



2023 TOP 100 GOOD PRACTICE STORY

Title: Making Waves in Water Conservation

Destination, Country: Club Paradise Palawan, Coron, Northern Palawan, Philippines

Submitted by: Joegil Magtanggol M. Escobar, Hotel Manager

In the category: Destination Management Environment & Climate Thriving Communities
 Nature & Scenery Culture & Tradition Business & Marketing

The Story in a picture:

As stewards of the oceans and waters, humans have a crucial responsibility to protect marine life and preserve the health and biodiversity of marine ecosystems. Individuals, communities, businesses, and governments can collectively work towards sustainable practices, reduce pollution, and promote conservation efforts. Through the collective action and responsible choices of the men and women of Club Paradise Palawan, we can ensure a healthier and thriving marine environment for the benefit of not only our community, but also of all life on Earth.



Summary:

Water is one of the most essential elements for life on Earth. It plays a crucial role in sustaining all living organisms, including humans. Despite its immense importance, water resources are finite, and many regions face water scarcity due to various factors like overuse, pollution, and climate change. Therefore, it is essential to protect, conserve and manage water resources to ensure its availability for future generations and the preservation of life on Earth.



Good Practice Story:

Destination description

Club Paradise Palawan is an exclusive 19-hectare private island resort dotted in a UNESCO Biosphere Reserve. It is a tropical paradise strategically located amid Coron's magnificent landscapes and seascapes, natural tourist attractions, and exhilarating dive sites.

Issues faced

The world's oceans are facing several issues that threaten marine ecosystems and biodiversity:

Overfishing has led to the decline of fish populations, disrupting the balance of marine life. The chief of the Fish Right Program in the Philippines of the United States Agency for International Development (USAid) said 70 percent of fishing grounds in the country are currently overfished. (source: sunstar.com.ph)

Coral reefs are being destroyed by crown-of-thorns starfish outbreaks and other human activities, further compromising marine habitats. Over a thousand crown-of-thorns (COTS), voracious sea stars that feed on corals alive, have been removed by volunteers from several environmental organizations from the waters of the San Jose Marine Protected Area (MPA) in Coron. (source: palawan-news.com)

The pervasive issue of **pollutants in water** not only has harmful effects on marine creatures but also on humans through the food chain. Pollutants like microplastics are ubiquitous in the environment and have been detected in a broad range of concentrations in marine water, wastewater, fresh water, food, air and drinking-water, both bottled and tap water. (source: cdn.who.int)

Pesticides and harmful chemicals from agriculture end up in coastal waters, causing detrimental effects on marine plants and shellfish. According to a report, water pollution from agrochemical runoff is more widespread in the Philippines than previously thought. Recent studies show that excess fertilizer use has already caused nitrates pollution in water bodies in agricultural areas in the country. (source: greenpeace.org)

Amidst all these problems, there is also the **decline of the turtle population** which calls for the urgent need for conservation efforts and sustainable practices to safeguard our oceans and the life they support. Turtle populations have declined substantially over the past century mainly from direct take of adults and juveniles for their carapaces and meat, as well as the harvesting of eggs for consumption across the Philippines and Southeast Asia. (lamave.org)

Methods, steps, and tools applied

In the face of pressing environmental challenges, Club Paradise Palawan's commitment and contributions to conservation, sustainability, and environmental protection demonstrates how even individual actions and initiatives can contribute to the broader solutions for marine conservation.

Overfishing and depletion of fish population

The waters surrounding Dimakya Island used to serve as fishing grounds for communities nearby. Squids and octopuses were hunted by locals. These practices resulted in overfishing. Targeted species are caught at a rate faster than they can reproduce, leading to a decline in their populations. To

address this problem, areas around Dimakya Island were declared as no-take zones, protecting them from any fishing, mining, drilling, or other extractive activities.

“Payaw” also known as a fish aggregating device (FAD) is installed in different areas. This is to attract fishes and encourage them to settle in reefs which will then lead to the enhancement of fish population. The installation of FADs also serves to provide habitat for juveniles and fingerlings.

Destruction of coral reefs

Club Paradise Palawan with its ECOCONSERVE program, continues to undertake marine ecological assessment to determine the various species present. Knowing the animals around the island will provide base knowledge as well as the proper means to conserve the rich biodiversity in the island.

