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ProGED
PROMOTION OF GREEN ECONOMIC DEVELOPMENT ProGED) PROJECT

Promotion of Green Economic Development (ProGED) Project

Interventions on Bantayan Island

October 2013 - February 2015

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Acronyms

AC	Air condition
BFAR	Bureau of Fisheries and Aquatic Resources
BIAHRBR	Bantayan Island Association of Hotels, Resorts, Bars, and Restaurant
BINPR	Bantayan Island Nature Park and Resort
BIWA	Bantayan Island Wilderness Area
BMUB	German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety
BMWi	German Federal Ministry of Economics and Technology
BMZ	German Federal Ministry for Economic Cooperation and Development
CC	Climate Change
CCCI	Cebu Chamber of Commerce and Industry
CCCI-BC	Cebu Chamber of Commerce and Industry – Bantayan Chapter
CFLs	Compact Fluorescent Light Bulbs
CPA	Cebu Port Authority
CPDRRM	Cebu Provincial Disaster Risk & Reduction Management
CSR	Corporate Social Responsibility
CTU-AREC	Cebu Technological University - Affiliated Renewable Technology Centre
CTU	Cebu Technological University
DA	Department of Agriculture
DAMGO	Damgo sa Kaugmaon, Incorporated
DENR	Department of Environment and Natural Resources
DILG	Department of the Interior and Local Government
DOH	Department of Health
DOT	Department of Tourism
DSWD	Department of Social Welfare and Development
DTI	Department of Tourism and Industry
GIZ	Deutsche Gesellschaft für international Zusammenarbeit
GTC-K	Green Technology Centre Korea
INGO	International Non-Governmental Organisation
LED	Light Emitting Diode
LGU	Local Government Unit
LGSP-LED	Local Governance Support Program - Local Economic Development
MPA	Marine Protected Area
MRM	Monitoring and Replanning Meeting
MSMEs	Micro, Small, and Medium Enterprises
NGOs	Non-government organizations
PAME	Protected Area Management Enhancement
PAMB	Protected Area Management Board
PDRRMC	Provincial Disaster Risk Reduction and Management Council
PDRRMO	Provincial Disaster Risk and Reduction Management Office
PEP SOA	Renewable Energy Project Development Programme in Southeast Asia
PNP	Philippine National Police
PPDO	Provincial Planning and Development Office
ProGED	Promotion of Green Economic Development Project
POs	Peoples Organisations
RRF	Resource Recovery Facility
SAFETEA	Santa Fe Tourism Enterprises Association
Support CCC	Support to the Climate Change Commission
THW	Technisches Hilfswerk
TIGRA	Transnational Institute for Research & Action
UNWTO	United Nations World Tourism Organization
YPDR	Young Pioneer Disaster Response
ZSL	Zoological Society of London

1 Background

The tourism sector on the Bantayan group of islands (later on referred to as Bantayan Island) is significantly contributing to the economic development of the island, particularly in the municipality of Santa Fe. Visitor numbers are steadily increasing and tourism positions itself as a potential driver for poverty reduction and development. However, uncoordinated growth patterns could significantly alter the beneficial outcomes of such a development and lead to environmental degradation, increased social inequality, and an enhanced vulnerability against climate change impacts. According to the most recent report of the International Panel on Climate Change (IPCC 2014), climate change is expected to increase the frequency and intensity of extreme weather events, such as typhoons, and lead to rising sea levels in the Philippines.

Around the globe, governments and development organisations increasingly implement legal frameworks, projects, and measures to steer and encourage economic sectors to adapt their operations in line with the 'green economy' concept. The United Nations Environmental Program (UNEP) defines 'a green economy [as] one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. In its simplest expression, a green economy can be thought of as one which is low carbon, resource efficient and socially inclusive' (UNEP n.d.).

In this context the Promotion of Green Economic Development (ProGED) project, jointly implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and the Department of Trade and Industry (DTI), decided to work on Bantayan island to steer the tourism development in a climate smart and sustainable manner. The primary objective of the project is that Micro, Small, and Medium Enterprises (MSMEs) as well as government institutions relevant to economic development increasingly implement environment friendly, climate smart, and inclusive strategies and measures. ProGED operates in different provinces in the Philippines and follows a multilevel and stakeholder approach. Most interventions are based on a value chain analysis (VCA) approach, specifically the Valuelinks methodology, with the perspective of identifying opportunities for greening enterprise activities in the process of delivering a good or service.

This consultancy report was prepared by Janto S. Hess and summarizes the activities and achievements of ProGED on Bantayan Island. Mr Hess was given the chance to support the ProGED project interventions as a permanent contact person on the island in different roles from October 2014 until February 2015. Among other tasks, he organized a tourism business matching event in January 2015 to promote local procurement. He also undertook a survey to evaluate the project's achievements. The outcome of this survey can be found in this report. This publication gives an insight about the current state of the tourism development on Bantayan Island and outlines major needs and hindering factors towards a sustainable growth of the sector. It can serve as a reference document to plan future interventions to steer the tourism development on the island in a climate smart and sustainable manner.

2 Green Economic Development part of the MSME Development Strategy

The following section of the report shows a brief summary of some methodologies and the theoretical background on which ProGED bases its interventions. A more comprehensive overview of the methodologies, as well as key policies and instruments in the context of green growth, existent in the Philippines, can be found in the 'Climate Change and Private Sector Development' report by Finkel et al. (2010). Furthermore, the ProGED website (www.greeneconomy.ph) offers key literature and publications, updates about the projects activates, as well as a database with green service and technology providers existent in different regions in the Philippines. Additionally, news and updates about the project and the green economic development in the Philippines can be followed through the ProGED Facebook page (https://www.facebook.com/GIZ.ProGED).

2.1 Goals pursued by the Green Economic Development Approach

Green growth intends to address five elements of concern, namely climate change mitigation, climate change adaptation, competitiveness, green jobs, and preserving nature's capital, simultaneously. Table 1 provides an overview of the five goals and a brief introduction of specific aims. Include ProGED graph

Table 1: Goals Pursued by Green Economic Development Approach

Elements	Aim
Mitigation	To reduce Greenhouse Gas Emissions (GHG) and thus decrease the intensity of climate change impacts.
Adaptation	To assist individuals and businesses to increase their adaptive capacity and enable them to react to climate change related impacts and market changes appropriately.
Competitiveness	Improve the long-term competitiveness of companies by helping them develop and implement sustainable green business strategies that simultaneously reduce their ecological footprint.
Green jobs	Make use of growth opportunities and new green market segments, which require innovative products and services, to protect existing employments and foster job creation.
Nature's capital	Conserve nature's capital (ecosystems, biodiversity, natural resources) through the recognition of its intrinsic and economic value for sustainable and competitive business operations.

2.2 Intervention Levels of the Green Economic Development Approach

In order to achieve these aims, ProGED focus its interventions on different levels (see table 2) and intents to involve a range of public and private stakeholders. The work is supported through an improved legal framework and programs fostering Green Growth in the Philippines (Finkel et al. 2010).

Overall, the target is to achieve an enhancement of the competitiveness and growth of MSMEs through going 'green'. Applying green development strategies, could alleviate poverty, conserve the natural resources, foster development, and simultaneously reduce the greenhouse gas emissions of the country. In order for these strategies to be effective, interventions should be structured in a systemic manner at the macro, meso, and micro levels.

- Macro level: The government takes political responsibility beyond legislative actions by setting the right incentives and price signals and by playing a role model regarding all issues of sustainability

- Meso level: The government proactively builds the institutional capacities needed for green growth. Due to limited resources, the MSMEs are especially dependent on the availability of adequate, affordable Business Development Services (BDS) or Green Service Providers (GSP) in order to cope with the necessary reorientation of business strategies and business models.

- Micro level: Businesses adopt resource efficient practices/technologies and explore opportunities for renewable energy sources to reduce their operating expenses. The government concurrently fosters the long term competitiveness of companies through promoting resource efficiency practices, conservation measures, the use of renewable energy as well as activities that increases the resiliency against climate change impacts. Sustainable consumption and lifestyles could trigger demand for products and services of companies that operate in an environmentally sustainable manner.

Additionally to the work on macro, meso and micro level, governments need to get proactively involved at the supranational level, trying to improve and secure a commitment for achieving the targets set out in international agreements regarding climate change, help set and shape the right financing instruments at a global level (like the Clean Development Mechanism) and achieve the reduction of trade barriers for environmental goods and services like clean technology.

Last but not least, governments need to work on the meta level, discussing and building an overarching vision for Green Economic Development shared among all stakeholders in the country to work on all levels. New modes of working together in partnerships and networks require cooperation management skills that governments need to establish at all levels.

Table 2: Interventions of the Green Economic Development Approach (based on Finkel et al. 2010)

Supra national level	Government gets proactively involved internationally to improve and secure commitment for international agreements regarding climate change, help to set and shape the right financing instruments at the global level (like the Clean Development Mechanism CDM), and achieve the reduction of trade barriers for environmental friendly goods and services like clean technologies.
Macro level	Government takes political responsibility beyond legislative actions by setting the right incentives and price signals, and playing a role model regarding all issues of sustainability.
Meso level	Government proactively builds the institutional capacities needed for green growth. Due to their limited resources, the MSMEs are especially dependent on the availability of adequate, affordable Business Development Services (BDS) to be able to cope with the necessary reorientation of business strategies and business models.
Micro level	Government fosters the long-term competitiveness of companies by promoting resource and energy efficient action, conservation measures, the use of renewable energy as well as measures that make companies more resilient to climate change. Advocating sustainable consumption and lifestyles will trigger demand for products and services of companies that operate in an environmentally sustainable manner.
Meta level	Government discusses and builds a vision for green growth shared among all stakeholders in the country. New modes of working together in partnerships and networks require cooperation management skills that governments need to establish at all levels.

2.3 The Push-Pull-Enable towards Green Economic Development

Besides grouping the policies and instruments into the different levels, they can also be classified into policies and instruments that push, pull or enable companies into going green. The push-pull-enable approach (see figure 1) summarizes the efforts that can be implemented at all levels – including meta, macro, meso, and micro – to create a supporting framework for MSMEs to take action towards increasing their operations in a sustainable and climate smart manner. The “push” factors capture all external influences, which create forces that motivate MSMEs to take action in order to avoid mostly negative impacts as a result of inactivity. These external influences include penalties, norms and standards, pressure from NGOs and media, as well as increasing energy prices. The ‘pull’ factors can be described as creating a „magnet effect“, which draws MSMEs towards implementing greening measures. Thus, ‘pull’ factors are for example increased consumer awareness and sensitivity about sustainable management practices, subsidies, or green supply chain initiatives. Additionally to these forces, enabling factors and entities can support MSMEs to implement greening measures. This framework includes measures, such as available information about sustainable management strategies and climate change, innovative financing opportunities, or training and consulting on matters concerning green economic development. Comprehensive projects intent to address all these three components in order to foster the interest of the MSMEs to comply to take action and create a supporting framework.

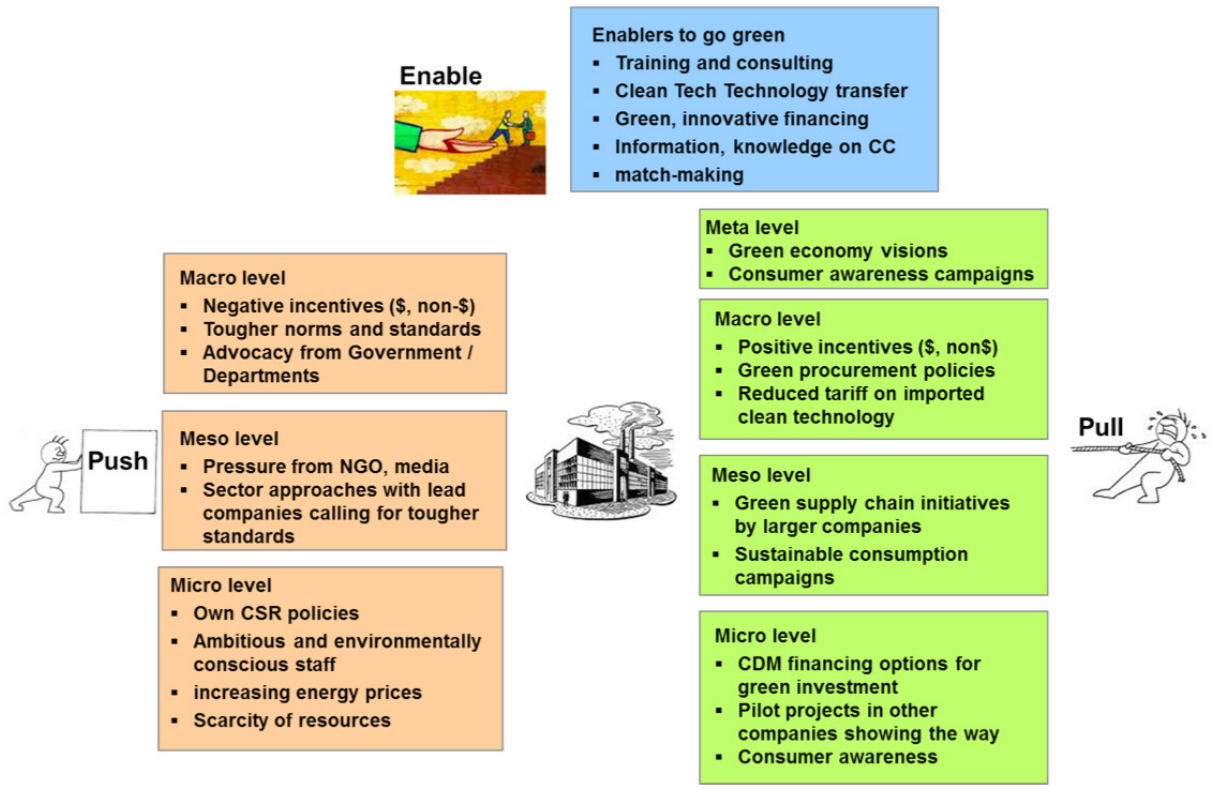


Figure 1: The Push-Pull-Enable Approach towards Green Economic Development (source: Finkel et al. 2010)

3 Profile of Bantayan Island

The Bantayan group of islands are located in the northwest of the Cebu Province in the central part of the Visayas islands in the Philippines. The Bantayan group of islands or Bantayan Island is composed of twenty islands and islets (see figure 2). Bantayan Island is subdivided into three municipalities or Local Government Units (LGUs), namely Bantayan with a population of 74,785 people, Madridejos with 34,905 citizens, and Santa Fe with 27,270 citizens (Philippine Statistics Authority 2010). All municipalities differ in their economic structure. The economy of Madridejos is mainly based on fisheries, whereas Bantayan's economy benefits from large-scale poultry farming, and Santa Fe's income is mainly generated from tourism. The whole island group is declared as a wilderness area under Presidential Proclamation No. 2151 of 1981. In 1992 this status was reaffirmed by the Philippine Congress through the Republic Act 7586 – the National Integrated Protected Areas System (NIPAS) Act of 1992. This status does officially forbid any kind of building structures on the islands / islets and the area fell under the responsibility of the Department for Environment and Natural Resources (DENR). The NIPAS act did not specify the extent of the protected area. Therefore, the whole island group, covering more than 11,000 hectares, is considered to fall under this legislation. However, a reclassification of the whole area is currently in process and will eventually lead to a division of the area as strict protected areas and multi purpose zones. Furthermore, according to the Republic Act No. 9176 and the Local Government Code of 1991, the local governments hold the mandate to manage their own natural resources (Department of Environment and Natural Resources 2012: 48).

The island's surface is determined by many exposed rocks and is only covered with thin soil layers. No large scale natural forest, apart from some mangrove forests, cover the island. Close to the shoreline many coconut trees have been planted. Most of the inner uncultivated landmass is covered by shrubs, bushes, and grasses.

