ECOTOURISM IN A COMMUNITY-BASED MANGROVE AFFORESTATION IN TAGPAIT, ABORLAN, PALAWAN

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INTRODUCTION

Tagpait is a rural coastal community in Aborlan, Palawan, Philippines where fishing and farming are the primary sources of livelihood. It is located 72 kilometers south of the capital city of Puerto Princesa in the eastern seaboard of mainland Palawan adjacent to the West Sulu Sea. Its afforested mangroves serve as a major coastal habitat and natural source of livelihood of the local people.

In April 1990, Japan-based Organization for Industrial, Spiritual, and Cultural Advancement International (OISCA) led the mangrove development project in Tagpait, Aborlan. Households with annual income of not more than PhP 20,000 (about US\$ 500) were the project beneficiaries (Takahara & Dator 1996). With the assistance of OISCA, the households organized the Tagpait Coastal Development Association (TACDA), which took over the management of the project after its termination in May 1992.

Under the OISCA-led project, each household was allocated one hectare (25 m x 400 m) for planting, after which the beneficiary was issued a certificate of mangrove stewardship contract by the Department of Environment and Natural Resources for 25 years and renewable for another 25 years (Takahara & Dator 1996). At present, the mangrove afforestation covers an area of 78 hectares (0.78 km²), planted with 6 species of mangroves and growing at sizes of 5 to 10 centimeters in diameter (Regoniel & Pacañot 2012).

METHODOLOGY

In this study, the rapid rural appraisal (RRA) and participatory coastal resource assessment (PCRA) methods were used. These involved field observation; key informant interview; and use of a field guide on the common mangrove species in Palawan, a 50-m transect, a 10 m x 10 m quadrat, and a 1 m x 1 m regeneration plot (Walters et al. 1998, Deguit et al. 2004). Field data gathering was done in October 2012 by the Ecotourism Class of Third Year BS Environmental Science program of Palawan State University.

RESULTS

Afforested Mangroves

The afforested mangrove forest in Tagpait is composed of mature trees (trunk diameter > 4 cm and height of tree > 1 m), saplings (trunk diameter = 4 and height of tree > 1 m), and seedlings (trunk diameter < 4 cm and height of tree ≤ 1 m). Approximately, the study site has more than 300,000 mature trees. The mangrove composition and relative abundance in the study site is presented in Figure 1. It is planted mostly (80%) with trees of the genus

Rhizophora (local name: Bakauan). The most abundant (51%) among the six species is Rhizophora mucronata (local name: Bakauan babae).

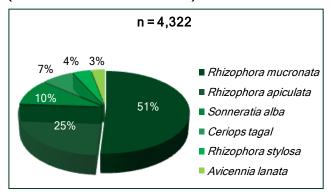


FIGURE 1. Mangrove Composition and Relative Abundance

A conservative estimate by Melana et al. (2000) on the direct economic benefit for every hectare (10,000 m²) of healthy mangrove forest is PhP 40,000 (US\$ 930 at the present foreign exchange rate) per year. Thus, the area could generate an annual economic benefit of about PhP 3.12 Million (US\$ 72,600) about half of which is accounted to fisheries. To ensure sustainability of the resource, it was reported that for every mature mangrove being cut, the project beneficiary has to replant another one. The relative abundance of mature trees, saplings, and seedlings in the study site is presented in Figure 2.

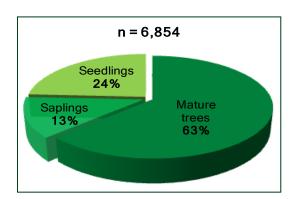


FIGURE 2. Relative abundance of mature trees, saplings and seedlings

Attractions

The area is managed by TACDA with 78 household beneficiaries under the Community-Based Forest Management Agreement (CBFMA), which is a land tenure instrument and a production sharing agreement entered into between an organized community and the Philippine government through the Department of Environment and Natural Resources (Melana et al. 2000). Ecotour attractions in the area include trekking in mangroves (Figure 3), bird watching, line fishing, boat rowing, gleaning for shells and crustacean. Entrance fee is minimal at PhP 10 (US\$ 0.25) and rental of cottages ranges from PhP 100 to 150 (US\$ 2.50 to 3.50).



FIGURE 3. Trekking in Tagpait afforested mangroves

Local Food

With prior arrangement, delicious and nutritious foods are served such as native chicken *tinola*, grilled snapper/grouper, steamed crabs, *dja*, and *amig*. The all-natural and tasty *buksi* mixed drink of coconut juice and calamansi juice are unique to the place. Figure 4 presents some of the local food in Tagpait.



FIGURE 4. Local food in Tagpait, from top: grilled fish, steamed crabs, *dja*, *amig*, and *buksi* mixed drink

CONCLUSION

The 78-hectare afforested mangroves in Tagpait, Aborlan, Palawan is a natural source of livelihood of the local people. It supports fisheries and household needs for wood. However, there is a need to improve and maintain ecotourism facilities in the area to attract more visitors. The association should not rely mainly on the produce derived from the mangroves, but it should look for partners that will assist them in making the place a vibrant ecotourism destination in Palawan.

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REFERENCES

- Deguit, ET, Smith, RP, Jatulan, WP & White, AT 2004, *Participatory coastal resource assessment training guide*, Coastal Resource Management Project, Department of Environment and Natural Resources, Cebu City, Philippines.
- Melana, DM, Atchue III, J, Yao, CE, Edwards, R, Melana, EE, & Gonzales, HI 2000, *Mangrove management handbook*, Department of Environment and Natural Resources, Manila, Philippines through the Coastal Resource Management Project, Cebu City, Philippines.
- Regoniel, PA & Pacañot, EB 2012, Family-based mangrove afforestation in Tagpait, Aborlan, Palawan: Sustaining the drive towards sustainable development, PSU University Journal 2012, pp. 8-13.
- Takahara, K & Dator, E 1996, *Community-based mangrove reforestation project, Barangay Tagpait, Aborlan, Palawan*, in Pido, MD, Pomeroy, RS, Katon, BM, Carlos, MB & Sandalo, AC (eds.) *The management systems of marine fisheries and other coastal resources in Palawan, Philippines: Concepts, experiences and lessons,* International Center for Living Aquatic Resources Management (now: The WorldFish Center) and the Palawan Council for Sustainable Development Staff, Puerto Princesa City, Palawan, Philippines, pp. 113-19, viewed 27 February 2013, <www.worldfishcenter.org/resource_centre/WF_171.pdf>.
- Walters, JS, Maragos, J, Siar, S & White, AT 1998, *Participatory coastal resource assessment: a handbook for community workers and coastal resource managers*, Coastal Resource Management Project and Silliman University, Cebu City, Philippines.