

Handbook on **REBUILDING RURAL TOURISM IN APEC ECONOMIES BY UTILISING GREEN RECOVERY STRATEGIES**

APEC TOURISM WORKING GROUP (TWG)

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Asia-Pacific Economic Cooperation

Handbook on Rebuilding Rural Tourism in APEC Economies by Utilising Green Recovery Strategies

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PREFACE

The COVID-19 pandemic led to a devastating loss of income and employment for rural economies that had become dependent on tourism. The closure of international borders and the enforcement of movement controls resulted in mass cancellations of trips by both domestic and international tourists.

The aftermath of the pandemic and the impact on the global economy led to the deployment of extraordinary policy measures to limit the spread of the virus and protect people's livelihoods. One area that policymakers are focusing on is how recovery can be green, sustainable and contributes to climate change mitigation and resilience building, especially among rural communities that are vulnerable to such crises.

The Handbook on Rebuilding Rural Tourism in APEC Economies by Utilising Green Recovery Strategies represents the main output of a study commissioned and funded by APEC to investigate how green recovery can be translated into action at the rural community level. An in-depth case study was carried out on one rural community in Malaysia that had successfully sustained through the pandemic due to the diversification of their economic activities, specifically in the area of forest landscape restoration.

A series of desktop case studies of rural communities in several APEC member economies namely China and Chile were conducted to further refine and support the critical success factors and strategies for developing green recovery through regenerative tourism in rural economies who are or were dependent on tourism.

As part of the study, a virtual seminar was held on 13 June 2024 using the online video conferencing platform, Zoom. This was followed by a community training workshop organised from 19 to 23 August 2024 at KOPEL, Kinabatangan, Sabah to disseminate knowledge and best practice on utilising green recovery strategies in rural economies, as well as to get feedback from stakeholders on how to improve the handbook.

This handbook is intended for tourism planners, conservationists, rural development officials, NGOs as well as community leaders who are directly or indirectly involved in rural or community-based tourism. It is hoped that the strategies and actions recommended in this handbook will be of value to these stakeholders.

ABOUT THIS HANDBOOK

The purpose of this handbook is to provide a resource for rural tourism economies looking to employ sustainable economic development and diversifying their economies towards the end goal of building resilience and inclusiveness and be equipped to weather future uncertainties.

The main contents of this handbook are an in-depth case study of *Koperasi Pelancongan Mukim Batu Puteh* (KOPEL), a rural tourism community that was awarded as one of 44 World's Best Tourism Villages in 2021 by the World Tourism Organisation's (UNWTO) in the first year of its initiative; and guidelines and best practice for implementing Forest Landscape Restoration as a main component of green recovery strategies in rural tourism communities to rebuild capacity and economic resilience.

The target audience of this handbook are tourism planners, conservationists, rural development officials, NGOs and community leaders who are interested in developing or are currently developing rural tourism as a catalyst for rural economic development and are looking to incorporate green recovery into their post-pandemic recovery strategies.

The rural tourism community of KOPEL in Sabah, Malaysia was selected for an in-depth case study due to its success in implementing green recovery strategies and actions through its reforestation programme in the Lower Kinabatangan. Data collection was conducted through physical site visits, interviews with community leaders and discussions with key resources persons involved in and supporting the community. Data and findings from a longitudinal study conducted by the researchers on KOPEL from 2007 to 2024 were also used in the analysis and synthesis.

Additionally, desktop case studies were conducted on three rural tourism communities in cosponsoring APEC member economies, which provided additional examples and data for analysis to determine the critical success factors to successfully implement green recovery strategies in rebuilding rural tourism communities.

1. INTRODUCTION

The COVID-19 pandemic led to an almost total lockdown of international borders and movement controls beginning in March 2020. The lockdowns resulted in mass cancellations of tourism services, which caused devastating economic losses to the industry. These losses resulted in the closure of hotels, tour operators and travel agencies, leading to a staggering loss of 62 million jobs in 2020. The Travel and Tourism sector's contribution to global GDP also decreased from 10.3 percent in 2019 to only 5.3 percent in 2020. Table 1 below lists the economic impact of the COVID-19 pandemic on tourism.

ASPECT	DESCRIPTION
Tourist Arrivals	 In comparison to 2019, the coronavirus pandemic reduced international visitor arrivals by 72% in 2020 and 71% in 2021. This amounts to a loss of 2.1 billion international arrivals over the course of the two years.
Export revenues from international tourism	• A combined loss of USD2.1 trillion was experienced over the course of these two years as export revenues from foreign travel tumbled by 63% in 2020 and 61% in 2021 (real terms).
International tourism receipts	• International tourism receipts grew 4% in 2021 over 2020 in real terms (local currencies, constant prices) but remained 62% below 2019. This percentage is slightly better than that of international arrivals (-71% versus 2019), due to a significant rise in spending per international trip during the pandemic.
Tourism jobs	 In 2020, 62 million jobs were lost, representing a drop of 18.6%, leaving just 271 million employed across the sector globally, compared to 333 million in 2019. 18.2 million jobs were recovered in 2021, representing an increase of 6.7% year-on-year.
Tourism Direct GDP	 In 2019, the Travel & Tourism sector contributed 10.3% to global GDP; a share which decreased to 5.3% in 2020 due to ongoing restrictions to mobility. 2021 saw the share increasing to 6.1%.

Table 1 Economic impact of COVID-19 on tourism

Source: UNWTO (2022) & WTTC (2022)

Rural communities that have gradually become dependent on tourism over the years were also severely impacted by the lockdowns. The communities' revenue from tourism dropped to zero during the height of the lockdowns and movement controls, resulting in the loss of a significant source of income among local guides, homestay providers and catering businesses. The resurgence of outbreaks during subsequent periods that required further lockdowns also caused uncertainties among tourists who were unable to plan or commit to long-distance travel plans, which certain rural communities depended on before the pandemic.

This handbook is the result of a study that aims to offer solutions in revitalising the rural economic base in a post-pandemic landscape using green recovery as the primary driver. The handbook's overall goal is to provide a resource that stakeholders can utilise to build the capacity and resilience of tourism-based rural communities in APEC economies by identifying critical success factors and recommending strategies and best practices to implement green recovery. Green recovery is the term for environmental, regulatory and fiscal reforms to recover prosperity after the pandemic in a manner that contributes to global climate mitigation and sustainable development goals.

To meet the overall goal above, the objectives of this handbook are:

- 1. To present an in-depth case study of a rural community in Malaysia that has successfully employed green recovery initiatives to compensate for the loss of income from tourism due to the COVID-19 pandemic.
- 2. To build the capacity and resilience of rural economies in APEC economies that have been impacted by the COVID-19 pandemic, by recommending strategies and best practices to implement green recovery.
- 3. To provide a platform for the sharing of knowledge and experience with other rural tourism communities in APEC member economies on Forest Landscape Restoration (FLR) in synergy with community-based tourism (CBT).

This project was conducted using an in-depth case study of a successful rural tourism community in Malaysia and how it has been able to cushion the impact of COVID-19 by leveraging on new opportunities created by the green recovery agenda. The case study involved consultations with local community leaders, related government agencies, tourism stakeholders and NGOs to identify critical success factors and propose business models specifically focusing on forest landscape restoration (FLR) as a primary component of green recovery, which could be replicated in the rural areas of APEC economies. The main output of this study is a handbook containing strategies and best practices for rural economies looking to implement green recovery.

1.1 Green Recovery Framework and Definitions

Green recovery is the term for environmental, regulatory and fiscal reforms to recover prosperity after the COVID-19 pandemic. Typically, green recovery relates to the fiscal policies employed to help economies recover due to the impact of the pandemic. In the context of rural tourism, green recovery can be instrumental in enabling rural economies to employ sustainable economic development and diversifying their economies towards the end goal of building resilience and inclusiveness, while contributing to the battle against climate change and helping to meet global goals.

The **Asian Development Bank** (ADB) in 2021 defined green recovery as an economic response to the pandemic that is based on green principles that aims to reduce the risk of future pandemics; mitigate and adapt to the impacts of climate change; create new jobs and increase competitiveness; and meet the UN Sustainable Development Goals.

The **World Bank** (2022) defined green recovery as a holistic and inclusive response to the COVID-19 crisis that mainstreams climate change considerations into short-term economic recovery and promotes climate-neutral and climate-resilient economic transformation that is aligned with the goals of the Paris Agreement and the 2030 Agenda for Sustainable Development.

The **Organisation for Economic Co-operation and Development** (OECD) defines green recovery as the name for environmental, regulatory and fiscal reforms to build prosperity after the pandemic. These typically pertain to fiscal measures that intend to recover economic growth while positively benefitting the environment, and include measures for renewable energy, efficient energy use, nature-based solutions, sustainable transport, green innovation and green jobs.

1.2 Translating Green Recovery into Climate-Positive Actions

The United Nations (2021) outlined the following six climate-positive actions to help rebuild economies from the COVID-19 pandemic (Figure 1).

1

Invest in green jobs: Invest in sustainable jobs and businesses through a clean and just transition.

4

Climate in all decisions:

Take climate risks and opportunities into account in all financial and policy decisions. Climate action as the core focus for both government and corporations.

2

End fossil-fuel subsidies: Carbon must have a price to deliver a market-driven shift to a decarbonized economy.

5 Work together:

International cooperation and multilateralism are essential to recovery from the economic crisis ushered by the COVID-19 pandemic.

3 No bailout for

polluting industries:

refrain from bailing out polluting industries unless they commit to the Paris Agreement, implement specific actions to improve worker conditions and put companies towards becoming low-carbon in key heavy-emitting sectors.

6

Leave no one behind: Transitioning to a carbon neutral economy must be fair and inclusive and ensure that more women are in decision-making positions.

Figure 1 UN Climate-positive actions to help rebuild economies from the COVID-19 pandemic

While the actions above were originally outlined as high-level policy actions, this handbook aims to take the key principles of green recovery and translate them into local action that rural tourism communities can actively participate in. In this context however, local government, NGO and/or private sector intervention may be required to provide "handholding" to rural tourism communities looking to implement green recovery, depending on their levels of readiness and willingness. Capacity building and the transfer of skills and technology also play important roles in developing resilient and sustainable rural tourism communities.

1.3 Why Green Recovery?

The COVID-19 pandemic has illustrated the strong link between the environment and public health. Fast-growing cities and accelerating deforestation and forest degradation contributes to the risk of future pandemics due to animal microbes spilling over to humans due to contact with wildlife and livestock (ADB, 2021). Green recovery contributes to building up the resilience of communities and economies against future shocks, especially those of the "fast variable" kind.

Green recovery can also be used as a springboard to accelerate green transformation (The Lancet, 2021). The following are some of the key drivers pushing policy makers around the world to leverage on green recovery in the post-pandemic era (Figure 2).



Figure 2 Key drivers pushing policy makers to leverage on green recovery in the postpandemic era

1.4 APEC Frameworks for Green Recovery

Several existing frameworks under APEC support the need for green recovery. These include:

A. APEC PUTRAJAYA VISION 2040

The APEC Putrajaya Vision 2040 was declared in November 2020, in the midst of the global pandemic, and aims to establish an "open, dynamic and peaceful Asia-Pacific community by 2040, for the prosperity of all our people and future generations". Three economic drivers were identified that can contribute towards achieving this vision, which are Trade and Investment, Innovation and Digitalisation, and Strong, Balanced, Secure, Sustainable and Inclusive Growth. These drivers are in-line with the core principles of green recovery, promoting sustainable growth and building resilience to shocks, crises, pandemics and other emergencies.

B. APEC BIO-CIRCULAR-GREEN (BCG) ECONOMY MODEL

The goal of the BCG Economy framework is to promote balanced and sustainable economic growth, shifting economies from prioritizing economic considerations over the social and environmental to a sustainable model where resources are regenerated, and their use is optimized alongside economic growth. The BCG Economy framework integrates three policy response models, which are the Bio-Economy, the Circular Economy and the Green Economy. These models are in agreement with the concept of green recovery, such as the use of renewable resources, regenerative production-consumption system, and the employment of ecosystem processes to benefit people in an equitable and inclusive manner.

C. APEC MINISTERIAL STATEMENT ON "TOURISM OF THE FUTURE: REGENERATIVE TOURISM"

The statement on Tourism of the Future: Regenerative Tourism was made in August 2022, and proclaimed the strong support of the APEC Tourism Ministers and senior representatives for regenerative tourism as a way to expedite sustained economic recovery in the region. Among the key points of the statement were the commitment towards convening inclusive dialogues among sustainability champions; reflecting on the pathways and progress towards rebuilding a stronger and more resilient tourism sector; achieving gender equality and women's empowerment; conserving the unique biodiversity of each place; and respecting the rich cultural diversity and knowledge of local communities and empowering them to seize economic opportunities that tourism provides.

1.5 Regenerative Tourism

The COVID-19 pandemic provides a significant opportunity for the world to conduct response and recovery activities that address some of the structural weaknesses of economies and societies, thus help build back better. It has highlighted the vulnerabilities of tourism sector, providing an opportunity to rethink tourism. At the same time, the United Nations declared that this crisis was "an unprecedented opportunity to transform the relationship of tourism with nature, climate, and the economy" (United Nations, 2020). Out of this crisis, regenerative tourism and the notion of "building back better" have emerged as new forms of travel. Regeneration involves first rebuilding and then regenerating the capacity to continue to live in a new relationship (Glusac, 2021). This regenerative approach views tourism and travel as a transformative force that can help restore both human and natural ecosystems (Regenerative Travel, 2020). Heslinga (2022) asserts that regenerative tourism is a sustainable form of travel and exploration. Its main objective is for travellers to leave their vacation spot in a better state than when they arrived, which is known as having a positive impact. Sustainable regeneration is a concept that goes beyond "not harming" the environment and aims to actively revitalise and regenerate it, resulting in a positive cycle of effects on local communities and economies (Heslinga, 2022).

In order to achieve such an ambitious goal, the economic system and societal paradigms must change from focusing on "sustainable" volume growth to pursuing a more qualitative development that promotes human health and wellbeing through the health of ecosystems (Laurent, 2021). All stakeholders involved in the tourism value chain, including visitors, businesses, employees, and communities, share responsibility for protecting local assets and fostering the growth of the destination as a whole.

Regenerative tourism aims to restore the harm that our system has already done to the natural world, and by using nature's principles, to create the conditions of life to flourish. It views wholes and not parts and is a very different way of looking at the world. A regenerative approach to tourism starts at home within ourselves, then our workplaces and our communities, and depends on caring hosts willing to ensure their destination is healthy and full of life

Anna Pollock, 2019

1.6 Principles of Regenerative Tourism

There are five (5) principles of regenerative tourism (Figure 3) that draw upon nature's wisdom as shown below. Table 2 contains detailed explanations of each principle.

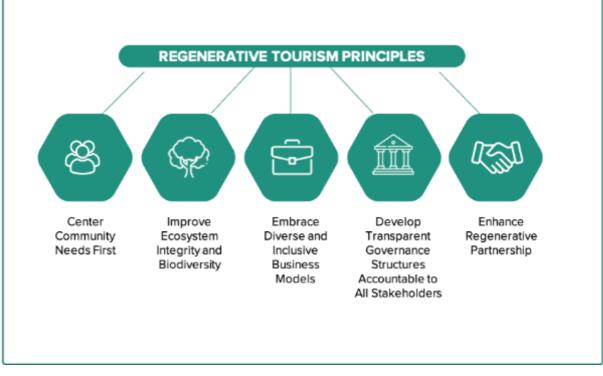


Figure 3 Five principles of regenerative tourism

Source: Adapted from King et. al (2022)

Table 2 Principles of regenerative tourism

PRINCIPLES	DESCRIPTION
PRINCIPLE 1 Centre Community Needs First	 The ability to create a "collective path forward," which establishes a relationship between a travel company and local communities that is based on a shared understanding of the intrinsic value of nature and a duty to protect it for the greater good of both parties' interests. Creating a sense of place through community engagement is frequently a large part of this first principle, because it creates a shared understanding of why preserving the landscape and its inhabitants is important.
PRINCIPLE 2	 Centred around improving ecosystem integrity and biodiversity.
Ecosystem Integrity and Biodiversity	 Tourism businesses can use their financial resources to preserve and rehabilitate threatened ecosystems, ensuring that the landscapes they profit from will still be stunning when the next generation takes over their operations.
	 True regenerative tourism businesses should be aware of this and should make a concerted effort to support carbon neutrality and biodiversity conservation initiatives in the communities where they operate.
PRINCIPLE 3 Embrace Diverse	 The success of tourism businesses in the long run depends on their understanding of diversity.
and Inclusive Business Models	 Businesses that grow with a balanced emphasis on profit, equity, conservation, and social responsibility are shielded from possible risks.
	 These "pro-diversity business models" offer a safety net when unforeseen challenges, like the COVID-19 pandemic, which had a significant negative impact on the industry, arise, much like a diverse ecosystem does.
	 Additionally, employees become more engaged and remain with a company longer when they work in diverse work environments that support social equity and cultural preservation.
	 It is critical for businesses to think about accommodating different kinds of travellers. The more diverse and resilient a company becomes, the larger its target market must be.