The climate on Bantayan can be classified as being Coronas climate type IV. It is characterised by not very pronounced maximum rainfall with a wet season of nine to ten months and a short dry season from one to three months (Department of Environment and Natural Resources 2012). Typhoons are a common natural phenomenon during the month of September to December. Thus the livelihoods and economic sectors are frequently impacted or damaged. In November 2013 the unusually strong super typhoon Yolanda (typhoon of the category 5) hit the island. It was the strongest typhoon ever recorded with gusts up to 380kph (Vidal 2013). 90-95% of the households on the island were affected by the typhoon as it destroyed roofs, houses, and crops (Umbao 2013). It is estimated that a total of 104,200 homes in 22 towns in Northern Cebu were damaged. Climate change is expected to increase the frequency and overall intensity of typhoons in the Philippines (IPCC 2014). Thus, it will be important for Bantayan Island to enhance its resiliency against such events.

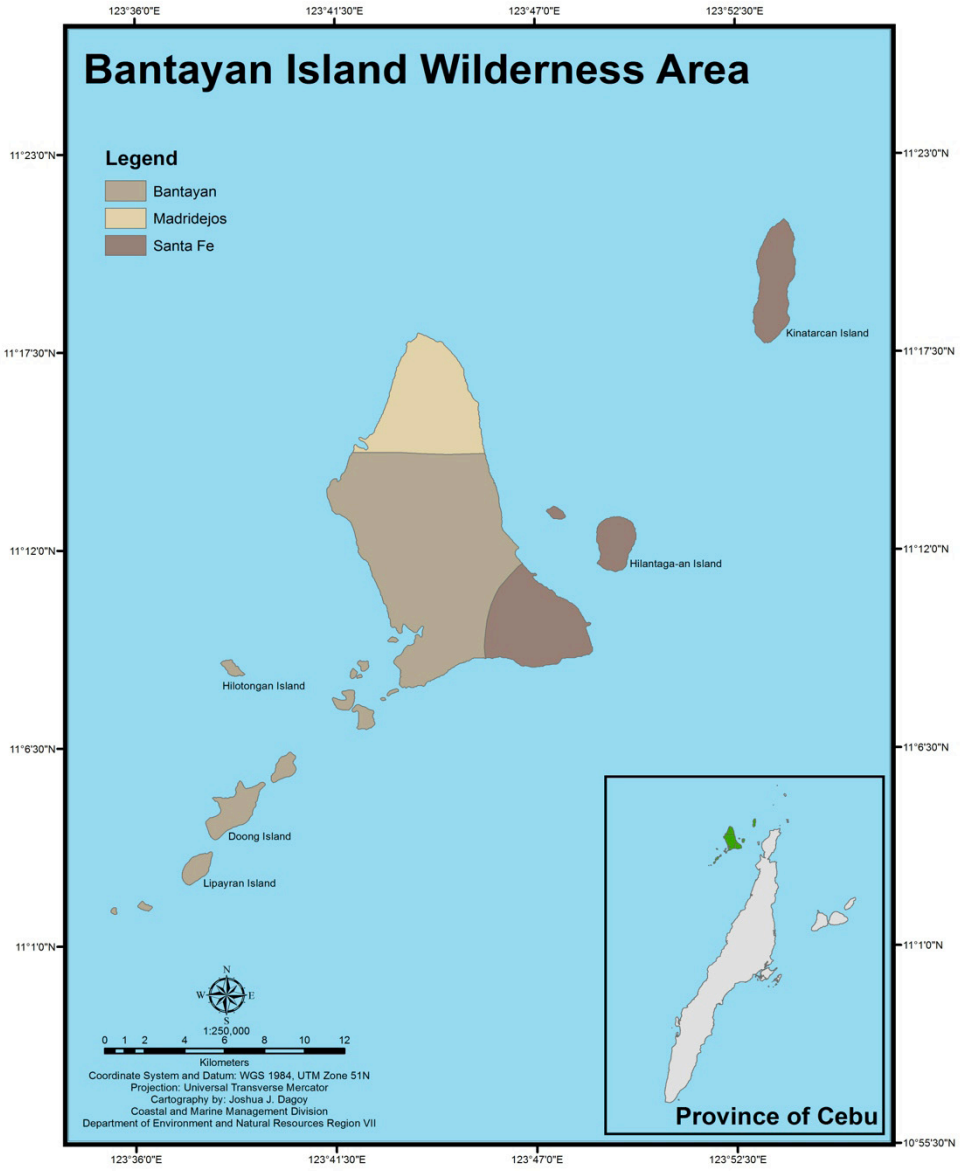


Figure 2: The Bantayan Group of Islands (source: Department of Environment and Natural Resources 2012: 19)

3.1 Tourism Sector

Since several decades the tourism sector on Bantayan Island experiences continuous growth. The official statistics for Bantayan Island counted a total of 9,325 tourist arrivals in 2013. However, the actual numbers are likely to be significantly higher – estimates are expecting more than 100,000 visitors per annum. The provincial Department of Tourism office now attempts to coordinate more closely with the tourism enterprises to generate more accurate figures on tourist arrivals.

The main attractions for tourists to come to Bantayan Island are its pristine white sand beaches, its festivals, and holy week celebration. Santa Fe is the tourism hotspot with a total of 63 accommodation facilities, ten restaurants, and many small eateries. Bantayan in comparison hosts ten tourism accommodations and Madridejos five hotels and pensions. Most of the establishments in Santa Fe are partly owned by foreigners, whereas Filipinos own the majority of enterprises in Bantayan and Madridejos. Most of the existing hotels and resorts are low to lower-mid tier accommodation establishments. Currently, the island offers limited shopping opportunities and spas for its guests.

The pristine white sand beaches can be found in Santa Fe as well as Madridejos. However, the longer beach strips are in Santa Fe. Santa Fe is also located closest to Cebu Island and has the busiest ferry port, operating trips to Hagnaya. Additionally, there is one airfield in Santa Fe, which currently hosts small private airplanes.

There are some plans to reopen the airfield and develop further as an airport to accommodate commercial flights from Cebu and Manila. The combination of easy accessibility and white sand beaches are most likely determining factors of why the tourism sector developed in Santa Fe the quickest.

Another operational port, offering trips to Negros Occidental, can be found in Bantayan.

Apart from the white sand beaches several festivals attract a huge number of visitors to Bantayan Island, particularly the holy week celebrations. Other natural and artificial attractions are shown in Table 3.

Recognizing the potential of tourism to further contribute to employment and income generation the municipality of Santa Fe has the vision to significantly develop tourism in Bantayan Island during the upcoming years. They are planning to establish tourism facilities on the islets of Hilantagaan and Kinatarcaan and create tourism circuits that enable island hopping all the way to Malapascua Island. Furthermore, potential dive sites are getting investigated to determine if its underwater resources allows the promotion of Bantayan Island as a dive destination. Furthermore, key stakeholders from the national and regional government recognised the need to "aggressively take the necessary step to attract private individuals and entities willing to pour investments to provide the services [transportation, communication, and infrastructure] needed" (Salimbangon 2013).

The tourism industry of Bantayan Island established the Bantayan Island Association of Hotels, Resorts, Bars, and Restaurant (BIAHRBR) to lobby their interests and coordinate their activities. This association exists since 2003 in order to facilitate an island-wide coordination of actions undertaken by the industry. However, after the typhoon Yolanda in 2013 the members of the association focussed their energy on rebuilding their establishments and the previously very active association did up to now not regain their influence and number of proactive members.

Another sector association, the Santa Fe Tourism Enterprises Association (SAFETEA), was established in 2014. The main initiators of SAFETEA were the Mayor of Santa Fe and the owner of the Anika Island Resort (previously no member of BIAHRBR). The association intents to represent the interests and coordinate actions of all public and private tourism stakeholders, which are located in Santa Fe. At the moment neither of the associations has all tourism establishments as members and supporters. Furthermore, there is a limited amount of coordination between the associations and according to some hotel owners a degree of rivalry can be sensed. The Cebu Chamber of Commerce and Industry - Bantayan Chapter (CCCI-BC) is another entity that was established in 2014 and proactively supports the economic development of the island. The CCCI-BC has 25 members representing all major industrial sectors on Bantayan and currently implements three projects in puroks (a government unit smaller than the barangay) and a livelihood project for woman, which is funded by the AFOS Foundation, in order to create new livelihood opportunities for marginalised people on the island.

Table 3: Tourism Attractions in Bantayan Island

Municipality	Natural Attractions	Artificial Attractions
Santa Fe	Ogtong cave	Churches
	Mangrove area	Museum (not open)
	White sand beaches	Ancestral houses
	Marine sanctuaries (badly managed)	Handicrafts (such as shells and woven bags
Bantayan	Hunasan (big low tide)	Holy week (March / April)
	Marine sanctuaries (badly managed)	Palawod Festival (June)
	Sunset view	Bantayan Island Nature Park and Resort
	Cave in Guiwanon	Baywalk
	Sto. Nino and Tyaba cave in Brgy Tamiao	Market
	Mangrove forest with visitor facilities	Botanical garden and mini-zoo in Brgy Ticad
	13 Islets (island hopping possible)	St. Peter Church (build in 1581)
	2 potential diving sites	Municipality Museum (not open)
Madridejos	Marine sanctuaries (badly managed)	ISDA Festival (December)
	Duha Reef	Kota Park (Madridejos)
	Mangroves	Lantawan
	Three potential diving sites	Old Spanish Fort

3.2 Environmental Hotspots

The ProGED project is focusing its interventions to tackle six 'environmental hotspots', which emerged as having the greatest impact on the environment and if addressed can provide great potential for generating savings for the enterprises and conserves the natural resources which are the main tourist attractions. The following section provides a summary of the six environmental hotspots based on the gained insights of the situation on Bantayan Island

- Energy efficiency – On Bantayan Island the Bantayan Electro Cooperative Inc. (BANELCO) provides the on-grid power supply of the island as a monopoly. Its current rate per kWh is with 18 PHP (including 7 PHP on taxes and fees) higher than the country's average. BANELCO produces its power from diesel-power plants. Currently, there is no publicly available power from renewables, such as solar or hydro-power sources. However, initial pilot projects in the field of photovoltaic cells are likely to get realized in the near future in the municipality of Bantayan. Overall, there is a big potential to shift the power supply towards using solar technologies, particularly as many business owners on the island complain about frequent brownouts and the high energy costs. Furthermore, the Department of Energy (DOE) has recently increased the national solar power capacity target and awarded 61 solar contracts, aiming for a total capacity of 1,014 MW to be realized under the legal framework of the renewable energy law (Republic Act No. 9513) (Jain et al. 2014). Another target of the central government is to implement net metering, which allows customers of on-grid power distribution utilities, such as CEBECO, with own renewable energy facilities (not exceeding 100kW) to export the energy surpluses for a fixed rate into the grid of the distribution company. This mechanism is already being implemented by several distribution utilities particularly in Metro Manila or Cebu City, the other distribution utilities throughout the Philippines are expected to follow suit. The implementation of net metering was jointly supported by the GIZ projects Renewable Energy Project Development Programme in Southeast Asia (PEP SOA) and the renewable energy component of the Support to the Climate Change Commission (SupportCCC) project through advisory services, trainings and workshops (GIZ 2013). These national targets enhances the opportunities to further increase the renewable energy share of the power mix and potentially decentralise the power supply on Bantayan Island.

- Water efficiency – Sources of the fresh water supply on Bantayan Island are from groundwater, rainfall, and virtual water (water used to grow imported crops). However, the island's only permanent source of fresh water is a small water lens in the mid-portion of the island with no stream feeding into its basin. Thus the only source of new fresh water is percolated rainwater (Department of Environment and Natural Resources 2012: 51). The water extraction of the ground water is widely unregulated and operational private and public wells exist. The Technisches Hilfswerk (THW), from Germany, implemented three wells for different communities to secure the water supply after the disastrous typhoon Yolanda. All three wells are still functioning and are operated by the municipalities. However, no single authority regulates the extraction or quality of the ground water. It is expected that domestic and industrial wastewater and agricultural runoffs can potentially cause pollution of the ground water body. This can lead to significant health problems. Furthermore, water shortages could occur if the tourism and other water dependent industries will increase the stress on the groundwater level significantly. Particularly, in combination with rising sea levels and potential salt-water intrusion into fresh water reserves it could create tremendous difficulties. Rainwater harvesting, improved water efficiency, and wastewater treatment can significantly reduce such future risks on the island.

- Waste management – Solid waste management on Bantayan Island is currently not well organised. A report by Paul (2004: 25) who undertook an assessment of the waste management on the island, for the GIZ, concluded that "the existing waste collection system is unsuited to allow efficient waste collection and waste segregation". More than ten years has passed since then, but little improvement has been made. A majority of the domestic waste is buried in small pitholes, thrown into sinkholes or burned in the backyard. However, the three municipalities organize waste collection and some segregation. The collected waste is brought to unsealed dumpsites in the middle of the island from which runoffs can go straight into the groundwater. Furthermore, there is a Resource Recovery Facility (RRF) at one dumpsite in Bantayan, and some structures to segregate waste on other dumpsites. However, the RRF and these structures are not used to their full potential. It was recommended by Paul (2004) to establish a 2-drum collection system and use the six existing waste collection trucks more efficiently to run several tours per day and collect the daily amount of 160m3 of waste. Furthermore, sealed dumpsites or a waste treatment facility, such as a waste-to-energy facility, could significantly improve the waste management on the island and lead to a sustainable development with reduced negative impacts on health and the environment.

- Supply chain – The tourism supply chain on Bantayan Island includes suppliers from mainland Cebu as well as local producers from Bantayan Island. Retailers from Cebu deliver imported goods, such as building materials or international goods. Locally produced products in Bantayan are common vegetables and fruits, such as tomatoes, bananas, and coconuts. Fish and seafood also comes from the island. Some handicrafts made of shells and raffles are produced by the local communities. Encouraging and enabling local producers to enhance the variety of 'green' products that can be locally produced, would significantly reduce the importation from the main land and other provinces and create alternative livelihood opportunities for local people. The latter is important to consider, as fish grounds are depleted and farmers focus their production on a small variety of crops, which increases the competition and reduces the possible benefits.

- Transport – The vehicle density on Bantayan Island is relatively low, particularly in comparison to bigger cities within the country. The public transportation is based on tricycles, motorbikes, and a few Jeepneys, commuting mainly between Bantayan and Madridejos. Ferries and trucks transport the main share of goods from the mainland. A reduction of emissions and the overall vehicle density on the island can be reached in different ways. First, tourist transportation can be based on car-sharing practices to pick the tourists up from the ferry port and bicycles can be provided. Second, the currently inefficient and 'dirty' oil engines can partially be replaced by more fuel-efficient or electro vehicles.

- Natural resource management – In the context of tourism, Bantayan Island's natural resources are the pristine white sand beaches, an intact flora and fauna, particularly the mangrove ecosystems, coral reef ecosystems, fresh water, air, and the cave systems. Through the reclassification process of the area of Bantayan Island, a total of 21 protected areas, covering a size of 596 hectares, are supposed to get defined as strict protected areas (see table 4). These protected areas include mangrove areas, water lens or water-recharge area, and sea turtle nesting sites. The preservation of natural resources is essential to enable a sustainable tourism development leading to a long-term profitability. Thus, management practices should get established that ensure minimum negative impacts on these natural resources. However, currently most of the protected areas in Bantayan Island are poorly managed. The GIZ project Protected Area Management Enhancement (PAME), together with the Zoological Society of London, initiate a new project component that aims to recover marine biodiversity and improve the management effectiveness of ecologically connected MPAs in Bantayan Island.

