposed to the key messages.

Underlying Assumptions

1. Partnership and cooperation with the people in any conservation efforts start by helping them understand the role of the forest in their livelihood and the various incentives that they can get by protecting the forest.
2. It is assumed that developmental activities such as provision of alternative livelihood, social welfare services and farm inputs (seeds, fertilizers, new farm technology) are extended by the local Government Of Peñablanca to complement the community awareness program.
3. Varied information materials and approaches are helpful in propagating conservation awareness to the general public (i.e. farmers, the women, the school children), government officials and other stakeholders.

Key Message :

- Logging, kaingin and firewood gathering stops the PPLS from providing people these benefits: continued supply of water to drink and other household needs, irrigation, clean the air, prevent soil erosion and flashfloods
- PPLS provides many services and benefits to the people. But, it is in great danger. Unless people will stop cutting trees for lumber, firewood and charcoal, PPLS will be gone forever, sooner than expected.

Target Audience	KAP Measure (on a scale of 1 to 10)	Barrier
General public	3	Lack of knowledge on the threats of PPLS

Activity 1(A1)

Conduct community visits to present the various threats of the protected area and how these threats affect the ecological functions of the forest and the wildlife. This shall be complemented by environmental games that illustrate the role of the forest and the top three threats. This activity includes the participation of the Environmental Educator in barangay special events like feasts and assembly meetings to conduct presentations and other related special events.

- **Why do this activity?** This is an effective way of increasing the awareness of a big group on the key messages and encourages participation. Community visits promote peer group discussions after the conduct of the activity which increases the probability of spreading the key messages. The games will eliminate possible emotional barriers that prohibited that from expressing their thoughts and will make them feel more comfortable with the people with authority (Any DENR officials are considered people with authority).
- **How will this activity be carried out?** The Environmental Educator will coordinate with the barangay officials, local officials, and the Protected Area Management Board in the conduct of this activity.
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services (PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City
- **Who will target this activity?** General Public
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** November 2004-July 2005
- **Pre-requisites:** Coordination and approval from the local officials, poster, fact sheets, flipchart

Activity 2(A1)

Production and airing of community conservation song to increase awareness of the general public on the key conservation messages.

- **Why do this activity?** Majority of the Filipinos love music and music is proven effective in instilling messages into the minds of people for a longer time through its rhythm and melody. Singing popular music on videos is another form of entertainment in the community. Hence, the song will be easily accepted by the general public and the key message remembered and memorized.
- **How will this activity be carried out?** The Environmental Educator will coordinate with stakeholders conducting a song writing contest that will showcase/present the key messages about the conservation of the flagship species and its habitat. The winning entry shall be the official community conservation song and will be aired in the favourite local radio stations indicated in the survey. During the second stakeholder meeting, committees were created to oversee the conduct of the contest.
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services (PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City.
- **Who will target this activity?** General Public
- **Where will this activity take place?** Throughout the municipality of Penablanca
- **When will this activity take place?** Produce November-December and air continuously until July 2005
- **Pre-requisites:** Coordination and approval from the local officials, Tapping of various sponsors for the prizes, participants to the song-writing contest, local radio station, cassette/CD, fact sheets

Activity 3(A3) – Production and distribution of sermon sheets that emphasize the moral basis for conservation

- **Why do this activity?** Majority of the Filipinos are conscious of their moral obligations and practice their faith through worship and public service. This religious inclination of Filipinos provide the reason for the production of sermon sheets. A sermon sheet is designed to give the people focus on the ethical arguments of conservation and its reflections help people realize the key messages the campaign would like to propagate into the minds of the people.
- **How will this activity be carried out?** The Environmental Educator will coordinate with the parish priest and other religious leaders in the preparation of the sermon sheets and coordinate with women leaders in the barangays for its distribution.
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain
- **Who will target this activity?** General Public
- **Where will this activity take place?** Throughout the municipality of Penablanca

- **When will this activity take place?** Produce in March-April and distribute in April 22, 2005 in time for the Earth Day Celebration
- **Pre-requisites:** Coordination and approval from the local officials, youth and women leaders, production of enough number of sermon sheets, fact sheets

Activity 4(A4) Production and distribution of interesting and colourful poster in the local dialect (Itawes) to increase the awareness of the local community about the flagship species and its habitat

- **Why do this activity?** The survey says that majority of them are farmers, not very literate and considering further their limited time to read and reflect on various issues that affects them, a poster is deem appropriate to reinforce the other activities of the campaign. The element of time often affects any conservation education activities that posters seek to remedy. Posters having designed to present brief and concise messages, complemented by colourful and interesting pictures and hanged in conspicuous places will attract the general public including the farmers to take a second look and suffice their curiosity.
- **How will this activity be carried out?** A poster making contest shall be conducted in the secondary schools to generate creative and catchy messages to be used in the mass production of posters. The poster shall contain a colourful picture of the flagship species and a brief and concise description/information about the species and its habitat. Volunteers will be tapped to distribute the posters and/or post them in conspicuous areas.
- **Who will be responsible for this activity?** The Environmental Educator, Melania B. Dirain. The production of the poster shall be coordinated with CIP-SMBC and DENR-PAWS Regional Office, Tuguegarao City
- **Who will target this activity?** PA general public
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** Production is January-February and distribute starting April 2005
- **Pre-requisites:** Winning entries in poster making contest, artists to draw the final lay-out the poster, production of adequate number of posters, distribution plan

Activity 5(A5) Production of a video documentary on the various eco-tourism and ecological benefits of the protected area and threats directly affecting the flagship species and its habitat

- **Why do this activity?** The area is slowly being fully energised and
- **How will this activity be carried out?** This activity shall be coordinated with the A poster making contest shall be conducted in the secondary schools to generate creative and catchy messages to be used in the mass production of posters. The poster shall contain a colourful picture of the flagship species and a brief and concise description/information about the species and its habitat.

Volunteers will be tapped to distribute the posters and/or post them in conspicuous areas.

- **Who will be responsible for this activity?** The Environmental Educator, Melania B. Dirain together with the IEC officer of SMBC-Conservation International and shall be coordinated with CIP-SMBC and DENR-PAWS Regional Office, Tuguegarao City
- **Who will target this activity?** PA general public
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** Produced in May 2005
- **Pre-requisites:** coordination with Bantay Kalikasan team and script including the people who shall be interviewed

Objective 2

To increase the knowledge of students aged 6-16 years old on the ill effects of logging or timber poaching, kaingin or slash and burn farming, and firewood gathering and importance of forest and wildlife laws by at least 20% from the data gathered in the pre-project (October 2004) and post- project (July 2005) survey quiz, by August 2005.

Factor/s In Conceptual Model Targeted by the Objective: Direct factors affecting wildlife such as: forest based extraction (logging, firewood gathering, charcoal making), hunting, forest fires and kaingin making; low level of awareness on the effects of these factors

Project Assumptions

1. In the two stakeholders' meeting and the result of the community survey revealed that people don't understand the ecological functions of the forest in relation to other ecosystems. The community believes that only the forest can alleviate their impoverished state through cutting trees for timber, charcoal and firewood gathering or clearing it for upland farming.
2. By providing them with appropriate information about the forest and its functions, the people will come to understand its importance that will eventually lead to a significant change in knowledge of those people exposed to the key messages.
3. Children can become catalyst of change. They need to be educated and instil in them their responsibility to care for the environment. These learning is brought home to be shared with their parents who at the moment are the ones conducting activities destructive the forest.

Underlying Assumptions

1. Conservation effort starts by helping people understand the role of the forest in their lives and the various incentives that they can get by protecting the forest.
2. It is assumed that developmental activities such as provision of alternative livelihood, social welfare services and farm inputs (seeds, fertilizers, new farm technology) are extended by the local Government Of Peñablanca to complement the community awareness program.
3. Varied information materials and approaches, including the frequency of their exposure to the key messages, are helpful in propagating conservation awareness to the farmers, the women, the school children, local officials and government authorities.

Key Message:

- Age is not a barrier in helping increase the awareness of other people about the importance of the PA and the threats it faces.

- The involvement of School children is important in disseminating information of about the protected area and its threats to fellow children and other members of the PA community
- The youth is the hope of the country. Whatever they learn and do today for the benefit of the environment will provide longer term benefits for their family and their children.

Target Audience	KAP Measure (on a scale of 1 to 10)	Barrier
Student (6-16 years old)	4	Lack of knowledge on the environmental effects of cutting trees and the laws that protect them

Activity 1(A1) Conduct of School Visits. This shall include the conduct of presentations, environmental games, singing of school songs..

Why do this activity? School visits will help the students to increase their awareness on the key messages by listening to the brief presentation focused on the key messages and interactively participate in the discussion and environmental games. School visits aims to complement formal academic instructions through these methodologies: short talks, games, songs, and puppet shows.

- **How will this activity be carried out?** The Environmental Educator shall coordinate and seek the approval of Education Officials in the primary and secondary levels.
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain together with stakeholder representatives of the Department of Education
- **Who will target this activity?** The students and teachers in primary and secondary schools, students (aged 6-16), farmers, housewives and general public
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** November 2004 to July 2005
- **Pre-requisites:** Coordination and approval from the school Heads, badges, costumes and school conservation song

Activity 2(A2) Production and use of Rufous Hornbill Mascot during school visits to stir excitement and sustain the interest of the students during the lecture.

- **Why do this activity?** The use of the mascot will attract the attention and sustain the interest of the students in the lectures/ presentation to be given. A costume is an unusual and eye catching production – which can be used to rouse people’s imagination – with the flagship species acting as the voice for

conservation, and as a symbolic prompt to remind people about the overall campaign key messages.

- **How will this activity be carried out?** The Environmental Educator shall coordinate with Education Officials for the artists to create the design and choose the right materials for the costumes. Seamstresses are always available in Tuguegarao City.
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain together with stakeholder representatives of the Department of Education
- **Who will target this activity?** The students and teachers in primary and secondary schools
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** Produce the costume in October and use starting November 2004
- **Pre-requisites:** design and materials for the fabrication of the costume

Activity 3(A3) Production and use of badges bearing the colourful picture of the Rufous Hornbill to encourage participation of the school children during lectures and presentations

- **Why do this activity?** Badges are presently becoming a fashion statement for the youth in the country showing their favourite singers and brands. By printing the picture of the Rufous Hornbill in a colourful design and catchy message the students will love wearing them as part of their everyday fashion and will remind them how important and unique their place is from other places in the country. With the Rufous hornbill on the picture, the students will remind them of the key message and its being a symbol of conservation in their municipality. This will also remind them of their participation and accomplishment during the school visit as this will be given as prize to students who answered the environmental questions correctly.
- **How will this activity be carried out?** The Environmental Educator shall coordinate and seek the approval of Education Officials in the primary and secondary levels. The design shall be produced from the cooperative efforts and skill of the certain DENR and Conservation International staff
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain
- **Who will target this activity?** Pre-school and primary school children
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** Produce in March and to be distributed in April 2005
- **Pre-requisites:** badge design, production of enough badges for the school children

Activity 4(A4)

Production of a school conservation song and jingle to be taught to the school children as a component of the school visits

- **Why do this activity?** Music is entertaining and lightens up the feeling. The singing of conservation song is fun and an entertaining way to inculcate into the minds of the young people the key messages and will stir their interest to propagate them in their families by sharing the song they are singing. Beautiful songs ignites communication and discussion among the family and this could be a starting point for the child to share what she/he learns from the school visit.
- **How will this activity be carried out?** The song will be created through the ingenuity of the teachers and the school children that will be sung by them during school visits
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services (PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City.
- **Who will target this activity?** Teachers and pupils of primary schools
- **Where will this activity take place?** Primary schools inside the protected area community.
- **When will this activity take place?** To be sang beginning November 2004
- **Pre-requisites:** fact sheets, local or student artists. CD player /cassette tape recorder or guitar for accompaniment

Activity 5(A5)

The production of puppets, puppet theatre and putting on show of puppet. This task will encourage participation of teachers and children in every school visits conducted around the PPLS. The teachers and the students shall be encouraged to produce and show their puppet story to the younger students including pre-schools and nearby barangays. This activity is an interactive way to communicate the importance of conserving forest and wildlife inside the protected area and realize the effects of cutting the trees in the forest.

