

ANALYSIS OF TOURISM POTENTIALS IN THE MUNICIPALITY OF DUMARAN, PALAWAN, PHILIPPINES

Reyes, Edgar M. Jr.¹, Devanadera, Ma. Catriona E.¹, Eligue, John Ceffrey L.¹, Gonzales, Ralphael P.¹, Paro, Fevi Rose C.¹, Polizon, Janece Jean A.², Samantela, Sandra S.^{1*}

¹*Department of Community and Environmental Resource Planning-College of Human Ecology, University of the Philippines Los Baños (UPLB)*

²*Department of Biological Sciences, College of Science and Mathematics, Mindanao State University – Iligan Institute of Technology, Iligan City*

Email: sssamantela@up.edu.ph

ABSTRACT

Dumaran is a 3rd class municipality in the northwestern section of Palawan. It is composed of 16 barangays, seven of which are part of Dumaran Island, and nine are located in the mainland. It is bounded by municipalities of Taytay, Roxas and Araceli. Dumaran is enriched with natural potentials coming from coastal, forest, and agricultural resources. One of the municipality's development goals is to explore its vast ecotourism potentials, however, it has not yet been achieved due to poor road networks and other support infrastructures. A pool of multidisciplinary researchers and planners from the University of the Philippines Los Baños conducted an exploratory study to identify and analyze the potential tourism sites and activities in Dumaran. Through secondary data gathering, on-site validation, focus group discussions and key informant interviews, the research team identified and characterized Dumaran's different potential eco-tourism sites. Recommendations were made on sustainable community-based tourism activities and strategies that would greatly contribute to the municipality's economic development.

Keywords: eco-tourism; sustainable; economic development; community-based

1. INTRODUCTION

Tourism holds the promise of increased employment and income opportunities, particularly for Filipinos living in the coastal and rural areas of the country (Alampay 2005, p. 35-36). It is recognized as a major contributor to the Gross National Product (GNP). As such, it is given much importance by some municipalities and provinces through the Comprehensive Land Use Plan (CLUP) where possible tourism sites or activities for potential economic development are identified (Tomeldan 2009, p. 16).

Many local government units (LGU) consider tourism as their main economic activity while some are yet to explore resources and potentials for tourism development. In 2014, the tourism sector directly employed 4.9M people, which is 32% higher than 2010 and contributed 6.5% (Php748.3B) of Gross Domestic Product (GDP). More than the 5.8% (Php523.9B) in 2010 making tourism the fourth largest source of foreign exchange in the country. Tourism arrivals in the country increased to 4.7M in 2013, higher by 9.7% (4.3M) in the previous year. Similarly, the Department of Tourism estimated the domestic tourists increase from 40.7M in 2012 to 44.1M in 2013 (Philippines, SEPO 2014, p.1).

During the administration of Fidel V. Ramos, in 1991, an integrated cluster development planning was pursued and master plans were prepared for the areas like Cordillera Autonomous Region, Tagaytay and Palawan. However, due to incoherent plans, heavy politicization of the industry made it the least priority for economic development. It was only some few years later and past one more administration that a stronger support for domestic tourism became a top priority (Alampay 2005, p.35-36).

As stated in Palawan's Provincial Development Physical Framework Plan (PDPFP) for 2009-2014, eco-tourism sites are considered existing areas of production land use. Furthermore, sustainable resource-based development in the province, which promotes agro-industrial, fisheries, environmentally-sustainable tourism, and resource-based development, is one of the strategies to address concerns on low income derived from employment in the province.

The province of Palawan relied significantly on Coron, El Nido and other municipalities in Northern Palawan, in enhancing growth of tourism industry in the province through its contribution to employment and revenue generation. However, tourism development in the province can be seen more evidently only in some specific areas. For one, the Municipality of Dumarán, which mostly depends on its agricultural products, has not taken its course in developing its tourism potentials.