Table 4: Proposed strict protected areas for Bantayan Island (Department of Environment and Natural Resources 2014)

Municipality	Name of Barangay		
	Mangrove Areas	Water-Recharge Areas	MT Nesting Sites
Bantayan (12)	Bood, Bantigue, Binabao, Baigad, Guiwanon, Kabac, Oboob, Patao, Suba, Sulangan, Sungko, Ticad	Kabac, Kabangbang, Kapinganon, Kangkaibe	None
Madridejos (7)	Kaongkod, Kodia, Maalat, Malbago, Tabagac, Tarong	San-Augustin	None
Santa Fe (4)	Balidbid, Marikaban, Okoy	Balidbid, Okoy, Talisay	Okoy (to be validated)

These hotspots emerged as a result of a pilot intervention on Greening the Tourism Value Chain undertaken in 2013. Using the Value Chain Links approach, it looked into the environmental impacts of the tourism industry, specifically those aspects in the business operation of an enterprise that have adverse impacts on the environment, as well as the changes in the environment that pose risks on the value chain.
These hotspots were also identified in their relation to destination management of a location. It is important to ensure that the attractions are protected and preserved so that tourists continue to visit the area in the years to come. A shoreline littered with garbage, denuded forests or dead corals would not be able to successfully attract tourists to continue coming to the area.

4 ProGED Activities on Greening the Tourism Value Chain on Bantayan Island

ProGED conducted a series of activities between October 2013 and January 2015 (see table 4) on Bantayan Island. The activities focused on greening the tourism value chain, such as improving energy efficiency, and matching up local and green suppliers with MSMEs within the tourism value chain. Based on the insights gained during these activities the following section of the report will describe the interventions undertaken and reveal an insight into the current state of environmental practices at a company and destination level.

Table 5: Timeline of ProGED Interventions on Bantayan Island

Date	Title	Page
Oct 2013	Value Chain Mapping of Bantayan	17
Apr 2014	Review and Greening the Tourism Value Chain	22
Jul 2014	Meeting with Bantayan Tourism Steering Body	---
Sep 2014	Progress Reporting on Action Planning	25
Oct 2014	Energy Efficiency Audit	27
Jan 2015	Business Matching Event	28

4.1 Value Chain Mapping of Bantayan

Event on a glimpse
Date
08-09 October 2013
Venue
Anika Beach Resort
Number of participants
150
Objective
Sensitization of tourism stakeholders about sustainable tourism development
Applied methodology
- Valuelinks (strategic objective, value chain mapping, identification of opportunities and constraints, action planning)

Final outputs
- Bantayan Island tourism value chain map
- Strategic objective
- Cluster based action plan

The first event of ProGED on the island focused on mapping the tourism value chain, bringing the stakeholders together, and collectively identifying constraints and opportunities towards a sustainable tourism development. Participants from the public and private sector attended this activity, taking place at the Anika Beach Resort on 08-09. October 2013. The event included a variety of presentations about ProGED, green economic development, and outlining regional framework conditions.

In order to have a common vision, the participants developed the following strategic objective during the event: “To increase tourist arrivals by 20% per annum for 2014 to 2016 (based on 2013 figures) through product and market development, institutional strengthening and improving access into the island”. This leading vision was supposed to guide the actions of stakeholders involved in the process to develop the tourism sector on the island. Significant to notice is that the focus of this objective was solely based on economic development and did not explicitly take into account any consideration of environmental sustainability or social improvements. Thus, this vision can be interpreted as a good example of the mind set of the stakeholders during the first contact with the ProGED project.

Figure 3 shows the tourism value chain map of Bantayan Island, which was collectively created during the event. The value chain map provides an overview about the different stakeholders involved, ranging from tour agents in Cebu to attraction site operators on the island. In the lower section of the figure, the public stakeholders and their responsibilities in relation to the different clusters of the value chain are displayed. The Department of Tourism (DOT) in cooperation with the LGUs are clearly in a distinct position to steer the value chain as a whole, at least in theory. However, one problem identified during the event is that DOT has no present staff on the island and depends on the LGU tourism officers to provide information in their promoting and supporting decisions made from their regional office in Cebu City.

Figure 3: Bantayan Island Tourism Value Chain Map

After this mapping exercise, the stakeholders started to identify constraints and opportunities for each of the cluster within the tourism value chain (see figure 4). Overall the stakeholders recognised major constraints and hindering factors towards an increased tourism growth. This awareness raising and identification of constraints is an important step towards unified action. Positively is that the provincial government and local networks did see the potential for developing the tourism on the island and thus are providing support.
For the marketing and sales cluster it was identified that individual bloggers and the Bantayan Island Association of Hotels, Resorts, Bars, and Restaurant (BIAHRBR) undertook some marketing activities, but that these initiatives are insufficient. The main limitations towards an effective marketing of the island as a tourism destination were identified as being a lack of budget and tourism information centre, as well as having no unified official website for the island.

In the transportation cluster, the main constraints were a low yet overpriced service quality due to old vessels and vehicles, as well as destructive behaviour of service providers. These negative impacts could be improved through support from the provincial government and the creation of an association among the service providers. Such an association could implement certain quality standards and train their members.
The constraints affecting the service quality of accommodation enterprises were a lack of trained staff, a limited number of DOT accredited enterprises, and noise pollution. On another note made and captured during the event, it was hoped that a planed connection of the Bantayan Island power network through a submarine cable to Leyte would lower the high energy costs. However, this project does appear to be unrealistic and could not be confirmed by local stakeholders.

For the cluster food and beverages of the tourism value chain, the constraints to a high quality were the limited availability of local food suppliers and the absence of inspections of establishments and traders regarding the quality of the food. The presence of fisher folk organizations, on the other hand, was seen as an opportunity. It would be possible to link these associations with the tourism establishments to encourage a direct supply of fish and seafood products. Furthermore, it would be possible to identify a demand within the tourism sector and initiate local production of specific products needed.

The activities offered to tourists on Bantayan Island were identified to be negatively impacted by apparently dishonest and untrained guides, a lack of health facilities, and limited service facilities for tourists. Promising on the other hand was the training program by DOT for tour guides and a draft development framework for tourism activities.

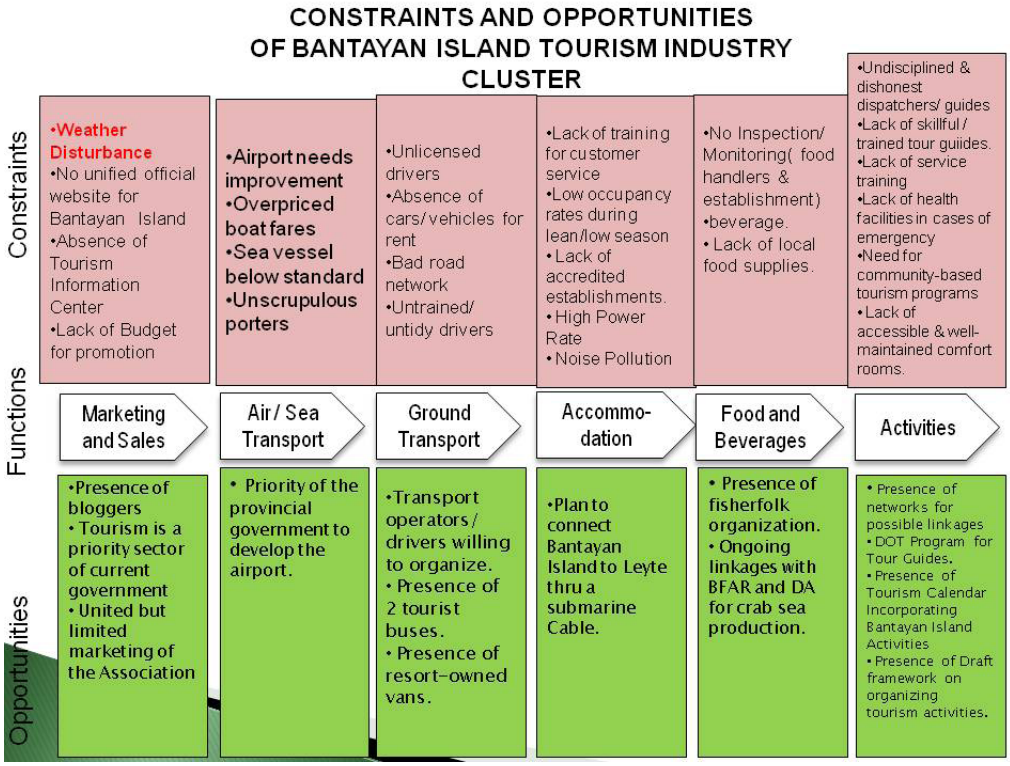


Figure 4: Constraints and Opportunities of Bantayan Island Tourism Industry Cluster

Based on these gathered information, the next steps of measures of different clusters of stakeholders towards reaching the strategic objective were discussed and noted as an action plan. The complete action plan, developed during the event, can be found as annex 1. The following section only provides some highlights of the plan. Characteristic for this first action plan is the distribution of responsibilities. The role as a lead implementer for all noted measures were either taken up by the BIHARBR as a whole or LGUs. No single actor or enterprise was made responsible to take action.

On the destination level the major changes focussed on land use planning. The entire land on Bantayan Island was declared as a wilderness area under Presidential Proclamation No. 2151 of 1981. However, this classification and the strict no building regulation it includes were widely ignored by all municipalities and towns, and infrastructure were developed. To tackle this discrepancy between legal regulations and the actual situation, the provincial government encouraged a reclassification of the landmass into strict protected areas and multi-purpose zones. In order to support this process, each LGU was obliged to develop a comprehensive land use plan. Another measure noted on the destination level was to strictly implement solid-waste management regulations.
Actions for the clusters of transportation included the investigation of the opportunity to reopen the existing airfield, initiate a dialogue with sea vessel operators and fishermen to improve the service quality to transport tourists and extend the possible shipping routes, as well as to secure support by the provincial government to renew the road system on the island.

To improve the marketing and sales of Bantayan Island, BIAHRBR took up the role to bring the three LGUs together and develop a website to promote the island as a whole. Furthermore, they planned to seek support from the DOT to develop promotion materials.

BIHARBR also took up the role to encourage the accommodation facility operators to get accredited with the DOT and organize activities to increase the awareness of resort owners regarding resource efficiency.
In the field of food and beverages BIAHRBR was responsible to implement sanitary ordinances and regulations regarding health standards among their members and to organize trainings on food handling.

The LGUs took up the responsibility to further develop the tourism support facilities and activities on Bantayan Island. This included reopening or developing service facilities, such as comfort rooms or health centres, and initiating new community-based tour packages.

This comprehensive action plan appeared to be a promising approach towards developing the tourism sector and targeting to reach the strategic objective. However, reflecting the difficulties and challenges of the three LGUs to collectively take action the plan can also be classified as being quite ambitious.

4.2 Review and Greening the Tourism Value Chain

The second ProGED event focused on reviewing the first action plan, assessing which measures have been implemented, and replanning the strategy towards a tourism development. Additionally, this event targeted the 'greening' aspect and to influence further the development direction of the stakeholders in a sustainable manner. After the first activity of ProGED, Bantayan Island was hit by the super typhoon Yolanda in November 2013. Yolanda is considered to be the strongest typhoon that ever hit the island. The typhoon killed many people on the island and damaged or destroyed building structures and homes of local people. Nearly all tourism enterprises were affected by the typhoon. After this event, the hotel owners and island citizens were mainly focused on rebuilding and rehabilitating and most of the measures planned during the first event have not been followed through. You might have more info on Yolanda in a box or a footnote – with map of the path

Event on a glimpse
Date
29-30 April 2014
Venue
Nature Island Resort
Number of participants
64 (40 male / 24 female)
Objective
Reviewing the action plan and situation after Yolanda affected Bantayan Island.
Applied methodology
- Valuelinks (strategic objective, action planning)

Final output:
- Updated strategic objective
- Action Plan to green the tourism value chain of Bantayan Island

Influenced by this experience, the stakeholders reformulated their strategic objective during the event and included a more sustainable focus. The new strategic objective is: "Within 2014 – 2016, Bantayan Island will develop into a sustainable tourism destination anchored on well-managed natural resources, preserved best of Bantayan local culture and responsible business practices, through functional partnerships among tourism stakeholders, integration of climate-change resilient and environment-friendly practices and with special attention on the welfare of women, children and other vulnerable groups." It differs significantly from the first objective in being more comprehensive on its targeted outcomes and considering climate change resiliency. This shift in the mind set is most likely caused by the horrific experiences during the typhoon and the realization by some of the stakeholders of possible climate change impacts, which could cause such intensified extreme weather events on a frequent basis.

Another change caused by the typhoon Yolanda was the constellation of stakeholders present during this event. After the typhoon Yolanda many NGOs and INGOs started first response and development projects on Bantayan Island. These NGOs and INGOs, such as Oxfam or the Zoological Society of London (ZSL), participated at the ProGED event and took up responsibilities to collectively work towards the new strategic objective. This presence of new actors and support for the island could make a major shift in the development of the island as a whole and lead to a more sustainable development. Particularly, collaboration between different projects can enhance their impact and effectiveness. The chapter 5 of this report shows the ProGED collaboration map and outlines some major synergies of ProGED with other stakeholders.

During the action planning exercise of the event the stakeholders were separated into four groups to focus their action on four overarching topics: (i) to increase awareness on climate change and the importance of conserving the natural resources and environment in Bantayan; (ii) to ensure the implementation of local ordinances and address inadequate infrastructure (e.g., Power and Roads); (iii) to provide livelihood opportunities and capacitate tourism stakeholders; and (iv) to increase an effective management of Bantayan as a Protected Area (PA) and explore sustainable economic activities. The complete action plan can be found as annex 2 of this report.

Major actions planned during this event for the first topic targeting climate change awareness and natural resource management were to organize a series of awareness raising events, initiate climate change vulnerability and risk assessments, and improve the waste water and solid waste management on the island. The distribution of tasks included a broader variety of stakeholders as in the first action plan. Some NGOs took up responsibilities, for ex-

ample Oxfam to work on wastewater management (still in working progress) or TIGRA to work on upcycling solid-waste into higher value products (it appears that this was not realised). Furthermore, the German AFOS Foundation supported the CCCI to initiate staff trainings and skills trainings for potential future employees for the local hotels and resorts on the island. These trainings took place. On the governmental stakeholders side, the responsibility of certain tasks were now dedicated to single actors within the municipalities and supporting collaborators from the provincial government were identified. Also the local community was now getting involved through fisher folk associations and community representatives. This precision of responsible stakeholders can be considered as a major improvement from the first action plan.

In the second working group focussing on the implementation of local ordinances and improving infrastructure, the major measures noted were to review and formulate ordinances concerning tourism development, investigating strategies to reduce the energy supply, and the rehabilitation of the LGUs tourism councils as well as the creation of an island wide body to steer the tourism development. This interim steering body was supposed to have representatives from the LGUs, the private sector, as well as local communities. The members of the body were noted down during the event and met in July 2014.

The third topic discussed in another group targeted livelihood opportunities and tourism stakeholders' capacity development. Their major planned actions included training of local people and communities to produce souvenirs and food products that can be offered to the tourists or MSMEs and the development of eco-cultural tours. The main stakeholders responsible to implement these measures were farmer and fisher folk associations, Peoples Organisations (POs), DAMGO, BIAHRBR, and Oxfam. Potential collaboration partners included local government officials from the LGUs and Department of Social Welfare and Development (DSWD), the Cebu Chamber of Commerce and Industry (CCCI) Bantayan Chapter, as well as NGOs, such as Young Pioneer Disaster Response (YPDR) or Fairtrade.

The fourth group worked on measures to improve the Protected Area (PA) management and explore sustainable economic activities. Their major actions included the assessment of the status of existing marine life around the island, a program to rehabilitate mangrove forests, and to re-establish marine life sanctuaries. Illegal fishing devices and practices are still a problem within the Bantayan group of islands. National and local policies to regulate the fishing industry are in place, but the implementation of such is still an issue (Department of Environment and Natural Resources 2012). However, PAME currently collaborates with the DENR to improve the management of the protected areas on Bantayan and legal compliance of stakeholders. Furthermore, the NGO Tambuyog took up the task to develop fishery plans to make sustainable use of the resources. Interestingly, apart from the DENR, no governmental officials took up tasks in this working field as direct implementers.