- **Why do this activity?** The puppet show is something new in the school visits previously being conducted by the DENR. Hence, it will be a big hit to students. The show will reinforce the key message imparted in the short presentation. The puppet show will leave a long lasting impact to the students as they will be the one acting out (through their puppets) and will inculcate into their minds. Their excitement will produce greater impacts to their fellow students, teachers and even parents who love to see their children present in school activities.
- **How will this activity be carried out?** The Environmental Educator shall coordinate and seek the approval of Education Officials in the primary and secondary levels to give a brief presentation on the importance of the forest, marine and other natural resources using the Rufous Hornbill (*Buceros hydrocorax*) costume, badges and community conservation song.
- **Who will be responsible for this activity?**

The Environmental Educator, Melania B. Dirain together with stakeholder representatives of the Department of Education

- **Who will target this activity?** The students and teachers in primary and secondary schools
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** Produce in November 2004 and will run until July 2005
- **Pre-requisites:** Coordination and approval from the school Heads, puppet scripts, badges, and school song

Activity 6(A6) Production and distribution of story telling and colouring books as follow up activity for the school children aged 5-10 years old.

- **Why do this activity?** Storytelling and Colouring books are interesting and educational to the growing children aged 5-10 years old. During this age, they are still being assisted or looked after by their parents (more often with their mothers) thus, this activity will also increase awareness among mothers. This is also the age where children acquire most of their habits and their minds developed through reading. Hence, the production of storytelling books that contains the key message detailing the various wildlife and forest services will create a lasting impact into the memory of the child which the child will bring up to adulthood. Parents (especially mothers) are also learning from the storybook or be reminded of the key messages they get from other sources developed through the campaign
- **How will this activity be carried out?** The Environmental Educator shall coordinate and seek the approval of Education Officials in the primary levels. The design shall be produced from the cooperative efforts and skill of the certain DENR and Conservation International staff
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain
- **Who will target this activity?** Pre-school and primary school children
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** Produce in November and to be distributed in December 2004
- **Pre-requisites:** story, design of the colouring book, distribution plan

Objective 3

By August 2005, at least 80% (up from 57 %) of students aged 17 years or more – will say that it is “Very Important” to have “Laws which protect forests and wildlife”

Factor/s In Conceptual Model Targeted by the Objective: low level of environmental awareness, insufficient information about protected area laws

Project Assumptions

1. The two stakeholders’ meeting and the result of the community survey revealed that majority of the people are not fully aware on the various laws that protects the forest and wildlife thus, compliance is affected.
2. By providing them with appropriate information about the forest and its functions and the benefits of protecting them, the people will come to understand its importance that will eventually lead to a significant change in knowledge of those people exposed to the key messages.
3. The increasing involvement of the youth in local politics (as councillors in local government units) can be tapped to increase the environmental awareness of their peer groups on the various laws that protect the forest and wildlife, and the various benefits that can be enjoyed by protecting.

Underlying Assumptions

1. Partnership and cooperation with the people in any conservation efforts start by helping them understand the role of the forest in their livelihood and the various incentives that they can get by protecting the forest.
2. Varied information materials and approaches are helpful in propagating conservation awareness to the general public (i.e. farmers, the women, the school children), government officials and other stakeholders.

Key Message:

- Laws protect forests and wildlife. Laws allow them to provide more services to people and benefits from them for a longer period. Laws must be observed and followed to enjoy these services and benefits.
- Animals and plants don’t have a voice. Laws give them voice and protection

(ref. question 17)

Target Audience	KAP Measure (on a scale of 1 to 10)	Barrier
Students (17 and up)	5	Lack of knowledge on the need for laws

Activity 1(A1)

Conduct Youth Congress for Conservation to discuss about general biodiversity conservation issues and their role in the maintaining the ecological functions of PPLS.

- **Why do this activity?** The involvement of the youth in Philippine local politics can also be tapped to increase their involvement in biodiversity conservation. The conduct of this congress will help them understand their roles in the conservation of their protected area. This congress will also serve as venue for sharing their experiences in conservation and for them to lay out their plans how they can best participate in disseminating the key messages of the campaign
- **How will this activity be carried out?** The Environmental Educator will coordinate with the barangay officials, and the officers of the Federation of *Samahang Kabataan(SK)* (Youth Club) and the Protected Area Management Board in the conduct of this activity.
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services (PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City
- **Who will target this activity?** SK members
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** Coordination and preparations will take place in April- May and conduct the congress in June 2005 in time for the Environment Month Celebration
- **Pre-requisites:** Coordination and approval from the local officials, SK Officials and appropriate government agencies, infokit (containing poster, flipchart, fact sheets)

Activity 2(A2) Conduct Exposure trips around the protected to immerse the students on actual resource protection and conservation activities in line with the management and conservation of the protected area

- **Why do this activity?** The conduct of exposure trip is an effective way of teaching students on conservation education through actual field experiences. This is an interactive way of learning and taps adventurous nature of the youth. They will share their learning better when they have actually experience what they are discussing. It is a fun and adventurous way of introducing them to them various treasures of the municipality that will remind them of the key messages of the campaign
- **How will this activity be carried out?** The Environmental Educator shall coordinate with DENR authorities for their approval in the conduct of this activity

- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain together with the Protected Area Management Board
- **Who will target this activity?** Student leaders in the Protected Area community
- **Where will this activity take place?** PPPLS
- **When will this activity take place?** November 2005
- **Pre-requisites:** Clearance from school officials

Activity 3(A3) Production and distribution of wildlife bookmarks

- **Why do this activity?** Bookmarks are very popular among students for their usefulness and aesthetic value. Hence, this is a useful and effective way of disseminating information about the wildlife and what laws protect them. The beautiful and colourful pictures of the wildlife will be very appealing with the students which are fond of collecting novelty items like bookmarks. This is also an effective them material that remind them of the campaign key messages.
- **How will this activity be carried out?** The Environmental Educator shall coordinate with SK officials and local volunteers in its distribution. The design shall be produced through the cooperative efforts and skill of the certain DENR and Conservation International staff
- **Who will be responsible for this activity?** The Environmental Educator, Melania B. Dirain
- **Who will target this activity?** Students aged 17 and up
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** Produce in May and to be distributed in June 2005
- **Pre-requisites:** design and lay-out of the bookmark, distribution plan
-

Activity 4(A4)

Conduct Awareness Campaign training for students. The students shall be trained on how to conduct campaign activities as part of their club's outreach activities.

- **Why do this activity?** By training the students on how to conduct awareness campaign will prepare them in actual campaign work which shall be part of their action plan to be made during the Youth Congress. This training will help them appreciate the jobs of law enforcers, understand the laws and will make them confident volunteers of conservation education. The sustainability of this campaign lies on the collective efforts of all the residents in sharing the knowledge and making them work in their specific age groups and situations.
- **How will this activity be carried out?** The Environmental Educator will coordinate with the SK officials, local officials, and the Protected Area Management Board in the conduct of this activity.
- **Who will be responsible for this activity?**

The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services (PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City

- **Who will target this activity?** Youth Club leaders
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** April 2005
- **Pre-requisites:** Coordination among the various Youth clubs and secondary schools inside the PA, infokit (wildlife booklets, legislative booklets and factsheets)

Objective 4

Increase in the general public reporting having carried out eco-tourism related activities (such as tour and cave guiding, kayaking and souvenir trade) from 1% up to 10%. ((reference question 15)

Factor/s In Conceptual Model Targeted by the Objective: Direct factors affecting wildlife such as: forest based extraction (logging, firewood gathering, charcoal making), hunting, forest fires and kaingin making; low level of awareness on the effects of these factors

Project Assumptions

1. The two stakeholders' meeting and the result of the community survey revealed that majority of the people are engaged in forest based activities such as logging, firewood gathering, and charcoal making as an alternative livelihood and open up more areas to plant cash crops through slash and burn. The community believes that only the forest can alleviate their impoverished state through cutting trees for timber, charcoal and firewood or clearing it for upland farming.
2. By providing them with appropriate information about the forest and its functions and the benefits of protecting them, the people will come to understand its importance that will eventually lead to a significant change in knowledge of those people exposed to the key messages.

Underlying Assumptions

1. Partnership and cooperation with the people in any conservation efforts start by helping them understand the role of the forest in their livelihood and the various incentives that they can get by protecting the forest.
2. It is assumed that developmental activities such as provision of alternative livelihood, social welfare services and farm inputs (seeds, fertilizers, new farm technology) are extended by the local Government Of Peñablanca to complement the community awareness program.
3. Varied information materials and approaches are helpful in propagating conservation awareness to the general public (i.e. farmers, the women, the school children), government officials and other stakeholders.

Key Messages:

- People can benefit more and for a longer period on the forest and wildlife from eco-tourism. Taking care of the trees and forest resources will allow them to

perform other ecological services like holding the soil and water, absorb carbon from the air, and provide clean air.

Target Audience	KAP Measure (on a scale of 1 to 10)	Barrier
General Public	1	Lack of knowledge on the possible benefits of eco-tourism

Activity 1(A1) – Production and distribution of fact sheets that focuses on the various resources of the PA, the flagship species and its habitat and how they can benefit from them through eco-tourism

- **Why do this activity?** Fact sheets provide many useful information about the protected area, the flagship species and how people can best benefit from them. Fact sheets serve as the basic reference material for the whole campaign and will help the general public appreciate their area and encourage them to protect it. Unless, people know the value of the things they have they will not learn to value it. This will help the local people give more value to the forest as a source of their livelihood through eco-tourism rather than cutting them for lumber, firewood or clearing lands to plant cash crops.
- **How will this activity be carried out?** The Environmental Educator will conduct a thorough research on the flagship species and other ecosystems to serve as basis for the preparation of the fact sheets.
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain
- **Who will target this activity?** General Public
- **Where will this activity take place?** PPLS
- **When will this activity take place?** Produce in February-March and distribute in April 2005
- **Pre-requisites:** Sufficient data for the preparation of fact sheet
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Activity 2(A2)

The production and distribution of bumper stickers that focuses on the permitted and penalized activities following the laws on Wildlife Resources Act and The Cave and Cave Management Resources Act. This would serve as warning to visitors and treasure hunters even before they enter the protected area.

- **Why do this activity?** By producing a colourful and eye catching sticker, the campaign slogan and image can grab people’s attention, and act as a prompt to remind them about other campaign messages seen or heard elsewhere. Also – it is believed that by asking people to do something small (like displaying a sticker for conservation) this will increase “buy-in” and people will be more likely to do join in the conservation effort. Bumper stickers can be seen and read even by almost all of the visitors and commuting residents.

- **How will this activity be carried out?** The Environmental Educator will coordinate with the transport sector and the members of the environmental club inside PPLS for distribution and posting of the stickers
- **Who will be responsible for this activity?** The Environmental Educator, Melania B. Dirain, in coordination with the personnel and staff of the CENRO-PAWS
- **Who will target this activity?** General Public, local commuters and the transport service sector
- **Where will this activity take place?** Throughout the municipality of Penablanca
- **When will this activity take place?** Produce in March and distribute in April, 2005
- **Pre-requisites:** collaboration with local officials and the transport sector for the distribution of the stickers

Activity 3(A3)

The production and installation of billboard focused on the importance of conserving the forest, its ecological functions and the flagship species.

- **Why do this activity?** Billboard are very effective in reminding people the key message of the campaign. Billboard contains catchy messages and interesting colourful pictures that easily catches people's attention. The production of big billboards are quite expensive but it will cover more number and appeal to all sectors of society regardless of age, occupation and the like. Billboards attract visitors to see the area that will eventually increase tourism activities in the area
- **How will this activity be carried out?** The Environmental Educator will coordinate with the local community, youth leaders and the teachers in the preparation of the colourful and interesting billboards carrying the key messages of the campaign. The placements shall be identified by the Education Committee of the Pride Campaign.
- **Who will be responsible for this activity?** The Environmental Educator, Melania B. Dirain, in coordination with the personnel and staff of the CENRO-PAWS
- **Who will target this activity?** General Public
- **Where will this activity take place?** The billboard will be installed at Camasi Junction.
- **When will this activity take place?** Produce February and install March 2005
- **Pre-requisites:** Collaboration with youth leaders, teachers and local officials, fact sheets, materials for the production of billboard, local artists, approval from the Local Government Unit, the Protected Area Management Board and the Callao Caves Resort Management

Activity 4(A4) Production and distribution of wildlife postcards which presents colourful picture of wildlife and their habitat to reinforce the key message

- **Why do this activity?** The local people as well as tourists coming into the protected area are always asking for things they could bring home or give to their visitors as souvenir. Postcards are valuable souvenir items that contain or illustrate the beautiful things that an area is famous for and things that they are proud of. Hence, wildlife postcards will carry this message for the local people to remember as well as their visitors. Postcards like bookmarks are novelty items that people would like to keep and remind them of the beautiful things and memories that they have. Postcards will help promote the beauty and diversity of the area and boast in a way, eco-tourism in the area.
- **How will this activity be carried out?** The Environmental Educator shall coordinate with SK officials and local volunteers in its distribution. The design shall be produced through the cooperative efforts and skill of the certain DENR and Conservation International staff
- **Who will be responsible for this activity?** The Environmental Educator, Melania B. Dirain
- **Who will target this activity?** General Public
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** Produce in April and to be distributed in May 2005
- **Pre-requisites:** design and lay-out of the postcards, distribution plan

Activity 5(A5)

Conduct Tourism related livelihood training such as tour guiding and souvenir making. This activity will be done in partnership with the local government unit of Peñablanca, Province of Cagayan and Department of Trade and Industry. This will also involve training them in the conduct of environmental awareness activity.

