



Women in Biodiversity Conservation: It's Impact to Community

Myrna Nicol Ogoc ^{a*} and Lyndon Abalos Ogoc ^{b#}

^a Center for Environmental Studies and Advocacy (CESA), College of Science, Philippines.
^b College of Agriculture, Fisheries and Natural Resources, University of Eastern Philippines, Philippines.

Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

Barangay San Isidro is an island community in the municipality of Lavezares with roughly 1000 residents. Fishing is the main source of living of the people. Few individuals resort to upland farming, while others subsist on rock scrapings from the mountain and bought from them by local construction companies in the mainland. Most of the women in the community do not have job. Healthcare services are inaccessible. Despite all odds the weather brings, the ill and the dying must cross the sea for medical assistance. Moreover, potable water is scarce with the well on top of the hill as the only water source of the community. Such conditions make Barangay San Isidro among the poorest Barangays of Northern Samar. The women supported with the knowledge in preparing the nursery for the propagation of mangrove. The mangrove seedlings produced and sold to Department of Environment and Natural Resources, DENR, and the Department of Tourism, DOT, with the coordination of Local Government Units as well as the local women folks in the plantation of the mangroves.

To address the most pressing problems faced by the community, trainings and seminars were conducted to increase the people's awareness and to capacitate the community in terms of organizational development and livelihood. Just like the experiences of other development practitioners, the passive and unreceptive attitudes of the people were observed. It took some

^o Director;

[#] Professor;

*Corresponding author: E-mail: myrna_uep@yahoo.com;

time for the women to realize that helping each other would help them alleviate their condition. The academe being the prime mover and organizer of development programs for the women continued to inspire them and found new hope for and from the women. They were taught about the value of savings, self-reliance and commitment as very important factors for their success. They were motivated to carry out a microfinance project from a “piso-piso” savings for the future. Driven by their willingness to uplift their lives from poverty, the “piso” per day contribution raised to 20 pesos each week. The group also increased in number as weekly meetings were conducted, which led to the realization of their vision, which became clearer as they got involved in the program.

This is where the Womens’ Association for Inter-Island Development or WAIID was born. Because of their strong commitment to help themselves and others, they continued their efforts through the help of different agencies both Government Organizations and Non-Government Organizations to finance their projects and activities. At present, WAIID has a total of P70,000 assets coming from their weekly contribution. The organization is able to lend 4000 to 5000 pesos to a member every week for putting up small businesses, such as sari-sari store and food vending, which support the needs of their families. On top of meeting the daily needs of their families, their aspirations levelled up as well. They aspired of sending their children to school, which has driven them to fund a scholarship program for their kids. Their livelihood came in varied means; they also sold mangrove propagules for planting projects. The men likewise, helped by means of performing heavy tasks which the women were limited at doing, such as in the crab-fattening farm. Monthly livelihood trainings and seminars were conducted by different agencies knowing the womens’ group commitment and activities reflective of good governance.

The effort did not end there. The island’s rich Lalaguna mangrove eco-park, which puts the island in the map of stunning ecotourism destinations in the province, offers a great potential for future livelihood and ecotourism program of the community. The site will be in the roster with the majestic rock formations of Biri Island in tour packages which are in the offing. Managed by the WAIID women, a pavilion built at the site caters to tourists; with a good provision of food and other amenities and a nice tour around the mangrove forest makes everyone feels nature at its best.

“Opportunity knocks once,” so the cliché goes and these women had a good grip of it. Having a sense of ownership of these opportunities and the desire to live better lives for their families and the community propel them to redefine life out of poverty. They turned shortcomings, both personal and government services, to become self-sufficient through the support of brave men and women who took the chance to see what was behind the thick foliage of mangroves; better lives for the once downtrodden. The Womens’ Association for Inter-Island Development (WAIID) has so much to succeed in the future; it could be a model community to look up to someday.

Keywords: Women; biodiversity conservation; livelihood.

1. BACKGROUND

The Biri-LAROSA Protected Landscape /Seascape (BLPLS) was proclaimed as a protected area under the category of Protected Landscape/Seascape by virtue of Presidential Proclamation No. 291 on April 23, 2000 on account of its famous geological wonders known as “Rock Formations”, tropical mangroves and excellent display of benthic life forms Situated [1-5].