Dumarán, is a third class municipality (PSA 2008) and has a total land area of 55,327.08 hectares and is located in the northwestern part of Palawan (MPDC 2012). As of 2010, the municipality has a total population of 21,397 (PSA 2010). Dumarán is composed of 16 barangays clustered into two groups: the mainland which covers nine (9) barangays and the island which has seven (7) barangays (Figure 1.0). Consequently, two (2) barangays are considered urban and the rest are rural (MPDC 2012).

Possible major tourism destinations were already identified by the local government such as waterfalls and springs distributed in the mainland, and the ruins of a Spanish fort in Poblacion (MPDC 2013). These also include the eminent pristine condition and abundance of resources such as coral reefs, seagrass, mangrove, and marine fishes.

Ecotourism development in Dumarán can catalyze the improvement of basic social services, employment situation, attract local and foreign investors. With ecotourism, the improvement of local economy, empowerment of communities and preservation of indigenous knowledge and practices follow for sustainable development promotion. This study identified and analyzed the tourism potential of the Municipality of Dumarán. Strategies to maximize its historical and natural resources were recommended.

2. PARTICIPATORY METHODOLOGY

Through participatory rapid assessment (focus group discussions, key informant interviews, and secondary data gathering), the local municipal context and possible tourism sites were obtained. Data analysis was conducted using SWOT (Strengths, Weaknesses, Opportunities and Threats) and Potentials Analyses. The study's high regard to stakeholders' participation is critical for ecotourism potentials identification as it forms a solid foundation for an inclusive and comprehensive planning activity for sustainable tourism development. Farmers, fisher folks, women's group, senior citizens, barangay and municipal LGU representatives, Non-Government Organizations (NGO) are among the stakeholders who participated in the study.

The SWOT and Potentials Analyses were used to contextualize the assets present in the municipality. SWOT could generate many ideas which could be useful in summarizing key management issues and opportunities (Hong & Chan 2010, p. 136-145). The strengths and weaknesses are the positive and negative internal factors (within the community's hold), while the opportunities and threats are the external forces (outside the community's control) that may affect the community in a positive and/or negative way. Potentials Analysis is a tool for defining community assets and/or potentials for development, such as for tourism. Participation of stakeholders and the availability of information are valuable in identifying the basic foundation of the potential analysis as a tool for developing tourism potentials.

3. RESULTS

3.1 Endogenous Characteristics as Potentials for Ecotourism Development

Potentials are latent and existing assets in an area reflective of its capacity to develop if tapped properly. For the municipality of Dumarán, all assets/potentials ascertained by the local community were identified to form the foundation for ecotourism development. Accordingly, tangible assets of an area can be categorized into seven clusters - human, social, cultural, intellectual, natural, environmental, and urban assets (Friedmann 2007). These form the basis for developing the basic tourism potentials/ assets of Dumarán, however, categorized into five sectoral developments as prescribed in local planning activities in the Philippines: (a) Natural Potentials –the natural resources and ecosystem services and goods; (b) Socio-cultural Potentials –the local culture, valuable traditions and practices; (c) Economic Potentials –the economically sound and income-generating activities; (d) Infrastructural Potentials –the supporting physical structures; and (e) Institutional potentials- the organizational and socio-civic arrangements.

Three (3) ecotourism potential categories with latent basic potential and the corresponding ecotourism activities were shown in Table 1. However, for infrastructure and institutional sectors, potentials identified relate to the complementary assets for ecotourism to prosper in the area.

Table 1: List of Identified Ecotourism Development Potentials by Category and Nature of Activity in Dumarán

Potential by Category	Potential Ecotourism Activities
1. Natural/ Environment Potentials a. Terrestrial Resources (Mountains, Virgin Forest, Waterfalls, Lake/Swamp, River, and Mangrove Forest Endemic Species, Flora and Fauna) b. Coastal Resources (Coral Reefs, Seagrass Beds, Endangered coastal species, Marine species, Aqua farming, Beach fronts, Sand and other mineral, Islets)	Trekking, Camping, Regulated Botanical Tours, Bird watching, Picture Taking/ Photography, Caving Mountaineering, Tree climbing River Cruise, Boating, Canoeing, Dolphin, Whale and Dugong watching, Swimming, Scuba diving, Kayaking, Snorkeling, Parasailing, Boating, Island Hopping

