RESPONDING TO CHANGE:
EXPEDITING AND SCALING UP INTEGRATED APPROACHES FOR SUSTAINABLE COASTAL RESOURCE MANAGEMENT THAT IMPROVE LIVELIHOODS AND FOOD SECURITY FOR COASTAL AND SMALL SCALE FISHING COMMUNITIES

SUSTAINING COMMUNITY-BASED CONSERVATION AND LIVELIHOOD PROJECTS

KEY MESSAGES

- Planning for long-term sustainability beyond the exit of the initial funders should be an essential part of all community-based conservation and livelihood projects.
- Failure to sustain projects can lead to a loss of their positive impacts, stalled community development, and a breakdown of trust.
- Long-term income can be generated through community development initiatives including eco-tourism, payment for ecosystem services, trust funds and endowments, and improved fisheries management.
- Multiple sources and levels of funding increase actor commitment and project resilience, as do wide-ranging coalitions and partnerships.
- Long-term sustainability strategies require broad-based community consultation and endorsement, and strong leadership from within the community.
- Clear roles and responsibilities must be established, and communities empowered to manage projects directly.
The challenge of continuing community-based conservation projects once the initial external funding (which is usually brokered by the lead NGO) has been exhausted, is one which is often underestimated – but it can have profound impact on the sustainability of the project and its outcomes. To help overcome this difficulty and to support strategies for fully transitioning management responsibility to communities, it is common practice for NGOs to integrate the development of sustainable funding mechanisms and local enterprises aimed at providing alternative livelihood opportunities or long-term financial support for the project.

Experience has shown that while establishing successful integrated conservation and alternative income and funding projects is highly challenging, it can be achieved if the project focuses from the outset on both its conservation objectives and its long-term financial basis, including the sustainability of community income generation enterprises. The early identification of appropriate long-term funding sources and possible income generation projects is critical, as is the application of a range of key management principles to guide their development.

**WHY IS SUSTAINABILITY IMPORTANT?**

There are multiple reasons, not the least being that failure of a community-based conservation project – and associated income generation and funding enterprises – will impact on community development aspirations, with the potential to generate community dissatisfaction with the project and the partner NGO(s) and other leading stakeholders. The disillusionment resulting from such a failure may also negatively affect community commitment to the protection of its valuable ecosystems and biodiversity, and to sustainable resource management. Not being able to sustain the project outcomes may also undermine the confidence of donor(s) in the principal partner NGO, thus affecting the potential for further funding for similar projects.

Furthermore, the investment made in these projects and local enterprises inevitably results in strengthened community capacity through training and the acquisition of new skills, new governance and management structures, improved leadership and, in many cases, in much-needed equipment and purpose-built infrastructure. Failure to provide sustainable sources of income or funding to maintain and build on these outcomes can mean the community is unable to continue to develop the potential and capitalise on these changes. This can result in the loss of hard-won skills and expertise as the project drifts towards closure, individuals look elsewhere for new opportunities, and infrastructure falls into disrepair.
It can also lead to a breakdown in trust between the community and the partner NGO, which is essential for a successful project. Once lost it is extremely difficult to regain or rebuild project momentum, or resurrect the conditions needed to start again. Under these circumstances if a project’s benefits and outcomes cannot be sustained, there will inevitably be a significant loss of benefits and opportunity for the community and stakeholders.

COMMON EXAMPLES OF SUSTAINABLE FUNDING AND INCOME GENERATION INITIATIVES

For many years the link between successful conservation and sustainable management of coastal resources and the improvement of the socio-economic conditions of local communities has been recognised by NGOs and governments. There are numerous examples of initiatives which have successfully combined these activities, some of which are listed below:

**Eco-tourism** – Eco-tourism (or nature-based tourism) is geared to the unique and pristine natural assets of a protected area and often showcases the culture and lifestyle of local communities. Popular local alternative income initiatives include guided activities such as nature walks, longer treks, dive and snorkel trips, village homestays, fishing, birdwatching, local cultural activities and rafting. Eco-tourism is promoted by many NGOs as it requires relatively low capital investment, can be supported with low-cost but effective training and marketing, and offers the potential for supportive partnerships with the private sector.