4.3 Progress Reporting on Action Plan

The third planning session on sustainable tourism development on Bantayan took place at Ogtong Cave Resort, on the 04-05 September 2014. This activity focused on reviewing the undertaken action by the different stakeholders and to agree on future measures that are necessary to reach the strategic objective to foster a sustainable tourism development on the island. A specific focus was given to explore the potential to introduce and implement a waste-to-energy facility together with the Green Technology Centre Korea (GTC-K) (see chapter 5.2 for more information about this collaboration).

Event on a glimpse
Date
04-05 September 2014
Venue
Ogtong Cave Resort
Number of participants
158 (83 male / 75 female)
Objective
Intensify collaborations between different stakeholders and plan the next steps towards a sustainable tourism development.
Applied methodology
- Valuelinks (action planning)
- Stakeholder mapping

Final outputs:
- Reformulated action plan
- Tourism stakeholder map (see chapter 5)

The two day event consisted of a range of presentations given by LGSP-LED (see chapter 5.1 for more information about LGSP-LED), GTC-K, the Department of Environment and Natural Resources (DENR), the Provincial Disaster Risk Reduction Office (PDRRO), ZSL, DAMGO, Oxfam, USAID, the Department of Interior and Local Government (DILG), the Department of Tourism (DOT), and ProGED. The presentations covered updates from different NGOs / INGOs about their activities on the island, information about legal frameworks and governmental programs, as well as some additional inputs about green economic development. The input and information shared by the stakeholders was highly appreciated among all present participants as the event was seen as a platform to exchange experiences and knowledge, and initiate new collaborations.

The presentations were followed by an action planning session during which the participants were divided into three groups focusing on: (i) the destination level: to increase the cooperation of key stakeholders and ensure a sustainable tourism development in Bantayan; (ii) the tourism enterprises: to increase awareness on climate change and importance of conserving the natural resources and environment in Bantayan; and (iii) the NGOs / INGOs: to improve the quality of natural resources on Bantayan. The complete action plan can be found as annex 3 of this report.
The major agreements in the first group looking at the destination development as a whole were to investigate the potential to implement a waste-to-energy facility on Bantayan Island, to inform the Protected Area Management Board (PAMB) about the process of re-zoning the land area, and to establish a culture of tourism. A culture of tourism was understood as a set of measures that creates a supporting framework for the guests' safety and comfort, such as informing guests that there are three tourism police officers on the island and establishing a health center for tourists. During the event a lively discussion developed about the consequences of the re-zoning process in relation to the tenure rights of local people that currently do not hold land ownership certificates but live in the places for a longer period of time already. This problem was not solved, but it was agreed that this issue would be raised during the next PAMB meeting. Apart from these measures, the plan to establish an island wide tourism council to steer the tourism development was raised again as such a body did not seem to function previously. Up to now, it appears that political challenges on the island hinder the formation of such a body.

The second group, consisting of mainly tourism enterprise representatives, agreed to work on improving the service quality for tourists, wastewater treatment and management, as well as to improve the energy efficiency of MSMEs in the tourism sector. Another main issue identified during the session was that ProGED had an incomplete list of tourism enterprises existent on the island and that of these firms only a few were accredited with DOT. It was agreed that the owner of Bantayan Cottages supports ProGED by providing the list of tourism establishments and that more firms would apply with DOT for accreditation. Another problem targeted was the low rate of compliance of accommodation facilities to provide visitor statistics to the LGU. The DOT offered to more closely collaborate with the enterprises and directly collect these figures from them. The suggestion was accepted, particularly after the stakeholders understood that additional funds by the provincial government for infrastructure projects were available but are held back as the visitor numbers reflected does not justify the need for further infrastructure investments in the island to develop tourism.

The third group consisted mainly of PO, NGO, and INGO representatives focusing their action planning on measures to improve appearance and quality of natural resources on Bantayan Island. They agreed to work on rehabilitating and improving the management of marine sanctuaries, provide direct supply of specific fishes to the tourism establishments, and establishing a community based eco-tourism project in Madridejos. Representatives of the present fisher folks associations took up nearly all of these tasks. The plan considered BFAR, DENR, the LGU of Madridejos, and bigger NGOs, such as ZSL or DAMGO as collaborating partners to realize the activities.

4.4 Event on Energy Efficiency and Energy Audits

After the planning sessions and extensive collaboration with individual tourism enterprise owners, the need of the MSMEs to improve their energy efficiency was identified. In order to support the firms to improve their energy management and introduce them to available renewable energy technologies, an event targeting this was realized. The event took place at the 16 October 2014 at Ogtong Cave Resort.

After a general introduction on some energy efficiency measures by ProGED, a presentation about LED lighting systems by Mr Wilson Young from Easy Links, and a presentation about renewable energy technologies by Cebu Technological University (CTU), the enterprises were given the opportunity that technicians from the Cebu Technological University - Affiliated Renewable Energy Centre (CTU-AREC) assessed their establishments. A range of Affiliated Renewable Energy Centres, located at different universities across the Philippines, offer this service.

Event on a glimpse
Date
16 October 2014
Venue
Ogtong Cave Resort
Number of participants
37 (18 male / 19 female)
Objective
Sensitization of tourism stakeholders about sustainable tourism development.
Applied methodology
- Presentations about renewable energies and energy efficiency
- Energy efficiency audits

Final outputs:
- Recommendation report by CTU-AREC

These centres were initiated and financed by the Department of Energy in order to develop indigenous energy resources and enhance the implementation of renewable energy technologies in the country (CEBU Daily 2012). In a countrywide context this initiative is part of the National Renewable Energy Program and the Renewable Energy Act of 2008.

During the event 14 establishment owners made use of this free assessment and a total of four teams of technicians investigated the different resorts, hotels, and restaurants. Additionally, representatives from two LGUs received consultation on solar powered street lamp systems. After the typhoon Yolanda the Department of Welfare and Social Development (DWSD) of each LGU received funds to realize infrastructure projects. Some Barangays on the island were highly interested to use such funds to implement solar powered street lamp lighting. Thus, ProGED actively supports the LGUs in the process of exploring the potential of renewable energy technologies to increase the resiliency against power shortages.
The outcomes of the assessments were provided to the establishments by the CTU technicians in December 2014 (see annex 4). Four establishments expressed a high interest to invest in photovoltaic technology. Three of them received a more detailed calculation of costs in relation to their energy needs by the technicians. Many of the participating MSMEs assured that they are going to invest in energy efficient lighting and appliances in the near future.

4.5 Business Matching Event

An integral part of the ProGED strategy to green MSMEs is to match the firms with suppliers of locally produced food products and suppliers of green technologies. On the 22 January 2015 ProGED organized the tourism business matching event at Ogtong Cave Resort on Bantayan Island. During the event MSME owners and representatives of hotels, resorts, and restaurants had the opportunity to meet a range of local suppliers of food and non-food products from Cebu City, Northern Cebu, and Bantayan Island. The event targeted to increase the local procurement and demand for environmental friendly produced goods of the tourism enterprises. An increased local procurement can distribute the benefits generated by tourism more equally and foster livelihood opportunities. The shorter ways of transportation of goods also reduces greenhouse gas emissions. Another target was to introduce MSMEs to reliable suppliers of renewable technologies and green service providers. Particularly, the MSMEs that indicated interest to invest in photovoltaic systems after the energy efficiency audit of the CTU technicians were targeted. It was to assume that they are willing to invest, but lacked the information on where to purchase this technology from reliable sources.

Event on a glimpse
Date
22 January 2015
Venue
Ogtong Cave Resort
Number of participants
68 (31 male / 37 female)
Objective
To facilitate the linkage of the tourism enterprises to green service providers and to introduce to the tourism stakeholders greening technologies and products.
Applied methodology
- Presentations about energy and water efficiency and sustainable tourism management
- ‘Speed matching’ of suppliers and buyers

Final outputs:
- New business linkages between tourism enterprises and local suppliers
- Increased number of enterprises that install energy efficient and renewable energy technologies

In total nineteen hotels, restaurants, and resorts were represented on the buyers’ side while fifteen suppliers were represented. The suppliers offered fresh organic herbs and vegetables, seafood and fish, as well as locally produced handicrafts such as shell crafts and bags. Most of these suppliers were from Bantayan Island and presented goods that are produced as part of their livelihood programs. Additionally, there were three suppliers from Cebu City, who offered LED lights, photovoltaic, solar technologies present as well as innovative hardware supplies.
The event program was structured into two parts with technical presentations during the morning and a structured speed matching of suppliers and buyers during the afternoon. The program was adapted from a similar event that was organized by ProGED and the DOT in Cebu City in 2014.

All participants of the ‘speed matching’ activity were provided with forms in which they were asked to note their agreements made. According to these forms a total of 18 closed deals resulted from this business matching. Another 68 times follow up negotiations or further exchanges of information were agreed between the buyers and suppliers. This is a significantly high number of linkages that could be followed through considering that only ten companies attended. The interest from the buyers’ side for fresh food products was the highest, most likely, as these are goods being purchased several times a week. Followed were this goods by a relatively high interest by the tourism enterprises for locally produced handicraft products, such as bags made of recycled materials or raffle, wallets, or art décor. The least interest during the event was expressed for innovative hardware supplies and renewable energy technology products that require high investment costs. However, many of the entrepreneurs that were not monitored through the evaluation forms, as they did not participate at the ‘speed matching’, visited the booths of the suppliers of renewable technologies during the morning hours to seek information about their products.

On the day after the event, the suppliers for renewable technologies were guided by a ProGED team member to visit another two restaurants and three resorts (four establishments of them that did not attend the matchmaking event) and present their products. All of these establishments expressed their interest prior to the visit to invest in energy efficiency or photovoltaic and battery technology.

Despite these positive outcomes of the agreements made and connections initiated through the event, the organizers realized that the format of the event should to get adapted to local conditions if the event will get repeated in another province. Many MSMEs on Bantayan Island are family-run and owners and managers have difficulties to be absent for a whole day, particularly during the tourism peak season from October to May. This circumstance explains that only ten out of the nineteen present MSMEs during the event participated at the speed matching activities. For future business matching events in a rural setting, it should get considered to either shorten the program to a half-day event with a very limited number of presentations or to organize the product presentation in a trade fair format in which the suppliers can display their goods in small exhibition booths in order to give the MSME owners the chance to 'drop-by' at the venue and talk to specific suppliers.

5. ProGED Cooperation Map

ProGED acknowledges that sustainable greening of a tourism value chain can only take place in a cooperative manner with active stakeholders at different levels. Thus, the activities on Bantayan Island always focused on linking up stakeholders and create synergies among the different actors. During the Progress Reporting on Action Planning event in September 2014, a cooperation map was created to visualize existing linkages and identify potential collaborators. This map was further developed to provide an overview about existing stakeholders on the island that can influence the tourism development in a sustainable way (see figure 5). It appears that an extended network of stakeholders supporting a sustainable tourism development on the island has developed. Among them are proactive stakeholders and parties that do not deliver promised action. Representatives from several national government agencies, provincial government departments, business membership organization and NGOs / INGOs participated during the tourism value chain planning workshops and thus showed their interest to proactively support the development towards reaching the strategic objective.

Of the range of stakeholders three NGOs has started to closely collaborate with ProGED's work on the island. Each of the partners and form of collaboration is outlined in more detail below. This listing of collaboration partners should by no means disregard the other fruitful collaborations existing with a range of NGOs, private and public partners who are all proactively working to steer the tourism and overall development on Bantayan Island in a sustainable manner.

5.1 LGSP- LED

The most comprehensive collaboration developed over the time with the Local Governance Support Program for Local Economic Development (LGSP-LED). Since many years LGSP-LED collaborates with the GIZ. This collaboration started during the time of the predecessor program of ProGED, the Small and Medium Enterprise Development for Sustainable Employment Program (SMEDSEP), in Bohol. LGSP-LED itself is an eight-year (2008-2016) cooperation program of the Governments of Canada and the Philippines with the Philippine Department of Interior and Local Government (DILG) as the local partner of implementation. LGSP-LED "is supporting DILG to improve the country's policy and programming framework for local economic development, enabling LGUs to work collaboratively with the private sector and communities to grow local economies in sustainable ways" (LGSP-LED 2014). Similarly to the ProGED approach, one component of LGSP-LED's work is to create an enabling framework for MSMEs to develop in a sustainable manner. Another commonality of the programs is the work on different levels and regions within the Philippines as well as the focus, in many regions, on the tourism sector. The latter accounts as well for Bantayan Island. LGSP-LED developed a comprehensive activities plan of their interventions for Bantayan Island to foster a sustainable growth of the tourism sector. These communalities of ProGED and LGSP-LED led to a comprehensive collaboration and constant coordination of interventions on the island in order to increase the impact on the local tourism sector to develop in a sustainable and climate smart manner.

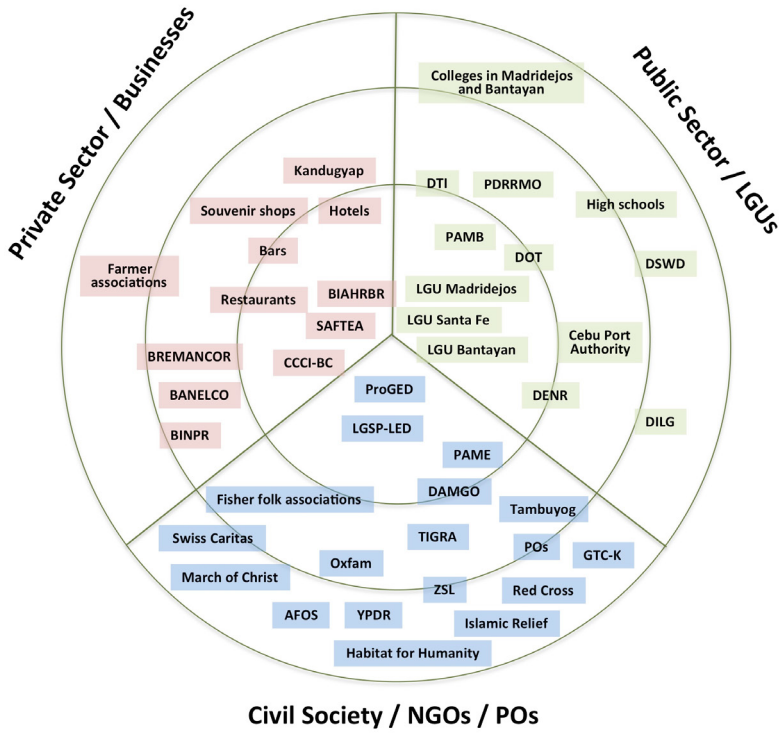
5.2 GTC-K

In 2014 ProGED started to collaborate with the Green Technology Center Korea (GTC-K) to explore opportunities to transfer renewable technology from Korea to Bantayan Island and possibly other locations in the Philippines. GTC-K is a state funded centre that targets to lead to sustainable development as well as to resolve global environmental issues "by carrying out a wide variety of functions including policy making of national R&D of green technology and support for cooperation between countries with respect to green technology" (GTC-K 2015). After several planning sessions and an exploration of Bantayan Island, GTC-K identified a potential need for a waste-to-energy facility or an integrated waste management system for the island to improve their currently ineffective waste management in a sustainable way. After further investigations, it was decided that an integral waste management system is the most appropriate technology to improve the waste situation at the current state. ProGED supports their activities and uses its extensive network to local decision makers to foster the development of a proper waste management system on the island.