Potential by Category	Potential Ecotourism Activities
2. Socio-cultural Potentials a. Local Culture (Indigenous Culture, Festivals, Sense of Community, Traditional Medicine) b. Historic Sites (Spanish Fort, World War II Warship Wreck)	BahayCuyunon (Cultural Center), Festivals Historic Tours, Research Tours
3. Economic Potentials a. Agricultural Produce Value Addition (Cashew, Fruits and Vegetables) b. Fishing Village (Fishing and processing, etc) c. Aquaculture (Pearl Farming, Seaweed Production, etc)	Product Diversification, Souvenir Creation Dried Fish Production, Fish Tourism Aquaculture Tourism

The Natural/Environmental Potentials. As defined by the Australian National Ecotourism Strategy, ecotourism is a nature-based tourism, which involves education and interpretation of the natural environment and is managed in an ecologically sustainable manner (FAO 2015). The natural landscape and seascape of Dumarán are potential nature-based ecotourism sites. From ridge to reef, the municipality has diverse set of flora and fauna. Dumarán ecosystems are found to be a habitat of endemic species of birds and mammals such as the Philippine Cockatoo, Palawan Bearcat and other endangered wildlife (KFI 2015 and PCSD 2013). Moreover, it is significant to note that Dumarán has wide agricultural lands and forest areas, which is about 49% of the total land area of the municipality. Surrounding Dumarán are long stretches of white sand beaches, and thick mangrove forest cover all the municipality's estuaries. These are indicators of strength and potential of the community for eco-tourism and agricultural production. According to WWF (2001), flora and fauna, which have inherent attractiveness or degree of interest to appeal to specialists or visitors, are preconditions for ecotourism development. However, resources in Dumarán are not fully maximized due to insufficient implementation of conservation and management practices. Furthermore, natural calamities, uncontrolled crop infestation and unsustainable activities threaten the availability and accessibility to natural resources.

The Social Potentials. The Municipality of Dumarán has existing school facilities from primary (36), secondary (9) and tertiary levels and health centers and Basic Emergency Obstetric and Newborn Care (BEmONC) units reflecting the decreasing prevalence of illiteracy and malnutrition, respectively. These are good social preconditions, at the minimum as it is reflective of the local awareness of the potential opportunities, risks and changes involved in doing community based-ecotourism (WWF 2001). The local indigenous group (Cuyunon) are vocal and empowered to actively integrate their local culture in the community-based ecotourism activities. The willingness to receive visitors is also a basic precondition for possible community based-ecotourism in the area (WWF 2001). This is also reflective of local peoples' realization that change is needed and must be prepared for it. Possible impacts of ecotourism to the indigenous people may be reduced since decision-making regarding the amount, location, timing, and nature of tourist visitation are directly under their considerations (Barna, Epure & Vasilescu 2011) and the preconditions for ecotourism set by WWF in 2001. However, social potentials must continuously be improved in terms of its accommodating capacity and safeguarding the local culture to match the possible future demand and threats.

The Economic Potentials. Given the abundance of agricultural lands with high potential for rice and crop production, Dumaran is also home to various naturally grown produce and raw materials such as cashew, coconut, mango and rattan, to name a few. These resources strengthen the municipality's potential for economic growth through livelihood and craft production. As stated by WWF (2001), a good economic precondition for ecotourism should have an effective initial market assessment for potential demands and an area should not be over supplied with ecotourism offer. This perfectly describes the economic condition of Dumaran in terms of its ecotourism industry. However, high cost in farming inputs and limited number of other livelihood for the community are being experienced in the municipality. Also, there is a high dependence on subsistence farming which influences the availability of the resources. Subsistence farming for both fishery and crop production is only good for household consumption, which is not profit generating and sustainable. Nevertheless, privately owned business enterprises are also present in the area adding up to the economic improvement in the community. However, sources of income are not sufficient to support the needs of the majority. Public and private sector must make investment decisions not only to increase firms' productivity and competitiveness, but also help in improving the well-being of local society (Va'zquez-Barquero 2002, p. 41-52). With the strengthened economic sector, there will be substantial acceleration of ecotourism development in Dumaran. Integrative activities point to the economic potentials for aquaculture and trading of commodities such as cashew.

