

## Civil society engagement

A new sustainable model of forest management founded on local knowledge, innovative business strategies and entrepreneurship is being pioneered to provide rural livelihoods and mitigate further climate change.



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# Local forest economies

## Context and challenge

Tropical forests are being razed, primarily to make way for intensified agriculture. This leads to vast degraded areas, soil erosion, devastating floods and the extinction of unique plant and animal species. Between 10-15% of global emissions stem from this deforestation as much of the CO<sub>2</sub> absorbed from the atmosphere by the forests is released in one go when they are cleared.

Beyond climate change impacts, forest loss is of particular concern to the millions of people worldwide who are directly dependent on these ecosystems for their health and wellbeing. For centuries, communities have harvested a wide range of non-timber forest products (NTFPs, defined as “any product or service other than timber that is produced in forests”) both for subsistence use and as a source of income. Forest products such as fruits, nuts, mushrooms and game play a key role in ensuring food sovereignty and security. Equally important are the forest-based sources of traditional medicine, and the local knowledge on what to use and how, both of which are disappearing as the forests are flattened.



PARINEETA DANDEKAR

The forest can also serve as a safety net in times of scarcity when collecting forest products can prevent families from going hungry or slipping further into poverty. In addition, forests support agriculture by recycling nutrients, countering erosion and floods, and serving as the habitat for insects that pollinate crops. Money earned selling fruit, honey, rattan, medicinal and other products at the market is often people's only source of cash, making a huge difference by, for example, enabling them to send their children to school.

Given the role of forests in providing livelihoods and combatting further climate change, a new sustainable model of forest management is needed. This fundamental turnaround requires a combination of local knowledge, innovative business models and entrepreneurial spirit, all dedicated to taking an ecosystem approach.

## Taking an ecosystem approach through civil society engagement

The ecosystem approach promotes the integrated management of land, water and living resources in a way that achieves mutually compatible conservation and sustainable use, and delivers equitable benefits for people and nature.<sup>2</sup> Working with communities toward the optimal use of NTFP resources can both support basic livelihoods and provide an

incentive for forest conservation. The Ecosystem Alliance has applied this approach in several ways:

- Alliance partners are closely engaged with the NTFP Exchange Programme, a civil society network focused on capacity building and organisational strengthening support in the sustainable management of forest-based communities' natural resources in several Asian countries.
- In India, the Keystone Foundation assists indigenous communities across the Nilgiris Biosphere Reserve in livelihood generation and environmental protection. NTFPs such as honey, coffee, tea, spices and essential oils are harvested, processed and traded through equitable, sustainable practices. Local groups are supported to secure forest rights, protect the environment, set up sustainable NTFP value chains and ultimately attain internationally recognised organic and fair trade certification. Several Alliance partners in India have also conducted training and orientation workshops with communities and government officials on the provisions of the Forest Rights Act to help clarify individual land and production rights. Work with the government also focuses on a mainstreamed livelihoods program through the National Rural Livelihood Mission of the Ministry of Rural Development.
- In Ghana, a partnership between A Rocha Ghana and Savanna Fruits Company has helped enroll 600 women in the certification of organic shea nuts across 1200km<sup>2</sup> of community managed landscape. The process includes training, registration, contract signing and organic certification.
- In Paraguay, Alliance partner Comunidad de Desarrollo Sustentable is working with 50 families in three indigenous communities to produce honey for both consumption and sale. Contracts have been established with the individual honey producers who commit that in return for materials and training they will sell their honey to Comunidad de Desarrollo Sustentable for two years. Through this process the honey producers who have organised into an association.