5.3 Tambuyog / POs

Another collaboration developed with the Tambuyog Development Center. Tambuyog started their operations on Bantayan Island after the disastrous impact of typhoon Yolanda. They work on developing organized and self-reliant coastal communities of men and women, which control and manage resources sustainably. Furthermore, they are active in influencing policies and public opinion concerning coastal communities and fisheries on international, national, and local levels (TAMBUYOG 2007). On Bantayan Island they collaborate with a range of fisher folk associations. Tambuyog attended all ProGED tourism development planning session and is proactively looking for opportunities of how to foster an inclusive tourism growth from which local communities can benefit. During the different events it was possible to link up local fisherman to directly deliver their products to the tourism establishments and thus receive a better price than selling the goods to the local market merchants. Furthermore, as many fishing grounds around Bantayan Island are exhausted, opportunities being explored of how to create alternative livelihoods for the families, for example through training them to grow high quality organic vegetables and herbs to serve the needs of tourism establishments.

Figure 5: Bantayan Island Tourism Cooperation Map (the position of the stakeholders in the graph display their influence on steering the tourism development in a sustainable way, whereas the middle of the circle indicates the highest level influence)



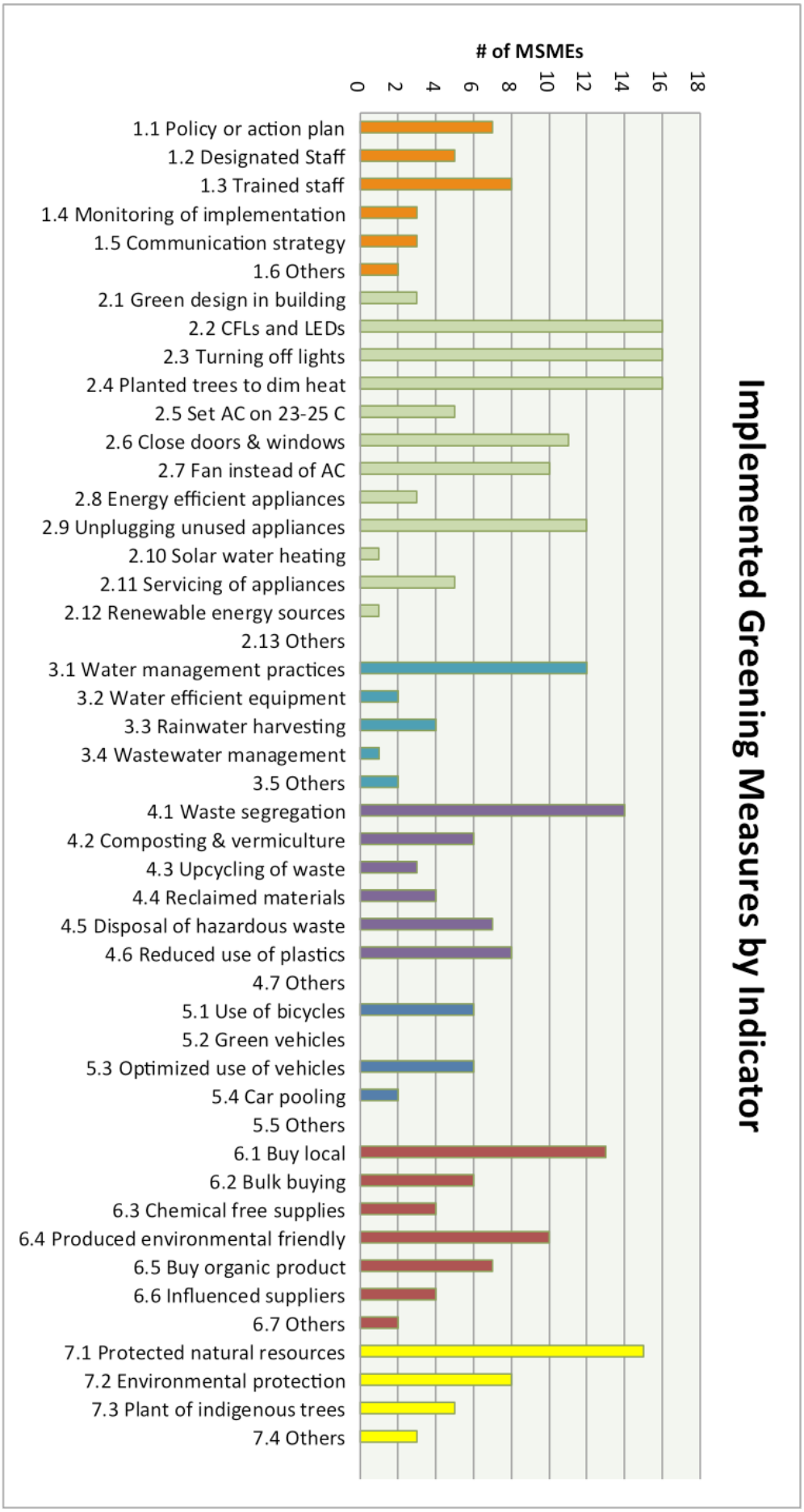
6. Assessment of Interventions on Bantayan Island

After this series of interventions on Bantayan Island, a survey based assessment of the impacts of ProGED events on tourism enterprises (MSMEs) on the island was conducted between the 23 January and the 6 February 2015. This assessment is part of ProGED monitoring. Monitoring is an integral part of GIZ supported projects and enhances the understanding of the strengths and weaknesses of the interventions being undertaken.

The tourism firms were asked to answer a questionnaire (see annex 5). The questions were categorized into six clusters that resemble the hotspots to green a tourism value chain and one targeting the management level. The leading themes of the clusters of questions (indicators) are: (i) Management level; (ii) Energy Efficiency and Renewable Energies; (iii) Water Savings and Waste Water Management; (iv) Solid Waste Management; (v) Environment Friendly Transport; (vi) Environment Friendly Supply and Local Procurement; and (vii) Natural Resource Management. Each question within the clusters asked for a specific 'greening' measure that enterprises could implement in order to increase the sustainability of their operation.

Overall, a total of 32 enterprises were contacted in person on the island. All of them are registered with the project, whereas five firms of them did not attend any previous ProGED events. Another two enterprises did not respond to the questionnaire for various reasons. Out of the 25 firms that were eligible and able to respond to the questionnaire, 18 did implement 'greening' measures after attending ProGED events.

Figure 6 displays the implemented greening measures for all indicators asked for in the questionnaire. It appears that the most common action undertaken after ProGED interventions was in the field of energy efficiency and local procurement. Followed by measures in waste management and natural resource management.


Implemented Greening Measures by Indicator
# of MSMEs
0
2
4
6
8
10
12
14
16
18
1.1 Policy or action plan
1.2 Designated Staff
1.3 Trained staff
1.4 Monitoring of implementation
1.5 Communication strategy
1.6 Others
2.1 Green design in building
2.2 CFLs and LEDs
2.3 Turning off lights
2.4 Planted trees to dim heat
2.5 Set AC on 23-25 C
2.6 Close doors & windows
2.7 Fan instead of AC
2.8 Energy efficient appliances
2.9 Unplugging unused appliances
2.10 Solar water heating
2.11 Servicing of appliances
2.12 Renewable energy sources
2.13 Others
3.1 Water management practices
3.2 Water efficient equipment
3.3 Rainwater harvesting
3.4 Wastewater management
3.5 Others
4.1 Waste segregation
4.2 Composting & vermiculture
4.3 Upcycling of waste
4.4 Reclaimed materials
4.5 Disposal of hazardous waste
4.6 Reduced use of plastics
4.7 Others
5.1 Use of bicycles
5.2 Green vehicles
5.3 Optimized use of vehicles
5.4 Car pooling
5.5 Others
6.1 Buy local
6.2 Bulk buying
6.3 Chemical free supplies
6.4 Produced environmental friendly
6.5 Buy organic product
6.6 Influenced suppliers
6.7 Others
7.1 Protected natural resources
7.2 Environmental protection
7.3 Plant of indigenous trees
7.4 Others

The following figures 7 to 13 show the distribution of implemented measures according to the individual clusters of questions.
The indicators on the management level (see figure 7) included staff trainings, and company strategies and policies implemented to foster a more sustainable operation. Overall a limited number of MSMEs did indicate that they were active on the management level. One reason can be the small size of the majority of the enterprises on the island. Enterprise policies and strategies are most common in bigger tourism companies and entrepreneurs of smaller firms often only steer their operations rather reactive or without formulated strategies and policies. However, eight of the firms did train their staff members to act in a more sustainable manner. Most of these trainings targeted the field of energy efficiency and waste management.

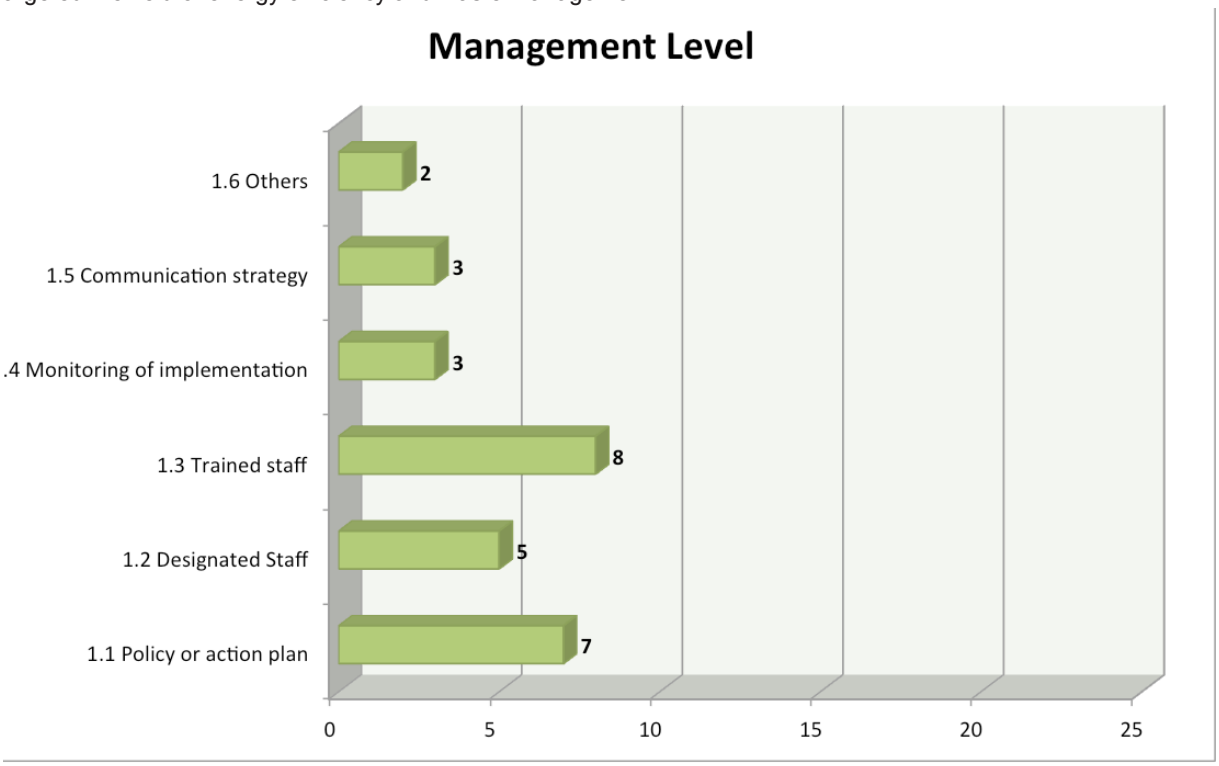


Figure 7: Implemented Greening Measures within the Management Level Cluster

Figure 8 displays the results for the indicators of the cluster targeting all measures in the field of energy efficiency and renewable energies. The most implemented measures where replacing light bulbs with energy efficient CFL or LED lights (16 firms), turning off lights (15 firms) and electrical appliances (12 firms) if not needed, as well as planting trees and ornaments around the building (15 firms). Followed were measures such as using a fan instead of air-condition (AC), and close doors and windows when an AC is used. It is likely that these measures have been implemented, as they need no or a low investment or, in the case of changing the light bulbs, the rewards can be seen immediately. One firm invested in renewable energy technology and one in solar water heating systems. Another four firms indicated during the business matching event that they are planning to invest in photovoltaic systems in the near future. In relation to the high investment costs for such technology it can be said that ProGED was very successful in promoting renewable energy technology if a total of six firms out of 24 will shift towards sustainable energy sources.

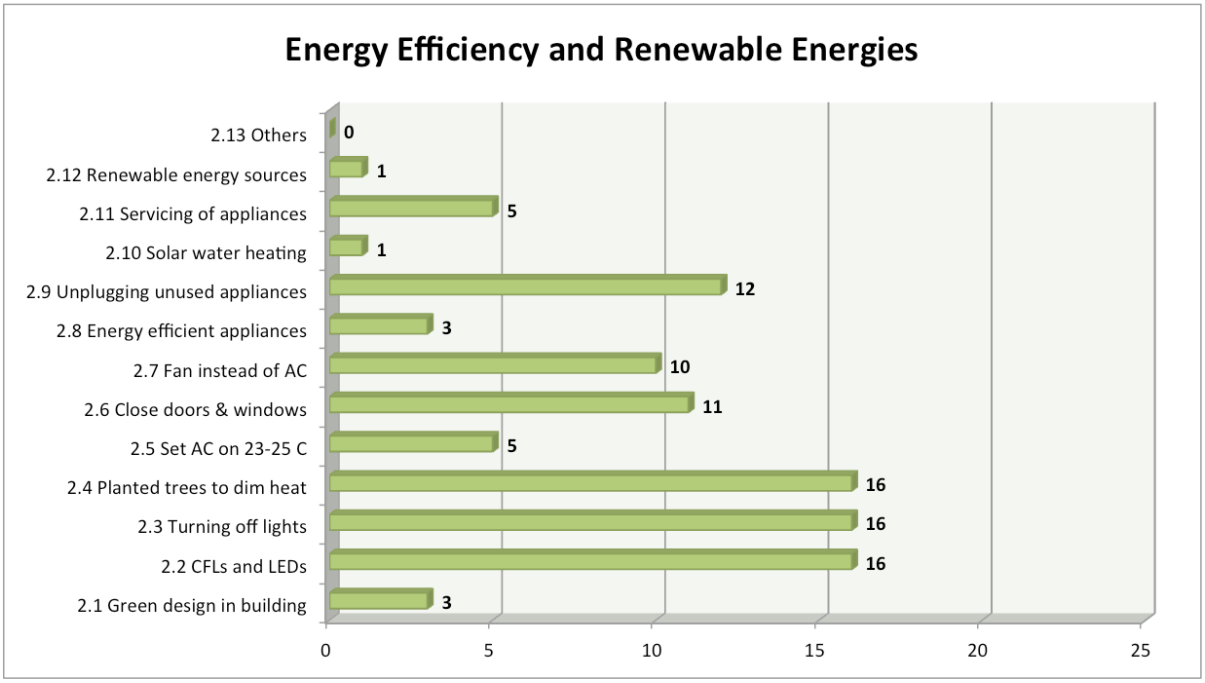


Figure 8: Implemented Greening Measures within the Energy Efficiency and Renewable Energies Cluster

In the cluster targeting water savings and waste water management (see figure 9), the only action that was widely taken by the MSMEs was in the field of improving the water efficiency through applying water management practices (12 MSMEs), such as regular checks of leaking pipes or replacing old equipment. In the majority of the cases, this was a common practice before the ProGED interventions. However, as ProGED raised these issues again during their events it may have encouraged some owners to increase the frequency of checking on water efficiency management processes. Remarkable is, that four enterprises already harvest rainwater. This is a promising development. Concerning on the other hand is that only one establishment is active in the field of wastewater management. It can be assumed that they expect that wastewater treatment lie within the responsibility of the local government.