PRINCIPLE 4 Develop Transparent	 This principle ensures that when tourism businesses make decisions, local stakeholders receive the same consideration as wealthy stakeholders.
Governance Structures Accountable to All Stakeholders	 In order to establish a long-term network of support, businesses should make sure they develop relationships with the surrounding communities. They must aim to comprehend the entire area in their destination, not just the tourism sector, if they are to accomplish this successfully.
	 Communities should have access to the natural and cultural resources that they want to preserve.
	• The best way to maintain stakeholder motivation to continue developing a regenerative tourism model is by creating a sense of place and understanding through experience.
PRINCIPLE 5 Enhance	 Highlights the importance of collaboration in regenerative tourism.
Regenerative Partnership	 To promote social and ecological regeneration, tourism businesses ought to act as a conduit between localities and the government.
	 Partnerships with NGOs and governmental bodies assist in managing and evaluating the success of projects.
	 Without the involvement of the government, it might be challenging to fully comprehend how regenerative tourism operations affect both natural and human communities.
	• For these partnerships to succeed, transparency is essential.
	(Source: Adapted from King C 2022)

(Source: Adapted from King, C., 2022)

1.7 Green Recovery and Regenerative Tourism

Over the past few years, the world has become increasingly focused on finding ways to promote economic recovery while also prioritizing environmental sustainability. Two concepts that have gained considerable attention in this regard are "green recovery" and "regenerative tourism." Green recovery is a strategic approach that emphasizes investing in sustainable, low-carbon infrastructure and promoting a shift towards a more sustainable economy (OECD, 2020; United Nations Environment Programme, 2021; European Commission, 2020). Regenerative tourism, on the other hand, is a tourism model that places a strong emphasis on preserving and improving natural and cultural resources while also creating social and economic advantages (Hussain, 2021: Dredge, 2022). Both of these concepts represent promising paths towards a more sustainable future, and they are likely to continue to gain attention and support in the years to come.

Regenerative tourism is inherently intertwined with green recovery, as it endeavours to have a positive impact on the environment, economy, and society. The COVID-19 pandemic has unmasked the susceptibility of economies and has underscored the importance of establishing robust and adaptable systems (Aulie et al., 2022). As communities recuperate from the pandemic's aftermath, there is a golden opportunity to prioritize investments in sustainable infrastructure, clean energy, and eco-friendly technologies (Aulie et al., 2022; Dafnomilis et al., 2022). Such investments would not only invigorate economic growth and create job opportunities but also decrease the carbon footprint while advancing ecological sustainability.

Through the investments in green infrastructure, regenerative tourism can produce tourism offerings that underscore environmental preservation and conservation, as well as generate sustainable economic benefits for the local communities (Hui et al., 2023). By engaging in regenerative tourism, travellers can embrace sustainable tourism practices, such as decreasing waste and carbon emissions, supporting local communities, and promoting conservation efforts (i.e., natural and cultural resources) (Heslinga, 2022; UHI, 2023). Such practices align with the goals of green recovery, which aims to establish a more sustainable and resilient economy while creating long-lasting social benefits for host communities.

Thus, the relationship between green recovery and regenerative tourism is symbiotic. Green recovery provides the necessary infrastructure and investments to promote sustainable economic growth, while regenerative tourism leverages these investments to create tourism products and experiences that promote environmental conservation and generate sustainable economic benefits for local communities. As societies recover from the COVID-19 pandemic, there is an opportunity to prioritize green recovery and regenerative tourism as key strategies for building a more sustainable and resilient future.

2. CASE STUDY: KOPEL

Chapter 3 presents an in-depth case study of KOPEL, from its establishment as a pilot project to its present-day status as a model of community-based tourism that had successfully weathered the challenges of the COVID-19 pandemic.

2.1 Koperasi Pelancongan Mukim Batu Puteh (KOPEL)

KOPEL is a village-based co-operative operating out of the *mukim* (sub-district) of Batu Puteh in the Kinabatangan District in the state of Sabah, Malaysia. Mukim Batu Puteh is located approximately 358 km from the capital city of Sabah, Kota Kinabalu, which is also the main entryway into the state by air. The nearest towns to Batu Puteh are Sandakan (108 km) and Lahad Datu (69 km), both of which have domestic airports with frequent flights to and from Kota Kinabalu and other destinations in Sabah and Malaysia.

KOPEL is situated along the banks of the Kinabatangan River and in the Lower Kinabatangan Wildlife Sanctuary, one of Malaysia's key biodiversity hotspots. The Kinabatangan flood plains contain more than 250 species of birds, including eight of the ten species of hornbill found in Malaysia. It is also home to over 90 species of mammals, including the iconic orang utan (*Pongo pygmaeus*), pygmy elephants (*Elephas maximus borneensis*) and proboscis monkeys (*Nasalis larvatus*), making it one of the top wildlife tourism destinations in Malaysia (Majail & Webber, 2006).





Pygmy Elephants (top) and Orang Utan (bottom) are among the iconic species of wildlife frequently sighted in the Lower Kinabatangan Wildlife Sanctuary

(Photo credits: KOPEL)

2.2 History of KOPEL

During the heyday of the timber industry in Sabah in the 1980s, the local *Orang Sungai* (River People) living along the banks of the Kinabatangan River were mostly engaged by timber companies. They were well paid, but the logging activities were causing extensive damage to the ecosystems and wildlife habitats along the Kinabatangan floodplains. Under heavy international pressure, the Sabah government ceased large scale and uncontrolled logging activities in the early 1990s and the Lower Kinabatangan was officially declared a wildlife sanctuary in 1996 (Lower Kinabatangan Wildlife Sanctuary or LKWS). However, the downside was the loss of jobs and income especially for those who used to work for the timber companies or as part time poachers. As a stopgap measure to address the deteriorating economic problem, the government introduced cocoa farming but the global collapse in the price of cocoa forced the local community to abandon this initiative (Payne, 1996). As a result, close to 90% of the local community were soon classified as hardcore poor which forced many of the local youth to leave their homes in order to seek jobs in Sandakan, Kota Kinabalu and Peninsular Malaysia.

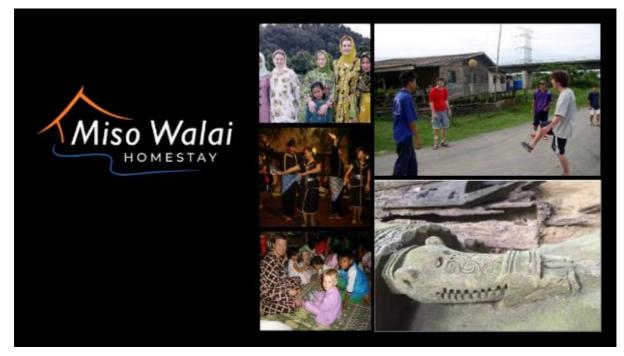
To compensate for the loss of livelihood and income from the gazettement of the LKWS, a CBT project was initiate by the government of Sabah, with the support of WWF Norway in 1997. The CBT project was given the acronym MESCOT (Model for Ecologically Sustainable Community Conservation and Tourism) and was given the task of building the capacity of the local community in Mukim Batu Puteh to operate a homestay programme that was linked to the ecotourism resources in the Lower Kinabatangan. In its formative years, MESCOT was administered by volunteers from the local youths in the village. In the effort to strengthen the homestay organisation, KOPEL was set up in 2003 under the auspices of the Co-operative Commission of Malaysia (SKM).



Figure 4 The early days of MESCOT (Source: KOPEL)

KOPEL offers the following tourism products and activities to their guests:

A. Miso Walai Homestay



(Source: KOPEL)

Miso Walai Homestay was the first tourism product of KOPEL and has been operating since the year 2000. The homestay offers tourists the experience of living with a local family in a village environment. With numerous dialects and beliefs, the local "Orang Sungai" (River People) offer many unique and diverse stories to tell of their past and changing future of living along the Kinabatangan River. Traditional local food is a speciality and homestay activities such as learning to cook, and outdoor farming activities are part of the cultural experience.

There are more than 18 family households participating in Miso Walai Homestay. Each village homestay is unique, and some homes are large and modern by rural village standards. Other homes are rustic and still maintain their traditional wooden stilt designs. All homestays have internal bathrooms and separate rooms for guests.

Miso Walai Homestay specialises in cultural programmes for students, families, groups, and volunteers. There is a code of cultural conduct for tourists, who are briefed by representatives of the co-operative upon arrival. Guests become an extended member of the family and have included volunteers, student groups, special interest travellers, naturalists, bird watchers and wildlife photographers. The homestay is a more social and culturally oriented experience, compared to the jungle camp, with village and farm life central to the experience.

B. Tungog Rainforest Eco Camp



(Source: KOPEL)

Completed in 2009, the Tungog Rainforest Eco Camp (TREC) was designed to self-generate income for KOPEL's forest conservation initiatives and is a low energy, low impact accommodation for adventurous tourists. The camp platforms were designed for serious bird and wildlife photographers, who will have the opportunity to photograph numerous and diverse mammal, bird, amphibian and reptile species in the surrounding floodplain forest. Another key feature of TREC is how it was built. Located in a forest reserve, the camp was fully built by both members of the local community, with the help of volunteers over several years.

C. Mandaa Stay Village



(Source: KOPEL)

Mandaa Stay Village is a simple, spacious, and clean village-based accommodation that was designed to provide dormitory-style accommodation to student groups and volunteers supporting KOPEL's biodiversity conservation programs. Mandaa Stay Village is made up of two large spacious dorm rooms set up with double-decker bunk beds with a capacity of 20 guests per room, and an additional eight separate guest rooms. Each of the eight individual guest rooms have different bed configurations, with some rooms ideal for small families, and others configured to fit a variety of small group needs.

Mandaa Stay Village is a specialist facility and an integral part of KOPEL's Training Hub. It is designed to provide accommodation for KOPEL's conservation volunteers and likewise for the CBEST Training Programmes. Located away from the noise and distractions of city locations, this peaceful location is ideal for experiential and immersive training programs. Mandaa Stay Village complements the two meeting rooms and training halls at the KOPEL Office and the Smiling Boat Riverside Café for meals.

D. Supu Adventure Camp



(Source: KOPEL)

The Supu Adventure Camp is in a remote forest location, around one hour by boat upstream from the village of Batu Puteh. The camp is surrounded by pristine limestone karst rainforest and offers a unique insight into rare limestone habitats. The camp is basic but provides a safe and comfortable platform to experience life in the rainforest, alongside jungle trekking, caving, historical sites, and wildlife cruises on the Kinabatangan River. The camp offers limited accommodation for only 20 visitors at any one time in a traditional-style ranger camp (a stretcher hammock camp).

E. Smiling Boat Riverside Cafe

The Smiling Boat Riverside Cafe is located on the banks of the Kinabatangan River, at the KOPEL central office area. The cafe caters for early sunrise wildlife river cruises and regularly hosts cultural performances in the evening with traditional music performed by local artists to help create a relaxed and happy mood. Group dinners and events can be arranged by the café operators and advanced booking is essential. Among the meals served at the cafe are staple rice dishes accompanied by wholesome freshwater fish, giant river prawns, and various jungle vegetables. These nutritious staples are steamed, stewed, pickled, or wrapped with a variety of local traditional spices to make some of the region's most unique gourmet secrets, seasoned with spices like cinnamon, cloves, nutmeg, and a variety of wild gingers like turmeric growing wild in the neighbouring jungles.

F. Menumpos Cultural Group



(Source: KOPEL)

The Menumpos Cultural Group was established to preserve and promote the traditional music and dance of the local Orang Sungai people. The Group regularly performs at local community events as well as for tourists and visitors using traditional brass, wood and bamboo gongs. The traditional melody and rhythms played by the Monompos Culture Group are unique to the Kinabatangan. In the long-distant past, performing artists have always played an important part of entertainment and take on a special role for creating the right atmosphere for merriment or celebration. Local ceremonies and special events would simply not be the same without the accompanying gong music. The full flare has more than twenty people performing and involves a full set of dancers and backup crew.

G. River Cruise



(Source: KOPEL)

One of the main activities offered by KOPEL is a cruise along the Kinabatangan River at sunrise or sunset. It is a relaxing activity that allows their visitors to unwind and soak up the forest environment. The river cruise provides a way for visitors to view rare wildlife, such as the long-nosed Proboscis monkey, Leaf monkey and Macaques. Along with the primates, there are many opportunities to view birdlife such as hornbills and Kingfishers; as well as Saltwater Crocodiles basking along the riverbanks. The sunrise and sunset wildlife river cruises are a daily reward for KOPEL's conservation volunteers and bring extra meaning to the habitat restoration efforts.

H. Training Hub

KOPEL's Training Hub provides an ideal place equipped with facilities for training programmes outside of the main cities in the east coast of Sabah. The Hub is located beside the KOPEL office and comprises of two training halls and a large outdoor space for activities. Catering is provided by the Smiling Boat Riverside Cafe, and accommodation is available at the Mandaa Stay Village.

KOPEL's Training Hub is frequented by community groups from around the region. A variety of programmes are organised at this location, including safety training programmes, first aid programmes, food safety programmes, sustainability certification programmes, health related programmes, and tourism certification programmes. KOPEL's Training Hub consists of the Balika Room Training Hall (max 60 people), the open KOPEL Reception Centre Hall (max 180 people), the Mandaa Kampung Stay (Accommodation for 60 people), and the Smiling Boat Riverside Cafe (seating 60 people).

2.4 Conservation Activities in KOPEL

In addition to tourism, KOPEL also carries out several conservation activities that are undertaken by community members or tourists (Figure 5).



Figure 5 Conservation programmes in KOPEL

(Source: TPRG, 2023)

A. Tree Planting / Forest Restoration

When MESCOT initially developed the tourism offerings at Miso Walai Homestay in the year 1999, a tree planting activity was included to complement the main experience of staying with the locals and experiencing the rural way of life. This was inspired by the realisation of how highly degraded the last remaining rainforests are in the Lower Kinabatangan. This realisation happened during the forest fires of 1998 following the El Nino drought of 1997-1998.

The extent of work involved in forest restoration was underestimated in the initial year of KOPEL's attempts. While it is an important step to include the overall restoration process, tree planting alone was not the answer to restoring the rainforest. Instead, more than 75 percent of the work involves rebuilding a suitable habitat/environment for infant tree species and keeping all young trees from being smothered in their formative years. Once the new stand of trees forms a closed canopy can maintenance efforts be scaled back significantly.