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## Impacts on communities, nature and policy

- In India's Nilgiris Reserve 3,850 families (12,000 people) in 89 villages have so far been supported in claiming forest rights, forest regeneration and ecological monitoring. A virtuous circle of fairer prices, steadier income and higher product quality has been created as production groups evolve into viable enterprises. Thus far, six such enterprises source products from over 50 local production groups to further process and refine the NTFPs collected. A range of high-quality, marketable products is now being traded by over 40 retailers and distributors. Some are sold under the brand *Last Forests*, one of the largest networks of organic and fair trade product chains in India. Further, under India's Forest Rights Act, over 450 families from 25 tribal habitations have been supported in filing their individual land claims.
- In Ghana, in 2013 the Savanna Fruit Company bought a total of 35.2 tons shea nuts directly from the newly certified women groups at a price 15% higher than that offered on the local market, significantly increasing household incomes.
- In the Paraguay project, 200 bee colonies currently produce 20 liters of honey three times a year, leading increased incomes of €40,000 per year for 50 families. In future, members will donate 1-2 liters of honey per harvest to the association to fund training, material replacement and marketing to help scale up on both the supply and demand sides.

## Looking to the future

Governments and business can support the scaling up of this vital work through three main avenues:

**Sustainable Livelihoods:** As NTFPs provide employment and increase the long term output of forests, governments should promote their sustainable commercialisation by creating enabling conditions by:

1. Supporting further research to both link the economic impact of NTFPs with local livelihoods regarding contributions to ecosystem management and value and identify new means for 'upscaling' and replication;
2. Training producers and harvesters in enterprise-oriented resources management;
3. Developing community-based enterprises and expanding their participation in the value chain;
4. Assisting producers and harvesters in meeting marketing requirements;
5. Developing networks, alliances and learning mechanisms.

**Market Potential:** Governments and businesses should ensure adequate access to information and marketing support for communities and civil society groups. Available data on details such as price, options for adding value and sustainable harvesting techniques would greatly increase the bargaining power of NTFP collectors and traders. Assistance could also be offered toward gaining credit, technology, skills and fair trade and/or organic certification. Moreover, governments should address relevant policy and regulatory issues, such as user rights and unfair competitive advantage. A global forum could develop and share trade related best practices toward improved NTFP marketing and management with the aim of creating functional NTFP markets where producers add more value.

**Community Forest Management:** NTFP collectors and producers intimately familiar with forest ecosystem dynamics have much to offer to forest resource management. Governments should ensure that all actors are engaged – from communities and civil society to forestry departments and, in some cases, donor agencies – in community forest management geared toward NTFP-oriented sustainable use. Communities which do not see meaningful benefits from sustainable use tend to be indifferent to sustainability practices, so it is vital to ensure that the benefits of any such enterprise are equitably shared.

The processing and marketing of NTFPs creates rural assets and wealth through the development of micro-enterprises. This both relies on, and can in turn contribute to, a healthy locally managed forest. Governments and business have a responsibility to support local civil society in making these productive ecosystems a reality.

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## Restoration of natural capital

Local civil society is leading the way to introduce a low-cost land restoration technique that helps combat poverty and hunger among subsistence farmers by enhancing food, water and income security in a region facing recurring drought.



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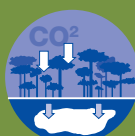
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# Regreening the Sahel: restoring native vegetation using Assisted Natural Regeneration

## Context and challenge

Mali and Burkina Faso are in many ways typical of the Sahel region. Primarily covered with grassland and savannah alongside scattered patches of woodland and shrub land, rainfall is low and unpredictable. They are among the world's poorest countries both ranking in the lowest ten percentile of the 2013 United Nations' Human Development Index<sup>1</sup>.

In an often picturesque land of traditional villages and rugged hills, the 34 million people who live within this landlocked belt practice small-scale cultivation and pastoralism, a centuries-old system of raising and herding livestock developed to cope with changing weather patterns. In addition to rainfed farming, irrigated vegetable production is one of the few remaining sources of income. Many parts of the region have been damaged by unsustainable farming methods and frequent bushfires. Population density is often high for an area with such nutrient-poor soil and low rainfall.

The Sahel has always been arid, but more unreliable and decreased rainfall and rising average air temperatures are making this region even hotter and drier. Crop yields are suffering and drinking water can become scarce during periods of low rainfall. Streams dry up earlier in the season, and the water tables have fallen. Moreover, individual storms can be very intense, washing away fertile soil layers. Today communities are finding it hard to feed themselves as they face crises of successive poor harvests and, in the case of Mali, the collapse of the once-flourishing tourist industry in the wake of recent conflicts.