Infrastructure and Institutional Potentials. Existing physical infrastructures such as road networks, bridges, water and energy supply, communication facilities and socio-economic support facilities are among the infrastructure potential. On the other hand, local institutional policies, inter- and intra- organizational linkages and directions of the local institution summarize the institutional potentials. These two sectoral potentials are the backbone in strengthening other assets/potentials of Dumaran. Proper management and continuous improvement of infrastructure, including both the soft and hard infrastructure support facilities should be prioritized. Shifting to sustainable practices in managing resource and establishment of marketing strategies for products and produce should be realized to fully maximize the tourism potentials of Dumaran.

3.2 Derived potentials analysis for ecotourism development

Derived potentials are results of the combination of the different basic potentials present in the Municipality (Gaesing 2012). The basic potentials were combined forming the "first-level derived." First-level potentials are immediate and direct outcomes of the blending of the simple essential components for tourism development. The "second level-derived" potentials are combination of the simple or basic potentials and first level-derived potentials. According to Arocena (1995), endogenous (assets) development involves a process in which social aspects are integrated into economic aspects. These derived potential themes will play significant role in defining the ecotourism development direction of the municipality (Table 2).

Table 2: Possible Themes and Activities for Ecotourism Development in Dumarán

Derived Potentials	Themes for Ecotourism Development
First Level	<p><u>Agricultural support</u> (processing of Cashew into butter, food processing, development of marketing strategies for local products); <u>Biodiversity strengthening</u> (improved management of Marine Protected Areas (MPA), inventory of wildlife flora and fauna, establishment of conservation sites, biodiversity showcase, restoration of damaged ecosystems); <u>Infrastructure complementation</u> (improved farm to market road, improved water supply and irrigation system, establishment of Tourism Information Center, centralized public land transport terminal, improvement and exploration of sustainable sources of electrical supply system); <u>Policy backing</u> (small scale business enterprises development, Integration of Municipal plans); <u>Economic vibrancy</u> (creation of organized community groups and cooperatives and Establishment of private business groups); <u>Natural Resources sustainable productions</u> (forest products production, nursery/ mass propagation of economic plants); <u>Indigenous culture mainstreaming</u>; <u>Continuing Research support</u></p>
Second Level	<p><u>Forest and Biodiversity-Related Ecotourism Potentials</u>; <u>Agriculture-Related Ecotourism Potentials</u>; <u>Mangrove Ecosystems-Related Ecotourism Potentials</u>; <u>Coastal and Marine Ecosystem-Related Ecotourism Potentials</u>; <u>Culture and Heritage-Related Ecotourism Potentials</u> (Research collaboration for ecotourism development, Active search and study for ecotourism sites identification)</p>

Themes for ecotourism development are combinations of existing assets that will further enhance the internal capacity found in the municipality. Benefits in a locality can be maximized and value added to its resources by focusing on the requirements, capacities, and values of its people. Thus, local environmental and social resources often incorporates complementary resource use and encourages strong people participation in decision making and tapping external opportunities to their own needs (Saxena 2008, p. 233-254).

Ecotourism themes are integrated with the existing ECAN Resource Management zoning to address the conservation and protection of the vulnerable landscape and seascape of the municipality. At the same time, these will enable the communities to use the resource for livelihood (Figure 2). The conceptual zonation of the possible tourism sites (Table 3) shows second-level derived potentials spatially distributed.