**Payment for ecosystem services (PES)** – Payments for ecosystem services (PES) occur when a beneficiary or user of an ecosystem service makes a direct or indirect payment to the provider of that service. The idea is that whoever preserves or maintains an ecosystem service should be paid for doing so. PES systems are frequently established to support the ongoing management of protected areas and can be a significant source of sustainable funding for conservation projects. The most common form of PES associated with community projects are entry/access fees or user fees, such as those negotiated with dive tour operators or trekking and adventure tour companies. The Koon Case Study (below) describes such an arrangement. PES systems often require some form of government regulation, and the collection and management of the funds needs to be accountable and highly transparent – especially where they are collected and distributed in support of community development.
Endowment and dedicated trust funds – In some cases international NGOs and development agencies are able to access donor or development funds for the purpose of establishing a trust fund or endowment to provide a sustainable source of project funding. The funds are managed professionally to provide an annual investment income which is used to support the core management and operation costs of a conservation area. An example in the Coral Triangle is the US$500,000 endowment established for the Arnavon Islands Community Marine Protected Area in the Solomon Islands (www.arnavons.com) which is managed on behalf of the local communities by TNC. Further afield, the Phoenix Island Protected Area Trust Fund has been established by the government of Kiribati in association with Conservation International to provide sustainable funding for the 408,250 km² Phoenix Islands Protected Area, one of the world’s largest MPAs and a World Heritage site (www.phoenixislands.org/trust.php).

Improved fisheries management and value added fisheries – Coastal communities throughout the Coral Triangle remain highly dependent on small-scale fishing for both subsistence and income through local market sales of surplus fish. Improved fisheries and catches linked to community or locally-managed MPAs will enhance fishers’ commitment to sustainable management and open up opportunities for improving fish handling and adding value to surplus catch (see Case Study on Cagayancillo). In addition, the prospect of sustainable catches will encourage private sector interest and investment in village-level processing capacity, adding further incentives to sustain the benefits of conservation and sustainable marine resource management projects.

GUIDING PRINCIPLES FOR SUSTAINING COMMUNITY PROJECTS AND ALTERNATIVE INCOME STREAMS

A body of knowledge has been developed to guide the successful development of sustainable alternative income sources which also contribute to the ongoing costs of conserving and sustainably managing the community-managed fisheries and coastal resources. This knowledge has been distilled into a series of guiding principles aimed at ensuring that local enterprises have the foundation needed to ensure their sustainability beyond the exit of the principal external partners (NGOs, government agencies) and the possible cessation of external funding subsidies.

ENSURE BROAD COMMUNITY UNDERSTANDING, PARTICIPATION AND ENDORSEMENT FOR PROJECTS AND ENTERPRISE ACTIVITIES

All too often, initial project establishment efforts are focussed on developing MOUs and securing donor support for the immediate start-up and initial costs of the conservation phase of a project. Under this scenario assumptions are often made by the partners (NGOs, communities, third parties) as to, for example, the outcomes of the project, who will be responsible for what, how long external support will be available, the extent of that support, distribution and purpose of funds etc. Unless there is a forum and process for the transparent and collegial identification and discussion of these assumptions, they have the potential to undermine the project and any linked enterprise which may be developed, and to negatively impact on its sustainability.
Time and effort must be applied to building the community’s understanding and support of the project and associated enterprise partnerships, including the working arrangements between the NGO and key stakeholder groups and individuals in the community. Although very important, it is not sufficient to assume that the support of a few key individuals and leaders equates with community support. Rather it is critical to ensure all community residents and groups (including women and young people) are engaged and informed to avoid problems arising from miscommunication and misunderstanding.

**DESIGN PROJECTS TO BE AS LOW COST AS POSSIBLE AND USE INTERNAL COMMUNITY RESOURCES**

While most community conservation projects depend, at least initially, on some amount of outside funding and guidance, it’s important to focus on developing projects at a scale that can be maintained by communities in the long term. It’s extremely helpful to long-term sustainability if projects don’t go through a boom cycle at the beginning with a large investment of outside resources, only to end up in a bust because the flow of outside resources can’t be maintained. In the process of project design, it’s useful to discuss what resources the community has already or can access with a little support. This can include existing community groups, motivated individuals, community infrastructure, and in some cases community development funds that can be secured to support conservation activities. Working with community groups can be an effective strategy to keep project costs low. These groups may have enough members to carry out many conservation activities, either as volunteers or with modest compensation. This can also help to spread the benefit of any outside funding across the community. Other strategies include working with neighbouring communities that have already been successful in conservation activities, to recruit them to train and mentor new communities. This can keep costs lower than having trainers regularly travel from distant towns or cities. It can also provide contextually appropriate technical support that’s more readily available. Finally, developing easy-to-use teaching materials that community members can use themselves between visits by outside facilitators is another strategy that can help to reduce project costs. Approaches will vary by country and local context, but overall a good principle for how to sustain conservation activities in the long term is to design them from the very beginning considering how the community will be able to maintain them with resources that they have or that they can develop.