Northernmost of the Province of Northern Samar, BLPLS, spanning 33,492 hectares, is the coastal areas of Lavezares, Rosario, San Jose and

embracing the Biri Group of Islands and its surrounding reefs [6-9].

It harbors interesting animals such as insects, bats and birds that describes the site as one of the Key Biodiversity Sites (KBA 129). There is a complete ecosystem, wherein two of the coral species are considered to be the trigger species of the Protected Area as listed by Conservation International (www.conservation.org): *Acropora puertogalerae* and *Goneopora cellulosa*.

San Isidro is one of the many islands covered by the UNDP-GEF funded projects situated in the municipality of Lavezares.

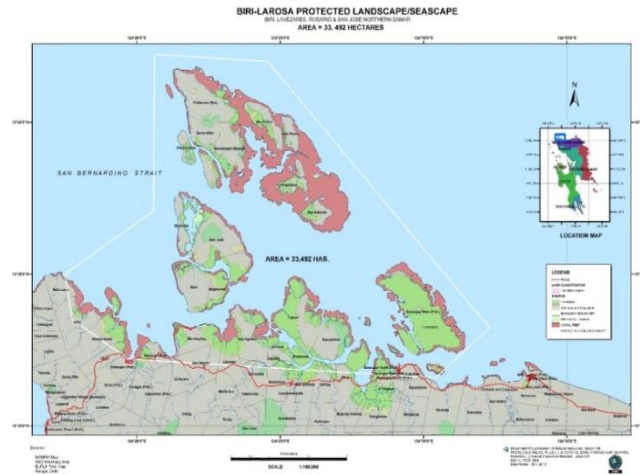


Fig. 1. Study location

Table 1. Direct Beneficiaries and Indirect Beneficiaries

Municipality	No. of Barangays	Direct Beneficiaries (No. of Families)	Indirect Beneficiaries (No. of Families)
Biri	9	100	150
Rosario	12	150	150
Lavezares	26	225	200
San Jose	16	160	100
Total	63	635	600

2. RATIONALE (HOW THE PROJECT RELATES TO BIODIVERSITY CONSERVATION)

Plan of Undertakings: Through this project, with the Women Association in biodiversity conservation initiatives, restoration and rehabilitation of target biodiversity areas with beach and mangrove forest trees have complemented the ongoing project of Protected Area Management Board in BLPLS MPA. This project has undertaken the following strategies: (1) rehabilitation of mangrove and seagrass habitats; (2) continuous capacity building to mobilize people’s organizations and government institutions; (3) sustained awareness building and advocacy for community mobilization, policy development and networking; and (4) coastal law enforcement.

Project Objective: The project aims to contribute to the restoration of degraded habitats of mangrove and seagrass in the Biri-Larosa Areas. Specifically assist the Women Association in Inter-Island Development in terms of increasing awareness in conservation agenda, capacitating them with skills in Community

Resource Assessment especially mangrove and seagrass assessment, nursery establishment and livelihood development.

3. METHODS AND PROCEDURES

The BLPLS Stakeholders are the targeted community of this project which belong to the following sectors: people’s organization of marginal fisherfolks, laborers, women and youth; business individuals and/or associations. Their participation in the project include attendance to activities proposed; provision of technical assistance to the target assisted groups, provision of counterpart sharing of costs on programs that are mutually beneficial, facilitate access to other services that are relevant to the attainment of this project’s goal. Other form of participation could be agreeing to as cooperating implementer especially for the beach shoreline restoration activity, or patronize the mangrove social enterprise products of the assisted people’s organization. Participating partners /cooperators may be encouraged to do resource mobilization activities for the counterpart sharing principle adhered by this project. On the part of the LGU, their support can be in the form of

resolution or letter of support for the project and participation in every activity that requires them.