- **Why do this activity?** The conduct of livelihood training can effectively provide longer benefit and enjoyment of the resources by the local people and promote protection for the wildlife resources. This livelihood training will provide the local people technical know how to earn by properly managing the visitors at the same time proud of their resources found in their place. Production of novelty items and tokens will maximise the use of resources and will benefit more people. Moreover, the survey reveals that the lack of alternative livelihood promotes destruction in the protected area which in turn makes any conservation education a failure if this concern is not addressed. This training will make them appreciate the key message that the campaign is adopting to secure the forest and the various wildlife resources.
- **How will this activity be carried out?** The Environmental Educator will coordinate with the barangay officials, local officials, and the Protected Area Management Board in the conduct of this activity.
- **Who will be responsible for this activity?**

The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services (PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City

- **Who will target this activity?** Selected upland farmers of the protected area
- **Where will this activity take place?** PPLS
- **When will this activity take place?** April 2005
- **Pre-requisites:** Coordination with LGU Peñablanca, Province of Cagayan, PAMB and Department of Trade and Industry

Objective 5

By August 2005, there will be significant increase in knowledge on environmental effects of cutting trees, amongst farmers, as follows: *Flooding* – from 54 % up to 80%, *Soil Erosion* – from 26 % up to 50 %, *Water Shortage* – from 27 % up to 50 % and *Loss of Wildlife Habitat* from 19 % up to 40 %.(ref. question 31)

Factor/s In Conceptual Model Targeted by the Objective: Direct factors affecting wildlife such as: forest based extraction (logging, firewood gathering, charcoal making), hunting, forest fires and kaingin making; low level of awareness

Project Assumptions

1. In the two stakeholders' meeting and the result of the community survey revealed that people don't understand the ecological functions of the forest. The community believes that only the forest can alleviate their impoverished state through cutting trees for timber, charcoal and firewood or clearing it for upland farming. This belief is also rooted from the people's low level of awareness on environmental laws, rules and regulations.
2. By providing them with appropriate information about the forest and its functions, the general will come to understand its importance that will eventually lead to a significant change in knowledge of those people exposed to the message.
3. Penablanca Protected Landscape and Seascape provides for the irrigation of the farmlands in the municipality and serves as watershed for Penablanca, Iguig and the City of Tuguegarao. While these functions are being enjoyed by the people, they are not contributing for the protection and conservation of the area because majority does not understand how important the forest is in terms of the potable water they drink, irrigation of their farms, and the fish they catch, among other ecological functions.

Underlying Assumptions

1. Partnership and cooperation with the people in any conservation effort starts by helping them understand the role of the forest in their lives and the various incentives that they can get by protecting the forest.
2. Varied information materials and approaches, including the frequency of their exposure to the key messages are helpful in propagating conservation awareness to the farmers, the women, the school children and government officials.
3. It is assumed that developmental activities such as provision of alternative livelihood, social welfare services and farm inputs (seeds, fertilizers, new

farm technology) are extended by the local Government Of Peñablanca to complement the community awareness program.

Key Messages:

- We depend on trees, trees depend on us. Trees need our protection from illegal cutters while trees protect us from flooding, keep the soil from being eroded, sustain our water supply and provide food and shelter for the wild animals.
- Farming depends on trees. Trees help provide water for farm and household needs and keep soil from being washed away. They provide food and shelter for people and wildlife. Trees prevent flooding and flashfloods

Target Audience	KAP Measure (on a scale of 1 to 10)	Barrier
Farmers	3	Lack of knowledge on the environmental effects of cutting trees

Activity 1(A1)

Conduct farmers’ visit and talk about general forest-soil-water conservation issues and to discuss the various environmental impacts of cutting trees. This will include the conduct of lectures, consultations, planning and presentation of events and learning as well as environmental games to rouse participation and sustain their interests during the visit.

- **Why do this activity?** The conduct of farmer’s visit helps the farmers understand the various concerns of the protected area and the impacts of cutting trees in relation to their farming activities and farms’ productivity. This will provide venue for discussion, problem solving and sharing of experiences. This will be a more comfortable approach to the farmers rather than imposing outright punitive measures for some of the violations they have done inside the protected area. They will understand and remember the key message better if they are discussed in a manner acceptable for both law enforcers and users of the protected area.
- **How will this activity be carried out?** The Environmental Educator will coordinate with the barangay officials, local officials, and the Protected Area Management Board in the conduct of this activity.
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services (PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City
- **Who will target this activity?** Upland Farmers of the protected area
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** December2004-June 2005

- **Pre-requisites:** Coordination and approval from the local officials, posters, flipchart, fact sheets

Activity 2(A2)

Conduct agro-forestry training and other appropriate agricultural land technology. This will be done in partnership with Conservation International, LGU Peñablanca and province of Cagayan.

- **Why do this activity?** The training is a positive approach to teach appropriate farming techniques and informing them indirectly the violations they have done inside the protected area. This will provide venue for sharing lessons learned in agro-forestry and various ways by which the farmers can help restore the areas they themselves have damaged. As they will implement what they will learn, they will be helping introduce conservations initiatives that will benefit them and the wildlife.
- **How will this activity be carried out?** The Environmental Educator will coordinate with the barangay officials, local officials, Conservation International and the Protected Area Management Board in the conduct of this activity.
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services (PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City
- **Who will target this activity?** Upland Farmers of the protected area
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** December 2004
- **Pre-requisites:** Coordination with appropriate agencies and partners

Activity 3(A3)

Establish agro-forestry and plantation demonstration farms to showcase best practices. This will be done in partnership with CI, LGU-Penablanca and Province of Cagayan

- **Why do this activity?** As part of the Filipino culture, the local people will follow proven and tested activities and oftentimes, they do not want to take the risk. The demonstration farm will serve as model for other farmers to emulate and follow. It will guide the farmers to adopt what's working and what's not. Demo farms is an effective way of convincing people that sacrificing for the environment is all worth it in the longer period. This activity is also conducted in line with the result of the survey which points to the fact that erosion and forest fires happen due to inappropriate farming techniques
- **How will this activity be carried out?** The Environmental Educator will coordinate with the barangay officials, local officials, and the Protected Area Management Board in the conduct of this activity.
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services (PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City

- **Who will target this activity?** Upland Farmers of the protected area
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** January 2005
- **Pre-requisites:** Coordination with local farmers and the Local Government Units of Peñablanca and province of Cagayan,

Activity 4(A4)

Conservation Talk over Radio and Cable TV Program during the most preferred time.

- **Why do this activity?** The survey says that the radio is the most trusted source of information for majority of the residents. This makes radio talk relevant and effective media to disseminate issues and concerns of the protected area and the key messages. The use of the radio will maximise the venues for educating the housewives, and women farmers on the importance of PPLS and other forest-water conservation issues and emphasize their role as one of the most trusted source of information and authority in disciplining and educating the family
- **How will this activity be carried out?** The Environmental Educator will coordinate with the preferred radio and tv stations including Conservation International and the DENR- Kalikasan weekly program for free air time.
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain
- **Who will target this activity?** Upland Women Farmers and housewives in the protected area, and the general public
- **Where will this activity take place?** Local Radio and TV stations
- **When will this activity take place?** Coordination and preparations will take place in October 2004 and will run until July 2005
- **Pre-requisites:** Coordination and approval from the local radio and TV stations, assistance from media partners for the script

Activity 5(A5)

Conduct of exposure trips for selected farmers in a well-established agro-forestry project in the region. Field exposures and on-site learning experience always have a lasting impact to the participants.

- **Why do this activity?** Experiential learning is proven effective among farmers. For farmers, it is easier to teach them by actually experiencing them and looking at the results rather than confining them inside classrooms. Considering their limited formal education and time to devote to formal instruction, cross learning visits provide venue for interaction and discussion. This is a good way of imparting to them the positive values of conservation and protected area management and knowing the impacts of cutting trees that dominates after farming season activities.
- **How will this activity be carried out?** The Environmental Educator shall be responsible for coordinate with successful agro-forestry areas in the region.

- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services (PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City
- **Who will target this activity?** Selected Upland Farmers
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** April 2005
- **Prerequisites:** Area to be visited and coordination

Objective 6

By August 2005, at least 55% (up from 34%) of those who say that it is *Very Important* to have forest and wildlife laws (out of those who say that they conducted fishing in the protected area in the last six months).
(reference Question 15 and 18)

Factor/s In Conceptual Model Targeted by the Objective: Direct factors affecting water resources such as: illegal fishing, low level of awareness, weak law enforcement

Project Assumptions

1. During discussions in the two stakeholders' meeting, as well as in meetings conducted with selected barangay officials, electro-fishing is a popular source of instant cash among the residents. This implies that people are not yet aware of the impacts of destructive fishing methods to the marine environment and the wildlife that thrives therein.
2. By providing them with appropriate information about the forest and its relationship with the health and productive condition of the freshwater and marine resources, the fishermen will come to understand its importance that will eventually lead to a significant change in knowledge of those people exposed with the key messages

Underlying Assumptions

1. Partnership and cooperation with the people in the area of conservation start by helping them understand the role of the forest in their livelihood and the various incentives that they can get by protecting the forest, the marine and other natural resources.
2. It is assumed that fisheries development program of LGU-Peñablanca which includes aqua-cultural production and management activities implemented to complement the awareness campaign.
3. Varied information materials and approaches, including the frequency of exposure to the message, are helpful in propagating conservation awareness to the farmers, the women, the school children and government officials.

Key Message:

1. Participation in the protection and management of the protected area through observance and obedience to forest and wildlife laws will sustain our fishing and farming activities

Target Audience	KAP Measure (on a scale of 1 to 10)	Barrier
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Fisher-residents	3	Lack of information on forest and wildlife laws
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Activity 1(A1)

Host public meetings in fishing villages and talk about the importance of the forest and its relationship with freshwater and marine environment to ensure the health and productivity of the water bodies while meeting the needs of the family

- **Why do this activity?** Conducting formal village meetings will give the local people importance and will make them feel they are part of the community when their concerns are discussed and their problems addressed. This will provide venue for problem solving and planning that will help the people understand the various laws that affects them and their livelihood. Meetings complement other activities that are designed to disseminate key conservation messages. In this kind of meeting, fishermen and other fishing residents become aware on their relationship with the marine environment and the impacts of destructive fishing methods
- **How will this activity be carried out?** The Environmental Educator in coordination with the barangay officials, local officials, and the Protected Area Management Board in the conduct of this activity.
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services (PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City
- **Who will target this activity?** Fishermen
- **Where will this activity take place?** In the Lagum and coastal barangays of the PA
- **When will this activity take place?** May 2005 (when the weather allows a safe to travel in the coastal barangays
- **Pre-requisites:** Coordination and approval from the local officials poster, flipchart

Activity (A2)

Conduct fishermen training on the alternative fishing methods

- **Why do this activity?** Training allows the local people to learn new and appropriate fishing techniques. Formal training cannot be substituted by providing them with materials and allow them to learn on their own. This kind of activity imparts knowledge that will sustain resources and income. This is one of the result out of analyzing the results of the survey.
- **How will this activity be carried out?** The Environmental Educator will coordinate with the barangay officials, local officials, and the Protected Area Management Board in the conduct of this activity.
- **Who will be responsible for this activity?** The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services

(PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City

- **Who will target this activity?** Fishermen living inside the protected area
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** May 2005
- **Pre-requisites:** Coordination and approval from the local officials, poster, flipchart

Activity 3(A3)

Conduct of exposure trips for selected fishermen in a coastal resources management project in the region. Field exposures and on-site learning experience always have a lasting impact to the participants. This provide venue for interaction and discussion.