Coral reef inspections have been done around Dimakya Island, as well as identification of genus and species which is significant in knowing the marine organisms commonly thriving and are abundant in the reef areas of Dimakya Island.

The marine ecosystem assessment was executed by the Environment, Health, Safety & Sustainability Manager of Club Paradise Palawan. It is a scientific method of determining areas that need further intervention through coral farming. Two types of experimental units were deployed within the reef area of Dimakya Island, first is coral bed nursery which utilized old table and bed metal frames as coral fragment grow-out and conditioning frames. Second is a coral tree nursery that utilized old pvc pipes. Fragments and broken branches of corals were collected along the substrate area of Dimakya Island for transplantation to the coral bed and tree nurseries. The collected coral fragments are then acclimatized prior to transferring back to the reef area. This is to ensure that they will be able to cope and adjust with the water quality of the recipient reef.

The reef inspections done around Dimakya Island are to check the presence of crown-of-thorns (COT) starfish. The crown-of-thorns starfish is famous for preying on corals. It feeds on hard corals by inverting their entire stomach, through the mouth, and digesting the thin layer of soft tissue off of a coral’s skeleton, right in the open environment, and sucking down the available nutrients. (source: Oceana.org) Thereby leaving nothing but the limestone skeleton of corals, subsequently affecting habitat of marine life. Last 2020, COTs were thriving in the reef area of Dimakya Island as well as in other neighboring reefs. About 40,000 individual COTs were collected and harvested by Club Paradise Palawan Divers in partnership with Green Fins. These were sun-dried and buried to prevent further infestation of the reef. To prevent future outbreaks that will cause harm to the coral reefs, monitoring and clean-ups are regularly done by Club Paradise Palawan divers.

Water pollution

An additional eight million tonnes of plastic are dumped into the world’s oceans every year, where they are responsible for the deaths of marine life. (source: earth.org) Because most tourism activities take place in coastal regions and beaches, which the Philippines has in abundance, the usage of plastic in the industry can contribute significantly to the ever-growing problem.

The United Nations Environment Programme (UNEP) launched a campaign to phase out single-use plastics (SUP) in the tourism sector last 2020, which was adapted and relaunched last 2021 by the Philippine Center for Environmental Protection and Sustainable Development, Inc. (PCEPSDI) under the Transforming Tourism Value Chains (TVC) Project, and the Philippine Department of Tourism (PDT).

Club Paradise Palawan joined the TVC Project to phase out Single-Use Plastics (SUPs) and have been proactive in protecting and sustaining the environment in their day-to-day operations through ECOCONSERVE, a program dedicated towards Rebuilding, Protecting and Conserving. Three very important tasks to ensure that the island and its surroundings are properly cared for.

Pesticides and harmful chemicals from agriculture end up in coastal waters

Pesticides and harmful chemicals used in agriculture can often find their way into coastal waters through various pathways. When these chemicals are sprayed on crops, some can be carried by wind or runoff into nearby rivers and streams. From there, they can eventually reach coastal areas through natural water flow.

Once in coastal waters, these pesticides and chemicals can have significant negative impacts on marine ecosystems. They can be toxic to aquatic organisms, including fish, shellfish, and other marine life, leading to reduced populations and biodiversity loss.

In order to still grow its own herbs and vegetables without causing harmful effects to the waters surrounding Sitio Iniriran, Decalachao, Coron where Club Paradise Palawan's Taranuman Farm is located, the Green Thumb team attended a Basic Organic Farming Training where they learned how to segregate vegetable trimmings, egg shells, fish heads, innards and bones from the restaurant's kitchen for fermentation to produce fruit juice, plant juice, fish amino acids and calcium phosphate for probiotics fertilizers. They also started to collect dried leaves and rice hulls for compost to use as fertilizer, produce Organic Pesticide from vinegar, sili, hagonoy and other raw materials that are endemic in the area. The team also learned how to cultivate African Night Crawlers to produce vermicast, a byproduct of the breakdown of organic matter which is an excellent and nutrient-rich organic fertilizer and soil conditioner.