KOPEL's forest restoration efforts involve a complex process with many variables. There is a need to understand the history of the site and adapt the reforestation process to that specific site. This is due to the diverse habitats and ecosystems that can be found in the Kinabatangan. Despite the challenges, KOPEL sees their work as critical in order to restore and reconnect the fragmented forests remaining along the Lower Kinabatangan and provide enable wildlife to roam across a wider area instead of small pockets of forests. Gradually the tree planting activity germinated into a community forest restoration programme in support of the Kinabatangan Corridor of Life project, which entails the creation of an ecological corridor to re-connect fragmented protected areas with traditional settlements along the Kinabatangan River. Over time the forest restoration programme became the Unique Selling Proposition (USP) of KOPEL – which corresponded with their success in securing funds for community forest restoration programme on the Stampin site in the Pin Supu Forest Reserve.



Figure 6 Restoration of the Kinabatangan landscape as a result of KOPEL's reforestation efforts over the years (Source: KOPEL)

B. Lake Restoration

The oxbow lakes of the Lower Kinabatangan Floodplain make up a rare type of aquatic habitat and are critical breeding areas for many freshwater fish species. The Tungog Lake is a special type of oxbow lake because it is not part of any broader catchment, making it a totally closed aquatic ecosystem that only connects to the Kinabatangan River in exceedingly highwater events. This means the Tungog Lake remains mostly clear of sediment from the main river and is thus very deep and surprisingly clear.

A major threat to the Tungog Lake began with the floods of 2001, when the flood borne water weed *Salvinia molesta* was introduced into the lake. *Salvinia* is an alien invasive species that can double its size rapidly within days and has no natural predators in the local ecosystem. After its introduction, the *Salvinia* rapidly spread across the Tungog Lake, covering it completely in a thick mat of weed by the end of 2003. Salvinia coverage can bring about a decline in aquatic diversity, and the acceleration of infilling. This impacts the wider food web, depleting fish stocks, displacing birds and mammals, and displaces local fishermen to ever shrinking locations, and hence exacerbates overfishing. After realising the disaster unfolding on the Tungog Lake, KOPEL began the gruelling work of removing this devastating weed species in the year 2004.

Many methods were used to restore the Tungog Lake over the years with varying degrees of success. KOPEL supports the restoration efforts using proceeds from ecotourism activities. Eventually, after four years of work with various government agencies, a biological control method using the Salvinia Weevil (*Cyrtobagous salviniae*) was used to control the growth of *Salvinia* weeds in the lake. However, physical labour is still required to clear some the weed from the lake. KOPEL welcomes support from tourists and volunteers who are willing to help get rid of the invasive water weed from the lake.



(Source: KOPEL)

C. Environmental Monitoring and Restoration Sciences

KOPEL carries out monitoring activities to collect data and better understand the impact and effectiveness of their work on the surrounding forest habitat and ecosystems. Environmental monitoring was formally initiated by KOPEL in 2012 with a permanent water quality monitoring and wildlife monitoring programme in the Pin-Supu Forest Reserve (PSFR) and the Kinabatangan River. These programmes were supported with technical expertise from the Rakuno Gakuen University based in Hokkaido, Japan. Eventually, the monitoring work was expanded to include the sampling of forest plots, monitoring of swiftlet populations in the limestone caves, and the monitoring of the biocontrol Salvinia Weevil in the Tungog Lake.

KOPEL's monitoring programmes provide important input into the ongoing management of the PSFR, and in the process fulfil their obligations to state government agencies such as the Sabah Forestry Department, Sabah Wildlife Department and Sabah Agriculture Department. The monitoring programmes have provided input into protected area management and provided insight into the broader landscape.

Another area that KOPEL has started exploring is the restoration sciences, where carbon sequestration data related to their tree planting / forest restoration activities are collected by the local community as a form of citizen science in collaboration with the Danau Girang Field Centre (DGFC) located in the Lower Kinabatangan Wildlife Corridor. The data is then analysed by researchers in DGFC to calculate the amount of carbon sequestrated through KOPEL's reforestation activities.



(Source: KOPEL)

D. Volunteering at KOPEL

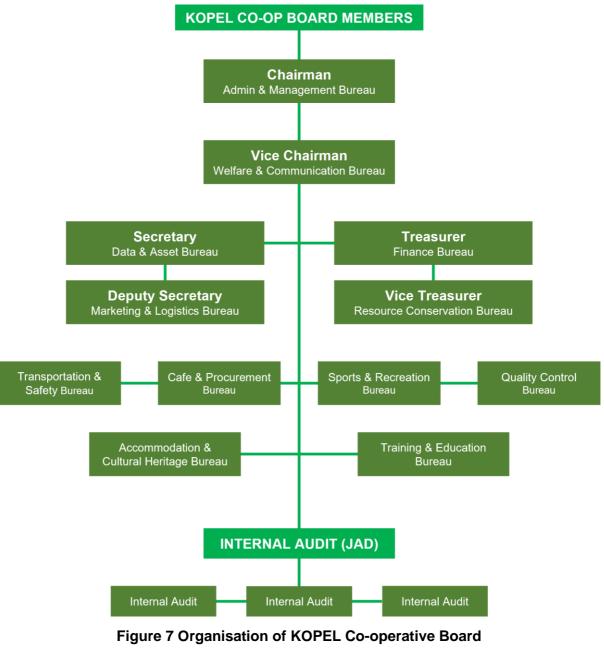
Another conservation-related activity that KOPEL has initiated since its inception is the volunteering programme. Independent volunteers support KOPEL's conservation work, particularly their forest restoration and lake restoration activities. Both these activities are ongoing throughout the year and sometimes volunteers are asked to help with other types of activities or special projects at certain times in the year. One of the major outcomes of their volunteering programme is the development of the TREC which involved many volunteers throughout the construction period.

KOPEL charges a flat rate per person per day for volunteers to cover their lodging, meals and boat transportation to and from the worksites. Volunteers collaborate with local staff and are provided with an information pack on the programme. Volunteers are given opportunities to enjoy being in the rainforest and experiencing the local culture.

2.5 Organisation of KOPEL

KOPEL is registered as a co-operative under the Malaysia Co-operative Societies Commission (SKM). In 2022, KOPEL had 352 registered members. The co-operative is overseen by a 12-member board and managed by a team of 15 staff. KOPEL employed a total of 134 people in 2022.

The KOPEL board is organised into 12 bureaus which are tasked to oversee specific areas of the co-operative (Figure 7). Each board member is responsible for monitoring the activities of the co-operative's management, ensuring accountability and transparency in its operations.



(Source: KOPEL, 2023)

The management team of KOPEL consists of 15 staff members who are employed to carry out the co-operative's day-to-day activities. The team is led by a Chief Executive Officer / General Manager and is divided into various departments (see Figure 8).

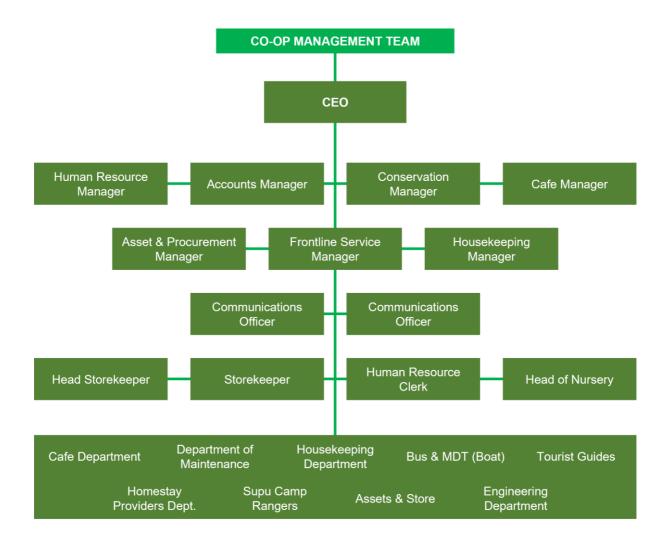


Figure 8 Organisation of KOPEL's Management Team

(Source: KOPEL, 2023)

2.6 Partnerships

KOPEL establishes working partnerships with organisations and individuals from the government, non-governmental organisations (NGOs), private sector and academia to obtain funding and to carry out their activities. The following are the four categories of partnerships that KOPEL has working relationships with:

A. Government Agencies

KOPEL carries out its activities in the nearby Pin-Supu Forest Reserve (PSFR) which is under the jurisdiction of the Sabah Forestry Department (SFD). KOPEL is empowered by SFD as the joint custodian of the PSFR via a Memorandum of Agreement (MOA) that was signed at the International Heart of Borneo Conference in November 2016. The area under the management of KOPEL is divided into three Blocks. Blocks A and B are located to the east and west of the Kinabatangan River in the PSFR, while Block is located approximately 8km to the southwest of KOPEL.

The current management approach within Pin Supu Forest Reserve between KOPEL and SFD has developed into a model for other forest management units both in the state of Sabah and across Malaysia. Each year, about 10 - 20 communities from across the region visit KOPEL for awareness or training programmes on community-based forest management.

KOPEL was first empowered to collect entrance fees on behalf of SFD since December 2009, when a Memorandum of Understanding (MOU) was signed between the two parties. This meant that SFD no longer needed to station staff at the forest reserve to collect entrance fees as the community organisation can do it instead. Over time, trust was built between both sides, which led to the signing of the MOA and the introduction of more programmes and initiatives to strengthen cooperation. These include the Honorary Forest Ranger training programme, forest monitoring programme and forest restoration.

Besides SFD, KOPEL also has working relationships with other government agencies who have jurisdiction in the surrounding area. This includes the Sabah Wildlife Department (SWD), the local authority, Kinabatangan District Council, the Ministry of Tourism, Culture and Environment Sabah (KePKAS) and the Ministry of Tourism Arts and Culture Malaysia (MOTAC).

B. Non-governmental Organisations (NGOs)

The establishment of KOPEL (then MESCOT) was initially funded by a grant from WWF Norway as a pilot project for developing a model for sustainable community-based tourism and conservation. Over the years, KOPEL established its own partnerships with various NGOs at the local and international levels, particularly in the area of ecological conservation and forest restoration. The partnerships with NGOs can be broadly categorised as follows:

a. Forest restoration partnerships

KOPEL works with many local and international NGOs who are involved in forest restoration projects and programmes. These NGOs typically provide funding to carry out reforestation activities in the PSFR, granting KOPEL the resources necessary to maintain their tree nursery and pay workers to undertake seedling collection, tree planting and maintenance activities.

One of the benefits of establishing partnerships with international NGOs is the recognition and reputation that KOPEL gains at the global level. This has opened up more opportunities for KOPEL in obtaining funding and grants in forest restoration.

b. Capacity building partnerships

Another area that these NGOs contribute to KOPEL is in capacity building. Several organisations provide training to KOPEL members in areas such as ecological science where they are taught to collect and analyse environmental data to better understand the challenges and implications of their forest restoration activities. For example, the Regrow Borneo project provides training to KOPEL members to calculate carbon sequestration of their forest restoration projects so that they can identify how much they have contributed to global goals such as the SDGs and provide quantitative data to their sponsors.

On the other hand, KOPEL has also positioned itself as the place to train other communities looking to implement a similar forest landscape restoration model in their area. KOPEL works with NGOs such as Forever Sabah to build the capacity of other community-based ecotourism projects across Sabah.

c. Science-based partnerships

KOPEL has also established partnerships with local and international NGOs to conduct scientific studies in the PSFR and surrounding areas, including the oil palm plantations and Kinabatangan River. These studies involve research institutions such as the Danau Girang Field Centre (DGFC) where KOPEL is engaged as partners to carry out wildlife monitoring activities through citizen science programmes. Indirectly, these partnerships have also provided KOPEL members with the knowledge and skills to undertake their own versions of these programmes.

C. Private sector

KOPEL's partnerships with the tourism industry is focused on marketing and promotion of their ecotourism experiences. KOPEL engages local and international tour operators and travel agencies to help promote and sell their packages. Additionally, KOPEL is selective in establishing partnerships with tour operators and travel agencies, focusing on companies that promote and sell ecotourism and responsible tourism as their main product. This is done to ensure that the carrying capacity of the co-operative's tourism activities is not exceeded, especially considering their limited accommodation and transportation facilities. Having a limit on the number of tourists at any one time also minimises the impact of tourism activities on the PSFR and Kinabatangan River.

Another area of partnership that KOPEL establishes is with private and international schools at the local and international levels. KOPEL targets this market segment for its environmental education activities, as well as to promote environmental awareness and action among the next generation.

The third group in the private sector partnership category are corporations, where KOPEL works with their Corporate Social Responsibility (CSR) departments to obtain sponsorship for

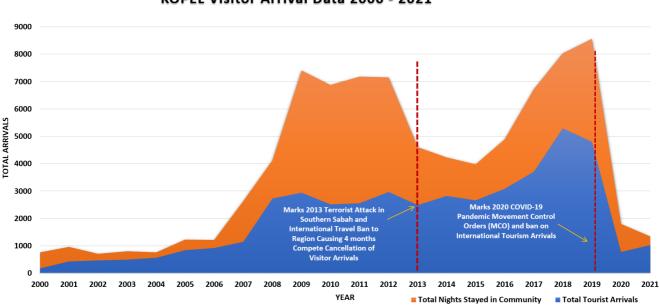
forest restoration and environmental awareness programmes. Partners in this category include various multinational conglomerates, financial institutions, development firms and various other companies who are looking to invest in environmental, social and governance (ESG) practices.

D. Academia

The fourth category of partnerships consist of universities who contribute to KOPEL in the form of capacity building and sharing of knowledge. KOPEL has signed MOUs with several universities to carry out long-term research projects, where students and researchers are sent to the co-operative to conduct scientific studies or to collect and analyse data. Community members will actively participate in these activities to learn from these researchers and students so that they can adopt the techniques and conduct their own citizen science programmes.

2.7 Challenges During the Pandemic

The COVID-19 pandemic led to the Movement Control Order (MCO) enforced in Malaysia which banned all international travel to and from the economy. This resulted in the mass cancellation of bookings at KOPEL and a total loss of income from ecotourism activities. The prolonged lockdown also led to uncertainties in the future, as tour operators and travel agencies cannot sell packages ahead of time. Income from training programmes, student exchange, volunteering and rental of boat services were also halted due to the movement restrictions enforced by the government. Figure 9 below shows the trend of visitor arrival to KOPEL from 2000 – 2021, where visitor arrivals dropped to 2005 levels in 2020.



KOPEL Visitor Arrival Data 2000 - 2021

Figure 9 KOPEL Visitor Arrival Data 2000 - 2021

⁽Source: KOPEL, 2023)

KOPEL's income from tourism-related activities also decreased significantly during the pandemic in 2020 and 2021 (Figure 10). However, KOPEL managed to sustain their income and employment of staff through additional revenue, especially from conservation activities. As a result, although tourist arrivals fell significantly, KOPEL's income did not decrease as much.

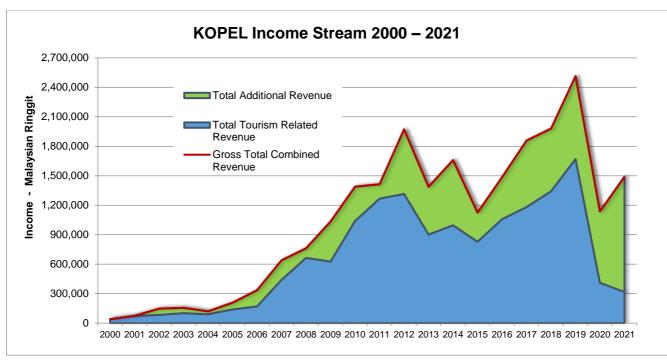


Figure 10 KOPEL Income Stream 2000 - 2021

(Source: KOPEL, 2023)

2.8 Green Recovery Strategies of KOPEL

In response to the loss of income due to the pandemic and associated lockdowns, KOPEL employed three strategies to recover their income in a sustainable manner:

A. Build on existing activities that generate income and continue regardless of the pandemic.

Conservation projects such as KOPEL's forest restoration, lake restoration and environmental monitoring activities were intensified during the pandemic in order to generate employment and income for their members who were previously only involved in the tourism side of the cooperative's business.