- **Why do this activity?** Experiential learning is proven effective especially among farmers and fisher men. Considering their limited formal education and time to devote to formal instruction, cross learning visits is more helpful among this group of residents in the PA. This is a good way of imparting to them the positive values of conservation and protected area management and knowing the impacts of their illegal fishing activities.
- **How will this activity be carried out?** The Environmental Educator shall be responsible for coordinate with successfully managed coastal zone in the region.
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services (PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City
- **Who will target this activity?** Selected Upland Farmers
- **Where will this activity take place?** In the coastal barangays of the Protected Area (PA)
- **When will this activity take place?** June 2005
- **Prerequisites:** Area to be visited and coordination

Activity 4(A4)

Organize and train core leaders to initiate community awareness campaign against illegal fishing.

- **Why do this activity?** This training allows the local people to learn new and conventional way of teaching their fellow residents the importance of a healthy and productive marine ecosystem. Formal training provides venue for discussion about the information materials related to the campaign rather than allowing them to learn on their own. This kind of activity imparts knowledge that will sustain resources. This is activity augurs well with the result of the survey that says there is a need to educate the local people about the importance of the marine resources and how we can greatly benefit from our conservation

activities. This activity will sustain conservation activity that will be introduced in the area knowing their place is not very accessible for DENR-PA staff.

- **How will this activity be carried out?** The Environmental Educator will coordinate with the barangay officials, local officials, and the Protected Area Management Board in the conduct of this activity.
- **Who will be responsible for this activity?** The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services (PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City
- **Who will target this activity?** Fishermen living inside the protected area
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** May 2004
- **Pre-requisites:** Coordination and approval from the local officials, poster, flipchart

Activity5(A5)

Production and distribution of comics to educate the local people on the various forest and wildlife laws particularly those that regulate illegal fishing.

- **Why do this activity?** Comics is a reading material that is very popular in the community because of its entertainment value. Comics have interesting stories that oftentimes relate to actual situations prevailing in the municipality thereby creating some sort of attachment among the various readers. The illustrations make it even more attractive and more appealing to various readers.
- **How will this activity be carried out?** The Environmental Educator will coordinate with the barangay officials, local officials, and the Protected Area Management Board in the conduct of this activity.
- **Who will be responsible for this activity?** The Environmental Educator, Melania B. Dirain shall seek the help of local illustrators to help create interesting characters for the script.
- **Who will target this activity?** Fishermen living inside the protected area
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** Produce in April and Distribute in May 2004
- **Pre-requisites:** Coordination and approval from the local officials, poster, flipchart

Objective 7

To identify possible Marine protected area (MPA) to be locally managed and create a Community Based Coastal Resources Management Council (CBCRM) by July 2005.

Factor/s In Conceptual Model Targeted by the Objective: Direct factors affecting marine and freshwater resources (illegal fishing), low level of awareness, weak law enforcement

Project Assumptions

1. In the two stakeholders' meeting and the result of the community survey revealed that people don't understand the ecological functions of the forest. The community believes that only the forest can alleviate their impoverished state through cutting trees for timber, charcoal and firewood or clearing it for upland farming or even conducting highly destructive activities like treasure hunting.
2. By providing them with appropriate information about the forest and its functions, the farmers will come to understand its importance that will eventually lead to a significant change in knowledge of those people exposed

Underlying Assumptions

1. Partnership and cooperation with the people in the area of conservation start by helping them understand the role of the forest in their livelihood and the various incentives that they can get by protecting the forest.
2. It is assumed that developmental activities such as provision of alternative livelihood, social welfare services and farm inputs (seeds, fertilizers, new farm technology) are extended by the local Government Of Peñablanca to complement the community awareness program.
3. Varied information materials and approaches, including the frequency of their exposure to the key messages are helpful in propagating conservation awareness to the farmers, the women, the school children and government officials.

Key Message:

- Nobody cares about your future better than you do. So manage the coastal resources well for a sustainable livelihood and a better future for our children
- No place is more beautiful and richer in natural resources than our protected area. Make it more productive and sustainable. stop illegal fishing.
- Manage our coastal resources well. It provides for our food, sustains our livelihood and send our children to school.

Target Audience	KAP Measure (on a scale of 1 to 10)	Barrier
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General Public (Coastal Villages)	2	1. weak law enforcement 2. Lack of awareness on environmental laws
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Activity 1(A1)

Conduct Focus Group Discussion about protected area laws, wildlife laws and other biodiversity laws, rules and regulations and their management

- **Why do this activity?** Focus group discussions give more opportunity for the stakeholders to express their issues and concerns about the management of the marine area. It is more manageable considering the number of participations. It is an effective of encouraging people to participate in the discussions relative to the establishment of the marine protected area.
- **How will this activity be carried out?** The Environmental Educator will coordinate with the barangay officials, local officials, and the Protected Area Management Board in the conduct of this activity.
- **Who will be responsible for this activity?** The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services (PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City
- **Who will target this activity?** Residents of the PA
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** January to July 2005
- **Pre-requisites:** Coordination and approval from the local officials, poster, flipchart

Activity 2(A2)

The production and installation of a billboard that focuses on the importance of conserving the forest and its ecological functions and the laws governing it. The billboards shall highlight the Penalty provisions of the NIPAS Act, Wildlife Resources Act and other appropriate environmental laws.

- **Why do this activity?** Billboards are effective medium to reach a greater number of audience. Billboards contains colourful pictures and catchy messages that will make it more interesting and lingering into their minds after sometime. Billboards rouse the imagination of passing visitors and will increase even more the awareness of the local people who see the billboard everyday and exposed to the key messages.
- **How will this activity be carried out?** The Environmental Educator will coordinate with the local community, youth leaders and the teachers in the preparation of the colourful and interesting billboards carrying the key messages of the campaign. The placements shall be identified by the Education Committee of the Pride Campaign.

- **Who will be responsible for this activity?** The Environmental Educator, Melania B. Dirain, in coordination with the personnel and staff of the CENRO-PAWS
- **Who will target this activity?** General Public
- **Where will this activity take place?** In the Coastal Barangays
- **When will this activity take place?** Produce and install January, 2005
- **Pre-requisites:** Collaboration with youth leaders, teachers and local officials, fact sheets, materials for the production of billboard, local artists, solicit the support of the business operators in funding the billboard inside the resort

Activity 3(A3) Production and distribution of wildlife booklets containing scientific and economic information about the wildlife and what laws are implemented in order to protect them.

- **Why do this activity?** Wildlife booklets help increase awareness of the local people about the different plants and animals that can be found in their protected area. It is an interesting information material than contains illustrations that will make them more useful to the local people in identifying them and protecting their population.
- **How will this activity be carried out?** The Environmental Educator shall coordinate with CI Biologist for the pictures and scientific information about a given wildlife.
- **Who will be responsible for this activity?** The Environmental Educator, Melania B. Dirain
- **Who will target this activity?** PA General Public
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** Produce in April and to be distributed in May 2004
- **Pre-requisites:** design and lay-out of the booklet, distribution plan
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Activity 4(A4)

Conduct Awareness Campaign training for Core Group living in coastal areas students. The local core group shall be trained on how to conduct campaign activities to sustain education campaign in this part of the protected area.

- **Why do this activity?** This training is one of the best ways to sustain education campaign in the area and for them to disseminate the key messages more effectively. This training will help the local core group manage their coastal resources and will help them manage their marine protected area through the Coastal Management Council. This training will allow them to appreciate the jobs of law enforcers, understand the laws and will make them confident volunteers of conservation education. The sustainability of this campaign lies on the collective efforts of all the residents in sharing the knowledge and making them work in their own area of operations.

- **How will this activity be carried out?** The Environmental Educator will coordinate with the local officials, and the Protected Area Management Board in the conduct of this activity.
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services (PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City
- **Who will target this activity?** selected core group
- **Where will this activity take place?** In the coastal barangays of the Protected Area (PA)
- **When will this activity take place?** May 2005
- **Pre-requisites:** Coordination among the various Youth clubs and secondary schools inside the PA, infokit (wildlife booklets, legislative booklets and factsheets)

Objective 8

To increase the knowledge of the PA general public on the incentives generated from protecting and conserving the biodiversity of PPLS by involving themselves in various conservation activities, as follows: tree planting from 55% to 75%, clean-up drive from 41% to 65% and reported illegal activities in the protected area from 1% to 20% based from the baseline survey by August 2005. (ref. question 32)

Factor/s In Conceptual Model Targeted by the Objective: Direct factors affecting the land resources such as, treasure hunting, kaingin, forest fires, low level of awareness, weak law enforcement

Project Assumptions

1. In the two stakeholders' meeting and the result of the community survey revealed that people are involved in some conservation activity but not enough to demonstrate their concern for the protected area particularly in sustaining the ecological functions of the forest. If the community knows the different incentives generated from protecting them and getting involved in its conservation, people will no longer conduct activities destructive to the forest like cutting trees for timber, charcoal and firewood or clearing it for upland farming or even treasure hunting.
2. By providing them with appropriate information about the forest and its functions, the farmers will come to understand its importance that will eventually lead to a significant change in knowledge of those people exposed

Underlying Assumptions

1. Partnership and cooperation with the people in the area of conservation start by helping them understand the role of the forest in their livelihood and the various incentives that they can get by protecting the forest.
2. It is assumed that there are developmental activities complementing the community awareness program.
3. Varied information materials and approaches, including the frequency of their exposure to the key messages are helpful in propagating conservation awareness to the farmers, the women, the school children and government officials.

Key Message:

- Local residents know their relatives, neighbour and friends. They know who are outsiders and why they are inside the protected area. Nobody takes care of their home other than the owner. People should not wait to tell what is happening in their neighbourhood when the damage goes beyond repair. Report any illegal activity in your area. You don't know its your life you are saving.

Target Audience	KAP Measure (on a scale of 1 to 10)	Barrier
General Public	1	Low level of environmental awareness

Activity 1(A1)

Conduct community visits to talk about protected area laws, wildlife laws and other biodiversity laws, rules and regulations. This activity includes the conduct of presentations, environmental games and skit. Presentations shall also be done in special occasions like feasts and other community celebrations.

- **Why do this activity?** Conduct of community visit is very helpful and useful in areas where it is not always accessible due to weather constraints. This occasion allows the educator to meet and talk to more people about the key messages and other concerns of the protected area in just one visit. Community visits likewise, promote peer group discussion even after the community visit. In this way, people would be encouraged to join through peer pressure more conservation activities in the future.
- **How will this activity be carried out?** The Environmental Educator will coordinate with the barangay officials, local officials, and the Protected Area Management Board in the conduct of this activity.
- **Who will be responsible for this activity?** The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services (PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City
- **Who will target this activity?** Residents of the PA
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** November 2004- July 2005
- **Pre-requisites:** Coordination and approval from the local officials, poster, flipchart

Activity 2(A2)

Establishment of Kalaw Holes and hot desk in the visitor centre to receive any comments, suggestions and reports of violations inside the PPLS to be manned by local volunteers and to be submitted for action and resolution to appropriate agencies.

- **Why do this activity?** The Kalaw Holes will facilitate anonymity for the informants and will be an effective way to get feedback from the public regarding the operation and management of the protected area. The hot desk shall be managed by local volunteers of the Visitor Center. A mechanism shall be developed to tract down actions about the written complaints, suggestions and recommendations. If the complainant or the person who reported the event is known he or she shall be informed of the action taken and/or result of the investigation conducted. This activity is an effective of gathering information about the concern of the local people and their awareness to existing laws and regulations.
- **How will this activity be carried out?** The Environmental Educator will coordinate with the Protected Area Superintendent (PASu) and the local volunteers as well as youth leaders for the operation of the Kalaw Hot desk The placements of the Kalaw Holes around the PA shall be identified by the Education Committee of the Pride Campaign.

- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain, in coordination with the personnel and staff of the CENRO-PAWS, PASu
- **Who will target this activity?** General Public
- **Where will this activity take place?** Throughout the municipality of Penablanca
- **When will this activity take place?** Establish in October 2004
- **Pre-requisites:** production of Kalaw Holes shall be coordinated with the CENRO for the use confiscated lumber

Activity 3 (A3): The production and distribution of legislation booklet that contains the Wildlife Resources Act, NIPAS Act and Caves and Cave Resources Management Act.

- **Why do this activity?** The legislation booklet will help the barangay officials and the DENR personnel in enforcing the law more efficiently and effectively. This booklet will not leave any room for negotiation or mistake in cases of confiscations and apprehensions that will create confusions in the interpretation of the laws.
- **How will this activity be carried out?** The educator shall produce a pocket size booklet which is printed clearly for easy reading and understanding by the users.
Who will be responsible for this activity? The Environmental Educator, Melania B. Dirain
- **Who will this activity target?** DENR-PAWS personnel, Barangay Officials, The Philippine National Police-Peñablanca and local volunteers, Barangay Tanod (volunteers to keep peace and security inside the barangays)
- **Where will this activity take place?** PPLS
- **When will this activity take place?** Produced in April 2005 and distributed starting May 2005
- **Pre-requisites:** Relevant and up-dated laws and regulations (NIPAS Act, Wildlife Resources Act and Cave and Cave Resources Act)

Activity 4(A4) Conduct Paralegal training for the barangay officials and law enforcers to equip them with the necessary legal skill in apprehending violators and to protect their rights as apprehending officers

- **Why do this activity?** This training will raise the awareness of the local community on the various laws and enhances their capability in abating illegal activities inside the PA and also in their own barangays. This promotes participation and involvement of the local people in enforcing the law.
- **How will this activity be carried out?** The Environmental Educator shall coordinate with DENR authorities for their approval in the conduct of this activity
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain together with the Protected Area Management Board
- **Who will target this activity?** Barangay Officials, Protected area staff, Staff and personnel of the CENRO, PENRO and DENR-PAWD, partners: NGO, LGU
- **Where will this activity take place?** PPLS and DENR
- **When will this activity take place?** October 2004
- **Pre-requisites:** Cooperation of the local DENR officials, posters, flipcharts, legislative booklets

Activity5 (A5)

Clean-up Drive along the coastal area and riverbank to instil into the minds of the local community the need to conserve and protect the marine and freshwater environment. Tree planting, community monitoring trips shall also be done to complement this activity.

- **Why do this activity?** This activity is very helpful in instilling into the minds of the local people the importance of coastal and freshwater resources management in order to maintain the productivity of the marine and freshwater resources. This will also increase the awareness of the fishermen to use non-destructive fishing methods. Follow up activities like tree planting shall also be done around the PA community to emphasize the need to restore degraded areas in order to sustain their ecological functions. This can also serve as venue for reinforcing the key messages.
- **How will this activity be carried out?** The Environmental Educator shall facilitate the conduct of the activity in cooperation with the PASu of PPLS and the PAMB.
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain, boat operators
- **Who will target this activity?** The PA general public
- **Where will this activity take place?** Coastal barangays and those near the riverbank
- **When will this activity take place?** November 2004 and February 2005 (Philippines' Wetlands Month Celebration)
- **Pre-requisites:** Coordination with local officials, and good weather condition along the coastal area

Objective 9

By July 2005, 1 out of 4 barangays which currently allow small scale timber harvesting (out of a total of 18 barangays) shall pass barangay ordinance that will prohibit timber harvesting inside their barangays, in line with proclamation of PPLS.

Factor in Conceptual Model Targeted by the Objective: low level of environmental awareness, insufficient information on PA laws, weak law enforcement

Project Assumptions

1. During the initial consultations conducted in some barangays, the local officials admitted to the absence of any ordinance that would prohibit the harvesting of forest resources beyond the household consumption. The absence made the local people harvest forest resources for sale that can lead to the massive loss of the forest.
2. By providing them with appropriate information about the forest and its functions, the local community will come to understand its importance that will eventually lead to a significant change in knowledge and support for the protected area management.

Underlying Assumptions

1. Partnership and cooperation with the people in every conservation efforts start by helping them understand the role of the forest in their livelihood and the various incentives that they can get by protecting the forest. When people are informed of the provisions of the law, people come to appreciate it and through time they will learn to abide by it.
2. It is assumed that developmental activities such as provision of alternative livelihood, social welfare services and farm inputs (seeds, fertilizers, new farm technology) are extended by the local Government Of Peñablanca to complement the community awareness program.
3. Varied information materials and approaches are helpful in propagating conservation awareness to the farmers, the women, the school children and government officials.

Key Message:

- People will learn how to follow when they are informed of the need for laws that regulate their activities and protection of the wildlife. Laws do not only protect the interests of the plant and animals but secures our food supply, water supply and need for clean air. In short, Laws protect humans rather than wildlife.

Target Audience	KAP Measure (on a scale of 1 to 10)	Barrier
Barangay Council and residents of Lapi, Minanga,	2	1. low level of environmental awareness 2. insufficient information on

Activity 1(A1) Conduct of Council meetings to assist the Barangay Officials in soliciting signatures for the campaign for total ban on harvesting inside strict protection zones and in drafting ordinances to protect the biological resources found in their respective barangays.

- **Why do this activity?** This activity fosters partnership with the barangay officials. It will promote the design for innovative conservation strategies appropriate in their own respective barangays that will eventually be adopted by them through an ordinance. This activity will encourage the local officials to be more vigilant in their management functions as guardians of their forest when they know that the DENR will be there to lend support.
- **How will this activity be carried out?** The Environmental Educator will coordinate with the local community, DENR Regional Staff, shall coordinate with the PAMB and the Local Government Unit of Peñablanca.
- **Who will be responsible for this activity?** Environmental Educator, Personnel and staff of the CENRO-PAWS
- **Who will target this activity?** Local officials and Barangay Tanod (Volunteers)
- **Where will this activity take place?** PA barangays
- **When will this activity take place?** Conduct in October-June 2005, Ordinance shall be passed July 2005
- **Pre-requisites:** Collaboration with local officials , production of adequate number legislative booklets, posters, fact sheets, and wildlife booklets

Activity 2(A2) Conduct of a Search for Barangay Conservation Champion to stir the barangay-wide interest to implement and adopt innovative conservation approaches that will help generate support from local community to join in various conservation activities (particularly on law enforcement) conducted by the DENR and the Protected area Management Board.

- **Why do this activity?** This activity will encourage the local people to entertain innovative ideas from residents fro the effective management of their forest resources ranging from curbing illegal logging to alternative livelihood options using local resources. This will help generate interest from the barangay officials to come up with innovative nature conservation activities and enforce ordinances supportive of environmental laws that can be implemented in their respective barangays. This encourages healthy competition from among the different PA barangays.
- **How will this activity be carried out?** The Environmental Educator shall attend council meeting to discuss about the importance of biodiversity and its governing rules as basis for the structuring the mechanics of the search.
 - **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain together with the members of the PAMB
 - **Who will target this activity?** 18 barangays
 - **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
 - **When will this activity take place?** Search will start January to June 2005 in time for the awarding ceremonies which are often done on June 30 Environment Month Culminating Activity
 - **Pre-requisites:** Approval for the activity, mechanics of the search, prizes to be coordinated to the PAMB

Activity 3(A3) Production and distribution of environmental news sheets with follow-up activities. Support for the production of the news sheets and comics shall be solicited from the local governments (Peñablanca and Province of Cagayan) and the business sectors to sustain outreach activities.

- **Why do this activity?** Environmental newsheet is an effective way to inform the public the different activities undertaken by the people to support conservation and management of the protected area and communicate the key messages. This is very useful in boosting the morale of the people who have done sacrifices for conservation(those who shall be displaced by the ordinance) and protection of the flagship species and other conservation species.
- **How will this activity be carried out?** The Environmental Educator shall coordinate and seek the approval of Education Officials in the primary and secondary levels.
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain together with stakeholder representatives of the Department of Education
- **Who will target this activity?** The students and teachers in primary and secondary schools, students (aged 15-19), farmers, housewives and general public
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** Produce and distributed in September 2004
- **Pre-requisites:** coordination for the its distribution

Objective 10

To increase the knowledge of the general public on the various incentives generated from the protection and conservation of the biological resources of PPLS by at least 70% (up from 50%) by saying that “*the people working to protect Penablanca forests are doing a very important job*”, by August 2005.

(ref. question 30)

Factor/s In Conceptual Model Targeted by the Objective: low level of environmental awareness, insufficient information on PA laws, weak law enforcement

Project Assumptions

1. The two concept models, which are a result of discussion in the two stakeholder meetings, highlighted the importance of law enforcement as a major indirect factor in the identified threats of the PA. Their major role of law enforcement is a big influence in securing the integrity of the PA and increase on the number of population of the wildlife that occurrence of logging as a major threat to the protected area. This is reflected in the recently concluded community survey where some of the people are aware of the impacts of logging but due to the absence of alternative livelihood, they defy the law.
2. By providing them with appropriate information about the forest and its functions, the local community will come to understand its importance that will eventually lead to a significant change in knowledge and support for the protected area management.

Underlying Assumptions

1. Partnership and cooperation with the people in the area of conservation start by helping them understand the role of the forest in their livelihood and the various incentives that they can get by protecting the forest. When people are informed of the provisions of the law, people come to appreciate it and through time they will learn to abide by it.
2. Varied information materials and approaches are helpful in propagating conservation awareness to the farmers, the women, the school children and government officials.

Key Message:

- The DENR is our major partner in our conservation efforts. They help us protect and maintain the health and productive condition of our forest and marine resources.

Target Audience	KAP Measure (on a scale of 1 to 10)	Barrier
General public	5	<ol style="list-style-type: none">1. Weak law enforcement2. Low physical presence of Forest Officers in the area3. Lack of information on

Activity 1(A1) Conduct community monitoring trips around the protected area with selected residents to involve the local people in actual resource protection activities and other management initiatives

- **Why do this activity?** This activity helps raise the awareness of the local residents on the actual activities being undertaken by the PA implementors. This will help them appreciate the sacrifices made by the PA staff in protecting and conserving the biological resources of PPLS. It gives them actual accounts of what is happening with their natural resources,
- **How will this activity be carried out?** The Environmental Educator shall coordinate with DENR authorities for their approval in the conduct of this activity
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain together with the Protected Area Management Board
- **Who will target this activity?** Protected area staff, Staff and personnel of the CENRO, PENRO and DENR-PAWD, partners: NGO, LGU
- **Where will this activity take place?** PPLS
- **When will this activity take place?** November to June 2004
- **Pre-requisites:** Cooperation of the local DENR officials, posters, flipcharts, legislative booklets

Activity 2(A2) Conduct focus group discussion with PA implementors and partners and talk to them the importance of strict law enforcement and effective protected area management

- **Why do this activity?** This activity is important because it encourages the implementors to communicate their problems and other constraints that bars them from performing their roles effectively and efficiently. This activity will serve as venue for discussion and laying out plans that will help do perform their duties well.
- **How will this activity be carried out?** The Environmental Educator shall coordinate with DENR authorities for their approval in the conduct of this activity
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain together with the Protected Area Management Board
- **Who will target this activity?** Protected area staff, Staff and personnel of the CENRO, PENRO and DENR-PAWD, partners: NGO, LGU
- **Where will this activity take place?** DENR Region 02
- **When will this activity take place?** September 2004, January and June 2005
- **Pre-requisites:** Cooperation of the local DENR officials, posters, flipcharts, legislative booklets

Activity 3(A3)

Creation of a PPLS Awards and Recognition Committee in the Protected Area Management Board to give incentive and recognition to deserving protected area personnel, who participated and introduced innovative strategies in the conservation of the protected area resources.

- **Why do this activity?** This activity will compliment existing DENR promotions and awards system. This boosts the morale of law enforcers to perform their duties more effectively. This activity recognizes the participation of the DENR forest officers who are committed in the performance of their jobs and those that introduces innovative strategies. This activity recognizes that recognitions of a job well done is not only in terms of money but giving respect and honor to whom it is due.
- **How will this activity be carried out?** The Environmental Educator shall coordinate with the PAMB to create the committee and set mechanisms/criteria for the search.
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services (PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City and the Protected Area Management Board
- **Who will target this activity?** PA implementors,
- **Where will this activity take place?** PPLS
- **When will this activity take place?** November 2004-June 2005
- **Pre-requisites:** Coordination and approval from DENR officials, and the members of the PAMB

Activity 4(A4)

Cross learning visit to a sustainably managed protected area (most probably in Bohol for its exemplary community-based ecotourism activity and volunteerisms to assist law enforcers in biodiversity conservation.) Field exposures and on-site learning experience has always a lasting impact to the participants.