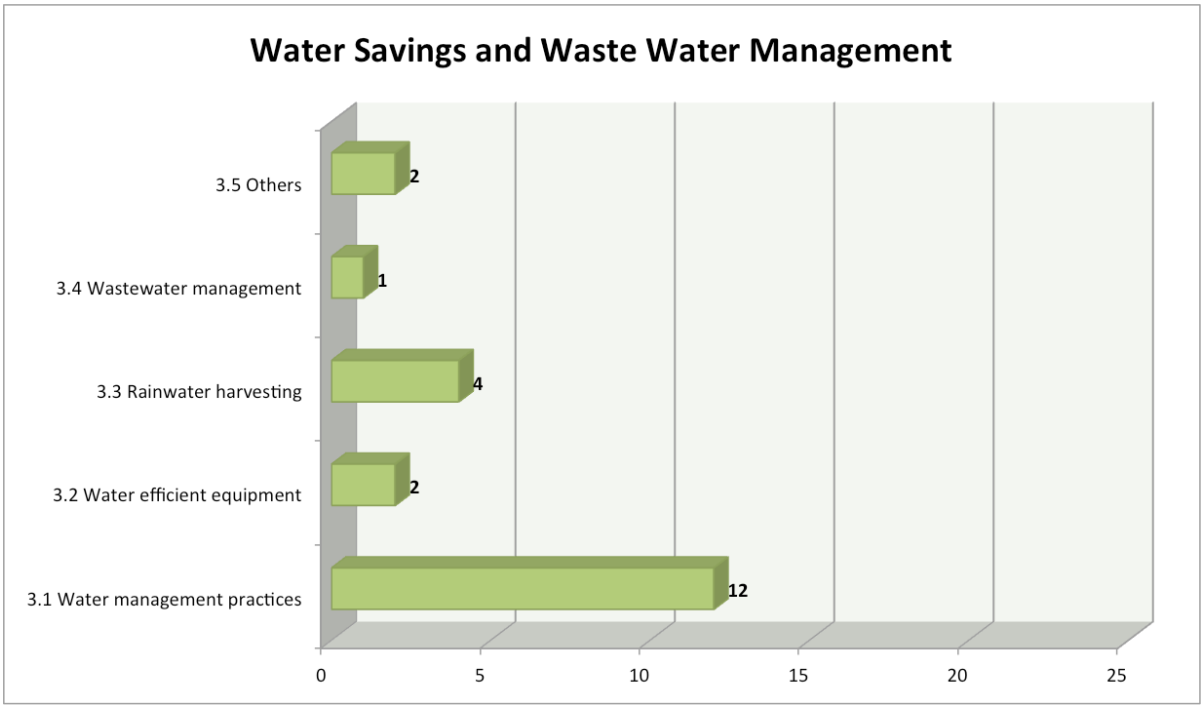


Figure 9: Implemented Greening Measures within the Water Savings and Waste Management Cluster

Figure 10 shows the results for the cluster of questions targeting the field of solid waste management. Positively is that ProGED influenced 14 out of 24 enterprises to actively practice waste segregation and that eight hotels reduced their usage of plastics. These positive changes could further encourage the LGUs to improve their waste management system and the active MSMEs could lobby for the establishment of a waste-to-energy facility. Remarkable is that three companies upcycle their waste, meaning that they are using their waste in a way that it increases the value of the materials.

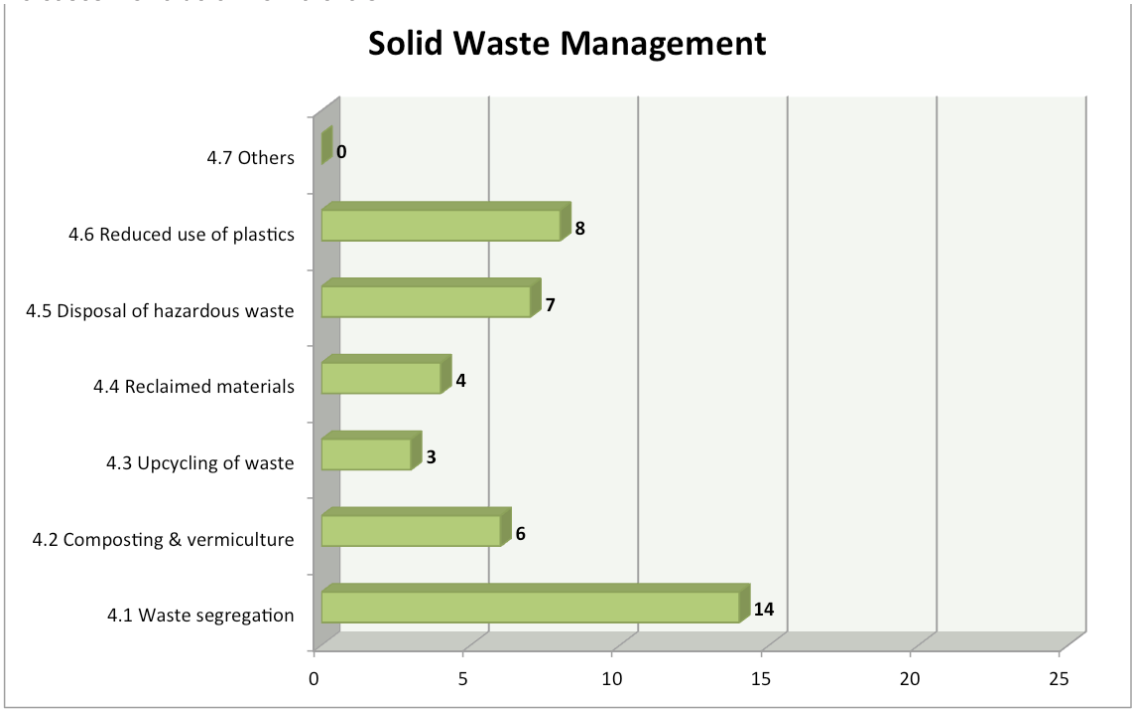


Figure 10: Implemented Greening Measures within the Solid Waste Management Cluster

In the field of environment friendly transport, only a few enterprises took some action (see figure 11). This can be caused by a limited number of vehicles used by the establishments, particularly to transport tourists. Nonetheless, six companies optimized their use of vehicles after they attended ProGED interventions and two even introduced car-pooling systems. Another six companies made an extensive use of bicycles or offered them to tourists as an alternative to tricycles or motorbikes to explore the island.

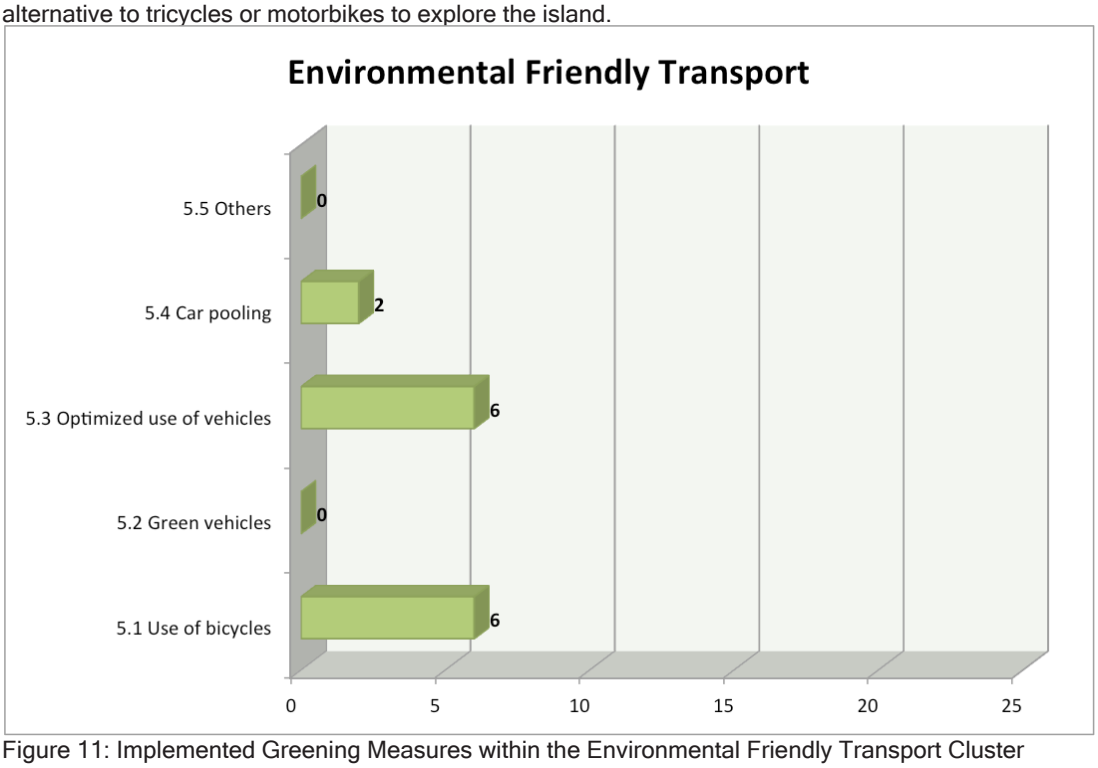


Figure 11: Implemented Greening Measures within the Environmental Friendly Transport Cluster

Figure 12 displays the measures MSMEs on Bantayan Island undertook to increase their share of goods being produced in an environment friendly way or locally. A significant number of enterprises (13 out of 24) started to buy more locally produced products after attending ProGED events. Ten companies are also purchasing environmental friendly produced products. It is to assume that this demand pattern will give a strong signal to local suppliers to adapt to the needs of the tourism establishments and produce in a more environmental friendly way. Seven companies did also start to buy organically produced goods and four influenced their suppliers directly to be more environmental friendly. Two companies also stated for the indicator "Others" that they stopped to purchase endangered marine products. In total it can be said that ProGED was very successful in introducing more sustainable buyer behaviour approaches to the MSMEs.

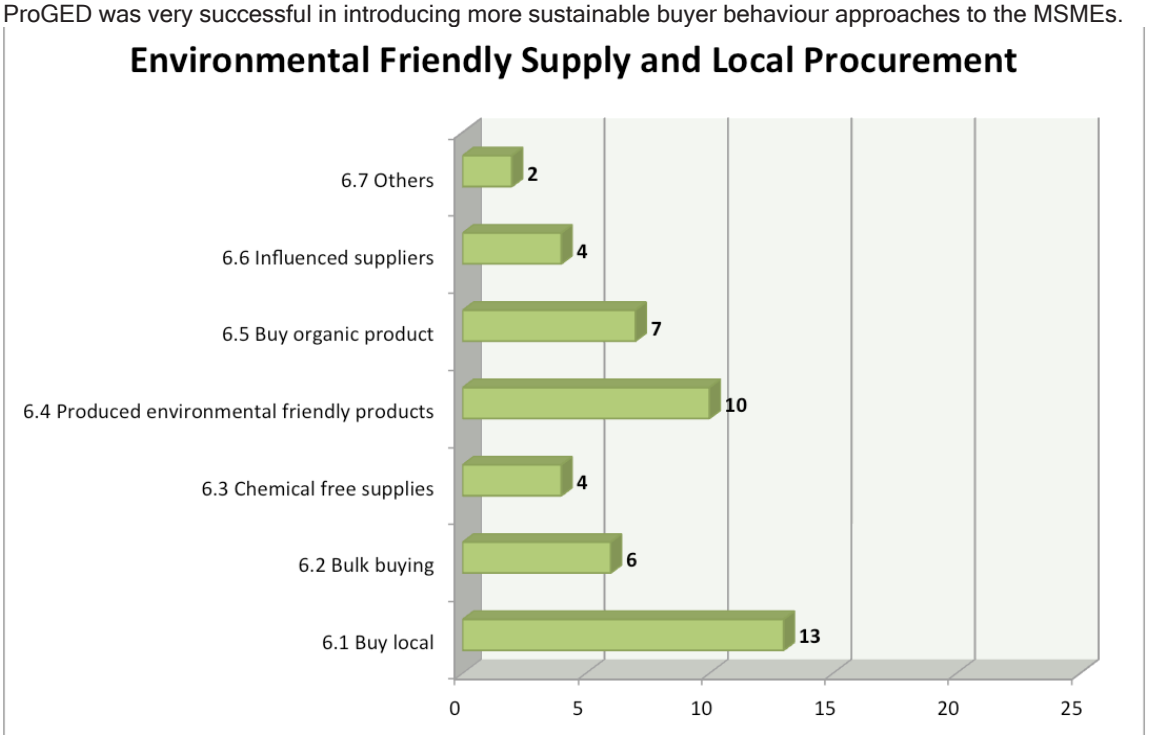


Figure 12: Implemented Greening Measures within the Environmental Friendly Supply and Local Procurement Cluster

In the cluster targeting natural resource management (see figure 13) the MSMEs were most active to protect the natural resources within the vicinity of the business (15 out of 24). Seven companies even organised or participated in community environmental protection and preservation activities. This is a great success as these companies start to raise environmental issue within the community and act as ambassadors for the 'good' cause. Another five companies started to plant local trees, one of them within an area of 2500qm.

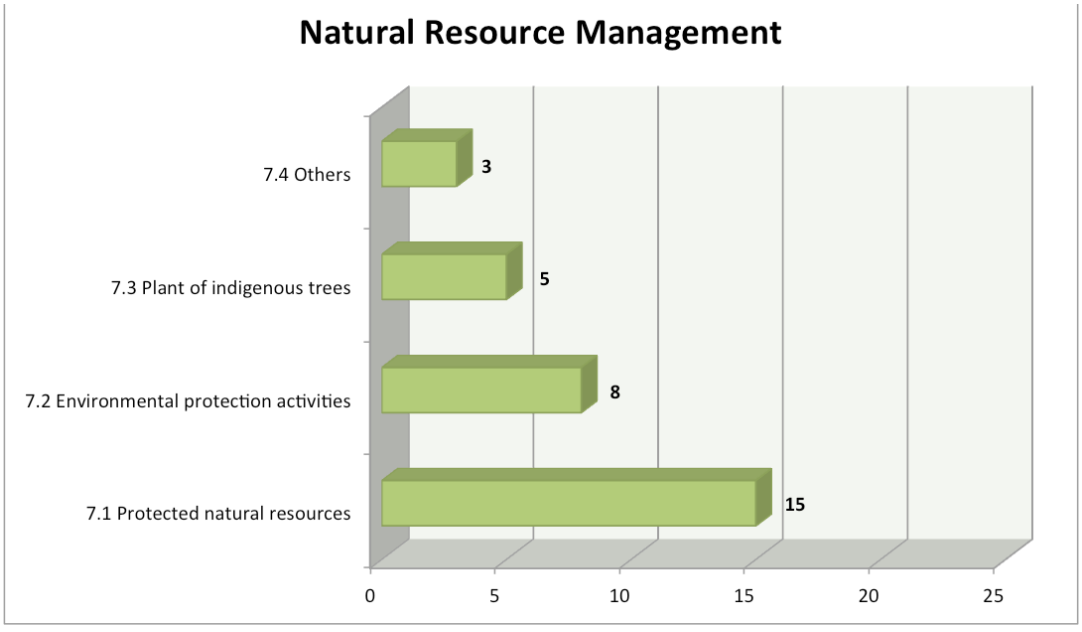


Figure 13: Implemented Greening Measures within the Natural Resource Management Cluster

Overall it can be said that ProGED was able to influence a solid amount of eighteen enterprises on Bantayan Island to implement 'greening' measures in their daily operations and strategic orientation. As it was to expect, the MSMEs were more likely to implement measures in the field of behavioural changes and low-investment options. However, the significant number of six firms that plan or currently do invest in photovoltaic energy technology and another seven companies that outreach to the local community to enhance an environmental friendly management of natural resources is a great success for the project's achievements. It needs to be taken into account that Bantayan Island's tourism sector is still in the process of development and that a range of concerning practices on the destination scale, such as wastewater or solid waste management, needs to get addressed in order to establish an enabling environment for the enterprises to go more green. Many interventions of ProGED on the island targeted the destination rather than the enterprise level and aimed to improve the collaboration between the different actors to secure a sustainable tourism growth and tackle the destination wide problems. The coordination between and among different stakeholders, particularly between the provincial and local government, has been improved which is a very positive development. Furthermore, some frontrunners (MSMEs) start to invest in renewable technologies and might influence more hesitant stakeholders to follow their 'good example'.