**ENSURE THERE IS ADEQUATE AND SUSTAINABLE INVESTMENT**

Often those developing project-based enterprises or alternative funding initiatives assume that investment from a single source will provide the capital needed for its establishment and operation. Experience has shown that the long-term financial viability of these initiatives is better secured through a mix of multiple funding sources secured at different levels. These can include direct funding and/or in-kind support from within the community – such as from village or community savings clubs or micro-finance programmes, business loans via local or external banks, and funding from external donors supporting international development efforts. Funding from multiple sources (especially community and private enterprise derived funding) helps create ownership and commitment to the sustainability of the enterprise, and resilience against failure.
ENSURE A CLEAR UNDERSTANDING OF MARKET CONDITIONS
Before starting a community or local enterprise it is important to undertake a market feasibility study and work through a process with the community and other stakeholders to develop a realistic business and marketing plan. It is not sufficient to assume that because the community has a marketable product or service – e.g. dive tourism in an MPA – this in itself will be sufficient to ensure customer uptake and long-term viability. Instead, a level-headed understanding of the market is required, and every effort should be made to develop a diversified and flexible market base from the outset. Coupled with this is the need for adaptability to ensure that alternatives can be pursued to deal with changes in markets which are often brought about by external factors, such as weakening international economic conditions.

DEVELOP CONSTRUCTIVE WORKING PARTNERSHIPS
Developing constructive working partnerships and relationships with a range of other stakeholders can enhance the sustainability of a project or enterprise. In the case of marine conservation projects, these stakeholders can include neighbouring communities, fishers from outside the area, commercial operators including the tourism sector, and local or national government agencies. For example, ensuring neighbouring communities and outside fishers are informed about the purpose of and local support for an MPA can help avert incidents such as illegal poaching, and can lead to the adoption of similar conservation measures by neighbouring communities. In this regard, the concept of rights-based fisheries management – whereby the allocation of fisheries rights to fishers provides an incentive for their sustainable management and responsible behaviour – is highly relevant, especially in the village/community and traditional fisheries context. The support of local and national government agencies can also assist the effective and sustainable management of conservation areas; and there are many instances where partnerships with government agencies have provided the authority needed to enforce conservation area rules and regulations. Partnerships with commercial entities can significantly enhance the sustainability of local enterprises through investment of additional capital and access to markets.

EMBRACE AND FOSTER APPROPRIATE LEADERSHIP
Recognising, respecting and using traditional community leadership and management systems in support of the project is important to ensure strong community ownership and commitment. It is also a very important aspect of ensuring the long-term presence of effective and consistent leadership, and broader community support and respect for any local regulations or rules which may be established in support of the conservation goals of the project, such as enforcement of fishing restrictions. Encouraging the support of important community institutions and groups – such as the church, women’s associations, schools and elders – through regular consultation and preferably through roles in the project will enhance community leadership.
ENSURE ACCOUNTABILITY AND TRANSPARENCY OF ROLES AND RESPONSIBILITIES

At the outset of the project it is important to establish clear roles, responsibilities, management structures and working relationships to ensure accountability and to head off potential misunderstandings between the project partners (including the community). Best practice requires that sufficient time and effort be applied to ensure an open and collegial initial project planning process which addresses the fate of the project beyond the current support/funding cycle. This includes transparency over the exit strategies and timelines of NGOs or other supporting institutions; and addressing the building blocks for sustainability from the outset: these must be an integral feature of the project management so that when external support drops away (as inevitably occurs) the community can continue the project through its own endeavours.

EMPOWER THE COMMUNITY

Early intervention by international conservation NGOs is often needed to provide financial support and also to lead and facilitate conservation activities and enterprise development. While this is welcomed by communities, too much reliance on external partners can create unnecessary dependencies at the expense of community empowerment. It is important that NGOs work to empower the community to ‘do it themselves,’ primarily by providing training and back-up support and assisting in other roles including conflict resolution. This will often require patience and long-term commitment on behalf of all parties, as strengthening community capacity requires working at the community’s pace.

KEY THINGS TO DO INCLUDE:

- Ensure that a rigorous, appropriate consultation and project planning process inclusive of all stakeholders is in place from the very beginning of the project.
- Ensure that the project has the goal of sustaining its outcomes (including linked enterprise developments) embedded in its planning and management approaches.
- Ensure that the building blocks for sustainability – planning, leadership, governance, capacity, partnerships, funding and empowerment – are addressed from the outset and become an integral feature of project implementation.
CASE STUDY 1

PROTECTING THE MARINE ENVIRONMENT OF KOON ISLAND

Koon Island and its surrounding marine areas are one of the last remaining spawning aggregation sites for grouper and snapper. They are crucial for the sustainability of these globally important fish stocks, the biodiversity of the region’s ecosystems and the economic and social wellbeing of the local communities. Located in the Coral Triangle just off the eastern coast of Seram Island at the northern end of the Banda Sea in Indonesia, Koon Island lies within the traditional kingdom of Kataloka, whose king has the right of sea authority (Hak Petuanan Laut) in 12 villages across four islands (Koon, Grogos, Nukus and parts of Gorom island).