- **Why do this activity?** This activity gives value to experience as an important aspect of learning. It is a relaxing way to acquire management skills and adopt innovative strategies that were found to be working in a given situation and condition. Experiential learning as it is sometimes called, this activity will give the PA implementors an alternative way of assimilating information and PA management initiatives. This will give them ideas on how to solicit active participation of the local people in PA management and for the people to appreciate more on protecting the biological resources of PPLS.
- **How will this activity be carried out?** The Environmental Educator shall be responsible for coordinate with other protected areas identified to provide learning in PA management and law enforcement
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services (PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City
- **Who will target this activity?** Selected PA Staff and DENR personnel
- **Where will this activity take place?** In the 18 barangays of the Protected Area (PA)
- **When will this activity take place?** April 2005

Activity 5 (A5): The production and distribution of legislation booklet that contains the Wildlife Resources Act, NIPAS Act and Caves and Cave Resources Management Act.

- **Why do this activity?** The legislation booklet is will help the barangay officials and the DENR personnel enforce the law when the local community knows the laws that are being enforced. This will also guide the enforcers in implementing them.
- **How will this activity be carried out?** The educator shall produce a brief and concise booklet for easy reading and understanding by the users.
Who will be responsible for this activity? The Environmental Educator, Melania B. Dirain
- **Who will this activity target?** DENR-PAWS personnel, Barangay Officials, The Philippine National Police-Peñablanca and local volunteers, Barangay Tanod (volunteers to keep peace and security inside the barangays)
- **Where will this activity take place?** PPLS
- **When will this activity take place?** Production and distributed in April 2005
- **Pre-requisites:** Relevant and up-dated laws and regulations (NIPAS Act, Wildlife Resources Act and Cave and Cave Resources Act)

Objective 11

By August 2005, there must be a 0% increase (from 5%, based on 2004 DENR and barangay records) in the area cultivated by slash and burn farmers inside the protected area.

Factor/s In Conceptual Model Targeted by the Objective: kaingin making, insufficient information on PA laws, weak law enforcement

Project Assumptions

1. The two concept models, kaingin making is one of the top three threats that must be addressed by the campaign. Based on the survey and stakeholder meetings conducted this economic activity destroys important habitat of wildlife and causes soil erosion, forest fires. This threat is caused mainly due to the absence of alternative livelihood, that the farmers defy the law.
2. By providing them with appropriate information about the forest and its functions, the local community will come to understand its importance that will eventually lead to a significant change in knowledge and support for the protected area management.

Underlying Assumptions

1. Partnership and cooperation with the people in the area of conservation start by helping them understand the role of the forest in their livelihood and the various incentives that they can get by protecting the forest. When people are informed of the provisions of the law, people come to appreciate it and through time they will learn to abide by it.
2. Varied information materials and approaches are helpful in propagating conservation awareness to the farmers, the women, the school children and government officials.

Key Message:

- The protected area provides a variety of income generating activities. Eco-tourism is one of them, people can venture into handicrafts, food processing and tour guiding. Kaingin making destroys important habitat and causes other environmental problems.

Target Audience	KAP Measure (on a scale of 1 to 10)	Barrier
General public	5	1. Lack of alternative livelihood support 2. Weak law enforcement 3. Low physical presence of

		Forest Officers in the area 4. Lack of information on Environmental Laws
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Activity 1(A1) Conduct of community visits to educate the farmers on the different ecological benefits that majority of the barangay residents can get from the forest.

Why do this activity? This activity helps raise the awareness of the farmers on the benefits that the forest provides. Apart from this, the recent environmental disasters that visited the country and the rest of Asia should be presented in order to give warning on the possibilities of this impacts should kaingin continue to be an alternative source of income. This activity will serve as venue for communication and cooperation among other national agencies like the Department of Agriculture and Department of trade and Industry to present their programs.

- **How will this activity be carried out?** The Environmental Educator shall coordinate with local officials and DENR authorities for their approval in the conduct of this activity
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain together with the Protected Area Management Board
- **Who will target this activity?** The farmers living inside the Protected area, other development partners like Department of Tourism, Department of Agriculture and Department of Trade and Industry
- **Where will this activity take place?** PPLS
- **When will this activity take place?** November to July 2004
- **Pre-requisites:** Cooperation of the local DENR officials, posters, flipcharts, legislative booklets

Activity 2(A2) Conduct focus group discussion with the Barangay officials and talk to them on the importance of the forest and other wildlife resources

- **Why do this activity?** This activity will provide venue for the farmers to communicate their problems and to elevate the same problems to local officials so they help their constituents adopt other sources of livelihood after the farming season.
- **How will this activity be carried out?** The Environmental Educator shall coordinate with DENR authorities and local officials for their approval in the conduct of this activity
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain together with the Protected Area Management Board
- **Who will target this activity?** Barangay officials, LGU and other partners
- **Where will this activity take place?** PPLS Barangays
- **When will this activity take place?** March 2005
- **Pre-requisites:** Cooperation of the local DENR officials, posters, flipcharts, legislative booklets

Activity 3(A3)

Inventory of Kaingineros (slash and bur farmers) inside the Protected Area

- **Why do this activity?** This activity will help us determine if the farmers understood that the forest provide them more sustainable benefits compared to the money they get from the cash crops that they planted for just one season. This will also provide the DENR baseline data in framing appropriate strategies in protected area management and biodiversity conservation as well as the Local Government Unit of Penablanca in carrying out appropriate livelihood development activities.
- **How will this activity be carried out?** The Environmental Educator shall coordinate with the PAMB, the barangay officials and the forest protection team in the conduct of this activity
- **Who will be responsible for this activity?**
The Environmental Educator, Melania B. Dirain, together with the Protected Areas and Wildlife Services (PAWS) Staff of the Community Environment and Natural Resources Officer (CENRO), Tuguegarao City and the Protected Area Management Board
- **Who will target this activity?** Slash and burn farmers
- **Where will this activity take place?** PPLS
- **When will this activity take place?** January-July 2005
- **Pre-requisites:** Coordination and approval from DENR officials, and the members of the PAMB

MONITORING PLAN

GOAL: To sustainably protect and conserve the biological resources of Peñablanca Protected Landscape and Seascape (PPLS) for the present and future generations.

Monitoring Strategy: Measure changes over time the attitudes and knowledge of the Protected Area (PA) community towards the forest, marine and other resources, by assessing forest cover and wildlife population changes and active participation in the management and conservation of the protected area

What (Indicators)	How (Method)	When	Who	Where	Comments
Wildlife Population	Applying DENR developed Biodiversity Monitoring System (BMS)	Quarterly	PASU Staff, and trained PO members	PPLS	Three BMS plots established in strategic locations at PPLS
Forest cover	Generating baseline GIS based zoning map of PPLS	Annually	Protected Area Staff	PPLS	Vegetative Map and Management Zones of PPLS are available at CIP and DENR
	Ground truthing		Protected Area Staff	PPLS	
	Inventory of kaingineros (slash and burn farmers) and area cultivated	Annually	PASU Staff, and trained PO members, Barangay Officials	PPLS	Forest Occupant Survey was already conducted in 7 barangays
Changes in attitudes by the local community	Community Questionnaire Survey	Before and After project Implementation (June 2004 – August 2005)	Environmental Educator (EE), PA Staff and Volunteers	PPLS	

Participation of the PA Communities in PA conservation and Management	Local communities to initiate conservation projects/activities	August 2005	EE, PA Staff, PAMB	PPLS	
	Pass Ordinances for PA conservation	July 2005	PAMB, Barangay Councils	PPLS	Preparatory activity include Signature campaign (of 5,000 signatures, which is 20% of the target area) for the total ban of forest resources harvesting inside selected strict protection zones.
	Identify proposed MPA area along coastal villages of PPLS - and create Community Based Coastal Resources Management Council.	July 2005	EE, PAMB, Coastal Barangay Councils	PPLS	
	Create Kalaw Hot desks and Holes to received reports on the species	October to July 2005	EE, PA Staff and Barangay Councils	Visitor Center and CENRO	

Objective (01)

To increase knowledge amongst the general public on the major threats to PPLS as follows: Logging or timber poaching from 39 % up to 60%, kaingin or slash and burn farming- from 32% to 65%, and Firewood Gathering from 5 % up to 25 % by August 2005.

Monitoring Strategy: Measure changes over time of general public's knowledge on the top three threats of PPLS.

What (Indicators)	How (Method)	When	Who	Where	Comments
Percent of PA general public that can demonstrate knowledge on the top three biodiversity threats of PPLS	Comparative study based on responses in the pre project and post project surveys (Refer to Q22 of Questionnaire Survey)	Project Duration	Environmental Educator (EE), PA Staff and Volunteers	PPLS	

Activities for Objective1

- Conduct community visits (involving, orientations, presentation, and environmental games)
- Airing of Community Conservation Song
- Production and distribution of Posters
- Production and distribution of Sermon sheets
- Participate in the regular radio and local cable TV program hosted by the DENR in a local radio and TV stations in Tuguegarao, City
- Participate in Barangay special events (feast, etc.) to conduct orientations and other related activities

Objective (02)

To increase the knowledge of students aged 6-16 years old on the ill effects of logging or timber poaching, kaingin or slash and burn farming, and firewood gathering and importance of forest and wildlife laws by at least 20% from the data gathered in the pre-project (October 2004) and post- project (July 2005) survey quiz, by August 2005

Monitoring Strategy: Measure changes over time of students' knowledge on the top three threats (Logging/poaching, kaingin making and firewood gathering) threats of PPLS, the environmental effects of cutting trees and importance of forest and wildlife laws.

What (Indicators)	How (Method)	When	Who	Where	Comments
Percent of students aged 6-16 years old that can demonstrate knowledge on ill effects of logging, slash and burn farming and firewood gathering, and the importance of forest and wildlife laws to protect biodiversity	Comparative study based on responses in the pre project and post project quizzes (Refer to Q18, 22 and Q31 of Questionnaire Survey)	Project Duration (October 2004 to August 2005)	Environmental Educator (EE), PA Staff and Volunteers	PPLS	A short survey quiz containing 5 questions taken from the questionnaire survey shall be done at the start of school visits and another one during the last school visit in July 2005

Activities for Objective 2

- Conduct school Visits
- Production and distribution of badges
- Production and use of Rufous Hornbill costume
- Production and distribution of Story and Coloring Book
- Singing of school conservation song during school visits
- Conduct Puppet shows during school visits

Objective (03)

By August 2005, at least 80% (up from 57 %) of students aged 17 years or more on the importance of forest and wildlife laws by – will say that it is “Very Important” to have “Laws which protect forests and wildlife”

Monitoring Strategy: Measure changes over time of students’ knowledge on the importance of laws which protects forests and wildlife

What (Indicators)	How (Method)	When	Who	Where	Comments
Percent of students ages 17 or more that can say that it is “Very Important” to have “Laws which protect forests and wildlife”	Comparative study based on responses in the pre project and post project surveys (Refer to Q17 Questionnaire Survey)	Project Duration (October 2004 to August 2005)	Environmental Educator (EE), PA Staff and Volunteers	PPLS	

Activities for Objective (03)

- Production and distribution of comics-
- Conduct of Youth Congress for Conservation
- Conduct exposure trips of selected student leaders at PPLS strategic areas
- Conduct poster making contest for students
- Train student leaders to participate in awareness campaign
- Production and distribution of wildlife bookmarks

Objective (04)

Increase in the general public reporting having carried out eco-tourism related activities (such as tour and cave guiding, kayaking and souvenir trade) from 1% up to 10%.