Table 3: Specific Sets of Ecotourism Activities per Derived Ecotourism Potentials and Zones

Zone	Second-Level Derived Potential	Nature of Activities
1	Forest and Biodiversity-Related Ecotourism Potentials	forest products marketing (souvenirs, baskets, honey, etc.), mountain trekking activities, bird watching, wildlife encounter, zoological and botanical garden and nature museum
2	Agriculture-Related Ecotourism Potentials	improved agricultural crops and processed products marketing, cashew eco-agri farming, Dumaran products marketing center
3	Mangrove Ecosystems-Related Ecotourism Potentials	sustainable crab farming, mangrove forest experience (walk, dine and tour), mangrove adventure (Balilit Picking, Tamlok hunting, etc), mangrove cruise, mangrove forest research tour
4	Coastal and Marine Ecosystem-Related Ecotourism Potentials	island/islets adventure tour packages, island living experience, kayak and boating, snorkeling and diving in coral reef areas, countryside resort living experience
5	Culture and Heritage-Related Ecotourism Potentials	Bahay Cuyunon (Cultural Center), Hispanic Fortification Conservation, ship wreck diving and underwater world experience, Kalabukay month-long festival, organizing of Community-based ecotourism groups

The conceptual zoning of the ecotourism activities followed the allowed set of activities specified in the PCSD resolution provided in the ECAN Resource Management Plan of Dumaran 2012 (PCSD 2012). Zone 1 exemplifies the epitome of protection of natural landscape blended with tourism through which forest and biological resources are treated based from its conservation value. Zone 2 means agri-ecotourism as the theme, wherein, appreciation of "farm to table" and value addition to agricultural resources is mainstreamed. Community-based ecotourism activities showcasing the rich and old growth mangrove forests coupled with controlled mangrove-related activities are highlighted in Zone 3 while Zone 4 includes the countryside resort experience combined with the relaxing island living. Zone 5 centers on experiencing the rich history and culture of Dumaran integrated in adventure packed and festive activities.

3.3 Strategic directions to showcase ecotourism development in Dumaran

Ecotourism potentials will remain as potentials until realized, tapped, and enhanced. This is also recognizing that potentials lead to inclusive growth with a character that is unique and apt to the needs and capabilities of the community. The identified potentials followed the Dag Hammarskjold Foundation (1977) involving five development characteristics namely need-oriented, endogenous, self-reliant, ecologically-sound, and based on structural transformations. Strategic directions of Dumaran include the following: (1) Unique ecotourism destination for Palawan "Relaxing Countryside Experience and Nature Encounter" (MPDO 2015); (2) Marketing promotions of Dumaran as the next ecotourism destination in

Palawan (3) Community-based ecotourism activities; (4) Development of ecotourism-based cottage industries; (5) Active engagement of the community and the indigenous people; (6) LGU's active collaboration with NGOs, academe and the local community; (7) Active implementation of priority projects for development of Dumaran; (8) Conservation of natural ecosystems and landscapes; and (9) Integrated waste management strategies. These strategies serve as potential measures in promoting sustainable tourism in Dumaran.

With the creation of "A Relaxing Countryside Experience and Nature Encounter", Dumaran will be marked as a self-reliant and a sustainable tourism destination. With the successful implementation and proper management of the tourism potentials, Dumaran can contribute to the ecotourism industry in Northern Palawan.

4. CONCLUSION

The identified potential tourism sites in Dumaran were from different topographical settings such as plain, mountainous, rivers and coastal environs. The location and natural ecosystem contributes to the level of attractiveness of the potential tourist destination areas. The social involvement of the community also adds to the degree of aesthetic indication as a core basis for the recognition of social and economic potentials. On the basis of the analysis, the array of distribution of the potential tourism sites allows a particular ecotourism activity within the identified category as to natural/environment, social and economic potentials. These specific potential activities were particularly useful for sustainability of the direct or indirect function of the ecotourism development potential and tourist sites. The nature of activities identified with respect to the derived potentials can attract tourists' interest and demand in exploring potential sites of Dumaran. With the diverse ecotourism potential in Dumaran, it can be showcased as a unique site for "A Countryside Living Experience" and a new tourism destination in Palawan taking into consideration the strategic directions for ecotourism development in Dumaran.