In response to a noticeable decline in fish stocks and rare fish species, the local Kataloka people agreed to work with WWF to protect their marine resources, and in 2011 the parties jointly established the Koon Marine Conservation Agreement: this established sustainable rights-based fishing controls across 2,497.45 ha around Koon Island, adding to the 9,901 ha MPA mandated by the local government. The commitment of the king of Kataloka – who established a customary rule to address illegal fishing in the area including the designation of a core zone closed to all fisheries activity – was critical. His leadership and authority, and the use of well-understood customary mechanisms for protection of the fisheries, has been instrumental in a consistent increase in fish aggregation numbers, which WWF data shows almost quadrupled in the space of three years. Local fishermen have also seen the benefits through increased catch numbers and size of fish.

Consistent with the strong community and traditional engagement which supports the Koon Island project is the establishment of the ‘guardians of the sea’, a group of men assigned to the local customs agency – Leawana – by the leaders of seven villages involved in the Koon MPA. They have been trained in marine surveillance and enforcement techniques and their role is to undertake daily patrols, monitor fisheries activity and enforce the customary and local government rules which protect the MPA.

WWF, the Kataloka communities and other project partners have worked together to establish sustainable sources of funding to support the ongoing management of the MPA. This has resulted in a partnership with a consortium of tourism operators including Jaringan Kapal Rekreasi Indonesia (Jangkar – the Indonesian Networking of Recreational Boats) and local government authorities to establish a payment for ecosystem services (PES) system whereby live-aboard dive and recreational boat operators and other tourists entering the area will be levied a fee of between IRD 50,000-250,000. Half of the funds go towards community development, and 20% is allocated to conservation programmes including the community enforcement patrols over the Koon Island MPA. Education and village development activities account for the balance of the fund. Inspired community members and leaders are now considering new ecotourism possibilities including home stays and treks; and a new partnership with an Indonesian responsible tourism operator, Jelajah Biru, has been established to help boost visitor numbers.

For more information: http://wwf.panda.org/what_we_do/where_we_work/coraltriangle/solutions/marine_protected_areas/
CASE STUDY 2

CALATAGAN MANGROVE FOREST PARK MPA

Calatagan Mangrove Forest Park – locally known as ‘Ang Pulo’ – is a beautiful 13 ha mangrove forest in Barangay Quilitsan, Calatagan, Batangas in the Philippines. Established in 2009 it is co-managed by Baranggay Quilitsan LGU and Talimusak, a local people’s organization composed of fisher families. Ang Pulo has elevated boardwalks, signs, viewing platforms, huts and observation towers, which differentiates it from other ‘passive’ beach destinations in the region.

To generate income for the operations and maintenance of Ang Pulo, the community run educational and recreational mangrove tours for tourists. These have been bolstered by the addition of birdwatching following the completion of a shorebird guide which identified 27 species of interest. These eco-tourism activities – which also include the construction of a mangrove boardwalk and the development of a comprehensive business plan – have been supported by Conservation International and the USAID Coral Triangle Support Partnership.

For more information: http://wwf.panda.org/what_we_do/where_we_work/coraltriangle/solutions/marine_protected_areas/

CASE STUDY 3

THE ARNAVON COMMUNITY MARINE CONSERVATION AREA – FIRST ENDOWMENT FOR A MARINE PROTECTED AREA IN THE PACIFIC

The Arnavon Community Marine Conservation Area (ACMCA) consists of four small islands and the surrounding ocean located between the islands of Choiseul and Santa Isabel in the Solomon Islands. It is home to the western Pacific’s most important rookery for the endangered hawksbill sea turtle and one of the world’s largest nesting populations of the species. It also includes a wealth of coral reefs and marine life, and in May 2017 it was officially declared the Solomon Islands’ first national park. Initial conservation efforts began as far back as 1995, and with the help of TNC over the years the three local communities with traditional rights to the islands formed the ACMCA Management Committee (now Trust) undertaking the operational management and enforcement of the rules and regulations needed to protect the turtle nesting grounds and the island’s impressive marine biodiversity.