7. Recommendations for greening the tourism sector in Bantayan

After these insights collected through working on Bantayan Island to steer the tourism development in a sustainable and climate smart manner, it is possible to draw a few concluding recommendations. The following section provides recommendations using a lens to focus on the hotspots to green a tourism value chain and for the destination as a whole.

7.1 Value Chain

The following recommendations target greening measures of MSMEs according to the hotspots identified as being most efficient to influence their operations to enhance their competitiveness and climate change resiliency. Some recommendations will be closely linked to interventions that will need to be undertaken on the destination level in order to create a framework, which pushes, pulls, and enables the MSMEs in going green. These measures will be described in more detail in chapter 7.2.

- Energy efficiency – In the field of energy efficiency the evaluation has shown that the firms have implemented a range of low and no investment action already. However, as not all companies did participate in the events it will be important to foster the experience exchange of the entrepreneurs and let them discuss the business case of being active in the field of energy efficiency. This can lead to further action by more hesitant entrepreneurs to follow good practice examples after they are informed of the benefits other establishments already achieved. Additionally, more action can be undertaken in supporting the businesses that expressed interest to invest in renewable energy technology. This can also be supported through the introduction of net metering by BANELCO on the island to allow MSMEs to feed in their energy surpluses produced through renewable technologies into the grid of BANELCO and receive a fixed rate for it.

- Water efficiency – A major issue that needs to be addressed on a destination as well as company level is the wastewater treatment. It will be important to educate the MSMEs about proper wastewater management practices and encourage them to build sealed septic tanks. Furthermore, it will be increasingly important with a growing tourism sector and thus enhanced water absorption from the ground water lens to reduce the overall consumption per guest. This can be reached through water efficient equipment and providing notices for guests to practice water saving behaviour patterns.

- Waste management – The solid waste management of MSMEs can get improved through implementing a strict 2-way segregation system and collect, reclaim, and recycle some materials such as cans, metal, or glass bottles. Furthermore, it will be important to collect and properly treat old cooking oil and hazardous rubbish, such as old batteries.

- Supply chain – In the field of supply chain management the MSMEs could collaborate further in order to communicate their demand to local suppliers or POs. Local suppliers or communities could produce specific quality products according to the needs of the enterprises. This can significantly reduce ways of transportation of goods and create livelihood opportunities for local people.
- Transport – In the field of transportation there is a huge potential to make use of the currently not too crowded streets on Bantayan and increase the number and styles of bicycles offered to guests. At the

current state Bantayan Island could brand itself as a quite tourism destination and provide guests with appealing bicycles such as group bikes, electro bikes or bamboo bikes. Furthermore, electronic vehicles to transport guests from and to the port could strengthen such an image.

- Natural resource management – The natural resources on Bantayan Island are the key attraction for guests to visit the island. Thus, the MSMEs should be further encouraged to frequently undertake some activities such as beach clean ups or environment protection events in order to encourage the local community to help them to sustain the resources on which their businesses base and send out a strong signal to the LGUs about the importance of the island's natural resources.

7.2 Destination level

On the destination level it will be important to create a framework that encourages entrepreneurs to go green and provide an infrastructure that allows the natural environment to deal with increasing numbers of visitors.
It is highly recommended to re-establish the island wide Bantayan Tourism Council with members from the public and private sector, as well as POs and NGOs. Regular meetings of the key stakeholders can ensure a rapid and sustainable tourism growth on the island and avoid conflicts, as arising challenges can be identified and discussed about in advance. Furthermore, the council can facilitate and coordinate the conservation and sustainable usage of protected areas for eco-tourism purposes. Other relevant associations and organisations, such as BIAHRBR, SAFETEA, or CCCI-BC, could also support and cooperate with the council, as only coordinated action will lead to a well-planned and sustainable development.

Implement a proper solid waste management system on the island. This will include improving the collection of garbage and announcing and enforcing ordinances to segregate waste, as well as building appropriate facilities to dump or treat the collected waste. The existing dumpsites should at a minimum get sealed in order to avoid a dangerous contamination of the ground water. A more promising approach would be to realize the integrated waste management system as proposed by GTC-K and ProGED. However, further research needs to be undertaken to investigate the current state of the waste and the ground water situation on the island and update outdated data.

In order to cope with an existing and increasing amount of wastewater, e.g. from septic tanks of tourism facilities, there is a clear need to build one or several wastewater treatment facilities. Such facilities can reduce the risk of ground water contamination and undesirable odors on the island, which significantly would alter the attractiveness of the island as a tourism destination and reduce health risks.

Furthermore, the government could encourage (pull) MSMEs to invest in renewable energy technologies through subsidies or tax incentives. Such a decentralization of the energy supply on the island will enhance their resiliency against natural disasters and reduce recovery times after such events. The LGUs can also seek support from the DOE to influence BANELCO to offer feed-in tariffs for owners of photovoltaic systems.

Protecting the existing wilderness is another important component to keep the natural beauty and sustain the attraction of the island as a tourist destination. The local government can ensure to improve the management of the marine and land protected areas and implement the existing legal framework. In order to do it, they are advised to comply with DOE and PAME in the rezoning process and can seek inspiration from other destinations with effective wildlife protection frameworks and functional tourism markets, such as El Nido, in the Philippines.

This rezoning process and appropriate management of land areas should get supported through land use planning. All three municipalities need to comply with current Philippine law and update their Comprehensive Land Use Plans (CLUPs) and Comprehensive Development Plans (CDP), which are currently outdated. This reformulation of the plans offer a great opportunity to consider rising tourism numbers and how negative impacts on the environment and local communities by tourism growth can be avoided or minimized. Furthermore, the plans should consider areas for eco-tourism projects, transportation infrastructure, wilderness areas, and economic hubs.

Overall the Bantayan group of islands holds a big potential to increase its visitor numbers and use tourism as a measure to foster overall development and create employment opportunities. However, during the work of ProGED on the island it was possible to identify existing development challenges and threats that need to get addressed in order to grow the tourism in a sustainable, inclusive, and climate smart manner.

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9. Annexes

9.1 Annex 1: Action Plan 1 – September 2013

BANTAYAN ISLAND TOURISM INDUSTRY CLUSTER
ACTION PLAN 2014-2016
DESTINATION LEVEL

Lead implementor: LGUs of Bantayan

ACTIVITIES	TIMETABLE
1. All three LGUs to finalize the Comprehensive Land Use Plans (CLUP)	Sta Fe – 2014 Bantayan – 2013 Madridejos – 2014
2. Propose reclassification of Bantayan Island from protected area to alienable and disposable land through joint resolution of the three LGUs and organize dialogue with stakeholders on this issue	by December 2013
3. LGUs to initiate standardization of land transportation system and organize the transportation operators in the island	by December 2013
4.LGUs to strictly implement solid waste management and establish materials recovery facilities (MRF) within the three municipalities	starting November 2013

BANTAYAN ISLAND TOURISM INDUSTRY CLUSTER
ACTION PLAN 2014-2016
Air and Sea Transportation

Lead implementor: LGUs of Bantayan

ACTIVITIES	TIMETABLE
1. Request for the assessment of feasibility of airport in Bantayan, establish land ownership where airport will be located	Within 2013 to 2014
2. Initiate dialogue among sea vessel operators to improve services	Last quarter 2013
3. Organize operators of boats offering island hopping services	Last quarter 2013

BANTAYAN ISLAND TOURISM INDUSTRY CLUSTER
ACTION PLAN 2014-2016
Land Transportation

Lead implementor: LGUs of Bantayan

ACTIVITIES	TIMETABLE
1. Promote investment opportunities on vehicles for rent to service tourists around the island	Within 2014
2. Secure support of province and national government to improve road network within the island	Within 2014
3. Organize land transport operators to improve land transpo services	First quarter 2014

BANTAYAN ISLAND TOURISM INDUSTRY CLUSTER
ACTION PLAN 2014-2016
Marketing and Sales

Lead implementor: Bantayan Island Hotels, Resort and restaurants association

ACTIVITIES	TIMETABLE
1. Develop website to promote Bantayan Island tourism (organize working group with representative from each LGU)	December 2013
2. Collaborate with the Department of Tourism to request support on promotion (ex. Design and printing of brochures)	First quarter 2014
3. Set up Bantayan Island Tourism Information Center with the support of the Department of Tourism	First quarter 2014

BANTAYAN ISLAND TOURISM INDUSTRY CLUSTER
ACTION PLAN 2014-2016
Accommodation

Lead implementor: Bantayan Island Hotels, Resort and restaurants association

ACTIVITIES	TIMETABLE
1. Conduct trainings with the support DOT to improve customer service of resorts and restaurants	Every quarter starting first quarter 2014
2. Develop more activities within the island and include in the various tour packages	Start first quarter 2014
3. Collaborate with DOT to have hotels and resorts in Bantayan accredited	Starting last quarter 2013
4. Organize activities to increase awareness of resorts and restaurants on resource efficiency (ex. Energy efficient systems, water efficient gadgets, conversion of biodegrable waste into fertilizers, etc)	Starting first quarter 2014
5. Follow ordinance related to noise pollution to address complaints of tourists and the communities	Last quarter 2013

BANTAYAN ISLAND TOURISM INDUSTRY CLUSTER
ACTION PLAN 2014-2016
Food and Beverage

Lead implementor: Bantayan Island Hotels, Resort and restaurants association

ACTIVITIES	TIMETABLE
1. Implement sanitary policies and other health-related ordinances	Last quarter 2013
2. Organize trainings of food handling	First quarter 2014
3. Link with local suppliers by providing them with information on what they need	Last quarter 2013

BANTAYAN ISLAND TOURISM INDUSTRY CLUSTER
ACTION PLAN 2014-2016
Tourism Activities

Lead implementor: LGUs of Bantayan

ACTIVITIES	TIMETABLE
1. Collaborate with DOT to organize trainings for community tour guides and on their accreditation	Starting last quarter 2013
2. Identify and organize the community tour guides	First quarter 2014
3. Improve the health clinics/facilities of the three LGUs to ensure safety of tourists and the communities	Starting last quarter 2013
4. Rehabilitate existing comfort rooms or promote investments on private comfort rooms to serve needs of tourists	Starting first quarter 2014
5. Collaborate with DOT to get more information on how to develop community-based tour packages	Starting first quarter 2014

9.2 Annex 2: Action Plan 2 – April 2014

Group 1 Workshop Output

Action Plan to ensure Implementation of Local Ordinances and address Inadequate Infra (e.g., Power and Roads)			
Activities	Responsible	Collaborator	Time Frame
Organize Information drive activities: Lectures / seminars / orientation on CC / Environment	• Bantayan Is.Assn of Hotels, Resorts, Bars & Restaurants (BIAHRBR) • Municipal Environment & Natural Resources Officer of each LGU • Fisherfolks Association	• DENR • DAMGO • PDRRMC • Sea Camp • YPDR • NGOs	3rd Qtr of 2014
Collaborate with organizations which can support in Climate Change vulnerability / risk assessment and resources assessment (coastal and land)	• BIAHRBR c/o Allan Monreal • President of 21 Fisherfolks Asso. • MENRO • MAO • Bantay Dagat community	• NGOs • Coastguard • DENR • DOST • DA • BFAR • PNP • DAMGO • YPDR • ZSL	3Q – 4Q 2014
Organize activities to disseminate Climate / disaster responsive policies and Guidelines	• MAO • MENRO • MDRRMO • BIAHRBR • Fisherfolks Asso. • Community	• PDRRMO • DENR • NGOs • DA • BFAR • Climate Change Commission • YPDR	3Q – 4Q 2014
Advocate for strict Implementation Solid Waste Ordinance	• LGU • NGOs • Community	• OXFAM • TIGRA • NGOs • Solid Waste Management Board	3Q 2014 – 1Q 2015
Implement Water Waste Water Management (Septage)	• OXFAM	• LGU	
Implement Waste Management Upcycling (Bantayan)	• TIGRA	• LGU	
"Happy Soil" in Suba, Bantayan – public market	Damgo sa Kaugmaon		

Group 2 Workshop Output

Action Plan to ensure Implementation of Local Ordinances and address Inadequate Infra (e.g., Power and Roads)			
Activities	Responsible	Collaborators	Time Frame
Dissemination of local ordinances on tourism and environment	Municipal Tourism Officers of the 3 LGUs	Barangay Tanods (in charge of dissemination and enforcement of local ordinances at the barangay level) Police	Sta Fe- May,2014 during the BIAHRBR Monthly Meeting Bantayan and Madridejos - to be scheduled
Consultation with Stakeholders on formulation of Ordinances	Private sector member of a tourism association (1 per municipality) Sta Fe: Marilyn Werner Municipal Councilors - in charge of Tourism and Environment	Barangay Councilor in-charge of Peace and Order People's Organizations (Kapunungan) BIAHRBR	To be scheduled
Make the Tourism Councils of each LGU functional Review the composition vis-à-vis National Tourism Act of 2009 Participation of POs in Council Capacity building for POs and other members of the Council	Chairperson of Tourism Committee in each LGU (Tourism Officers to ensure / inform the chairpersons) Municipal Tourism Officers of the 3 LGUs Private Sector member from Tourism Association People's Organization	DOT DILG BIAHRBR NGOs that work with women, children and tourism DSWD	As soon as BIAHBR designates representatives to the Tourism Council
Organize an island-wide Tourism Council	POs coming from all municipalities Municipal Tourism Officers Private Sector members from Tourism Association (business sector)	DOT DENR With support of Regional Ecotourism Council	As soon as municipal tourism councils are revived
Request dialogue with BANECO re status of distribution	BIAHRBR	BANELCO Other consumers BIPCOR / Power Source	To be made part of BIAHRBR schedule of activities
Seek alternative sources of power Orientation on sources Matching with suppliers	DAMGO Bantayan Island Nature Park "BINP"	DOE DOST DTI Suppliers of solar panel	One supplier from Singapore with ongoing negotiations with BINP

Group 3 Workshop Output

Action Plan to provide Livelihood and capacitate tourism stakeholders			
Activities	Responsible		Time Frame
Shellcraft production for souvenir items Fashion accessories and gift items made from coconut	Mylene Rayco (BIAHRBR) Allan Monreal (DAMGO	DTI DSWD Fairtrade CCCI OXFAM LGU Police	3Q 2014
Training on the production of organic wellness products Training and skills development on organic farming and gardening	Kaongkod Farmers and Fisherfolks Asso	CCCI YPDR TIGRA DAMGO Fairtrade	April – July 2014
Skills development on marine product processing Seaweeds culture Sardines processing	DAMGO OXFAM Guiwanon Multi-Purpose Cooperative	CCCI YPDR Fairtrade	Seaweeds culture: April – Oct 2014 Sardines processing: ongoing
Development of eco-cultural Tours	BIAHRBR	YPDR DAMGO NAITAS DOT	Jan 2015
Training on Culinary (bakery products, e.g., delicacies)	Fairtrade	CCCI and AFOS YPDR Fairtrade	Ongoing
Live Fish Culture	Muambok Fisherfolks Association (MFA) TIGRA Bantigue Fisherfolk Association Sulangan Fisherman Association (SFA)	YPDR DAMGO Fairtrade	MFA: ongoing SFA: 3Q 2014

Group 4 Workshop Output

Action Plan to increase effectively manage Bantayan as a Protected Area and explore sustainable economic activities			
Activities	Responsible		Time Frame
Organize orientation on Laws & Regulations on Protected Area	DENR	OXFAM	June 2014 onwards
Conduct Bantayan Island-wide Marine Assessment	OXFAM (Jermaine)	Zoological Society of London (Bantayan-based) 3 LGUs Communities in mangrove areas (18 locations)	April – July 2014
Development of Fisheries Plan	Tambuyog Resource Development Center (Melissa Gibson)	TIGRA Bantayan LGU DAMGO	4Q 2014
Orientation on Coastal Resource			01 – 03 June 2014
Organize event to present findings / feedback of Silliman Study on MPAs			To be verified
Mangrove rehabilitation & establishment of mangrove nursery	OXFAM	ZSL 3 LGUs 18 communities	June – Oct 2014
Re-establishment of marine sanctuaries	Chairpersons of the Farmers and Fisherfolks Assn Joel Carino	BFAR (LGU-based) DA Tambuyog	June – Sept 2014
Organize Association of PATAO and register association	Exiquel Giltendez	DOLE SEC	May 2014
Organize seminars & trainings on solid waste management in Madridejos	Chairpersons of the Farmers and Fisherfolks Assn.	DENR Barangay Officials	May – July 2014