Decline of turtle population

Revered for its rich marine life, Club Paradise Palawan serves as a turtle sanctuary from December to February. Dimakya Island, being one of the many marine turtle nesting sites as identified by the DENR-Biodiversity Management Bureau, is an established turtle nesting location.

During the nesting season, endangered sea turtles visit the island's shores and lay eggs at night. Club Paradise Palawan's Sea Guardians cover up the burrows gently and provide fencing of the nest after the mother sea turtle lays its eggs. The enclosure will provide added protection and will prevent monitor lizards as well as other predators of newly laid turtle eggs from feeding up on them.

Club Paradise Palawan recognized the need to protect these amazing species thus since pre-pandemic years, the Sea Guardians have made protecting and conserving turtle nests among the main agenda. The resort's house reef also serves as home for several sea turtles where they can feed on seagrass.

Key success factors

Collaboration with the government and non-government organization that promotes the preservation and conservation of the environment:

By working together with the government to establish a no-take zone around Club Paradise Palawan, stakeholders can contribute to the protection of a biodiverse marine region while promoting

sustainable tourism and responsible environmental practices. Fishing and other extractive activities have been prohibited, allowing marine species to thrive without human interference.

Working together with Philippine Center For Environmental Protection and Sustainable Development, Inc. on its Campaign to Phase Out Single-Use Plastics (SUPs) enabled the dissemination of information about eco-friendly and reusable alternatives to SUPs which then encouraged the adoption of more sustainable practices, leading to a decrease in plastic usage. Likewise, the campaign raised awareness about the detrimental impact of SUPs on marine life, ecosystems, and natural habitats, thus contributing to the preservation of the environment.

Research and information gathering

Research and information gathering played a crucial role in Club Paradise Palawan's marine conservation efforts.

- **Baseline Knowledge:** Conducting marine ecological assessments and identifying species present in the area provided a baseline understanding of the current biodiversity. This serves as a reference point for future assessments and will help track changes in the marine ecosystem over time.
- **Informed Conservation:** Knowing the various species around the island enables informed decision-making for conservation efforts. Understanding the distribution and abundance of marine organisms helps in formulating appropriate conservation strategies and prioritizing areas that require protection.
- **Targeted Interventions:** Through research, areas that need specific interventions, like coral farming, can be identified. This allows for targeted and efficient conservation actions to restore and enhance the health of the marine environment.

Monitoring and Evaluation

Regular monitoring of the marine ecosystem and species populations provides valuable data on the success of conservation efforts. It helps assess the impact of interventions and informs adaptive management strategies if needed. Through monitoring, harmful outbreaks can be prevented: reef inspections to monitor the presence of crown-of-thorns starfish (COT) are essential for early detection and prevention of harmful outbreaks. Timely actions can mitigate the damage caused by COT infestations on corals and other marine life.

EcoConserve Teams: Sea Guardians and Green Thumb

Sea Guardians play a vital role in Club Paradise Palawan's efforts to protect and conserve sea turtles and their nesting sites. Their efforts in covering up the burrows, providing nesting enclosures, and preventing predation help increase the chances of successful hatchings and the survival of baby turtles. They do not only protect turtle nests but also raise awareness among guests about the importance of sea turtle conservation. Through educational programs and engagement with guests, they are able to promote a sense of responsibility and understanding of the need to protect these endangered species.

By embracing organic farming techniques, the Green Thumb team avoids the use of harmful pesticides and chemicals that can find their way into coastal waters and negatively impact marine ecosystems. This helps protect the delicate balance of marine life and contributes to the overall health of the surrounding environment. Likewise, the team's practices contribute to the promotion of sustainable agriculture through producing their own organic fertilizers and pesticides, they are able

to reduce the dependence on external inputs and minimize the ecological footprint associated with conventional farming.

Sustaining Efforts

To reduce the resort's consumption of single-use plastics, Club Paradise Palawan uses EcoPure Water instead of bottled mineral water, cloth laundry bags instead of plastic, bath amenities are in easy to use refillable pumps, and plastic straws were replaced with metal straws. Since using EcoPure Water, the resort has eliminated these single-use PET bottles through purifying its own drinking water and sterilizing glass bottles.