For the forest restoration project, KOPEL identified new plots and partnerships to undertake tree planting and forest landscape restoration. One of the key partnerships is with Regrow Borneo, which is a registered charity that aims to recreate living, breathing and complex forests which offer value to communities, wildlife and being stores of carbon. Regrow Borneo collects donations to raise funds that is used to pay forest restoration teams in KOPEL to carry out their work. At the same time, the donors can mitigate their carbon emissions and contribute towards achieving net zero targets and global goals.

B. Seek funding grants for immediate survival during lockdown and cessation of tourism activities.

The second strategy employed by KOPEL to survive during the pandemic is to seek out funding grants from local and international agencies, NGOs and corporate donors to carry out forest restoration and other conservation-based programmes. This strategy required KOPEL to search, prepare and send proposals to various organisations to request for funding or grants to carry out conservation projects. Both local and international funding opportunities were examined. However, KOPEL developed a set of criteria and conducted screening to select only grants that were in line with their own principles of green recovery and sustainable tourism.

C. Diversification

The third green recovery strategy that KOPEL employed during the pandemic was to develop a sustainable farming group. The farming activities carried out by this group are in accordance to sustainable agriculture standards, for example the Malaysian Sustainable Palm Oil (MSPO) Certification. These farming activities add value to KOPEL members' income and strengthens food security for the future through intercropping. The aim of this project is to develop sustainable local food supply to KOPEL and the local community. Sustainable farming is also a potential stand-alone activity that generates a revenue stream to sustain the co-operative that does not depend on tourism.

2.9 Lessons Learnt from KOPEL

KOPEL has been frequently cited as a successful model for CBT and ecotourism, particularly in synergy with environmental conservation. The COVID-19 pandemic has pushed the community to respond and adapt their plans and strategies in order to survive the total loss of tourism income, which they depended on to finance their conservation efforts. Instead, KOPEL has looked at other sources of income to sustain their conservation activities and have managed to sustain their community members' income and employment throughout the lockdowns. The following are some of the key lessons that can be extracted from this case study of KOPEL:

- a. Adaptability is critical to successful green recovery. KOPEL not only adapted to the challenges of the pandemic, but also continuously adapts their forest landscape restoration approach according to science and experience.
- b. Rural communities need to take the initiative and apply for international funding to carry out green recovery activities. There are many agencies, donors, organisations and institutions that have funds available and are willing to finance such activities.
- c. A strong community organisation will ensure the successful implementation of green recovery initiatives through proper management, organisation, documentation and leadership.
- d. Partnerships with scientific institutions (e.g., research centres and universities) is critical to ensure that the right method is used to undertake forest landscape restoration. Communities should also adopt a learning mindset when working with these institutions to deepen their own understanding and enhance their capacity.

- e. Economic diversification is important to build resilience and protect against future pandemics and other crises.
- f. Leverage on the synergy between ecotourism and conservation to add value to green recovery initiatives through complementary income generating activities such as accommodation, food and beverage and guided tours.

2.10 Critical Success Factors of KOPEL for Embracing Green Recovery

Chapter 1 presented the definitions of green recovery and how it could provide the foundation for regenerative tourism, while Chapter 2 presented an in-depth case study of KOPEL on green recovery strategies and actions that it employed at the destination level. Essentially best practices in green recovery and the principles of regenerative tourism are well documented in the literature but few case studies and success stories at the destination level have emerged given that the application of the related concepts into practice is still in its infancy. There is also the danger of equating regenerative tourism as being synonymous with sustainable tourism - and that they are interchangeable in a post COVID-19 tourism landscape. Although regenerative tourism and sustainable tourism are indeed related, the former has its roots specifically in the concept of green recovery.

This chapter will present the analysis of how green recovery has been successfully applied at the destination level, which has also provided the impetus for the emergence of green shoots in regenerative tourism. KOPEL, one of the winners of UNWTO's Best Tourism Village Initiative in 2021, was selected as the main case study for unpacking the critical success factors for embracing green recovery and regenerative tourism.

The following critical success factors for embracing green recovery are mainly derived from the experience of KOPEL. KOPEL is a unique CBT which had incorporated community forest restoration as its USP hence building their capacity and community resilience well before the pandemic. The community did not escape the brunt of COVID-19, but it was able to cushion its financial impact because of its relatively strong financial and social capital. These critical success factors will be further refined by considering the interviews with the relevant government agencies, donors and tourism industry players in the Kinabatangan. For instance, there is a need to identify the appropriate policy framework for green recovery to flourish besides identifying the associated impediments (if any).

The critical success factors at the destination will explore to what extent global, economy-wide and regional policies and initiatives related to green recovery have been successfully cascaded down to the grass root level. Although there no one size that fits all in terms of recovering from the pandemic, the following critical success factors for incorporating green recovery could provide the foundation for the development of regenerative tourism at the destination level - especially rural economies.

No.	Critical Success Factor	Supporting Actions	
F1	Agility of Community	Supporting Action F1-1:	
	Leadership	Swift decision made by the KOPEL management to intensify conservation efforts towards compensating for the loss of income from tourism.	
		Supporting Action F1-2:	
		Prepare and submit proposals to domestic and international donor agencies to expand community environmental restoration projects.	
F2	Head Start in Community	Supporting Action F2-1:	
	Forest Restoration	Appoint local youths formerly employed by logging companies to lead the initial community forest restoration projects.	
		Supporting Action F2-2:	
		Employ local housewives to implement the community forest restoration projects commissioned by government agencies and donors.	
		Supporting Action F2-3:	
		Use traditional ecological knowledge in selecting appropriate tree species and replanting methods to ensure a high degree of survival and plant diversity.	
F3	Partnerships with	Supporting Action F3-1:	
	Voluntourism Companies	Partner with international volunteer tourism companies (e.g., Raleigh International) in the development of Tungog Rainforest Eco Camp (TREC) in the Pin-Supu Forest Reserve.	
F4	Build Trust and Reputation	Supporting Action F4-1:	
		Nurture strong environmental stewardship among KOPEL members by setting and maintaining a high standard in community forest restoration.	
F5	Nurture Citizen Science	Supporting Action F5-1:	
		Nurture interest among the youth leaders to embrace citizen science as an essential component	

Table 3 List of KOPEL's Critical Success Factors in Embracing Green Recovery

		of local conservation efforts and environmental stewardship.
		Supporting Action F5-2:
		Investing in future KOPEL leaders through formal education in resource and environmental management.
F6	Intrinsic Support for	Supporting Action F6-1:
	Environmental Stewardship	Shift from paid workers to a temporary deed system (<i>pajak</i>) in allocating forest restoration funds.
		Supporting Action F6-2:
		KOPEL's new role as a 'gatekeeper' to the overall forest restoration programme in the Kinabatangan Corridor of Life.
F7	Embrace Green Recovery	Supporting Action F7-1:
	Initiatives	Apply Internet of Things (IOT) technology for adopting replanted trees.
		Supporting Action F7-2:
		Attract 'buyers' using EcoMatcher to visit KOPEL

(Source: TPRG, 2023)

Critical Success Factor F1: Agility of Community Leadership

In terms of resilience theory COVID-19 could be described as a 'fast variable' that causes an unexpected, sudden and acute impact. The negative impact of COVID-19 on the Malaysian tourism industry was abrupt and destructive to the extent that around 30% of tourism businesses were wiped out within two months of the onset of the pandemic and lockdown. KOPEL's customer base has been predominantly international tourists (90%), especially from Europe, and the closure of international borders had abruptly stopped tourist arrivals to the CBT site. The agility of KOPEL's leadership and swiftness of its response were instrumental in cushioning the financial impact of the pandemic – by broadening non-tourism income streams. The nimbleness of the community leadership is demonstrated in the following actions:

Supporting Action F1-1:

Swift decision made by the KOPEL management to intensify conservation efforts towards compensating for the loss of income from tourism.





(Source: KOPEL, 2023)

Supporting Action F1-2:

Prepare and submit proposals to international and domestic donor agencies to expand community restoration projects.

KOPEL leveraged on its contacts within a wide network of conservation-related agencies and donors to apply for additional contracts to carry out community-based forest restoration. Among others, its agility in diverting all its efforts to seek green recovery funding was rewarded when KOPEL succeeded in securing a lake restoration grant from Yayasan Hasanah, a foundation under Khazanah Nasional Berhad, the sovereign wealth fund of Malaysia.

Partner Organisation	Conservation Grants or Programmes	Area Ha.
 Yayasan Hasanah 2021-2022 Tungong Lake restoration activities 	COVID-19 Kinabatangan Conservation Project Relief Fund 2.0	8.5 ha.
Cardiff University's Sustainable Places Research Institute and Danau Girang Field Centre (DGFC) 2019 • Tropical reforestation and carbon mitigation project	Cardiff University Carbon Offset Fund – "Regrow Borneo"	12 ha.
 Sabah Forestry Department Ecotourism activities Forest restoration activities Forest monitoring and research Monitor environmental indicators in supporting of SFM and HCVF Support surveillance & protection and enforcement activities Management of edible birdnest within the Supu Limestone Complex Sabah Wildlife Department Wildlife monitoring activities 	2nd Forest Management Plan of Pin Supu Forest Reserve (PSFR) • 10-years agreement since 2016 (2016 – 2026)	4,620.44 ha.

Box F1-2: Conservation grants secured during the pandemic

(Source: KOPEL, 2023)

Critical Success Factor F2: Head Start in Community Forest Restoration

When MESCOT was launched in 1996, the tourist offerings included a tree planting activity which gradually germinated into a systematic community forest restoration programme, to become the Unique Selling Proposition (USP) of KOPEL. In contrast to the tree planting activity which is offered by most CBT programmes in Malaysia as a 'feel good' farewell ceremony, the systematic restoration programme offered by KOPEL managed to entice guests to stay longer so as to actively participate in the various implementation phases.

However, it was an ironic decision for the MESCOT management to incorporate tree planting as part of the tourist experience given that youths from the community had been collaborating with logging companies to cut down trees before the area was gazetted as part of the Lower Kinabatangan Wildlife Reserve. Despite the lack of initial enthusiasm among the community, increasing demand from volunteer tourists had given the community a head start in terms of developing the capacity to implement a full-fledged forest restoration programme. The planning and implementation of the forest restoration programme involved the following actions:

Supporting Action F2-1:

trees in the

Appoint local youths formerly employed by logging companies to lead the initial community forest restoration projects:



Box F2-1: Building on existing skills for green recovery

(Source: TPRG, 2023)

Supporting Action F2-2:

Employ local housewives to implement the community forest restoration projects commissioned by government agencies and donors

DIVISION	PEOPLE
Board of Directors	12
Admin & Management	13
Tourist Guides	10
Forest Restoration Team	40
Bus Drivers	8
Homestay Families	35
Boat Drivers	8
Cultural Performers	20
Tungog Eco Camp Staff	6
Supu Adventure Camp Staff	4
Food & Beverage	12
Laundry Service	2
Handicraft Shop	2
Landscape Services	2
KOPEL Tree Nursery	4
Lake Restoration Team	2
Cave Restoration Team	4
Total	184

Forest restoration in KOPEL employs the most workers (40) out of the total 184 workers employed under the cooperative. Most of these workers were initially housewives and their daughters who welcomed the additional income of around MYR800/month.

(Source: KOPEL, 2023)



Figure 11 KOPEL tree planting team in 2019 (Source: KOPEL, 2023)



Figure 12 Local woman transporting tree saplings to the reforestation area

(Source: KOPEL, 2023)

Supporting Action F2-3:

Use traditional ecological knowledge in selecting the appropriate tree species and replanting method to ensure a high degree of survival and plant diversity.

Box F2-3: Tree species are selected using traditional ecological knowledge of the local communities living around the Kinabatangan.

Restoring the riparian reserve along the Kinabatangan river, which is an alluvial flood plain that is susceptible to constant flooding, requires knowledge and expertise in selecting the appropriate tree species. Species such as Nauclea spp and Mytrogyna speciosa have high tolerance to flooded and waterlogged environments and are therefore suited for such conditions according to the traditional ecological knowledge of the local community. During the early days of the restoration programme, the local community was given instructions by the Sabah Forestry Department (as partner) on the choice of species and planting method. However the local community later adjusted the planting method through trial and error to incorporate their traditional knowledge and sciencebased approaches. In addition, site preparation and follow up (maintenance) were also identified as important to ensure that the planted trees survive.



(Source: TPRG, 2023)

Critical Success Factor F3: Partnerships with Voluntourism Companies

From the inception of the CBT programme at Miso Walai Homestay in 1996, MESCOT had identified its target market and subsequently curated the tourist experience accordingly. The Kinabatangan, being a biodiversity hotspot, has always attracted Western tourists especially those who were searching for 'top of the mind' ecotourism and wildlife tourism experiences. Leveraging on the tourism image of the Kinabatangan, MESCOT added conservation-based activities to add depth to the tourist experience.

Through its initial contact with international tour operators and voluntourism companies who were seeking the same niche for their customers, KOPEL's USP was co-created. As KOPEL matured it further fostered active partnerships with renowned voluntourism companies such as Raleigh International, GVI and Intrepid Travel etc.

Box F3-1: Forging long-lasting partnerships with specialist tour operators.

In 2003, KOPEL took a game changing initiative to submit a proposal to the Sabah Forest Department for the construction and operation of TREC in a nearby forest reserve. When the application was approved, KOPEL took another bold decision of not engaging a private contractor to build TREC, which would have taken 18 months to complete. Instead KOPEL decided to partner voluntourists from Raleigh International to undertake the entire planning and construction of TREC which took 7 years before it was operational. Despite taking a much longer time to develop TREC, the partnership between the local community and voluntourists ensured a two-way learning process as well as nurtured a stronger community spirit and sense of ownership. The success of TREC is a testimony to the passion, sacrifice and resilience of the local community as well as the crucial role of voluntourism. KOPEL had continued to forge partnerships with specialist tour operators as its main marketing strategy.



(Source: TPRG, 2023)

Critical Success Factor F4: Build Trust and Reputation

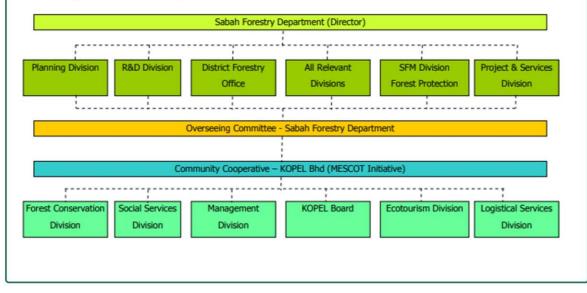
Prior to the pandemic KOPEL had successfully planted more than 400,000 trees of 174 different species along the Kinabatangan Corridor of Life. MESCOT was able to secure funding from international donors as early as 1999, which had been instrumental in developing the capacity of its members. Equipped with the necessary skills and knowledge, KOPEL decided to submit an application to the Sabah Forestry Department in 2007 to undertake a community forest restoration project. Given that the Sabah Forestry Department was also looking for partners for its Social Forestry programme, KOPEL was initially given more than MYR300,000, which proved to be a game changer. Since then, KOPEL had managed to secure substantial grants for community forest restoration projects from the Sabah Forestry Department and Sabah Wildlife Department. More importantly KOPEL has gained the trust of government agencies and international donors and has also developed a reputation of being highly competent, committed and trustworthy.

Supporting Action F4-1:

Nurture a strong environmental stewardship among KOPEL members by setting and maintaining a high standard in community forest restoration.

Box F4-1: KOPEL formally recognised as joint custodian of a protected area.

In 2008, KOPEL had been given the responsibility to jointly manage the Pin Supu Forest Reserve with the Sabah Forestry Department. This is a rare honour given to a local community to jointly manage a forest reserve measuring 4,696 ha. in area in which an ecolodge that adheres to the principles of sustainable tourism is located within within it (TREC). KOPEL's role as joint-custodian is to manage all visitors to the reserve besides carrying out restoration and monitoring tasks within the protected area.