I. INTERIM STEERING BODY

	STA. FE	BANTAYAN	MADRIDEJOS
LGU	Melanie Loyao (Tourism Officer, Sta. Fe)	Tourism officer to be informed	Melchor Samson (Tourism Officer, Madridejos)
Private Sector	Jon Ray Alix (Beach Placid)	Allan Monreal (BINPR)	Capt.Eusebio Rebamonte (Master Inn)
	Arlene Riggillo (Tristan)		
Community-based		Jesus Quiseo (Bantigue FFA)	Romulo Jarina (Tarung FFA)

Advisory Body Members

- Cebu Provincial Government
- Department of Tourism – Central Visayas
- Department of Trade and Industry – Cebu Provincial Office
- International Organization/ Donor

II. NEXT STEPS

WHAT	WHO	WHEN
Documentation of event and shared to Steering Body and organizations	Hope Melgar (DTI – Cebu)	2nd week of May 2014
Presentations & pictures posted at www.greeneconomy.ph	Raquel Capio (GIZ - ProGED)	2nd week of May 2014
First meeting of Steering Body	Chair: Allan Monreal Co-Chair: Melanie Wagas	Last week of May
BIAHRBR Monthly Meeting	Member Resorts	Every first Wednesday of the month
Progress reporting	Steering Body & ProGED	12 August 2014

9.3 Annex 3: Action Plan 3 – September 2014

Action Plan to increase the cooperation of key stakeholders and ensure a sustainable tourism development in Bantayan			
Activities	Responsible	Collaborators	Time Frame
Solid Waste Management • Collection of Garbage • Waste to energy 1) Study on potential + benefits + costs • Training and feasibility study • Information needed: volume; characterization of waste; current practices; policies 2) Presentation of proposals	1) GTC Korea 2) DAMGO	• Solid Waste Management Councils • LGUs and BRGYs • Oxfam and Philippines Solid Waste Management Council (provide data from their scoping study on waste management by Mid October)	1) Sept/Oct 2) November
PAMB • 1) Inform PAMB of Meeting Agenda • New Members: 3 Reps of POs/ municipality + Damgo • Carrying capacity of sites • Conduct orientation seminar to business about regulations regarding the new zoning plan • Status and plans on how to deal with the user Fees • No Dwelling Zone (Strongly Remind LGU)	1) Janto S. Hess (ProGED	1) Janto S. Hess (ProGED) RTD Orolfo	September 8-10 (PPDO with Junie and Larry will attend) (October 10th Next Meeting of the PAMB)

Culture of Tourism • Governance of Tourism • Tourism Zoning i.e. Boats are docking in front of the resorts • Tourism awareness for communities 1) Ensure the presence of the tourist police 2) Ensure the emergency health supply (implement hotlines and number provision for tourists by the hotel owners) 3) Provide a public beach (remind LGUs) 4) Coordinate POs on schedule	1) - 3) Tourism Council and Chief of Police 4) ProGED / DAMGO		
Island wide body to steer tourism 1) Invite representatives from Palawan and Camotes to inform about good practices on steering tourism	1) ProGED / DOT		8. November
Tourism Statistics 1) Dialogue with DOT on how to make compliance easier	1) DOT		Next Municipal Tourism Officers' Meeting
ADDITIONAL:			
1) Resettlement issues	1) PAMB		(October 10th Next Meeting of the PAMB)

Group 2 (Tourism Enterprises) Workshop Output

Action Plan to increase awareness on Climate Change (CC) and importance of conserving the natural resources and environment in Bantayan			
Activities	Responsible	Collaborators	Time Frame
Sewerage and septic system • Increase the water quality 1) Respondents to future study survey		Oxfam, GTC-K	
Technical Session / Training • Waste water management • Renewable Energy / Energy Efficiency • Green Buildings & Waste up-cycling	Accommodation and Restaurant Operators	DTI, CCCI	1st week of Nov 2014
Consultation with accommodation & restaurant establishments on • Product development • Noise/air pollution • Cleanliness • Street lights • Signages • Docking area of boats informal canvassers • To include porters trike2 habal drivers		Cebu PLGU / LGSP-LED	2nd week of October 2014
Provide complete list of accommodation and restaurant establishments • Include contact details	Marylin Werner		10th September 2014
Submit data on tourist statistics		Judy Q / Berns / Czarina	
Request EMB to Reorient The Accommodation Est. on EMB Requirements (Water,…) for their Compliance	Miriam		12 September 2014
Request Space From CPA For Info Counter Of Bantayan IS. Accommodation / Restaurants Association	Judy Q / DOT 7		9 September 2014
Apply for DOT-Accreditation Reorientation / Mobile Accreditation		DOT-7	4Q 2014

Group 3 (NGOs) Workshop Output

Action Plan to improve appearance and quality of natural resources on Bantayan			
Activities	Responsible	Collaborators	Time Frame
Revival of marine sanctuary at Kaongkod, Madridejos	JR Bautro (Kaffa)	• KAFFA Members • MAO (…) of Madridejos • BFAR (Iroy Simog) ZSL • Municipal Council of Madridejos	February 2015
Benchmarking to Happy Soil System at Balamban, Cebu	Abraham (TASFFA)	• DAMGO • LGU of Madridejos • Barangay Officials of Talangnan	30th September 2014
Preparation of SSF proposal & submission to DTI	Abraham (TASFFA)	• DAMGO • DTI-Cebu	30th September 2014
Development of artificial reef at BRGY. Tarong, Madridejos	Romulo (TAFFA)	• LGU-Madridejos (Committee on Agriculture) • MAO • BFAR	EO December 2014
Stocking of “BINGA” at Guiwanon, Bantayan to supply to tourism establishments	Cristita (BRGY Guiwanon Fisherfolk Association)	• MAO • DENR	November 2014
Construction of communal toilets at Binawbao & Bantigue, Bantayan	• Jesus (BFA for Bantigue) • Mylene (PNB for Binawbao)	• LGU-Bantayan • DOH	EO December 2014
Beautification of the coastal area of Botigues, Bantayan	Amelito (BFA)	• Barangay Officials of Botigue • BFA Members	March 2015
Culture of Lapu Lapu At Barangay Sulangan, Bantayan	Miraflor (SFA)	• OXFAM • BFAR	Dec 2014
Planning and Preparation of Establishment of Community-Based Eco-Tourism Resort Art Malbago, Madridejos	BONIFACIO, Lumakang	PAMB, DOT, NGOs, LGU-Midridejos	March 2015
Construction of Floating Guard House at Tami-Aw Bantayan	ANASTACIO (KAMFA)	KAMFA Members, CCCI-Bantayan Chapter, LGU-Bantayan, MAO, DENR	March 2015
Rehabilitation of Marine Sanctuary At Talisay, Santa Fe	Reynaldo B. (TAFFA)	MAO, LGU-Santa Fe, BRGY. Officials of Tausay DENR	November 2014

9.4 Annex 4: Results of the CTU-AREC Assessment on Energy Efficiency

Cebu Technological University
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(CTU-AREC)

Establishment	Recommendations			Remarks
	Energy Efficiency	Water Catchment	RE Systems Adoption	
Sunday Flower Hotel	Expand the use of LED bulbs.	Need to adopt rain water catchment measures.	A PV system is feasible.	Management is interested in PV but a specific proposal is needed.
Bantayan Cottages	Use LED for all lighting fixtures.	On-going construction at new site.	A PV system is feasible. Wind energy system is also feasible.	Management is interested in having a PV system installed but specific load demand for the new structure is required.
Anika Beach Resort	Gradual switch to LED bulbs.	Adopt rain water catchment measures.	A PV system had been proposed for two (2) new cottages.	Estimated cost for a PV system for room lighting only will cost the resort approximately P 30,000.00
Natures Structures	Explore other applicable EE measures.		Limited potentials for PV system due to vegetation.	The establishment is already using LED bulbs for lighting.
Sta Fe Beach Club	Gradual switch to LED.		Explore the use of Solar Water Heaters.	
Balikan Bayan	Adopt EE measures in the use of freezers and electric pump. Avoid excessive use of said equipment.	Adopt rain water catchment measures to augment water supply from pump.	Limited potentials for PV system. Structure is not oriented.	
Bavaria Beer Garden	Explore alternative less energy consuming spotlights	Adopt rain water catchment measures to help minimize electric pump operations.		

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SUMMARY OF RECOMMENDATIONS

Bantayan Resorts Site Assessments

Establishment	Recommendations			Remarks
	Energy Efficiency	Water Catchment	RE Systems Adoption	
Ogtong Beach Club	Adopt the use of LED bulbs focus on areas where lighting application is intensive such as the restaurant, lobby and peripheral lights.	Existing	A PV system is feasible and designs have been done for the restaurant and reception area.	The resort is already implementing rain catchment measures.
Adelaida Pension Hotel	Use LED bulbs for the walkway, peripheral lights and signage.	Make use of the built cistern for rain water catchment.	A PV system is feasible and a design for the peripheral lights and signage has been done.	
Kota Beach Resort	Need to adopt the use of LED bulbs.	Adopt rain water catchment measures.	A PV system had been proposed for four (4) cottages. Management is also interested to use PV for water pumping.	
Coral Blue	Gradual switch to LED is suggested to start with bed headboards.	Adopt rain water catchment measures.	Location of the establishment limits the potentials for a PV installation to peripheral applications.	Management is interested to light the resort's beachfront with smaller PV units such as solar lanterns.
Queen Elizabeth	Gradual switch to LED.	Adopt rain water catchment measures.	Limited potentials for PV system applications.	Management showed reservations in having a PV system installed.

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Establishment	Recommendations			Remarks
	Energy Efficiency	Water Catchment	RE Systems Adoption	
Mark Ville	Gradual switch to LED bulbs.	Adopt rain water catchment measures. Structures are ideal for rain water collections.	A PV system is feasible. Structure is oriented.	Estimated cost for a PV system for room lighting only will cost the resort approximately P 30,000.00
Budyong Beach	Gradual switch to LED bulbs. Adopt EE program in the use of Aircon units.	Adopt individual rain water catchment system for each cottage.	A PV system is feasible for individual cottage application.	Estimated cost for a PV system for room lighting only will cost the resort approximately P 30,000.00

Prepared by:

EDWIN T. TESALUNA
SRS II
16 December 2014

Approved by:

DR. CECILIO S. BAGA
Project Leader

R. Palma St., Cebu City
Philippines 6000

9.5 Annex 5: ProGED Monitoring Form

Monitoring Form for Micro, Small and Medium Enterprises (MSMEs) Implementing Environment Friendly and Climate Smart Activities

Enterprise		
Respondent	*Full Name*	*Position Title*
Email		
Telephone	*Landline*	*Mobile*

Introduction

This Monitoring Form is to be filled out by the enterprises who have attended events and activities of the project Promotion of Green Economic Development (ProGED) since 2013 up to now. The objective is to collect information and details on the extent and level of implementation of environment friendly and climate smart measures both at the management and operational levels. All information provided shall be for ProGED use merely for monitoring and knowledge management purposes.

Please submit the filled out form to the Department of Trade and Industry (DTI) Provincial Office. Thank you very much for your cooperation.

1. What ProGED activities have you attended and when?

.....

.....

.....

2. Have you implemented greening measures after having participated in any ProGED activities?

☐ **Yes** *(please proceed to the questionnaire on the following pages)*

☐ **No**. The reasons for non-implementation are:

.....

.....

.....

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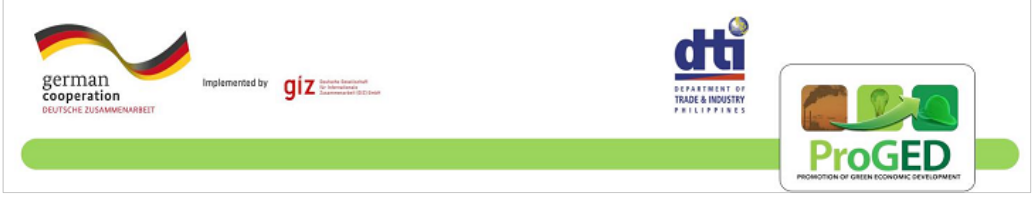
A. Management Level

☐	prepared and approved a policy or action plan to implement environment friendly practices
☐	designated team or staff to implement the green policy or action plan
☐	trained staff to implement green policy or action plan
☐	prepared and implemented a system to monitor the implementation of the green policy or action plan
☐	prepared and implemented a communication strategy on green practices to staff and clients
☐	others: *(please write down)*

B. Operational Level

Energy Efficiency and Renewable Energy

☐	constructed new building or renovated existing building following a green design (natural daylighting, natural ventilation, insulated buildings, light colored roof, etc.)
☐	replaced incandescent light bulbs with compact fluorescent light bulbs (CFLs) and / or light emitting diode (LED)
☐	practiced turning off lights in unoccupied workspaces / rooms
☐	planted trees and ornamentals around the building
☐	practiced setting thermostat of air conditioning unit between 23 and 25 degrees Celsius
☐	practiced keeping the doors and windows closed when air conditioning is running
☐	used electric fan instead of air conditioning
☐	used energy efficient appliances (inverter air cond., energy efficient certified appliances, etc.)
☐	practiced unplugging of all appliances and equipment when not in use
☐	reduced consumption of hot water or used solar water heating systems
☐	practiced periodic maintenance check and servicing of appliances and equipment
☐	used renewable energy sources
☐	others: *(please write down)*



Water Savings and Waste Water Management

☐	reduced water loss by implementing good water management practices (conducting regular leakage checks of pipes, fixing leaky taps and pipes, turning off faucets when not in use, replacing faulty / old equipment to water efficient equipment, etc.)
☐	reduced overall water consumption by installing water efficiency equipment (ultra low flush toilets, spray nozzles, waterless urinals, faucet aerators, faucet sensors or push water tap, pressure reducing valves, low flow showerheads, etc.)
☐	installed rain water harvesting system
☐	practiced wastewater management (reed bed system, mechanical, etc.)
☐	others: *(please write down)*

Solid Waste Management

☐	practiced waste segregation
☐	practiced composting and vermiculture
☐	practiced upcycling of waste (develop new products from waste materials)
☐	used reclaimed materials (used debris and old wood for architectural components)
☐	practiced proper disposal of hazardous waste
☐	reduced use of plastics (packaging materials, supplies, etc.)
☐	others: *(please write down)*

Environment Friendly Transport

☐	integrated the use of bicycles as one of the modes of transport
☐	used green vehicles (electric vehicles, hybrid vehicles, etc.)
☐	optimized trips of vehicles
☐	practiced car pooling
☐	others: *(please write down)*

Environment Friendly Supply and Local Procurement

☐	bought locally produced supplies and materials
☐	practiced bulk buying
☐	bought chemical free supplies and materials
☐	produced environment friendly food and non-food products (vegetables, fruits, oils, scents, etc.)
☐	introduced naturally or organically grown products
☐	influenced suppliers to adopt green practices
☐	others: *(please write down)*

Natural Resource Management

☐	protected natural resources within the vicinity of the business (avoid cutting trees, tree planting, river and beach clean-up, etc.)
☐	organized and / or participated in environment protection and preservation community activities (tree planting activities, river and ocean clean-up, tree nursery establishment, etc.)
☐	used indigenous trees in tree planting activities
☐	others: *(please write down)*

To be filled out by DTI:

_____ _____

Name of DTI Staff *Province*

_____

Date of Submission

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