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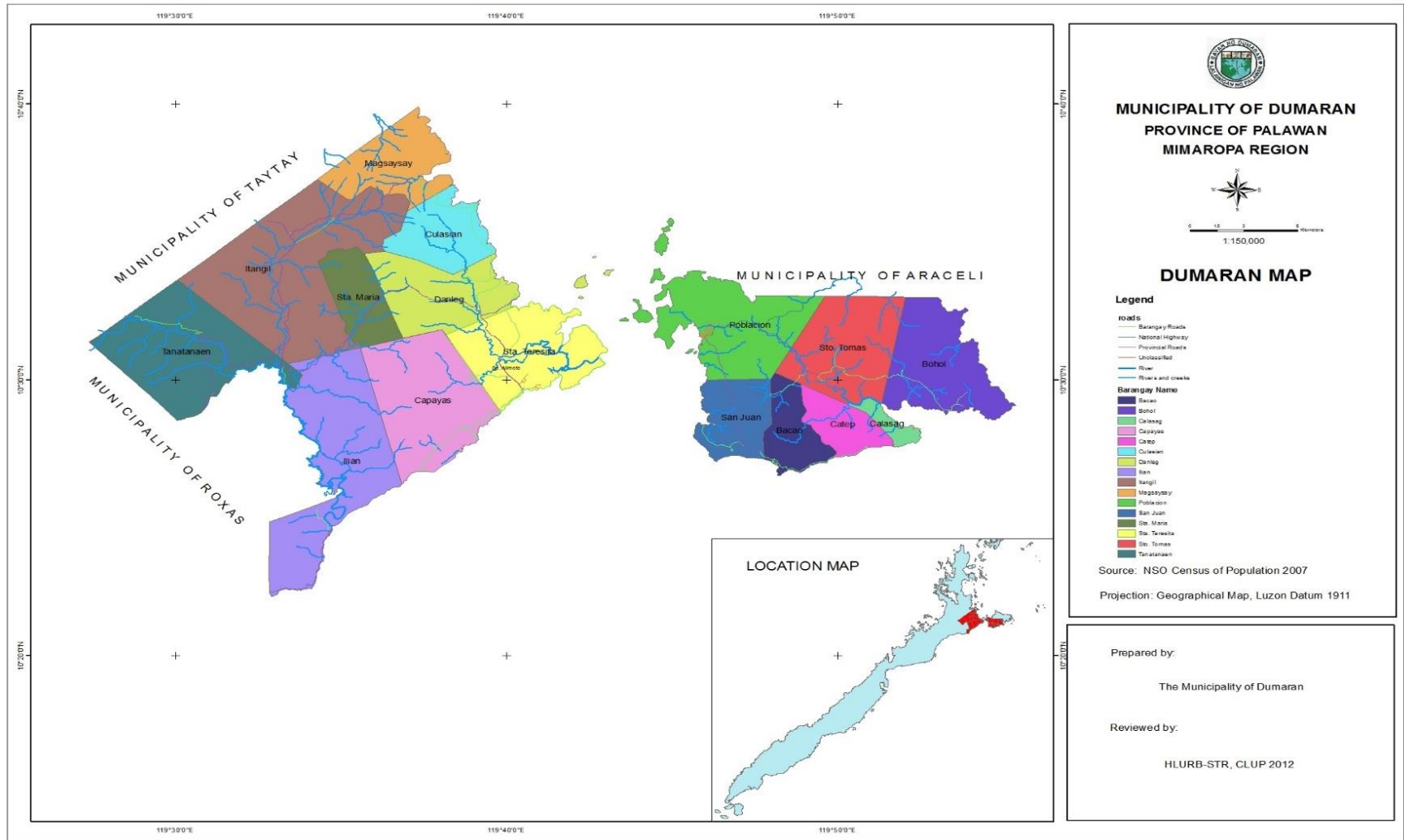