## Taking an ecosystem approach

The ecosystem approach promotes the integrated management of land, water and living resources in a way that achieves mutually compatible conservation and sustainable use, and delivers equitable benefits



for people and nature.<sup>2</sup> Subsistence farmers in both Mali and Burkina Faso have long traditions of soil and water conservation. They have devised a range of conservation techniques including hillside terracing, stone lines, earth basins, planting pits and earth mounds. A relative newcomer to this wealth of local knowledge is Assisted Natural Regeneration (also known as Farmer Managed Natural Regeneration) – a pioneering low-cost land restoration technique that, with Ecosystem Alliance support, is accelerating the revival of natural vegetation, with a focus on the varieties of trees that best fit communities' needs.

Alliance partners have supported smallholder farmers in several countries in Africa to apply Assisted Natural Regeneration through restoring the original tree vegetation on their own farm land, by nurturing and protecting spontaneous regrowth of tree seedlings and by using pruning techniques which allow young trees to grow faster. Integrated into crops and grazing pastures, the regenerated trees and shrubs have several functions, such as adding soil fertility by fixing nitrogen in the soil, providing leaves (mulch) on the soil which increases the water holding capacity of the soil, or simply as provider of shade, fruit, fodder and such. As a result, crop yields have been shown to double. Full regeneration typically takes 20 years, but Alliance partners have been working with farmers who are already noticing benefits within 5-7 years.

The technique can be accompanied by the planting of indigenous tree species and the further production of non-timber forest products which communities can use for food and income. Thus pressure on high biodiversity sites outside these areas is further reduced.

The trees and shrubs provide extra timber and firewood, fodder and shade for livestock, additional nutrition to the human diet and medicinal products. The availability of more fodder can reduce conflicts between nomadic pastoralists and farmers over the exploitation of natural resources. 'Social fencing' – either agreements between farmers, community members and herders on how to prune and use the tree resources, or actual fences – has been key to success in many cases. Mutual benefits are realised when the pastoralists passing through the farmers' fields leave manure in return for fodder for their



### Benefits to women

Under the hot Morena sun, in the west of Mali, Aissata Diallo is loading her donkey trailer with wood. She has gathered it while pruning native trees that grow alongside the millet and sorghum on her two hectare farm.

She used to destroy these trees, which she considered as weeds. Since 2011, along with 60 fellow villagers in the Groupement des Femmes DoloSaba-Morena, Aissata has practised ANR. In three years tree density has increased by 50-60%. Aissata and other early adopters of ANR are reaping huge benefits compared to when they had to walk a few hours every day to collect wood from the adjacent Doro forest. As tree densities rise over time, they will benefit from the availability of ground water, improved soil fertility and improved yields. All of this will greatly enhance the health and well-being of the women and their communities.



livestock. Such agreements can be essential to the survival rates of the seedlings.

Local civil society engagement and leadership has been critical to success. In Mali, the Alliance has worked with Développement au Sahel, Association Malienne pour la Conservation de la Faune et de l'Environnement, DONKO, AMPRODE and Sahel Eco, and in Burkina Faso with Réseau Marp, Association pour la Gestion de l'Environnement et le Développement, Association pour la Gestion Association inter villageoise de Gestion des Ressources Naturelles et de la Faune de la Comoé – Léraba, Naturama et New Tree. The local organisations have offered training in techniques which farmers are encouraged to use during routine farm maintenance.

A documentary highlighting the Ecosystem Alliance work on Assisted Natural Regeneration in Mali was broadcast as a tool for lobby and outreach on Mali's National Television.