Club Paradise Palawan also conducts regular beach clean-ups to address water pollution. Removal of plastic debris, litter, and other pollutants from the shoreline and coastal areas are done. By preventing these materials from entering the water, the resort reduces the risk of harm to marine life and the marine ecosystem.

Support from the Stakeholders

Stakeholders provide essential resources such as funding, manpower, and expertise, which are necessary for implementing and sustaining the resort's EcoConserve initiatives. The owners were supportive of collaborations with NGOs, management's decision to hire a key person in charge of the resort's Environment, Health, Safety & Sustainability, sustainable farming, spending on monitoring and evaluation.

Lessons learned

Implementing initiatives and solutions at Club Paradise Palawan may face several challenges due to the complex nature of the environmental issues and the need for sustained efforts. Some of the challenges include:

Financial constraints: Initiatives often require financial investments for infrastructure, equipment, and training. Securing adequate funding and maintaining financial sustainability is a challenge, especially during economic downturns or uncertain times.

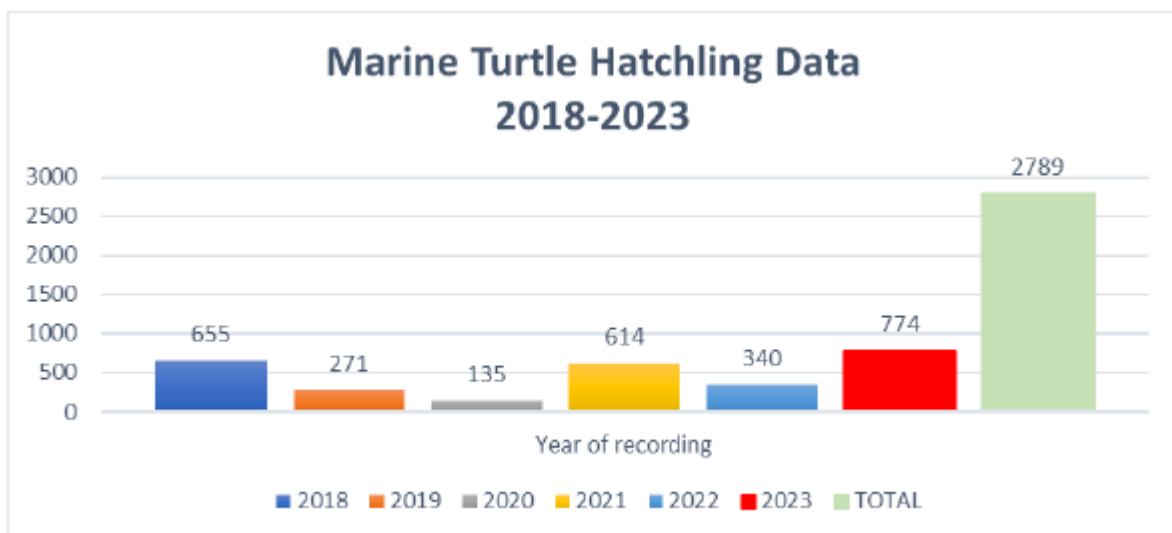
Community cooperation: Engaging and involving local communities in conservation efforts is vital, but it is challenging to gain their full support and participation. Overcoming cultural norms, traditional practices, and ensuring equitable benefits from ecoconserve initiatives requires education and awareness-building efforts.

Education and awareness: Raising awareness and promoting behavior change among tourists, staff, and local communities about ecoconserve initiatives take time and effort. Effective communication and education campaigns have been crucial for long-term success.

Despite these challenges, the dedication and efforts of Club Paradise Palawan, along with the cooperation of stakeholders, local communities, and government support, has led to significant positive outcomes for marine conservation and sustainability. Continuous learning, adaptability, and strong collaboration are essential for addressing the environmental issues faced by the resort and its surroundings.