Monitoring Strategy: Measure changes over time the number of the PA general public that reported having carried out eco-tourism related activities (such as tour and cave guiding, kayaking and souvenir trade) in the PPLS

What (Indicators)	How (Method)	When	Who	Where	Comments
Percentage of the local community's general public who report that they have carried out eco-tourism activities	Comparative study based on responses in the pre project and post project surveys (Refer to Q15 of the Questionnaire Survey)	Project Duration (October 2004 to August 2005)	Environmental Educator (EE), PA Staff and Volunteers	PPLS	

Activities for Objective (04)

- Production and distribution of bumper stickers
- Production and distribution of wildlife postcards
- The production and installation of 1 billboard
- Conduct training for tour guiding and souvenir making
- Conduct of exposure trips in eco-tourism destinations inside PPLS

Objective (05)

By August 2005, there will be significant increase in knowledge on environmental effects of cutting trees, amongst farmers, as follows: *Flooding* – from 54 % up to 80%, *Soil Erosion* – from 26 % up to 50 %, *Water Shortage* – from 27 % up to 50 % and *Loss of Wildlife Habitat* from 19 % up to 40 %.

Monitoring Strategy: Measure changes over time the knowledge of the farmers on environmental effects of cutting trees.

What (Indicators)	How (Method)	When	Who	Where	Comments
Percentage of farmer's knowledge on the environmental effects of cutting trees	Comparative study based on responses in the pre project and post project surveys (Refer to Q31of Questionnaire Survey)	Project Duration (October 2004 to August 2005)	Environmental Educator (EE), PA Staff and Volunteers	PPLS	

Activities for Objective (05)

- Conduct community visits (orientations, consultations, planning, presentation of events and learnings, lecture, environmental skit and games)
- Conduct agro-forestry training (Sloping Agricultural Land Technology –SALT,
- Establish agro-forestry and plantation demonstration farm (Use of techniques imparted during the training)
- Conduct conservation Talk over Radio and Cable TV Program during the most preferred time.
- Organize and train local core leaders to initiate community awareness campaign
- Conduct exposure trips for selected farmers in a well established agro-forestry project in the region

Objective (06)

By August 2005, at least 55% (up from 34%) of those who say that it is *Very Important* to have forest and wildlife laws (out of those who say that they conducted fishing in the protected area in the last six months).

Monitoring Strategy: Measure changes over time the knowledge of the general public (who conducted fishing for the last six months) on the importance of the forest and wildlife laws

What (Indicators)	How (Method)	When	Who	Where	Comments
Percentage of the those who reported to have conducted fishing inside the Protected Area on the importance of forest and wildlife laws	Comparative study based on responses in the pre project and post project surveys (Refer to Q15 and Q17 of Questionnaire Survey)	Project Duration (October 2004 to August 2005)	Environmental Educator (EE), PA Staff and Volunteers	PPLS	

Activities for Objective (06)

- Conduct community visit in fishing villages
- Conduct training on sustainable fishing techniques
- Organize and train local core leaders to initiate community awareness campaign
- Conduct exposure trips for selected fishermen in a well established and managed coastal management project in the region
- Production and distribution of poster-comics

Objective (07)

To identify possible Marine protected area (MPA) to be locally managed and create a Community Based Coastal Resources Management Council (CBCRM) by July 2005.

Monitoring Strategy: Active participation of the coastal communities in managing their marine area through the establishment of MPA and CBRCM council.

What (Indicators)	How (Method)	When	Who	Where	Comments
Participation of the coastal communities in managing their marine area	Local communities to initiate the establishment of marine protected area managed by the CBRM Councils)	July 2005	Environmental Educator (EE), PA Staff and Volunteers	PPLS	Local support shall be provided to the communities by the Project in partnership with the Local government Unit of Peñablanca

Activities for Objective (07)

- Conduct Focus Group Discussions
- Production and Installation of one Billboard
- Conduct Community Based Coastal Resources Conservation and Management training for local leaders
- Production and Distribution of Wildlife Booklets

Objective (8)

To increase the knowledge of the PA general public on the incentives generated from protecting and conserving the biodiversity of PPLS by involving themselves in various conservation activities, as follows: tree planting from 55% to 75%, clean-up drive from 41% to 65% and reported illegal activities in the protected area from 1% to 20% based from the baseline survey by August 2005.

Monitoring Strategy: Measure changes over time the involvement of the PA general public who had been involved in selected conservation activities.

What (Indicators)	How (Method)	When	Who	Where	Comments
Percentage of the general public who are involved in selected conservation activity	Comparative study based on responses in the pre project and post project surveys (Refer to Q32 of Questionnaire Survey)	Project Duration (October 2004 to August 2005)	Environmental Educator (EE), PA Staff and Volunteers	PPLS	

Activities for Objective (08)

- Conduct Barangay assembly meetings (includes presentations, environmental skit, and games)
- Establishment of Kalaw Holes and Hot desk
- Conduct Paralegal training
- Conduct of conservation activities such as tree planting, clean up drive and monitoring trips around the protected area

Objective (9)

By July 2005, 1 out of 4 barangays which currently allow small scale timber harvesting (out of a total of 18 barangays) shall pass barangay ordinance that will prohibit timber harvesting inside their barangays, in line with proclamation of PPLS.

Monitoring Strategy: Involvement of the protected area barangay management councils in the management of PPLS through the passing of resolutions for the total ban of harvesting inside strict protection zone.

What (Indicators)	How (Method)	When	Who	Where	Comments
Participation of the PA barangays in the conservation and management of PPLS	Local communities to initiate the passing of ordinance for the total harvesting inside strict protection zones	Project Duration (October 2004 to August 2005)	Environmental Educator (EE), PA Staff and Volunteers	PPLS	
	Conduct a signature campaign (of 5,000 signatures, which is 20% of the target area) for the total ban of forest resources harvesting inside selected strict protection zones.	Project Duration (October 2004 to August 2005)	Environmental Educator (EE), PA Staff and Volunteers, the local people	PPLS	

Activities for Objective (9)

- Conduct of Council meetings
- Conduct of Search for Most Ecologically Aware Barangay
- Production and Distribution of wildlife booklets
- Conduct a signature campaign (of 5,000 signatures, which is 20% of the target area) for the total ban of forest resources harvesting inside selected strict protection zones.

Objective (10)

By August 2005, at least 70% (up from 50%) of the PA general public say will say that " *the people working to protect Peñablanca's forests are doing*" a very important job".

Monitoring Strategy: Measure changes over time on the knowledge of the PA general public who say that "*the people working to protect Peñablanca's forests are doing an important job*".

What (Indicators)	How (Method)	When	Who	Where	Comments
Percentage of the PA general public will say that " <i>the people working to protect Peñablanca's forests are doing</i> " a very important job".	Comparative study based on responses in the pre project and post project surveys (Refer to Q30 of Questionnaire Survey)	Project Duration	Environmental Educator (EE), PA Staff and Volunteers	PPLS	

Activities for Objective (12)

- Community Monitoring trips with the local people in identified "problem areas " of the PA
- Focus group discussion with DENR and PA Implementors
- Creation of a PPLS-PAMB Awards and Recognition Committee
- Cross Learning Visit

Objective (11)

Monitoring Strategy: Measure changes over time on the knowledge of the PA general public who say that “*the people working to protect Peñablanca’s forests are doing an important job*”.

What (Indicators)	How (Method)	When	Who	Where	Comments
Percentage of area of cultivations made by slash and burn farmers	Inventory of area cultivated by slash and burn farmers	Project Duration	Environmental Educator (EE), PA Staff and Volunteers	PPLS	Forest Occupant survey was already conducted in 7 barangay Data for the remaining 11 barangays shall be taken from latest DENR and barangay records

Activities for Objective (12)

- Community Visits
- Focus group discussion with DENR and barangay officials
- Inventory of new kaingin areas

PROJECT TIMELINE

Project/Activities	Pre-project Apr/May/June 2004	Mon 1 Oct 2004	Mon 2 Nov 2004	Mon3 Dec 2004	Mon4 Jan 2005	Mon5 Feb 2005	Mon 6 Mar 2005	Mon 7 April 2005	Mon 8 May 2005	Mon 9 June 2005	Mon10 July 2005	Mon 11 August 2005	Mon 12 Sept 2005
Project preparation:													
Stakeholder meeting	=====												
Community survey	=====												
Project Plan	=====	===											
Project implementation:													
Fact sheet preparation					=====								
Fact sheet distribution						===	===	===					
Badge production and distribution		===						===					
Puppets and theater and production	=====	=====											
Puppet presentation									==	===	===		
Hornbill Mascot production		===											
Poster production						=====							
Poster distribution							===	===					
Environmental Youth Camp								===					

Project/Activities	Pre-project Apr/May	Mon 1 October 2004	Mon 2 November 2004	Mon 3 December 2004	Mon 4 January 2005	Mon 5 February 2005	Mon 6 March 2005	Mon 7 April 2005	Mon 8 May 2005	Mon 9 June 2005	Mon 10 July 2005	Mon 11 August 2005	Mon 12 Sep 2005
Storybook and coloring book production								===					

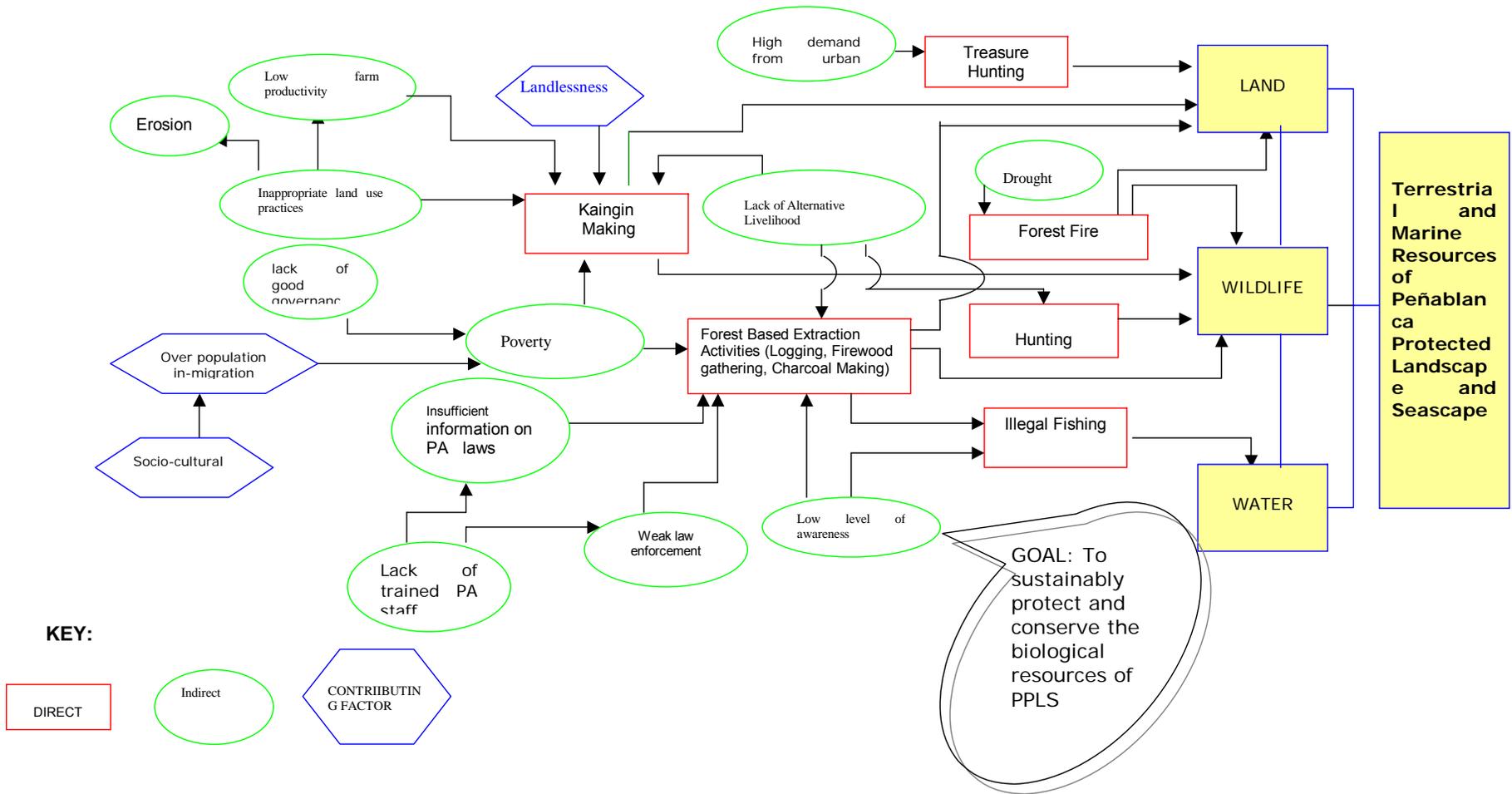
Storybook and coloring book distribution								===						
School Song/Jingle production			=====											
Poster-Comics production									===					
Poster-comics distribution										===				
Sermon sheet production								===						
Sermon sheet distribution								===		===				
Song writing contest		=====												
Community Song Recording and Production								===	===					
Community Song in airwaves								=====	===	===	=====			
Radio /TV Program with partners				===	=====	=====	=====	=====	===	===	=====			
Comics Production								===						
Comics Distribution								=====	===	===	===			
Youth Congress										===				
Student Leaders Awareness Training								=====						
Project/Activities	Pre-project Apr/May	Mon 1 October 2004	Mon 2 November 2004	Mon 3 December 2004	Mon 4 January 2005	Mon 5 February 2005	Mon 6 March 2005	Mon 7 April 2005	Mon 8 May 2005	Mon 9 June 2005	Mon 10 July 2005	Mon 11 August 2005	Mon 12 September 2005	
Bumper Sticker Prod'n							===							
Bumper Sticker Distribution								=====	=====					
Wildlife Postcards production								=====						