### Impacts on Communities, nature and policy

- Since 2008, approximately 47,000 hectares of land are in the process of being restored.
- The average number of trees per hectare has risen from 7 to 70 over the course of seven years.
- In places like the Bankas area in Mali and Ouedougouia in Burkina Faso, Assisted Natural Regeneration has been adopted at larger scale. It is being replicated in other regions.
- The technique has been integrated into Burkina Faso's national REDD+ strategy for both mitigation and adaptation purposes. Farmers and local communities have been empowered to engage in national discussions on redefining the forest under the REDD+ strategy. If successful, this could at last bring adequate financial support to address deforestation and degradation.

### Looking to the future

Assisted Natural Regeneration has great potential for 'Regreening the Sahel' in a relatively cheap and participatory way, creating a basis for improved livelihoods, water provision, employment and a green economy. Over time it will also reduce the unsustainable extraction of resources from adjacent forests.

Work is advancing to scale up the local approach into regional and national agricultural extension programs. Ambassadors from grassroots networks, producer associations, and municipal or national government departments should be mobilised to spread the word. Key to success will be the training provided by the local civil society organisations and community partners to national government representatives to embed the new thinking in climate change related policy and legislation, and to incorporate it into district biodiversity planning processes. Civil society is also lobbying for the revision of on-farm trees and land tenure legislations, to enable private ownership of those resources, which highly encourages farmers' investments in trees and land.

There is a real opportunity for governments, and perhaps increasingly companies, to capitalise on successes to date. A business case can be made for Assisted Natural Regeneration to be integrated into sustainable value chain development for commodities such as cotton and shea butter, as well as for certain local non-timber forest products. Those involved in climate policy can look to Ethiopia as well, where the approach is being embedded in a national carbon sequestration project.

Mali and Burkina Faso's subsistence farmers are leading the fight to offset the worst impacts of climate change in one of the world's most fragile areas.

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## Ecosystem based adaptation

An innovative river-basin scheme is strengthening climate resilience and addressing biodiversity loss by encouraging businesses to reward indigenous peoples for conserving vital ecosystem services. This initiative is a model for cooperative resources management that offers long-term security for the most vulnerable.



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# Climate adaptation through 'payment for ecosystem services' in the Philippines

## Context and challenge

The Cagayan de Oro River drains the northern central part of the island of Mindanao in the Philippines. From its headwaters in the biodiversity-rich forest areas of the Kalatungan and Kitanglad mountains, and across its 137,000-hectare catchment, protected areas overlap with the ancestral domains of indigenous peoples. Tensions have flared between industry – including logging, mining and agribusiness – and indigenous communities in the mountains who rely on subsistence and seasonal cash crops for survival, and who are alarmed by persistent encroachment into their forests.<sup>1</sup>

On the fertile mountainsides of the province of Bukidnon, flourishing agribusinesses such as pineapple and banana plantations are boosting the economy and providing employment for thousands of Mindanao 'lowlanders'. Meanwhile, indigenous people are experiencing the loss of ancestral lands and facing threats to their culture, but are not receiving benefits such as new jobs or services. Agriculture is also causing sedimentation and chemical pollution that severely affect downstream ecosystems.

Alongside these land-use conflicts, there have been radical changes in weather patterns. Mindanao has traditionally been 'typhoon free', but in recent years the island has been subjected to a series of tropical storms, or (super)typhoons. These have caused extreme floods, numerous casualties, and considerable economic losses, soil erosion and siltation. Climate change models predicted this southward movement of the typhoon belt, and experts now agree that the recent disasters are likely to have been as a result of this shift.

These natural disasters jeopardise the ecosystem goods and services that have been freely provided to local communities for millennia. The impact of the typhoons was made even more devastating, in terms of both lives lost and damage, due to a perilous combination of the pre-existing ecosystem degradation caused by irresponsible land use by industries –

including agri-plantations on steep slopes and mining – and the non-preparedness of the population.<sup>2</sup> Action is needed to protect people in the face of these mounting threats.

## Taking an ecosystem approach

The ecosystem approach promotes the integrated management of land, water and living resources in a way that achieves mutually compatible conservation and sustainable use, and delivers equitable benefits for people and nature.<sup>3</sup> In this case, the region's growing vulnerability reinforces the urgent need for sustainable land-use management and ecosystem-based adaptation (EbA) to mitigate the impacts of future climate change-related disasters.