Achievements and Results

- **Water Pollution and Waste Disposal**
 - 2022 Beach Clean-up Report:
 - Total of 19.5 kgs of trash collected
 - Composition of trash collected: 7.69% rope, 35.90% plastic bottles, 5.12% can, 20.51% plastic sack, 15.38% plastic and foam packaging, 15.38% styro
- Club Paradise Palawan team installed 2 fish aggregating devices. While installing the fronds, juveniles of pelagic fish species were observed hovering along the "payaw" area.
- The no-take zone serves as a safe haven for marine species to recover and replenish their populations. This contributes to the restoration of the natural balance and resilience of the marine ecosystem.
- Plastic straws and stirrers have now been totally eliminated saving the resort a total of Php50,000(USD1K) in 2018.
- Organic harvest from January to June 2023 from Taranuman Farm amounted to a total of Php 65,012.20.
- Club Paradise Palawan’s house reef is home to several fishes, sea turtles and other marine creatures.
- Two common marine turtle species were observed to be frequently nesting in Dimakya Island: the Green sea turtle (*Chelonia mydas*) and the Hawksbill turtle (*Eretmochelys imbricata*). It was observed that variation in total annual hatchling count from 2018 to 2022 was present. Initially, 2018 data gathering was still being implemented while the drastic decrease in hatchling count in 2019 to 2020 was attributed to the low work force at the island resort. This resulted in low counting events by trained members of the Sea Guardians team. Sometime in 2021 to 2022, as the restrictions loosened, the number of trained spotters and turtle counters increased thus efforts in turtle monitoring also improved.



Marine Turtle Hatchling Data (2018-2023)

- Club Paradise Palawan team installed a total of 12 coral bed nurseries and 6 coral tree nurseries around Dimakya Island. These are both innovative and effective methods for coral reef restoration and conservation.

- Operating its own desalination plant showcases Club Paradise Palawan’s commitment to environmental stewardship and sustainable practices, positioning the property as a leader in green and eco-friendly tourism. Before there was a desalination plant, the total expenses brought about acquiring clean water from mainland Coron last 2021 amounted to Php 3,516,260.01. While desalination plants require upfront investment, in the long run, it will lead to cost savings by reducing the need for water transportation and eliminating the reliance on expensive water sources. Likewise, by producing freshwater from seawater, the resort reduces its reliance on traditional freshwater sources, such as groundwater or freshwater rivers, which helps conserve local freshwater ecosystems.

Tips for other destinations

For other destinations facing similar challenges, implementing effective solutions and sustainable practices is crucial for protecting marine ecosystems and biodiversity. Here are some suggestions and recommendations:

Implement no-take zones: Designate certain areas as no-take zones to protect marine habitats and allow fish populations to recover and thrive. Enforce strict regulations to prevent fishing, mining, and other extractive activities within these protected areas.

Control crown-of-thorns outbreaks: Monitor coral reefs for crown-of-thorns starfish outbreaks and implement measures to control their population, such as targeted removal and manual collection. Collaborate with divers and conservation organizations to carry out regular clean-ups.

Combat plastic pollution: Launch campaigns to raise awareness about plastic pollution's impact on marine life and promote plastic reduction and recycling initiatives. Encourage the use of alternatives to single-use plastics and support policies that regulate plastic production and usage.

Encourage organic farming: Promote and support organic farming practices to minimize the use of harmful pesticides and chemicals. Provide training and resources to farmers to transition to organic methods and establish local markets for organic produce.

Invest in waste management: Improve waste management practices, especially in coastal areas, to prevent litter from entering marine environments. Implement recycling programs and encourage responsible waste disposal among locals and tourists.

Sustainable Tourism: Clean beaches and well-maintained coastal areas enhance the overall tourist experience and contribute to the sustainability of tourism in the region. Clean environments attract tourists who value eco-friendly destinations. Destinations can invite them to participate in eco-friendly initiatives such as beach clean-ups and tree planting activities.

By implementing these recommendations, other destinations can work towards safeguarding our oceans and preserving the invaluable life they support.



Recognitions and Additional references

2020

Club Paradise Palawan made it to the Top 100 Green Destination List as the first Private Entity globally in 2020. Also, because of the success story of the Taranuman farm, the resort placed 3rd in the 2020 Sustainable Awards under the Asia-Pacific Category and placed 5th for the People's Choice Award also from Green Destination.

2021

Club Paradise Palawan's 'Turning Waste to Wonderful' Good Practice Story made it to Top 100 Destinations Sustainability Stories.

2022

Club Paradise Palawan made it to the Green Destinations Story Awards under the Environment and Climate Category placing second.