Wildlife Postcards distribution										=====	==	===		
Tour guiding training and souvenir making									=====					
Billboard production and Installation						=====	===							
Exposure trip to Eco Destination									=====					
Agro-forestry training			=====											
Establishment of Demo farm					=====									
Exposure trip of Farmers						=====								
Exposure trip of Fishermen							=====							
Fishermen training						=====								
Barangay council Outreach			===	===	=====	===	===	=====	===	==				
Operation of Kalaw holes and hot desk			=====	=====	=====	=====	=====	=====	=====	==	===	=====		

Project/Activities	Pre-project Apr/May	Mon 1 October 2004	Mon 2 November 2004	Mon 3 December 2004	Mon 4 January 2005	Mon 5 February 2005	Mon 6 March 2005	Mon 7 April 2005	Mon 8 May 2005	Mon 9 June 2005	Mon 10 July 2005	Mon 11 August 2005	Mon 12 Sept 2005
Paralegal training		===											
Business outreach				=====	===	=====	=====	=====	=====		===		
Signature Campaign								=====	=====	===			
Kalaw Monitoring trips					===			=====			===		
Cross Learning Visit of PA								=====					

implementors													
FGD-PA and DENR implementors					===				====				
Creation of PPLS Awards And Recognition Committee								====					
Post project Questionnaire Survey												===	
Past project questionnaire analysis												====	
Past project stakeholder meeting												====	
Final report													====

FINAL CONCEPT MODEL



Summary of Final Concept Model

Penablanca Protected Landscape and Seascape is popular for its numerous cave systems estimated to be around 300 which host a number of varied species of wildlife and keeper of treasures of early civilization. It has the largest remaining old growth forest in the province of Cagayan. It has sparkling freshwater and productive marine area.

Majority of the local population lives on farming but the very low turn out of farm produce have compelled them to look for other sources to augment the family income. This condition created the hardest impact on the biological resources of the protected area especially on the land and the forest. Like most other rural areas, the protected area (PA) community look at the forest as a source of instant cash in the form of timber, firewood and charcoal. But the most destructive and most common of the practices to increase the family income is opening up kaingin areas in order to plant cash crops like vegetables. This practice is reinforced by the widespread poverty in the uplands, weak law enforcement, lack of trained PA staff, lack of alternative livelihood and the lack of information about the laws that penalize this practice. The problem of kaingin became more widespread with the increasing impoverished population that seeks land ownership inside the protected area. This practice is also influenced by the lack of alternative livelihood that could alleviate the prevailing poverty situation in the uplands. The continued indifference of the local people about conservation and prevailing perceptions against responsible parenthood lead to increasing population that competes with each other for the services and resources have worsened poverty.

Forest based resource extraction is directly affecting the land, water and wildlife resources of the PA. Cutting trees for timber, charcoal and firewood are also perceived to be a critical factor to consider in framing strategies to protect the forest and thus, grouped together in the final concept model. Ironically, majority of the respondents in the community survey believed that it endangers the wildlife. While they believed that the forest contains natural resources that support life, they still cut trees for the lack of alternatives to feed a growing family. This situation runs parallel with the condition that reinforces hunting and illegal fishing. Treasure hunting and extraction of mineral resources like sand and gravel were identified to be due to the great demand in the speedily urbanizing Tuguegarao City.

The long dry spell during summer seasons spark forest fires that destroy wildlife habitat. This is made more prevalent with the inappropriate land use practices that are applied in kaingin areas. These stakeholders believed that the local people have insufficient and inaccurate knowledge about the conservation of the protected area and its resources and this was reflected in the community survey conducted.

This revised conceptual model represents the prevailing condition of Penablanca Protected Landscape and Seascape as perceived by the local people in the community survey and as observed by the stakeholders in a meeting conducted in two occasions.

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APPENDICES

Appendix 1: The Questionnaire Survey for Penablanca

This questionnaire survey seeks to study people's lives and certain resources. There is no right or wrong answers. Your name is not required and your answers shall be strictly confidential. We would appreciate your willingness to participate by answering some questions.

(1) Which barangay do you live in?

(2) Is this site inside Callao-Lagum-Coastal area? (CHECK WITHOUT ASKING)

Yes (inside C-L-C area) No (comparison area outside C-L-C area)

(3) What dialect do you use at home ?

(4) Gender: (CHECK WITHOUT ASKING)

Male Female

(5) Which age group are you in?(SHOW OR READ OUT)

15-19 20-24 25-29 30-34 35-39 [] 40-44
 45-49 50-54 55-59 60-64 65-69 [] 70-74
 75 and above

(6) What is your MAIN occupation?(CHECK ONE ONLY)

Unemployed Student Housewife Farmer Boatmen [] Business person
 Transport Operator Government Employee Construction Worker []
 Retired Employee Other, Please specify _____

(7) What is your FAMILY's main SOURCE OF INCOME? (CHECK ONE ONLY)

Unemployed Student Housewife Farming Business [] Boatmen
 Transport Operator Government Employee Construction [] Retired Employee
 Other, Please specify _____

(8) What is the highest level of education that you have completed? (CHECK ONE ONLY)

No schooling Some Elementary Elementary Graduate Some High School High School Graduate
 Some College College Degree [] Vocational/Technical
 Post Graduate Other, Please specify _____

(9) What is your most trusted source of LOCAL news and information ?(CHECK ONE ONLY)

Radio Newspaper Television Magazine Friends/Family []
 Barangay Officials Religious Leader Teacher Local Cable TV []
 Other, Please specify _____

(10) If you read magazines, what is your favorite?(CHECK ONE ONLY)

Free Press Lifestyle Magazine Celebrity Magazine Bannawag [] Liwayway
 Comics Don't have favorite Other, Please specify _____

(11) If you read the newspaper, what is your favorite? (CHECK ONE ONLY)

Northern Forum Philippine Daily Inquirer Philippine Star [] Manila Bulletin
 Don't read newspaper Don't have favorites [] Other, Please specify _____

(12) If you listen to the radio, which one is your favorite radio station? (CHECK ONE ONLY)
 DWPE DZTG RJFM Bay Radio DZRH Bombo Radyo Don't listen to radio Don't have favorite Other, Please specify _____

(13) What time do you usually listen to the radio? (CAN ANSWER MORE THAN ONE)
 Between 3AM-6AM Between 6AM-9AM Between 9AM-12PM Between 12PM-3PM
 Between 3PM-6PM Between 6PM-9PM Between 9PM-12AM Between 12AM-3AM

(14) Which is your favorite TV station? (CHECK ONE ONLY)
 RBC-Cable ABS-CBN GMA7 ABC5 Don't watch TV Don't have favorite Other, Please specify _____

(15) In the past six months, what did you use the Penablanca's forest and natural resources for? [CHECK ONE OR MORE ANSWERS, READ OUT OPTIONS]
 Farming Hunting wild pigs, Philippine deer or birds Spelunking Firewood gathering Small-scale logging Collecting orchids and ornamental plants Water extraction Kayaking Stone/rock collection Fishing Charcoal Making Grazing Hiking/recreation Rattan/bamboo collection Other, Please specify _____

(16) If you gathered any wild plants, animals, or other forest products in the past six months, for what purpose did you collect them? (CHECK ONE OR MORE)
 For fun/recreation For personal use For sale or exchange of other goods and services Don't know Did not collect any Other, Please specify _____

(17) Do you think, it is important to have laws which protect the forests and wildlife?
 Not important Somewhat important Important Very Important Don't know

(18) Do you think that your local forest resources are threatened or endangered?
 Yes, very threatened Yes, somewhat threatened Yes, a little threatened No, not threatened Don't know

(19) Do you live near or inside a protected area?
 Yes No Don't know

(20) If you live in or near a protected area, what is it called?

(21) FOR ENUMERATOR TO CHECK WITHOUT ASKING: The respondent named Penablanca Protected Landscape and Seascape
 Correctly Incorrectly

(22) In your opinion, what are the three most important problems affecting the forest in your area? (LIST UP TO THREE THREATS)

(23) Which of the following animals would you like to see protected the most? (CHECK ONE ONLY, SHOW PICTURES)
 Philippine Eagle Rufous Hornbill Pygmy Fruit Bat Isabela Oriole Luzon Bleeding Heart Philippine crocodile Other, Please specify _____

(24) Which animals are found only here in Penablanca and nowhere else? (LIST ONE OR MORE, READ OUT OPTIONS, SHOW PICTURES)

Philippine Eagle Rufous Hornbill Philippine crocodile Pygmy Fruit Bat
 Isabela Oriole Luzon Bleeding Heart Other, Please specify

(25) How strongly do you agree or disagree with the following statements?

Cutting trees threaten the animals that live in the forest.

Agree strongly Agree somewhat Disagree Disagree strongly Don't know

(26) There is a need to penalize (by law) anybody cutting trees in Penablanca's forests.

Agree strongly Agree somewhat Disagree Disagree strongly Don't know

(27) Which of the following activities are permitted inside Penablanca Protected Landscape and Seascape? (CAN CHECK ONE OR MORE)

Hunting wild pigs or birds lowland farming Spelunking Firewood gathering
 Cutting trees Collecting orchids and ornamental plants Water extraction
 Kayaking Stone collection Fishing Charcoal making Grazing
 Hiking/recreation Other, Please specify _____

(28) Do you think there is a fine for cutting trees and hunting wildlife inside Penablanca's protected forest? if so, what is it? (CHECK ONE ONLY)

No fine less than 5,000 between 5,000 and 500,000 between 50,001 and 1,000,000
 more than 1,000,000 Don't know Other, Please specify

(29) In your opinion, what should be the fine for cutting trees and hunting wildlife inside Penablanca's protected forest? (CHECK ONE ONLY)

No fine less than 5,000 between 5,000 and 500,000 between 50,001 and 1,000,000
 more than 1,000,000 Don't know Other, Please specify

(30) Do you think that the people working to protect Penablanca's forests are doing an important job?

Not important Somewhat important Important Very Important Don't know

(31) Can you think of any environmental effects of cutting trees?(LIST THREE MAJOR EFFECTS)

(32) In the past six months, have you been involved in any conservation activities? If so, what? (CHECK ONE OR MORE)

No Tree Planting Community Clean Up Drive Reported an Illegal Activity Joined a Conservation Group Donated Money for Conservation Don't know Other, Please specify _____

(33) Would you be willing to support nature conservation in your area? If so, how? (CHECK ONE OR MORE, READ OUT ALL OPTIONS)

No, I do not support it Tree Planting Community Clean Up Drive Reported an Illegal Activity Joined a Conservation Group Donated Money for Conservation Don't know Other, Please specify _____

(34) In the past six months, have you heard any information about your chosen species, _____ (READ OUT THE SPECIES IDENTIFIED IN Q23),, if so, through which sources? (CHECK ONE OR MORE)

Books TV Fact sheets Sermon sheets Bumper stickers Meetings Friends/family DENR Posters School visits Local Officials Radio Newspaper Legislation booklets Puppet show [] Teachers
 Other, Please specify _____

(35) How strongly do you agree or disagree with the following statement:

"I support the expansion of Penablanca protected forest."

Agree strongly Agree somewhat Disagree Disagree strongly Don't know

Thank you very much for helping me with this survey!!!