On Mindanao, achieving this means building-up the resilience of upland ecosystems while ensuring the delivery of the range of ecological services that people and nature rely on. This requires: (i) reforestation of barren grasslands in the degraded headwaters; (ii) protection of remaining healthy rainforest; (iii) promoting sustainable agricultural practices in the mid-slopes; (iv) addressing mining practices and other land-uses that are weakening ecosystem resilience and increasing disaster vulnerability; and (v) relocating settlements from the flood-prone areas along the river to higher grounds to create 'room for the river'.

Adopting a river basin-wide system of payment for ecosystem services (PES) offers a strategic way to realise these goals while rehabilitating landscape and community integrity. With Ecosystem Alliance support, local civil society has already put in place several critical enabling conditions to set the stage for an effective PES:

- **Governance** – Project partner, the Xavier University-McKeough Marine Center, supported the re-establishment of the Cagayan de Oro River Basin Management Council, which consists of local governments, NGOs, academics, the church and the private sector. The Council has now formulated an integrated river basin management master plan and carried out a climate change vulnerability assessment and GIS mapping. The Council is key to implementing EbA and piloting PES in the basin, and provides a model for civil society organisations across the country.<sup>4</sup>
- **Community engagement** – Kitanglad Integrated NGOs, another project partner, has mobilised local indigenous peoples and is now working with them to design new approaches to managing their natural resource base and create new sources of income.
- **Policy Advocacy** – Xavier University is working with the Office of the Presidential Adviser for Environmental Protection, who is championing private sector engagement on PES through policy legislation. Advocacy is also being targeted at the municipal level, with a view to streamlining PES in Local Government Units and ensuring that it will survive well beyond the timeframe of the Ecosystem Alliance project. This initiative includes help to develop new PES/EbA-related legislation.



Datu Dungkuan Rio Besto by ANTHONY JACOB C. KARAGDAG





CDOREBMC SECRETARIAT



*“We live here. Our ancestors lived here. All our actions will affect the future generations. That is why we need to take care of our forest. What is there to life when the forests will be taken away from us? The success of this ecological undertaking lies in the synergy among the communities of Northern Mindanao.”*  
 Datu Dungkuan Rio Besto, chairman of the Miarayan-Lapok-Lirongan-Tinaytayan Tribal Association (MILALITTRA) in Talakag, Bukidnon

- **Awareness raising** – Valuing Ecosystem Services Together (VEST) is a Xavier University social marketing movement aimed at propelling communities, local governments and the private sector towards the sustainable management of ecosystems and ecosystem services in Northern Mindanao.

Thanks to these collaborative actions, the groundwork has been laid to implement PES in Mt. Kalatungan, with sustainable water supply and flood control as the main ecosystem services and indigenous communities identified as the ‘sellers’. Key to success will be the readiness of potential beneficiaries to recognise and reward the efforts of upstream communities to conserve the upstream environment. Mindanao Development Authority and Oro Savings and Sharing Cooperative were the first two buyers. Xavier University is now recruiting more ‘buyers’ among the private sector – such as agri-businesses like Del Monte and Unifrutti, water and electric providers – and segments of the public, ready to pay for ecosystem restoration and protection.

To scale-up these activities, Kitanglad Integrated NGOs is now developing a similar PES initiative for Mt. Kitanglad, where an indigenous-owned Talama trust fund is in place to manage the finances.

### Impacts on communities, nature and policy

- PES agreements have been successfully implemented in Mt. Kalatungan and are now being closely monitored, with semi-quasi government and cooperatives among the first buyers of ecosystem services.
- PES mechanisms are being put in place in the adjacent Mt. Kitanglad region.
- Local communities across the river basin will benefit long-term from a decreased vulnerability to climate change impacts as a result of improved ecosystem management and adaptation.
- EbA and PES have been integrated in the new Cagayan de Oro River Basin master plan, covering 137,000 hectares of land, one city, three municipalities and 120 communities.
- PES-EbA-related ordinances have been drafted at the request of the local government, with assistance from Xavier University. An inter-Local Government Unit alliance memorandum has been signed, pledging cooperation to improve management of the entire watershed.