(Source: Sabah Forestry Department, 2022)

Critical Success Factor F5: Nurture Citizen Science

KOPEL's management team had limited formal education but this did not stop international universities, especially from Japan, from approaching them to offer training in citizen science. Among others, Rakuno Gakuen University, Japan had been conducting on-site training for the local youth leaders in wildlife monitoring and water quality monitoring since 2010. In addition, selected youth leaders had been sponsored to serve as interns in Japanese universities, which had been pivotal in developing their interest and skills in citizen science. Wildlife monitoring using camera traps has been useful in analyzing the behavioral pattern of the *orang utan* to assist in the design of wildlife watching trails and hides. Water quality monitoring along the Kinabatangan River provides reliable baseline data on the level of pollution for KOPEL to use in alerting the relevant authorities as well as for monitoring the impact of KOPEL's activities.

Supporting Action F5-1:

Nurture interest among the youth leaders to embrace citizen science as an essential component of local conservation efforts and environmental stewardship.

Box F5-1: Water quality monitoring by community members

Box F5-1: Water quality monitoring by community members

When citizen science was introduced by Rakuno Gakuen University very few KOPEL members were interested in the programme, which initially involved learning to use the equipment for water quality monitoring followed by analyzing and interpreting the results. Interest in this new initiative grew when selected youth leaders were incentivised through fully sponsored internship programmes in Japan. Currently citizen science has germinated into an essential component of KOPEL's conservation efforts.

(Source: KOPEL, 2023)

Supporting Action F5-2:

Investing in future KOPEL leaders through formal education in resource and environmental management.

Several of the offspring of the KOPEL management had recently completed tertiary education in courses related to resource and environmental conservation. Instead of staying on to find jobs in the cities upon the completion of their study, several of them returned to the village to serve KOPEL. Their contribution is not only limited to the new skill sets that they bring to KOPEL's management and operations but also their role in inspiring and motivating the local youths.

Box F5-2: Investing in future leaders through formal education.

Syuzana (photo) is the daughter of a KOPEL pioneer and had graduated with a Bachelor's Degree in Conservation Biology from a local university. She chose to return to her village to work as an Assistant Conservation Manager for KOPEL. Her knowledge and training in the subject matter is invaluable towards further developing KOPEL's methodology for habitat restoration, tree planting and forest management. She also brings fresh new ideas and skill sets to KOPEL's conservation approach.



(Source: TPRG, 2023)

Critical Success Factor F6: Intrinsic Support for Environmental Stewardship

Based on a longitudinal study at KOPEL since 2007, the reasons for the active local participation in conservation efforts have been mainly extrinsic in nature. New jobs and additional income through the forest restoration programme as well as the fully sponsored internship in Japan have been, the main reasons for the strong environmental stewardship among KOPEL members.

The pandemic and lockdown had significantly affected the income of the local community and survival was the main reason for their shift of focus to conservation efforts. However, the twoyear lull with hardly any tourists to serve and only trees to tend to have given the local community breathing space and the opportunity to reflect. What is emerging from the slower pace during the lockdown could be early signs of an intrinsic reason for continuing with the conservation programmes. Local guides, youth leaders, homestay operators and even F & B staff interviewed during fieldwork in September 2022 were resolute that KOPEL should continue to focus on its conservation efforts as their USP. Although the financial rewards (extrinsic) from the conservation programmes are important to the community, the intrinsic reason for continuing along the same path has surfaced during the recovery from the pandemic. Their conservation efforts have defined KOPEL and have become a 'part of their DNA'.

Supporting Action F6-1:

Shift from paid workers to a temporary deed system (*pajak*) in allocating forest restoration funds.

During the early days of the community forest restoration programme, housewives were paid a monthly salary according to their contribution. As funding from government agencies and donors increased, the *pajak* system was introduced in which contracts were given to small groups to carry out restoration activities within designated plots along the riparian reserve. These groups of between 5 to 8 members were given contracts to plan, set their own target and implement forest restoration activities. The financial remuneration was decided according to the performance of each group in satisfactorily completing their task. During the pandemic more contracts were given out according to the amount of additional grants that KOPEL received. In turn the contractors have to ensure that the tree saplings are cared for until they mature as well as being responsible for the heathy growth of the trees for a 3-year period albeit with the assistance of voluntourists. Along this process caring for the trees has evolved into an intrinsic motivation.

Box F6-1: Family Forest Restoration Teams

Karseh (top right) and her family (bottom right) manages one of the deeds for forest restoration. They work from 8 a.m to 4 p.m six days a week transporting and planting tree saplings from KOPEL's nursery to their contracted plot along the Kinabatangan River. When asked if she wanted to retire and rest at home instead of working hard, the 66 year-old replied (translated from Bahasa Malaysia):

"Why should I stop tending to the trees that I have planted? If I stay at home I will only spend time watching TV and fiddling with my mobile phone... I will get sick. Here I'm active which makes me healthy... besides... I need to take care of my trees."



(Source: TPRG, 2023)

Supporting Action F6-2:

KOPEL's new role as a 'gatekeeper' to the overall forest restoration programme in the Kinabatangan Corridor of Life

KOPEL's success in community forestation has set a new benchmark for other forest restoration projects along the Kinabatangan River of Life. Established NGOs operating in the Kinabatangan e.g., Danau Girang through ReGrow Borneo have become KOPEL's partners and the recently launched UNDP's economy-level project in the Kinabatangan (Cycle 7) have also sought the views of KOPEL. Furthermore, KOPEL is extending its forest restoration programme to the barren alluvial land that belong to big oil palm companies such as Sawit Kinabalu on a *pro bono* basis, which reflects KOPEL's reluctant role as the 'gatekeeper' for the landscape level forest restoration programme in the Kinabatangan.

Box F6-2: From volunteer to KOPEL CEO

Saidal (third from right), the current CEO of KOPEL started as a volunteer with the cooperative. He shared that KOPEL had received offers from several high profile MNCs to carry out reforestation projects in the Kinabatangan. However, KOPEL had to turn some of these offers down due to the limited scope of the project and a lack of "follow through". He emphasised that KOPEL's interest lay not only in planting the tree saplings, but also to nurture them into a regenerated landscape where wildlife can range. He states:

"There are many forest restoration projects in the Kinabatangan. Some are limited to the planting of saplings without taking the necessary care required to ensure good growth. KOPEL's programme has avoided this pitfall... we have set a high standard."



(Source: TPRG, 2023)

Critical Success Factor F7: Embrace Green Recovery Initiatives

Innovative approaches are being introduced globally to support green recovery initiatives. Tree planting apps to translate carbon offsetting into practice is one of those initiatives. There are already many tree planting apps available that provide a platform for people/organisation to buy or gift trees and monitor their progress online from afar. EcoMatcher is one of those apps. It partners with vetted global organisations that specialise in planting trees to provide a platform that would allow people to adopt trees that have been planted by its partners. Through IOT technology, tree adopters on EcoMatcher would know everything about its adopted tree from location, planting date, species, etc. to even the amount of carbon sequestered to date. Acting as a tree-adoption platform, EcoMatcher has developed a partnership with ReGrow Borneo who had already forged a partnership with KOPEL to plant hectares of indigenous trees. By embracing these contemporary approaches KOPEL has opened up a new income stream for its members while cementing its reputation globally.

Supporting Action F7-1:

Apply IOT technology for adopting replanted trees.

Box F7-1: Using IOT technology to calculate total carbon sequestered by KOPEL's reforestation efforts since 1997.

KOPEL's management is leveraging on the knowledge and expertise of academics and researchers who specialize in calculating carbon sequestration. By learning from academics and researchers as well as using IOT technology through the platform of tree planting apps, KOPEL can possibly track the progress in carbon sequestration from its programme. The data from the partnership with ReGrow Borneo and EcoMatcher will be useful so as to make the partnership dynamic and based on mutual respect. The ability to contribute to the partnership effectively ensure that the financial contribution from this partnership is not perceived as a form of handout from the Global North hence cementing their intrinsic motivation.

(Top right): KOPEL's carbon plotting team measuring the circumference of a 6 year old tree in one of KOPEL's riparian restoration sites for the purpose of calculating how much carbon their restored forests sequester



(Source: TPRG, 2023)

Supporting Action F7-2:

Attract sponsors using EcoMatcher to physically visit KOPEL in the future.

While the use of EcoMatcher is supposed to be fun and interactive the relationship between the online sponsors/buyers and the contractors on the ground might be superficial and lack an emotional element such as empathy. To bridge this gap KOPEL is presently exploring ways of engaging with the online 'sponsors' and 'buyers' with the intention of enticing them to visit KOPEL and actively participate in the on-site restoration efforts. Alternatively, KOPEL could produce virtual tours to be sold online and reduce the potential carbon footprint of international tourists.

Box F7-2: Voluntourists' participation in forest restoration

Voluntourism has been one of KOPEL's primary tourism activities offered to those who chose to stay with them. Voluntourists are offered the opportunity to join one of KOPEL's treeplanting teams and participate in the activity, which may include clearing the site for planting, helping to transport saplings, planting the saplings in the ground, and helping to maintain the site. Other voluntourism activities at KOPEL are lake restoration, environmental monitoring and restoration sciences.



(Source: TPRG, 2023)

2.11 Strategies for Developing Regenerative Tourism

The previous chapter had discussed the success of KOPEL in leveraging on green recovery initiatives to cushion the financial impact of COVID-19. It has to be highlighted, however, that KOPEL's swift response was solely aimed at consolidating the income streams from green recovery during the lockdown and in the current recovery stage. Since the opening up of international borders, income from tourism has gradually risen in tandem with the return of international tourists – but not to the pre-pandemic level yet. It is argued that given its success in leveraging on green recovery during the lockdown, KOPEL is in the ideal position of rebuilding tourism along the lines of regenerative tourism. Towards this end the synergistic relationship between green recovery and regenerative tourism should be fully optimized.

This chapter will recommend strategies to transform green recovery initiatives into regenerative tourism. The recommendations will be based on the critical success factors for embracing green recovery – as a foundation for a type of holiday that leaves the holiday spot in a better state than when they arrived. In essence the success story and lessons from KOPEL will be extensively used to develop the strategies. Five principles of regenerative tourism (King, et.al, 2022) are used as a basis for developing the strategies:

Principle 1: Centre Community Needs First

KOPEL has demonstrated how a community could overcome a series of adversities by rebuilding pride in the community, social cohesion and community resilience towards a common vision of restoring and protecting the intrinsic value of nature surrounding them. In addition, KOPEL has been successful in re-positioning itself from the periphery of the ecological corridor (Kinabatangan Corridor of Life) to the centre – in terms of its relationships with government agencies, international donors, local NGOs, tourism industry players and oil palm plantation companies. The recommended strategies for achieving Principle No.1 are as follows:

No.	Strategy	
Strategy P1-1:	Formulating and creating community 'buy in' for a common vision that includes the protection and conservation of the surrounding natural resources	
Strategy P1-2:	Setting a high standard in community reforestation that elevates its credibility and legitimacy beyond the given mandate	
Strategy P1-3:	Upscaling CBT by increasing the depth of the tourist experience through interactive activities associated with conservation-related projects.	
	(Source: TPRG, 2023)	

Table 4 Strategies to achieve Principle No. 1

Principle 2: Improve Ecosystem Integrity and Biodiversity

KOPEL's systematic reforestation programme goes beyond the gimmicky tree planting farewell ceremony performed by the majority of CBT programmes in Malaysia. Furthermore, the programme is not an isolated community initiative but is fully integrated into the creation of a landscape level ecological corridor (Kinabatangan Corridor of Life). More importantly, KOPEL's forest restoration efforts have entered into a new phase in which the amount of carbon being sequestrated are being calculated and monitored by loyal youths who have completed tertiary education in the related fields as well as those who have been trained in citizen science. The latest development in this aspect is the use of IOT technology for the online adoption of trees by the global community. The recommended strategies for achieving Principle No.2 are as follows:

Table 5 Strategies to achieve Principle No. 2

No.	Strategy
Strategy P2-1:	Integrating community reforestation into the mainstream and landscape level forest restoration programme for the re- creation of ecological corridors
Strategy P2-2:	Adding a new dimension to community reforestation by acquiring competency in calculating carbon sequestration
Strategy P2-3:	Leveraging on IOT technology to develop attractive virtual tourism packages that include the 'adoption' and virtual 'caring' of re-planted trees.

(Source: TPRG, 2023)



(Left) KOPEL's tree planting teams carrying saplings to be planted. (Right) Tree saplings planted at KOPEL's Stampin plot in the Pin-Supu Forest Reserve (Source: KOPEL, 2023)

Principle 3: Embrace Diverse and Inclusive Business Models

KOPEL's business model is well supported by its financial capital and social capital which have been instrumental in achieving community resilience to withstand unprecedented shocks such as COVID-19. Unlike most CBT organizations before the pandemic, KOPEL did not put all its eggs in one basket. By further diversifying its conservation efforts to include lake restoration, biomass production and solar energy production, KOPEL has achieved a fine balance between profit, equity, conservation and social responsibility.

As KOPEL enters the post-pandemic recovery phase, it is currently focusing on its new role as a training provider. Towards this end KOPEL is optimizing the existence of its own training centre and quality chalets (Mandaa stay) to conduct training courses on CBT, rural development and conservation, etc. By being one of the winners of UNWTO's Best Tourism Village initiative in 2021, KOPEL is currently attracting the attention of rural development agencies in Malaysia as a training provider – with trainers from within the KOPEL management. The recommended strategies for achieving Principle No.3 are as follows:

No.	Strategy	
Strategy P3-1:	Diversifying the economic base to include non-tourism income streams that are associated with global priorities such as green recovery that comes with funding	
Strategy P3-2:	Optimising the capacity, knowledge and experience accumulated to venture into training as a new source of employment and income	
Strategy P3-3:	Leveraging on awards and certifications to enhance branding as a powerful marketing and promotion tool	
	(Source: TDDC 2022)	

Table 6 Strategies to achieve Principle No. 3

(Source: TPRG, 2023)



KOPEL members with their UNWTO Best Tourism Village award in 2021 (Source: New Straits Times, 3 December 2021)

Principle 4: Develop Transparent Governance Structure

During its inception in 1996, Miso Walai Homestay was led by local champions as part of a tourism association, MESCOT. In 2003 the CBT was registered as a formal tourism cooperative (KOPEL) which ensured that all decisions are made through a consensus and that financial transactions are transparent, accountable and audited annually. Eighty per cent of the income from tourism goes back to KOPEL's 300 odd members while the remaining 20 per cent goes to management costs and a community fund. Income from conservation projects are disbursed according to the services rendered by KOPEL members.

During the lockdown KOPEL members approved the redistribution of tasks (and income) to compensate those who were directly affected such as the F & B staff. KOPEL currently enjoys a healthy working relationship with the relevant government agencies, established NGOs and specialist tour operators operating within the Lower Kinabatangan area – collaborating with each other in terms of forest restoration, capacity building and sustainable tourism. Additionally, KOPEL maintains a good relationship with the other 3 villages along the Kinabatangan River, and often extends assistance in community forest restoration projects in these villages thus maintaining a common sense of place between the 4 communities belonging to the same ethnicity (Orang Sungai). The recommended strategies for achieving Principle No.4 are as follows:

No.	Strategy	
Strategy P4-1:	Establishing a formal tourism cooperative and a revolving community fund once a CBT led by informal local champions have matured	
Strategy P4-2: Upscaling CBT from a niche experience to a mainstrean tourism product well connected with key stakeholders al the supply chain		
Strategy P4-3:Creating a sense of place that is shared with the surrounding stakeholders and communities based intrinsic natural and cultural resources		
	(Source: TPRG, 2023)	

Table 7 Strategies to achieve Principle No. 4

Principle 5: Enhance Regenerative Partnership

Regenerative partnership requires the strong role of government in providing the policy framework for regenerative tourism to flourish. Crucially a sound understanding of the symbiotic relationship between green recovery and regenerative tourism is essential at the policy level. International donors and local NGOs are now responding positively to the global focus on green recovery by allocating appropriate funding for a variety of conservation projects.