1. Rehabilitation of Mangrove and Seagrass Habitats have the following key activities: establishment of restoration and rehabilitation for mangrove sites and beach shoreline, nursery establishment, care and maintenance of planting sites,
2. nurseries and beach shoreline, monitoring and evaluation, where the women Association in Inter-Island Development or WAIID is a major implementor.
3. The M&E of this project have 2 features – the conduct of biodiversity M&E tools with expanded habitats assessed, and project meetings, reporting and re-entry planning. Rehabilitation will be based on the DENR Technical Team.
4. Capacity Building for mobilization of POs and government institutions have the following key activities: conduct of training of trainers (TOT) on Mangrove and Nursery Establishment, Resource Mapping of Mangroves, TOT on Mangrove Social Enterprise Development; TOT on Mainstreaming Mangrove-Seagrass Habitat Management Advocacy. Social Enterprise Development helped the POs engaged in nursery as livelihood in selected barangays especially in San Isidro Womens' Association.
5. Awareness building and advocacy for community mobilization, policy development and networking. This strategy shall undertake biodiversity conservation education. Peoples Organization members, business sectors, pumpboat operators, students and other identified key players in BLPLS sites were included. Integration of this project into other organizations especially into LGUs' programs have been pursued as sustaining mechanism for this project. The community-based conservation management framework considered the ongoing multi-sectoral, public-private partnerships existing among stakeholders, reaching more youth audiences thru schools and women. Other key activities are the production of IEC materials, which were utilized during sessions on Biodiversity Conservation Education and Coastal Clean-Ups as incentive and promotional material.
6. Coastal Law Enforcement. Key activities under this strategy are: deputation of

Coastal and Marine Brigade and other volunteers; conduct of shoreline, forest and seaborne patrolling, and facilitation of inter-agency and LGU convergence meeting. The latter activity aims to harmonize law enforcement at LGU, protected area and DENR –BFAR jurisdiction. The use of digital camera with GPS facilitates strong evidence against violators. Eventually, mapping of violations can easily be analyzed and strategize for effective and efficient operation.

4. RESULTS AND DISCUSSION

The project aims to contribute to the restoration of degraded habitats of mangrove and seagrass in the Biri-Larosa Areas).

Four (4) sites identified for 69.53 hectares for coastal area forest rehabilitation; thirty eight point seven (38.7) hectares of beach/seagrass shoreline restored and maintained in agreement with beach front lot owners that somehow integrate biodiversity conservation at the local level especially in San Isidro by the Women Association in Inter-Island Development, thru the increase of mangrove cover and seagrass beds, ensuring their commitment to restore degraded habitats, climate change mitigating initiatives in the area as part of carbon sinks; with this project, 4 POs committed as project partners with 2 POs having deep commitment to undertake stakeholderhood (WAIID and Sto Ninians PO); Memorandum of Agreement on the stakeholderhood of these ecosystems with the PAMB as the highest policy making body in Protected Areas is prepared ensuring its initiatives in the future especially in the protection and conservation as a locally managed Protected Area; The DENR suggested to apply for PACBARMA with the WAIID to take care of all mangrove plantations in the sites; 2 temporary nurseries established in the target barangays that will provide a sustained supply of propagules even if it is not in season to collect, thus supporting the NGP Project on Mangrove Rehabilitation and Maintenance. Replanted 695,352 seedlings/ propagules to identified 69.53 hectares mangrove forest specifically in San Isidro Lavezares by WAIID and 38.37 has seagrass/ beach areas that resulted to more or less 80% survival of mangrove planted/rehabilitated that is considered an important initiative by the PO recognizing the importance of these ecosystems in their survival and climate change mitigating measures and

disaster risk reduction initiatives, aside from its importance in terms of biodiversity conservation as one of the major ecosystems serving as habitat of their associated species.

Coastal Clean-Up with public education in schools/ academic institutions conducted; World's Wetlands Day and Mangrove Planting at and Mangrovetum site; Provincial Tourism Assembly and Mangrove Planting International Coastal and Marine Clean-up (simultaneously conducted by the different POs in Biri-Larosa sites).

1000 brochures and primers produced –low cost only distributed to increase awareness to school children, youth, women, fisherfolks and the like.

Network of mangrove and seagrass advocates organized among youth and student volunteers; 20 deputized sea and mangrove forest volunteers /blue brigade conducting patrolling and monitoring activities. This is a very important component in Biodiversity conservation as it will try and instill the value of commitment in doing advocacy works, enforcement and apprehension initiatives to the youth which in the long run they will lead in the patrolling works as a sustainability mechanism in maintaining biodiversity in the area.