Figure 1: Location Map of the Municipality of Dumarán, Palawan

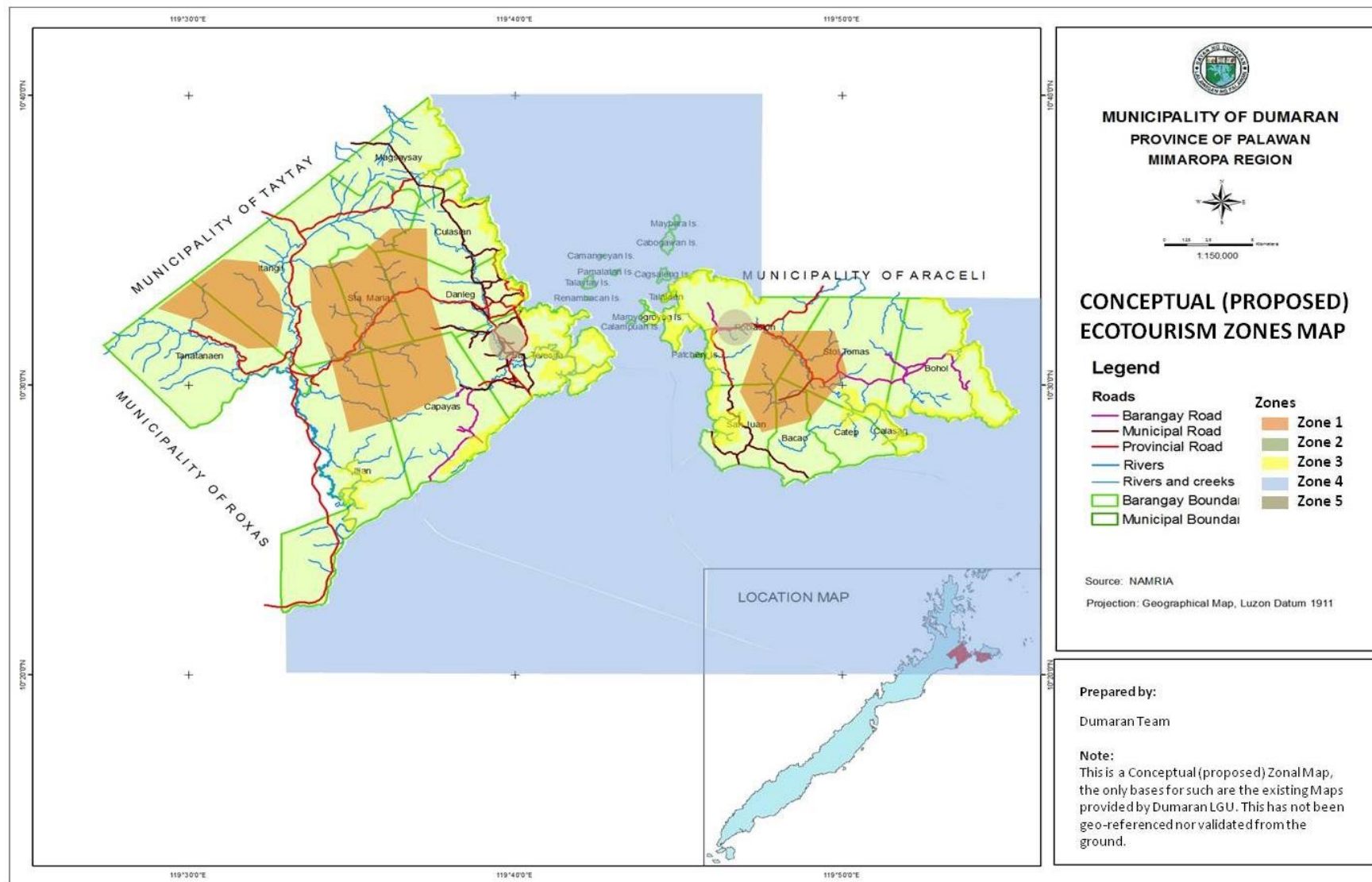


Figure 2: Conceptual (Proposed) Ecotourism Zones for the Municipality of Dumaran, Palawan.