However, only CBTs such as KOPEL have the advantage of a having sound understanding of the needs of different segments of tourists in the context of regenerative tourism to match these needs with the activities generated by green recovery initiatives. It is this profound understanding that made KOPEL submit proposals to donors and other partners to resuscitate its CBT that had been ravaged by the pandemic. The recommended strategies for achieving Principle No.5 are as follows:

No.	Strategy
Strategy P5-1:	Formulating a master plan for regenerative tourism to provide the policy framework, strategic direction and the stakeholder collaboration required.
Strategy P5-2:	Complementing green recovery initiatives with interactive tourism elements including the use of IOT technology and virtual tours
Strategy P5-3:	Enhancing the skill sets of nature and localized guides to include interpretation and storytelling related to peculiarities of regenerative tourism
	(Source: TPRG 2023)

Table 8 Strategies to achieve Principle No. 5

(Source: TPRG, 2023)

3. CASE STUDY: YUCUN VILLAGE, ANJI COUNTY, HUZHOU CITY, ZHEJIANG PROVINCE, CHINA



(Source: <u>http://regional.chinadaily.com.cn/huzhou/2021-12/03/c_687480.htm</u>, retrieved June 2023)

3.1 Introduction to Yucun Village

Yucun Village is located in Zhejiang Province in the south of China, 60 km away from Hangzhou City. The village is surrounded by mountains, known as the Yu Mountains, which are branches of Tianmu Mountain. The village is famous for its bamboo forest, tea plantation, and river drifting activities. The forest and vegetation coverage rate of the whole village reaches over 90%. Besides the natural landscapes, there are also historical and cultural heritages, like the thousand-year-old Longqing Temple. The village was awarded the Best Tourism Village by UNWTO in 2021.



Figure 13 Yucun Village was awarded the UNWTO Best Tourism Village in 2021

(Source: https://www.unwto.org/tourism-villages/en/villages/yucun, retrieved June 2023)

Yucun Village houses around 280 peasant households with a registered population of 1,080 persons in the community. Tourism activities began around the year 2000 as a response to pressure from environmental pollution caused by extensive economic development that heavily rely on cement plants and limestone mining. Decades ago, the village was heavily polluted, with residents stating that "the sky was always grey, every leaf was covered with dust, and white mud floated on the rivers," Over time, the cement plants and mines were shut down one after another, while tourism activities thrived. The local community were organised as a collective to develop rural tourism, with each villager buying shares in the co-operative. Tourism activities in Yucun Village include parent-child study tours, farming experiences, fruit-picking, sightseeing, healthcare holidays in the natural forests, outdoor camps, etc.

3.2 Sustainable Wastewater and Solid Waste Management in Yucun Village

In 2014, The Water Treatment and Control Project Action Plan for Anji County was enacted. Since then, enormous effort had been made to construct a comprehensive water treatment system involving sewage treatment, flood prevention, flood drainage, water supply and water conservation. To minimise the negative environmental impacts caused by tourism development, Yucun Village in 2016 initiated a pilot waste-sorting project which applied the "dropping at a fixed place and collecting at a regular time" system. Throughout the whole process, waste was collected without any exposure and transited without any falling or leakage. As a result of the waste management system, the village became significantly tidier and cleaner.

3.3 Green Development in Yucun Village

In 2019, Zhejiang Province issued the Overall Comprehensive Reform and Innovation Plan for Fleshing out the Concept of Green Development in the New Era in the Pilot Zone of Anji County in Zhejiang Province. Positioning Yucun Village as its core region, the Plan sought to minimise the negative impact of rural tourism on the surrounding environment by means of expanding financial investment and introducing more flexible market mechanisms. In this Plan, women are encouraged to work in tourism and restoration activities. Over 350 out of about 750 job opportunities in the tourism industry have gone to women workers via women's organisations. The village set up the "Daughters of Two Mountains" classroom, regularly promoting ecological education and carrying out women's voluntary activities such as "Women in charge of garbage separation", "Women to promote clear water", and "Taking a picture with green water and green mountains". Promoting programmes such as "Green Coin Reward" and "Smiling Face Card Evaluation" helped to encourage women to protect the beauty of the green water and green mountains. "Two Mountains-She" forum and the "She-Power" Female Housekeeper Alliance were created to cultivate a green leisure industry led by women. With training titled "to improve women's production capacity and skills for common prosperity", 10 skill-based training sessions were held, and more than 180 women were provided with assistance to obtain skill certificates. As a result, women in Yucun Village became more prepared to be further engaged with both tourism and restoration activities.

3.4 Tourism Activities and Performance before COVID-19

Before the COVID-19 pandemic in 2019, the village received about 800,000 visitors, with a combined tourism revenue of about CNY35 million (about USD5 million). Rural tourism had contributed about 70% to the village's GDP. Yucun Village was also awarded with many honours, including the National Ecological Culture Village, Model Village for Rural Governance, National Key Village of Rural Tourism, China's Beautiful Leisure Village, etc. The village itself had also been ranked as a economy-level AAAA-class tourist area since 2018.

Rural tourism in Yucun Village was established with extensive participation from the local community. The first family farm resort called Chunlin Villa was opened by a former miner in 2002. It set an example and inspired their local community members to begin operating their own family farm resorts and rural B&Bs. With both a well-protected and well-preserved natural landscape and cultural heritage sites, tourist arrivals to Yucun Village increased significantly, particularly from the more developed areas of the Yangtze River Delta of China. The urbanites from those regions visit Yucun Village for leisure and holidays and to escape from the city.

3.5 Impact of the COVID-19 Pandemic on the Community

A significant number of family farm resorts and rural B&Bs had to close down for a prolonged period of time in 2020 and 2021 during the outbreak of the coronavirus. However, with the rebound of domestic travel market and stronger demand of rural tourism due to the increased concern for health and safety, Yucun Village rebounded as a top destination among domestic tourists and received more arrivals after the lockdowns were lifted.

3.6 Green Recovery Actions

The COVID-19 had awakened the public's awareness of health and wellness. This resulted in a growing preference among tourists for low-density travel activities, which includes ecotourism, rural tourism and healthcare tourism.

Under these circumstances, Yucun Village continued to follow the concept of green development and aimed at enhancing the green development of tourism destinations in the surrounding areas. Over the past two years, Yucun Village tried to enhance and extend the travel value chain by introducing new travel development projects, improving access to e-commerce platforms, undertake tourism brand building and destination marketing, and carried out tourism service quality improvement.

The government of Yucun Village continued to develop it as a green destination, turning the abandoned mine pits and vacant land into camping sites and art galleries, improving greenness in the whole village, beautifying ecological landscapes, promoting study tours in forest landscapes and leisure walks in rural streets. At the same time, there was also a focus on developing digital tourism, and promoting low-carbon sightseeing and agricultural leisure tourism.

In addition, Yucun Village emphasised Carbon Neutral Development. The forum titled "Carbon Peak, Carbon Neutral" was held in the village and a public welfare team for green development was set up, along with a carbon credits system established to promote and encourage the concept of Carbon Neutral Development. Villagers and tourists were encouraged to carry out various green public welfare activities such as garbage classification and afforestation.



Figure 14 Yucun Village has committed itself to become a Carbon Neutral Village

(Photo credits: Xinhua/Zhang Cheng)

To attract more entrepreneurs to contribute to further green development, Yucun Village, together with another four nearby villages launched the Yucun Global Partner Program in July 2022. Liangshan State Holdings set up the Yucun Industry Funds with the first phase of more than CNY100 million to provide financial support for the implementation and development of partner projects.

3.7 Impact of Green Recovery

The many green recovery actions adopted by Yucun Village had led to a transformation in the economic, environmental and social structure of the area. After shutting down the mines, new types of business were introduced, such as family farms resorts, camping sites and art galleries. Green recovery had provided former miners living the village with new sources of income through these businesses. The abandoned mine pits were also covered with plants and vegetation to enhance the visual aesthetics of the landscape.

3.8 Critical Success Factors

The demonstration effect plays a critical role in green development. When the initially sceptical villagers saw the benefits of rural tourism, more and more of them began to participate in tourism and restoration activities. In addition, strong community leadership is also very important. The local government as an organiser as well as a guide in the process of developing and taking green recovery actions collectively. A collective enterprise set up under the lead and management of the local community, with each villager holding certain shares is

also key to the success of a community-based green recovery initiative. There is also a need to set aside some of the income that the collective earns to spend on environmental conservation and restoration.

3.9 Lessons Learnt

The following are some of the key lessons that can be extracted from the case study of Yucun Village:

- a. Persistence is key in the concept of green development.
- b. There is a need to find balance between environmental preservation / restoration and development of the local economy, especially in the initial stage of green development.
- c. The consensus and participation of the local community is critical for sustainable development.
- d. The community organisation or local government can play the role of leader and guide to the rest of the community.
- e. Leisure and sightseeing are the basis of rural tourism. However, the tourism industry should also evolve with the changing demand and trends of tourists by providing more experiential activities and encouraging more innovation and creativity in the sector.
- f. The use of digital tools is beneficial for sales and marketing, especially during the COVID-19 pandemic where physical meetings are discouraged.

4. CASE STUDY: SUSTAINABLE HEALTH SYSTEMS INITIATIVE FOR MICRO AND SMALL TOURISM ENTERPRISES LOCATED IN RURAL AREAS, CHILE



Figure 15 Pan de Azucar National Park, Chile

(Source: <u>https://www.chile.travel/blog/parque-nacional-pan-de-azucar-entre-el-desierto-y-el-</u> <u>mar</u>, retrieved June 2023)

4.1 Introduction

Between the years 2019-2021, with financial support from the Chilean Economic Development Agency (CORFO), and the participation of the National Forest Corporation (CONAF), Institute of Agricultural Development (INDAP), Ministry of Health (MINSAL) and Undersecretariat of Tourism, the Public Good Project, Standards of Sustainable Sanitary Systems for Tourism Services in Rural Areas and Protected Wild Areas was carried out. This project systemised information on alternative and sustainable sanitary technologies for the treatment of drinking water and wastewater (sanitary systems) that can be used in tourist services located in areas such as areas in desert climates with water scarcity, conservation areas, remote areas or other exceptional cases (contaminated areas, hard soils, saturated soils, among others). The outcome of the project also facilitates the formalisation in situations or scarcity of water resources and improves the quality of the user experience.

The following alternative and sustainable health technologies were identified:

- 1. Catchment: fog traps, rainwater harvesting and moisture condensers
- 2. Sanitation: dry toilets and constructed wetlands
- 3. Reuse: greywater reuse strategies

4.2 Pilot Projects

In the context of this initiative, the execution of two pilots of sustainable systems in tourist destinations was financed. The pilot projects were carried out in the Pan de Azucar National Park in the Atacama region, and Quehui Island in the Chiloe Archipelago in the Los Lagos region. Both pilot projects incorporated the procedure of entry of sanitary folders to the respective Regional Health Secretaries for their formalisation.

PILOT LOCATION	PAN DE AZÚCAR NATIONAL PARK, ATACAMA REGION	QUEHUI ISLAND, CHILOÉ ARCHIPELAGO, LOS LAGOS REGION
Technology implemented	Advanced technology dry bath (suitable for medium or high load public use) and water collection system through fog trap.	Sanitary system for rural accommodation, based on rainwater harvesting as a drinking water production system for human consumption and conventional private sewerage technologies.
Investment	USD 22,000	USD 10,000
Selection criteria	Public wilderness area that will face a situation of severe water scarcity and need to implement sanitary infrastructure to meet the needs of public use of visitors.	Beneficiary (a) INDAP that did not have water supply possibilities, that was located in an area of sufficient rainfall and that had growth projection as a rural tourism enterprise.

(Source: Adapted from Ministerio de Economía, Fomento y Turismo, Chile, 2022)

4.3 Sustainable Health Systems for Micro and Small Tourism Enterprises

The initiative was expanded to micro and small tourism enterprises, that are mostly led by women, located in rural communities that meet certain conditions and are disconnected from the ecosystem of productive tourism development. The initiative will provide technical advice and financing instruments to enable drinking water and sustainable basic sanitation in these areas.

This programme is expected to improve the quality of the communities and companies operating within them. With sustainable health systems in place, the rural communities and companies are able to:

- Obtain legal permits to operate in Chile, mainly from sanitary authorities.
- Increase their competitiveness by maximising water supply and capacity of services.
- Serve their visitors in a safe and sanitary manner, especially in the context of the COVID-19 pandemic.

- Enhance the value of their initiatives by giving them a differentiating attribute that is increasingly valued globally in the context of water crisis.
- Access to drinking water for human consumption among rural tourism entrepreneurs who currently do not have the technical ability.

This programme recognises the need to generate sustainable tourism development based on the protection of culture, the landscape and human resources, and is conceived to promote the improvement of the quality of life and access to basic and complementary infrastructure among the rural tourism communities.

In addition, this initiative follows the guidelines of the World Tourism Organization Recommendations for Tourism and Rural Development, a document that reaffirms that tourism in rural areas offers remarkable opportunities for recovery, as tourists seek less populated destinations and outdoor experiences and activities, being an effective way to open socio-economic opportunities for rural communities and actively celebrate the values of a territory, which often constitutes the essence of the travel experience.

The beneficiaries of the programme were tourism service companies that do not have conventional alternatives for clean water supply and/or sanitation. These include micro and small tourism companies dispersed across the rural areas and can include areas with water scarcity, conservation areas, remote areas with very hard or saturated with water, excessively pollution areas or any place where conventional systems cannot be used.

The provision of drinking water and sanitary systems also allowed the tourism enterprises to be legalised by registration with the proper authorities. Rural tourism enterprises were unable to be officially registered as drinking water and sewerage are mandatory requirements to obtain sanitary permits from the local authorities.

Among the tourist services that benefitted from this programme are various alternatives tourism enterprises such as rural accommodation, guided excursions, visits to craft and product workshops, local cuisine in *tambos*, *quinchos*, *rukas* and *stoves*, horseback riding guided by *muleteers* and *baqueanos*, nature hiking and multiple traditional manifestations.

4.4 Lessons Learnt

The following are some lessons that can be learnt from this brief case study of sustainable health systems in Chile:

- a. A government-driven initiative and financing is sometimes necessary to enhance the health and sanitation of rural communities that otherwise cannot access conventional water treatment systems.
- b. Pilot projects are important to identify and resolve the issues and challenges of implementing green recovery at a larger scale.
- c. Green recovery policies can add value to rural tourism enterprises through provision of sustainable health systems and legalisation of tourism operations.
- d. Refer to global standards to set a benchmark for green recovery initiatives.



Figure 16 Quehui Island in the Chiloe Archipelago, Chile (Source: Castro Municipio, 2023)

5. SEVEN STEPS FOR DEVELOPING GREEN RECOVERY STRATEGIES IN RURAL TOURISM COMMUNITIES

Using the critical success factors, principles and strategies for developing green recovery in the previous chapters, a seven-step guideline has been formulated to guide rural tourism communities in planning, evaluating and implementing their own green recovery actions, build resilience and contribute to global goals.

5.1 Step 1: Revisit the Value Proposition of Rural Tourism Attractions in the Post COVID-19 Pandemic Tourism Landscape

A unique value proposition is essential in defining what makes a product or service unique and valuable to the target market. Tourist surveys carried out by various organizations during the COVID-19 pandemic revealed a strong preference for ecotourism and rural tourism that adhere to the principles of sustainable tourism.

How the pandemic has influenced the travel motivation of tourists - specifically in terms of their commitment to a more benign and responsible form of travel - could have significant implications on the value proposition of rural tourism attractions. Towards this end a Value Proposition Canvas (Figure 17) could be applied to revisit the value proposition of rural tourism destinations notably the extent to which a more sustainable and responsible tourist experience has become a more significant expectation among tourists.