WAID and Sto Nino Fisherfolks Womens Association were able to access funding. This is also one strategic option wherein their buying capacity in the future will increase that will consequently reduce some exploitative activities nearby especially the quarrying, coral extraction and mangrove cutting as their other sources of income in previous years prior to our Project interventions.

Cross visit realized to successful mangrove community managed ecotourism sites as a sustainable enterprise by key stakeholders/ implementors; Inputs in seminars and trainings were complemented with this on-site experiential activity that encourages stakeholders and policy makers commitment, and idea in doing or supporting ecotourism initiatives in the area. Experiential sharing is an important tool in the appreciation of shared knowledge and experiences and in coming up with new ideas/ plans doable in the sites, BLPLS.

Defined cooperation and coordination among key agencies and stakeholders for law enforcement in Marine Protected Areas.

There has been notable progress in managing the protected area with the cooperation of LGUs and DENR Blue brigade volunteers and PAMB technical team.

5. CONCLUSION

Barangay San Isidro is a lone community in the island with roughly more than 1000 or less inhabitants on it. Fishing is the main source of living of its people; few individuals resorted to upland farming while others harvest rock scrapings from the mountain, bought from them by local construction company in the mainland. Most of the women in the community do not have a job. A barangay building was left undone by the local government as well as a little chapel. Luckily, an elementary school, the only operating government facility in the island with only one teacher saves the children from inherent ignorance. Healthcare services is inaccessible; even potable water is a scarce. A well on top of the hill is the only water source of the community. Despite all odds the weather brings, the ill and the dying must cross the sea for medical assistance. Barangay San Isidro is one of the poorest Barangays of Northern Samar.

This project has somehow created socio-economic impact to the organization and the whole community as well. The team was able to motivate the women to carry out a microfinance from a "piso-piso" savings for the future. Driven by their willingness to lift their lives up from poverty, the piso per day contribution raised to 20 pesos each week. The group also increased in number as weekly meetings are conducted.

They are on the right track and the goal they are envisioning is becoming clearer and real.

The Northern Samar Environmental Protection (NSEP) Center for environmental Studies and Advocacy (CESA) of the University of Eastern Philippines and the Department of Environment and Natural Resources (DENR) helped the group realized its first project of a mangrove propagules nursery and a crab-fattening farm; proceeds contribute to the group's growing microfinance scheme. Right now, the group shared 70,000 pesos total assets coming from their weekly contribution. They were able to lend 4000 pesos to a member every week and resulted to small businesses, which support the needs of their families such as sari-sari store and food vending among others. Moreover, their desire to send their children to school has driven them to fund a

scholarship program for their kids. Mangrove propagules are sold to groups for planting projects. Husbands also lend them hands in performing heavy tasks in the crab-fattening farm and mangrove nursery construction. Livelihood trainings and seminars are also conducted by the Department of Labor and Employment such as massage therapy, haircut and manicure/pedicure. The group received 100,000 pesos support from The United Nations Development Program (UNDP) and was augmented with additional 200,000 pesos by the DENR. The additional support are intended for the proposed tailoring project for the women and adding milkfish to the crab-fattening farm and the group's long desired office building. The group promised the appropriate use of the fund and the success of the projects in return.

To top it all, the island's rich Lalaguna mangrove eco-park, which puts the island in the map of stunning ecotourism destinations in the province, is now a hope of the future of livelihood and ecotourism of the community. The Provincial Government worked with the local government of Lavezares in developing the Lalaguna Mangrove Eco-park into one of the sought after destinations of the Biri-LaRoSa Protected Landscape and Seascape. The site will be in the roster with the

majestic rock formations of Biri Island in the tour package as proposed and funded by the Provincial Tourism Office of Northern Samar. A pavilion was built at the site managed by the WAIID women because of their strong commitment, which cater to tourists providing good food, nature feels and a nice tour around the mangrove forest.

Opportunity knocked at once, and these women had a good grip on it. Having a sense of ownership with these opportunities and the desire to live better lives propels them to alleviate themselves from poverty. Things would not have changed if they all waited for external help coming from the government. They must learn to become self-sufficient because their area is hardly reached by the government support if not by brave men and women who took the chance to see what is behind this thick foliage of mangroves. WAIID has so much to succeed in the future and served as model community to look up to someday.

COMPETING INTERESTS

Authors have declared that no competing interests exist.



Image 1. Photo documentations

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