With strong community and government support for the ACMCA and effective day-to-day management and enforcement practices in place, the challenge for the ACMCA was finding a way to sustainably fund its management costs. One way of doing this was to establish an endowment, and in 2007 – with the help of TNC and donors who not only cared about conservation in the Solomon Islands but also believed in contributing to a permanent fund like this – more than US$400,000 was secured for this purpose. The ACMCA endowment is now managed on behalf of the ACMCA in a dedicated fund as part of the Conservancy’s larger endowment fund. It returns annual income which is used to support both the management costs of the ACMCA and local education and awareness activities which utilise the MPA for learning.

For more information: www.arnavons.com (www.nature.org/ourinitiatives/regions/asiaandthepacific/solomonislands/placesweprotect/arnavon-islands.xml)
Homestays offer a way for coastal communities to diversify their income and strengthen their livelihoods while providing a strong link between protecting the environment, preserving culture and traditions, and enjoying the economic benefits of tourism. Importantly, the income earned from homestays goes directly to the family or community. NGOs can play a facilitation role in assisting communities to develop their homestay and eco-tourism income potential by providing advice on homestays and associated activities, helping with access to micro-finance, and providing training. In addition, they can provide critical early support to these ventures by helping with marketing through their membership channels and by using homestays for project and volunteer staff accommodation.

One recent example of an NGO working effectively to support local homestays and ecotourism activities is on Atauro Island in Timor-Leste, where the NGO Blue Ventures has begun working with local communities to establish a coastal conservation and sustainable livelihoods programme. From the outset Blue Ventures and the communities have recognized the importance of linking their conservation effort with the development of diversified and sustainable livelihoods. Using the successful models developed in Madagascar and Africa, Blue Ventures has encouraged families on Atauro to enter the homestay business, offering training and ensuring that their project staff and volunteers stay locally for up to six weeks at a time. In a significant development Blue Ventures arranged for fisherwomen, men, youth and community leaders from Atauro to the Raja Ampat region of Indonesia to undertake a learning exchange and training with local members of the Raja Ampat Homestay Association, the CTI region’s largest coastal community homestay group (https://vimeo.com/2304311952). The learning exchange was an outstanding success which also illustrates the power of peer-to-peer learning as a means of strengthening capacity and empowering communities.

For more information on how Blue Ventures supports Atauro homestays: https://blueventures.org/volunteer/timor-leste/#base and https://blog.blueventures.org/from-atauro-to-raja-ampat-a-homestay-adventure/
CAGAYANCILLO, PHILIPPINES – REAPING THE BENEFITS OF PROTECTING TUBBATAHA

Cagayancillo is an archipelagic municipality in Palawan, Philippines. Located in the north-eastern region of the Sulu Sea it is about 130km from the protected oceanic reef complex of Tubbataha Reefs Natural Park, itself a World Heritage listed site. In 1988 the provincial government of Palawan endorsed the idea, and President Corazon Aquino declared Tubbataha a National Marine Park. In 1992, the site was listed as a UNESCO World Heritage site. Since that time protection of the reefs and associated waters has resulted in dramatic recovery of both the reef ecosystem and the associated fisheries, making Tubbataha a mecca for divers and an important source of ecotourism-derived revenue. This supports the park management but also provides compensation (10% of revenue) to the communities of Cagayancillo for the fishing rights they surrendered on establishment of the park.

However, what is perhaps more important is that after noticing the dramatic recovery of fish stocks in the Tubbataha Reefs Natural Park, the people of the communities of Cagayancillo were inspired to better manage their waters closer to home. In 2004, these communities worked together to establish the first set of local marine reserves in Cagayancillo, forming a chain of small MPAs. Today, the Cagayancillo municipality has the largest protected coastal marine area in the Philippines with 1,013,340 ha of Cagayancillo waters protected, including 528,000 ha of municipal fisheries and an ecotourism zone, as well as about 485,000 ha of open water that connects Cagayancillo and the Tubbataha Reefs Natural Park. The scale of the protected marine area has strengthened the authority of the Cagayancillo communities and their ability to control external (and often illegal) fishing incursions, but more importantly it has significantly enhanced their access to sustainable fish stocks for many years to come.

For more information: http://wwf.panda.org/what_we_do/where_we_work/coraltriangle/solutions/marine_protected_areas/

Where to go for further information

Principles for Best Practice for Community-based Resource Management (cbrm) in the Solomon Islands, October 2011, USAID Project Number: GCP LWA Award # LAG-A-00-99-00048-00 Authors: Timothy Alexander, Bruno Manele, Anne-Marie Schwarz, Salome Topo, Wilson Liliqeto. Edited By: Maurice Knight, Freya Paterson
https://blueventures.org/conservation/toolkits/

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