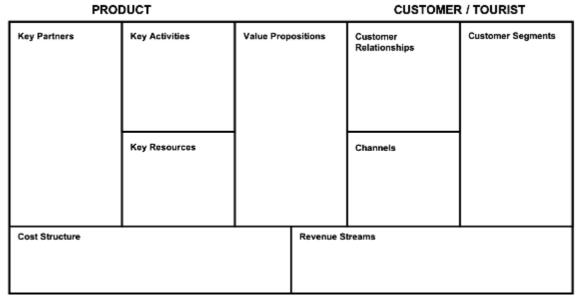


Figure 17 Value Proposition Canvas Template

(Source: Adapted from Strategyzer.com)

Among others, the Value Proposition Canvas should include the following considerations:

- How will your product or service benefit the customer?
- Whose needs does the product meet?
- What makes the product or service different from those offered by competitors?
- Is the customer more attracted to values associated with regenerative forms of tourism?

Filling in a value proposition canvas to identify a unique value proposition

The process of identifying the value proposition of a rural tourism product or experience will involve an evaluation of both the supply (product) and demand (tourist) aspects:

Analysis of supply aspects:

The left half of the Value Proposition Canvas is used to list the product offering of the tourism community or enterprise. These are focused on the supply side of the value proposition.

A. Key resources

Identify key tourism resources within the community and the surrounding areas. In rural tourism areas, these typically include cultural, natural and agricultural resources that could be utilized for tourism purposes. A community mapping exercise will help locate and document these resources and guide the planning process in the subsequent steps. For example, the community is located next to a protected forest reserve that could be utilized sustainably for tourism.

B. Key activities

Based on the tourism resources identified, a brainstorming session should be undertaken to come up with possible activities that could be carried out at these locations. These could include tourism and conservation activities. This should be followed by a curation process to shortlist the activities that could be carried out by the community and are based on the principles of sustainability, green recovery and/or regenerative tourism. For example, the community identifies that camping activities are suitable low-impact ecotourism activities that could be carried out in the forest reserve.

C. Key partners

The community should then identify the potential partnerships that could be established in order to manage, promote and sell the activities. Partnerships with government agencies, conservation NGOs, tourism industry, and other organisations should be considered based on the intended use of the resources. For example, if the community wishes to undertake camping activities in the forest reserve, they should establish communication with the forestry department responsible for managing the area and work out an arrangement with them.

D. Cost structure

Next, the community will calculate the cost of doing the intended activity, which includes construction, staffing, marketing, etc. Once the cost structure has been identified, a suitable pricing strategy can be developed. For example, the cost of developing and operating camping activities should take into account construction costs, concession fees, guiding fees, cost of materials and equipment, transportation fees, marketing costs and commissions paid to tour operators.

Analysis of demand aspects:

The right half of the Value Proposition Canvas lists the demand aspects, which are used to identify which groups of tourists would be interested in the product, as well as the best channels to reach out to these segments.

A. Tourist segments

Once the supply side of the Value Proposition Canvas has been filled, the community will then identify the target tourist segments that would be interested in purchasing and participating in the activities offered. These segments could be categorised by demographic, geographic, psychographic, etc. segments according to the market research and knowledge of the community. For example, the community identifies several tourist segments who will be interested in their camping activities, such as students, nature lovers, wildlife enthusiasts, and corporate team building groups.

B. Tourist relationships

Once the segments have been identified, the community should then work out how the relationships with these tourists will be like. Certain segments might have long-term relationships with the community, while others may be once-off. For example, the community could sign contracts with private or international schools to organise seasonal camping trips for their students. Another example will be co-creation where tourists contribute to the community such as in KOPEL where volunteer tourists contributed to the construction of the TREC.

C. Channels

This aspect consists of the channels of communication that the community or enterprise uses to reach out to their target audience. These could be direct (e.g., website, social media accounts, email) or indirect channels (tour operators, travel agencies, third-party websites). For example, the community above decides to promote their camping activities on their social media page as well as on online travel websites such as TripAdvisor to reach out to their target customers.

D. Revenue streams

Based on the cost structure identified earlier as well as the various target segments and channels, the community will then identify the potential revenue streams that could provide income to the community and its members. Typically, tourism enterprises generate income from the usage of services. However, the community could develop diverse income sources within that area by offering related services such as sales of food and beverages, laundry services, guiding fees, boat rentals, etc.

Determine Value Proposition

The value proposition describes the tourism products and services that create value for a specific tourist segment or segments that are identified above. A rural tourism community's value proposition is the main reason tourists choose to visit it instead of other destinations. A value proposition is an aggregation of the benefits or value that the community can offer to tourists. For example, KOPEL's value proposition is its long-term forest restoration projects that offer volunteers and tourists the opportunity to contribute to improving the environment, offsetting their carbon emissions and contributing to sustaining a rural community that is working to restore the forest landscape of the Lower Kinabatangan (Figure 18).

PRODUCT

CUSTOMER / TOURIST

 Key Partners Government agencies (forestry department, wildlife department) Tour and travel companies (Intrepid, Sticky Rice) NGOS (LEAP, Forever Sabah) Research institutions and universities (Rakuno Gakuen, UTM, Danau Girang) Private and international schools 	Key Activities • River cruise • Homestay programme • Eco camp • Café • Community training • Volunteering • Forest landscape restoration • Lake restoration • Environmental monitoring	 Value Propositions Environmental restoration projects Volunteer programme Environmental education Model for community-based tourism and conservation 		Customer Relationships - Long-term (government agencies, donors, research institutions, universities) - Co-creation (volunteers) - Communities (other CBTs, birdwatchers, wildlife enthusiasts)	Customer Segments Students Researchers Scientists Gap year travellers Nature lovers Birdwatchers Wildlife enthusiasts Families Training participants Corporate sector
 Volunteer tourism companies (Raleigh International) Corporate sector (Sawit Kinabalu, Sime Darby Plantations, etc.) Donors/charity (Regrow Borneo) Foundations (Yayasan Hasanah) 	Key Resources Pin-Supu Forest Reserve Oxbow lakes Wildlife Kinabatangan River Limestone caves Orang Sungai culture Traditional village			 Channels Direct (universities, donors, NGOs, government agencies, corporate sector) Indirect (tour and travel companies, volunteer tourism agencies) 	
Cost Structure • Raw materials / ingredients • Construction and maintenance of buildings and campsites • Raw materials / ingredients • Staff salaries • Outlural performances • Energy costs • Vehicle maintenance • Forest restoration • Equipment operation and maintenance costs			Revenue Streams • Accommodation (Mandaa Stay) • Campsite • Homestay • Café / food and beverage • Training fees		

Figure 18 KOPEL's Value Proposition Canvas

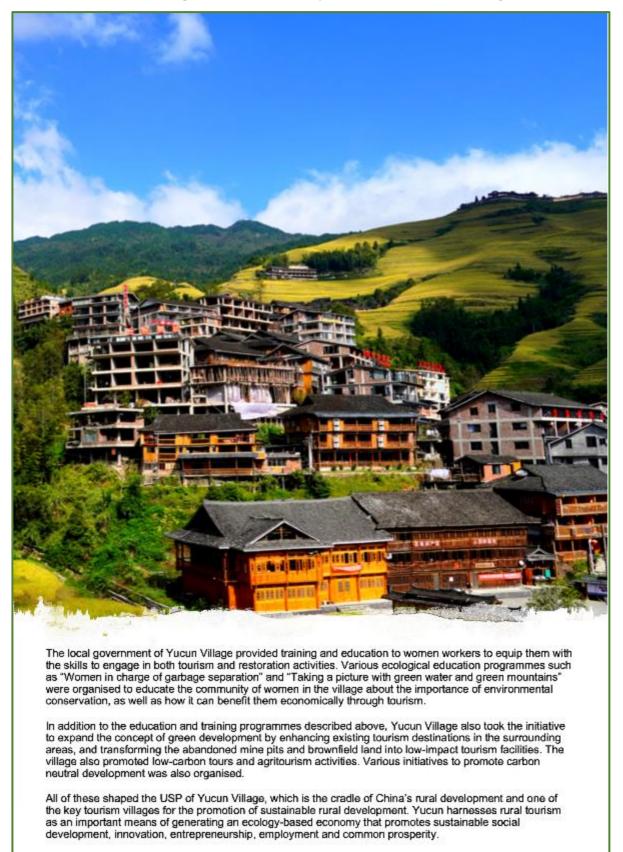
(Source: TPRG, 2023)

5.2 Step 2: Educate Rural Tourism Entrepreneurs on Regenerative Forms of Tourism that have Emerged in the Aftermath of the Pandemic

For the majority of rural and community tourism operators building back in the aftermath of the COVID-19 has been a challenging process given the real and perceived changes in tourist motivation and expectations. Rural tourism operators are finding it difficult to recreate their Unique Selling Proposition (USP) without a sound understanding of the importance of introducing elements of regenerative tourism as part of the post-pandemic tourist experience.

Essentially rebuilding rural tourism has to start by focusing on how to harness new values associated with regenerative tourism through re-educating rural tourism operators. In this respect it is essential that rural tourism players do not become disillusioned with their future prospects given the devastating impact of COVID-19 on their business and income. New training modules related to regenerative tourism should be introduced to cover aspects such as:

- a. Why is regenerative tourism the way forward for the community?
- b. Fundamentals and principles of regenerative tourism
- c. Success stories in regenerative tourism
- d. Funding opportunities related to regenerative tourism
- e. Revisiting the unique selling proposition to incorporate regenerative tourism
- f. Restructuring the business model to embrace regenerative tourism
- g. Realigning marketing and promotion



Box S2: Educating women community members in Yucun Village, China

(Source: Adapted from Yucun Village)

5.3 Step 3: Assess and Identify Resources to Create New Experiences Related to Regenerative Tourism

Rural tourism operators need to reassess the natural and cultural resources within the attraction and beyond to identify resources that could be curated and promoted as experiences that are related to regenerative tourism. Rural destinations where the biophysical environmental have been overexploited in an unsustainable manner prior to the COVID-19 pandemic, could provide new opportunities for building back better and more sustainably.

For instance, mangroves that had been cleared in an unsustainable manner for aquaculture uses could provide the setting for mangrove restoration programmes that will not only benefit the physical environment and contribute to climate change mitigation but also offer the opportunity for the creation of water-based tourism activities as an income generator. Likewise, community-based forest restoration projects are also appropriate for rural areas that have suffered from illegal logging and quarrying activities.

Some of the rural resources that could provide new opportunities for tourism experiences related to regenerative tourism are as follows:

- Legally or illegally logged-over forest
- Disturbed wetlands
- Over-exploited coastal areas and islands
- Polluted rivers
- Infested lakes or other closed bodies of water
- Neglected archaeological and cultural areas

Box S3: Community mapping as a resource assessment tool

COMMUNITY MAPPING

KOPEL conducted in-depth research and mapping of their surrounding resources before identifying the key tourism and conservation activities that could be undertaken. The mapping exercise included a botanical inventory, wildlife study, cultural history, traditional customs, as well as places with stories and legends. All data collected were documented and organized for easy access by the community. The community mapping exercise provided a solid foundation for KOPEL in designing their ecotourism and conservation activities.



(Source: KOPEL, 2023)

5.4 Step 4: Build Local Capacity and New Skills Set to Plan, Implement and Manage Regenerative Tourism Projects and Programmes

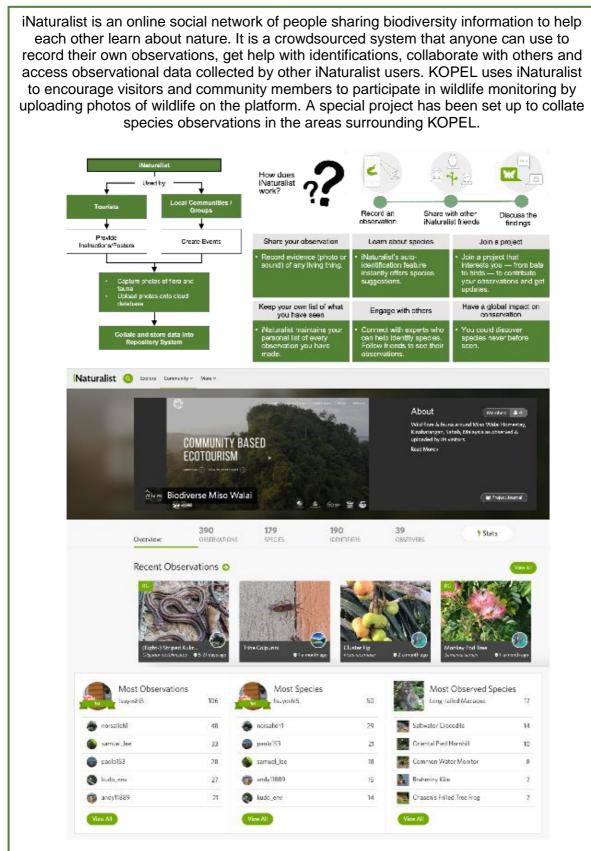
Regenerative tourism activities such as forest restoration are not only physically demanding but also require skills set that include knowledge related to silviculture as well the selection of tree species to optimise biodiversity. For rural and community tourism attractions that had been used to selling tourist experiences that are restricted to tourists staying and experiencing rural life with the local community, the physical demand of starting forest restoration programmes is daunting and might not get the required 'buy in' to ensure its success.

Therefore, it is essential for regenerative tourism activities to be planned and implemented by involving tourists who are committed or keen to participate in conservation activities including voluntourists. Prior to the COVID-19 pandemic tourists would have been satisfied by participating in a tree planting ceremony. In a post-pandemic scenario, tourists are more discerning and curious such as wanting to know how much carbon is being sequestrated through their involvement in forest restoration programmes. As such, it is critical that local youth are trained and exposed to the technical aspects of conservation projects in synergy with tourism such as the calculation of the resulting carbon sequestration.

Some of the new skills set that need to be acquired by the local community especially youth include the following:

- Selection of appropriate tree species to propagate biodiversity
- Silviculture techniques
- Mangrove replanting techniques
- Coral replanting and transplanting techniques
- Wildlife conservation skills and techniques
- Environmental monitoring techniques including the use of citizen science
- Carbon sequestration calculation techniques





(Source: TPRG, 2022)

5.5 Step 5: Position Local Regenerative Tourism Efforts within Global and Economylevel Frameworks on Green Recovery

Community based regenerative tourism projects were mostly initiated by NGOs to fulfil their project aim such as the conservation of fragile ecosystems and the protection of endangered wildlife – with tourism being a spinoff that benefits the local community. As a consequence, most of these projects are isolated and seldom integrated into wider conservation projects at the global, economy-wide or regional levels. For regenerative tourism to be successful, it should be able to identify its position in relation to formal ecological corridors at the regional level as well as other global and domestic initiatives related to green recovery.

Green recovery initiatives that are funded by international and domestic organisations should provide the context and platform for the development of regenerative tourism. In a postpandemic tourism landscape it is essential to identify potential regenerative tourism projects at the destination landscape level that could leverage on institutional and financial support from international and domestic organisations. Several examples of green recovery initiatives that are related to regenerative tourism are as follows:

- **KOPEL, Sabah, Malaysia**: KOPEL intensified their conservation and restoration initiatives during the pandemic in order to sustain jobs and income for their community members. They continued to build on their regenerative tourism activities post-pandemic as a key source of income in funding for their conservation work, but is also looking to diversify the co-operative's activities to guard against future shocks.
- Kinabalu Ecolinc, Sabah, Malaysia: A project that was aimed at improving the ecological connectivity of habitats and species between Kinabalu Park and the Crocker Range Park. This project was carried out to implement a network of community-conserved areas (CCAs) that are managed by local communities and supported by government and international agencies. The Ecolinc project carried out community-based restoration of degraded habitats and the development of sustainable agriculture for livelihoods and enhanced land management. The project also enhanced forest-related community tourism options to support forest management.
- Yucun Village, China: The green development of Yucun Village is driven by the government of Zhejiang Province through the Overall Comprehensive Reform and Innovation Plan for Fleshing out the Concept of Green Development in the New Era in the Pilot Zone of Anji County in Zhejiang Province. Yucun Village was selected as its core region and several projects such as the Water Treatment and Control Project Action Plan for Anji County was enacted.
- **Global Family Travels, Oregon, USA:** This tour operator offers packages based on their mission framework: *Learn, Serve and Immerse*, where their guests can learn about wildfire recovery and prevention, and partake in trail building projects along with the community-based non-profit organisation, Cascade Volunteers. Guests are also given the opportunity to immerse in the natural history of Canada's Bay of Fundy by connecting with local communities and discovering the natural environment.
- **Guyana**: Indigenous communities fully partake in tourism activities by owning and operating their own ecolodges as a result of government-driven CBT initiatives. For example, tourism directly benefits the local community of Rewa Village who in turn

protect a rainforest of 350 km². As a result, travellers to the village can transform their carbon footprint into a net positive due to the direct conservation efforts.

 Amsterdam, Netherlands: Local governmental agencies announced a post COVID-19 plan based on Doughnut Economics (similar to APEC's Circular Economy), which redefined tourism and its infrastructure. The city uses this framework to guide all future decision-making processes to ensure a balance between the social foundation and ecological ceiling of tourism instead of simply economic growth.

Box S5-1: Kinabalu Ecolinc's Community Use Zones for Green Recovery

Sabah Parks, as the project initiator of the Kinabalu Ecolinc, introduced the concept of the Community Use Zone (CUZ) as a management option to address issues concerning indigenous communities living and utilizing resources within the Crocker Range Park. CUZs are areas where existing cultivation and forest resource collection are found to occur inside the boundaries of the Parks and where traditional human activities were allowed to continue under the supervision of Sabah Parks. The primary objectives of the CUZ was to balance the existing local communities in Park management, and to preserve the cultures and traditional knowledge of the local communities.

The CUZs enabled the local communities to undertake the traditional and livelihood activities, which were further enhanced through ecotourism. Traditional activities such as handicraft-making were rejuvenated among the community members who now had the opportunity to earn additional income from it. New tourism products such as a homestay programme, agritourism projects and recreational activities such as birdwatching and rafting were introduced by the community-based tourism operators in these CUZs, providing much need economic diversification.

Within the context of Green Recovery, the Kinabalu Ecolinc and CUZ concept work together to restore ecological linkages between forest reserves while empowering and enabling local communities to benefit from ecotourism activities, consequently reducing outmigration and harmful activities to the environment.

5.6 Step 6: Unlock Funding Opportunities for Regenerative Tourism through a Collaborative Approach

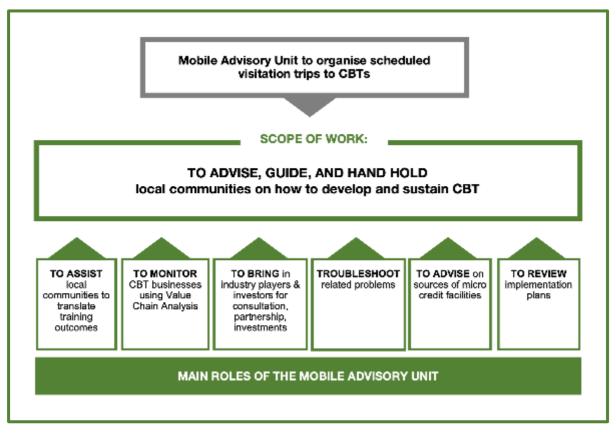
The need for financial support for regenerative tourism is gradually being recognised and provided albeit not specifically for this particular purpose. In the majority of cases funding for regenerative tourism are indirectly made available through green recovery initiatives. Given that regenerative tourism is an emerging variant, the institutional set up and support is lacking as well as information on funding opportunities for rural tourism operators and local communities. Therefore, it is critical that APEC economies with the aspiration to embrace regenerative tourism should set up a dedicated funding mechanism in the form of grants, soft loans and seed money for rural tourism operators and communities to initiate and finance regenerative tourism projects and programmes.

Furthermore, rural tourism operators and local communities are challenged by the lack of capacity to access funding opportunities such as lack of awareness on latest trends and difficulty in writing financial proposals. In this respect the institutional set up should include consultancy service by the related government agency to assist applicants in writing and submitting financial proposals. This could even include the setting up of a Mobile Advisory Unit to approach and provide 'handholding' to rural tourism operators on funding opportunities for regenerative tourism. In addition, the institutional set up should empower donor agencies, NGOs and the social enterprises in embracing a collaborative approach for harmonising funding for regenerative tourism projects and programmes.

Box S6-1: KOPEL's diverse funding sources for green recovery

KOPEL's environmental restoration and monitoring activities are financed through various means. In the initial stages, seed funding in the form of grants from the Sabah Forestry Department and international NGOs provided the resources necessary to kickstart their tree planting projects. Over time, the tourism activities in KOPEL grew to the point that it could support conservation efforts and the forestry department could gradually reduce their financial support.

During the pandemic, KOPEL was forced to seek funding from additional sources due to the disruption of tourism activities. International donors such as Regrow Borneo, and corporate foundations such as Yayasan Hasanah, provided much-needed resources for them to continue their reforestation efforts. Partnerships with surrounding private landowners, such as Sawit Kinabalu (oil palm plantation company) also provided KOPEL with the opportunity to earn additional income through tree planting as part of the company's effort to obtain Malaysian Sustainable Palm Oil (MSPO) certification.



Box S6-2: The main roles of a Mobile Advisory Unit

(Source: TPRG, 2019)

5.7 Step 7: Establish Regenerative Tourism Networks for Sharing Knowledge and Experience and Create Role Models

It has to be acknowledged that not all rural and community-based tourism operators are knowledgeable or keen to embrace regenerative tourism during the post-pandemic tourism landscape. Operators that had proven to be resilient during the pandemic and were able to cushion the resulting impact by optimising income streams from conservation programmes, are more likely to be embrace regenerative tourism. Instead of trying to entice the entire spectrum of rural and community-based tourism operators, notwithstanding their degree of willingness and readiness, the more pragmatic approach is to establish a network of operators who have incorporated the principles and elements of regenerative tourism as part of their USP. A network of successful operators to join the network especially if and when the economic benefits become significant.

The aim of setting up a regenerative tourism network is to nurture a more holistic and systematic approach to developing regenerative tourism. Of prime concern is clarity in terms of the definition, principles and best practices in developing and promoting regenerative tourism. In addition, the network could act a platform for minimising confusion between the terms sustainable tourism, responsible tourism and regenerative tourism. Enticing the other rural economic sectors to support the implementation of regenerative tourism will be a challenge hence the need to have a common platform for knowledge sharing, conflict resolution and joint product development, capacity building and marketing/promotion.

Among others several of the functions of the proposed regenerative tourism network are as follows:

- Platform for knowledge sharing and transfer
- Development of best practices
- Establish and monitor targets
- Joint training, internship placement and research
- Creation of role models and local champions
- Platform for collaborative approach with key tourism stakeholders
- Champion the use of IT
- Joint branding and marketing/promotion

Box S7: KOPEL's community-to-community training network

COMMUNITY-TO-COMMUNITY TRAINING NETWORK

KOPEL's success has made it a model for other CBTs in Malaysia looking to implement their own regenerative tourism projects and programmes. The establishment of the CBEST Training Hub has enabled KOPEL to become the focal point and mentor of communities located around the region. The following are some of the communities that work with KOPEL to develop CBT and regenerative tourism:

- Community Abai Project (CAPS), Kinabatagan
- RCG8 Communities, Kinabatangan Ramsar Wetlands
- Sinagang Community (Crocker Range)
- Penan Community, Ulu Baram, Sarawak
- Women Empowerment Pitas
- Bukit Kuda Community, Labuan
- Kg Singgaron, Ranau
- Kg Terusan Sugut, Beluran, Kuala Labuk Eco Region







(Source: KOPEL, 2023)

6. SYNTHESIS AND CONCLUSION

The previous chapters have provided the definitions and scope of green recovery and regenerative tourism, highlighted three case studies of regenerative tourism in practice, described the critical success factors and suggested seven steps in developing regenerative tourism at the destination level – specifically in the context of rural tourism. This chapter will present a synthesis of the previous discussions and conclusion by highlighting the three main aspects that are critical in mainstreaming regenerative tourism as part of the green recovery agenda.

6.1 Policy Direction and Institutional Support

Essentially the growing popularity of regenerative tourism could be regarded as a doubleedged sword. As a concept, regenerative tourism is an opportunity that emerged in the aftermath of the COVID-19 pandemic, in which there is general consensus that the global tourism industry can no longer operate its business as usual. The devastating economic impact of the pandemic had been widely reported and tourist surveys carried out by various organisations during the pandemic revealed a strong desire by tourists to travel differently during the post-pandemic landscape – avoiding crowded places and preference for tourism that takes place in spacious areas such as ecotourism.

The tourism industry could have continued to use sustainable tourism and responsible tourism as the guiding principles for tourism development in the post-pandemic era, despite the ambiguity of translating both concepts into practice. However, tourism responded to the worldwide drive to use the opportunity of building back from the pandemic in a more sustainable manner under the green recovery movement. Towards this end, sustainable tourism is currently regarded as being too focused on minimising impacts through a 'do no harm' approach. Likewise, the term responsible tourism was coined by industry players to create a more benign and caring form of tourism. Both concepts are currently viewed as being restrictive in their capacity to bring about meaningful changes to the physical environment, the preservation of cultural heritage and resources and the well-being of local communities. Recovery from the pandemic is widely regarded as a golden opportunity to introduce a strategic approach that emphasizes investing in sustainable, low carbon infrastructure and promoting a shift towards a more sustainable economy – hence the emergence of the term green recovery (OECD, 2020; UNEP, 2021).

In response to the global green recovery movement, the term regenerative tourism was introduced by academics and tourism social enterprises, which has latterly received the endorsement by international organisations such as APEC, European Travel Commission and the World Travel and Tourism Council (WTTC). Essentially regenerative tourism aspires to go beyond 'not damaging' the environment to actively revitalise and regenerate as well as improve human health and well-being through ecosystems' health.

However, the negative side of introducing a new concept that overlaps in many respect with the concepts of sustainable tourism and responsible tourism might result in a lack of clarity or even confusion within the tourism industry, that might limit the acceptance of the regenerative tourism concept. In the context of rural tourism there are signs that green shoots in regenerative tourism are emerging. However, such success stories were not specifically triggered by the COVID-19 pandemic and the need to recover more sustainably. As in the case of KOPEL, synergy between conservation and community-based ecotourism started

during its formative years, initiated by an international NGO to minimise further depletion of the last remaining alluvial floodplain in Asia while protecting the well-being of the local community. It was only after forest restoration became institutionalised through the re-creation of an ecological corridor (the Kinabatangan Corridor of Life) that synergy between conservation and tourism became systematically planned and implemented.

Central to this green recovery initiative that started from the early 2000s in the Kinabatangan was having the policy framework to support landscape-level forest restoration projects carried out by government agencies that was complemented by community-based forest restoration in tandem with ecotourism. Essentially having an affirmative policy framework facilitated institutional support that was instrumental in creating inclusiveness while encouraging the local community at the local level to offer solutions. Furthermore, partnerships with government agencies, NGOs and tourism industry players had paved the way for long term implementation that facilitated the advent of green recovery initiatives formally introduced as the region began its recovery from the pandemic.

In the case of Yucun Village, policy intervention in support of green recovery was introduced by the government of Zhejiang Province in 2019, when it formulated issued the Overall Comprehensive Reform and Innovation Plan for Fleshing out the Concept of Green Development in the New Era. The Plan sought to minimise the negative impact of rural tourism on the surrounding environment by means of expanding financial investment and introducing more flexible market mechanisms including encouraging women to work in tourism and restoration activities. As part of the policy support for regenerative tourism, Yucun Village and the surrounding villages were able to create financial incentives to encourage industry partners to further contribute to the seed funding from the government amounting to CNY100 million. Clarity in its vision is also evident in its ambitious plan to transform Yucun Village into a Carbon Neutral Village.

The value of adopting a holistic approach to policy making involving multi agencies cannot be overemphasized in planning for regenerative tourism. This is evident both in the case of Yucun Village and the two pilot projects on sanitation in Chile. In the latter, the provision of drinking water and a systematic sanitary system benefitted tourism enterprises by facilitating their registration with the relevant authorities given that it is a mandatory requirement. Although sanitation is not the responsibility of tourism agencies, inter-agency efforts have benefitted the tourism industry, tourism SMEs and local residents in terms of economic opportunities and their well-being.

6.2 Measuring Success and Impediments

The majority of rural and community-based tourism operators lack the knowledge and technical capacity to carry out systematic monitoring of their performance, for instance in terms of visitor arrivals, income, tourist expenditure and expectation and satisfaction levels. Embarking on regenerative tourism requires a sound understanding of the complexities of the interconnected dynamics of growth that straddle across aspects such as tourist motivation and behaviour, integrity of the natural and cultural resources, socio-economic wellbeing and inter-sectoral linkages.

This type of knowledge gap is evident at KOPEL despite the best intentions of the local community to embark on a data-driven approach in measuring the success and impediments related to regenerative tourism. Current efforts by the local youths in measuring carbon sequestration resulting from the forest restoration projects involving tourists and disseminating the results to a wider audience have been challenged by the lack of technical know-how. Furthermore, exploring the potential of using information technology such as IOT for online tree adoption platforms in partnership with international companies has been impeded by the inequitable sharing of profits.

Likewise, measuring the progress and success in implementing the Carbon Neutral Village at Yucun will be challenged by the lack of local capacity in acquiring new skills set. As such, future capacity building and training programmes to upscale the skills set of rural tourism operators so as to be able to measure and disseminate success stories on regenerative tourism should be revisited. Such stories are essential in educating tourists on the new travel norms and behaviour that are expected from them as they resume their travel in a postpandemic tourism landscape.

6.3 Educating Tourists and Co-creating Tourist Experiences

Tourists have short memory. Despite revealing a strong preference to avoid congested tourist destinations in preference for 'spacious' attractions such as ecotourism – as revealed by surveys carried out during the pandemic, many flocked back to the once popular mass tourism attractions. Educating tourists on the dos and don'ts of travel to minimise negative impacts on the environment, culture and local community wellbeing is at the heart of responsible tourism. Regenerative tourism, however, demands a greater contribution from tourists such as making a useful contribution towards climate change, protecting biodiversity and creating inclusive and equitable sources of livelihood for the local community. These are lofty ideals which might be difficult to translate into practice given the diverse nature of tourists with different travel motivations and behaviour.

Targeted marketing to the desired market segments complemented by educating tourists on responsible tourist are the typical approaches used in minimising tourist impact. Of late the co-creation of tourist experiences has been applied especially in the context of creative tourism. The growing popularity of glamping in tropical counties has resulted in the increase in emissions given that these so-called glamorous tents are mostly air-conditioned. In popular glamping sites in Cambodia and Laos, conservation activities such as participating in wildlife rehabilitation programmes are often integrated into the glamping experience. Such activities are not only educational and gratifying to the tourist, but they also entice them to spend more time outside the luxury tents hence reducing the need for air-conditioning in the daytime.

Volunteer tourism is one of the segments that could facilitate the co-creation of tourist experiences. However, a significant proportion of voluntourists who stayed at KOPEL lamented the fact that they were expected to perform tasks such as painting a school or cleaning a lake without prior discussion with the local community. Instead voluntourists would welcome the co-creation of tourism experiences and leveraging on the desire of tourists to visit and leave the attraction in a better state is key in changing tourist behaviour in a post-pandemic tourism landscape.

6.4 Conclusion

Green recovery is widely regarded as a golden opportunity to build back better and sustainably as the world gradually recovers from the COVID-19 pandemic. Regenerative tourism has essentially dovetailed with the agenda and aspirations of green recovery but implementing the concept into practice is problematic challenges. The three case studies presented in this handbook are green shoots of regenerative tourism that have revealed capacity limitations and the need for a holistic and collaborative approach to deliver lofty ideals into practical and effective solutions with 'buy-in' from all stakeholders.

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