- The Kalatungan initiative has set a new precedent, and is now being regarded with interest by many environmental organisations, academic institutions and government agencies with a view to its replication in different arenas. These include public-private partnerships, ‘reef-to-ridge’ engagement, indigenous peoples participatory development, watershed and ecosystem restoration, and even potentially for REDD+ negotiations.

### Looking to the future

Securing firm commitments from agribusinesses, municipalities and other stakeholders is the biggest challenge ahead. A carefully targeted marketing strategy is emphasising that a river basin-wide PES system is critical to the climate resilience of this vulnerable, disaster-prone region. This message is being relayed to a select audience, including corporations and cooperatives, governments and municipalities, and members of the public. Local civil society partners will continue to actively engage and the project will ensure that they have more support and a stronger voice in negotiations.

A second challenge is to consolidate and upscale PES and EbA across the Cagayan de Oro basin, expanding the scope of the project to include mid- and downstream regions. To achieve this it is vital that regional and local government authorities continue to integrate these processes in their policy and legislation. Further replication opportunities may come from developing this initiative as a showcase for applying PES and EbA in many river-basin contexts.

Given the innovative nature of this PES approach, participating businesses could be considered global trendsetters and environmental champions. A wider outreach strategy will be required to communicate this emerging success story at relevant regional and international fora.

Most important for all the people of the Cagayan de Oro river basin will be the ongoing bolstering of climate resilience and restoration of national capital that will help them to face future threats and challenges.

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# Protecting nature, people and livelihoods through stronger mining laws

PHILIPPINES

Through a concerted advocacy campaign, underpinned by targeted alliance building and training, civil society is successfully tackling one of the greatest threats to food and income security and biodiversity in the Philippines.



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## Context and challenge

The Philippines is the world's fifth most mineral-rich country, with the third largest reserves gold, the fourth largest copper and the fifth largest nickel.<sup>1</sup> Mining areas frequently overlap with vital watersheds, agriculture, and key biodiversity areas, and encroach on the ancestral lands of indigenous peoples. As well as being a major carbon emitter, mining activities exacerbate climate risks by reducing the adaptive capacity of both communities and ecosystems.

Over the past decade, the national government has stepped-up its mining policy, actively welcoming foreign investment in large-scale commercial mining. Vast areas are now exclusively reserved for mining operations, overriding pre-existing land uses – including food production – and overruling environmental codes. This policy is leading to severe and large-scale environmental degradation; a host of human rights violations; the displacement of indigenous communities; and community division.<sup>2</sup> In 2012–2013, the killing of more than 20 tribal leaders, farmers and advocates led to a decision by the Commission for Human Rights Philippines to monitor mining sites.<sup>3</sup> This destruction is for minimal financial returns: the mining industry contributes less than 1% of GDP, and provided just 0.7% of total employment in 2012.<sup>4</sup>

The government has identified 9 million hectares, about 30% of the country, as having high mineral potential.<sup>4</sup> Because of this, mining is the single most significant threat to the nation's rich biodiversity, and to the natural goods and services provided by healthy ecosystems. In the face of such acute threats to the ecosystems they depend upon, local people are increasingly realising that they need to take collective action to assert their rights and protect their livelihoods.



Mining along the river in CDO-Iponan watershed

## Taking an ecosystem approach

The ecosystem approach promotes the integrated management of land, water and living resources in a way that achieves mutually compatible conservation and sustainable use, and delivers equitable benefits for people and nature.<sup>5</sup> The Ecosystem Alliance has brought together 10 local civil society organisations in partnership with affected communities in Palawan, Mindanao and Luzon to simultaneously: (1) strengthen land tenure; (2) empower people to assert their legal rights vis a vis mining companies; (3) improve land-use planning processes; and (4) enhance people's capacity to secure sustainable livelihoods.

Local constituency building is vital to the application of pressure on decision-makers in Congress to strengthen social and environmental safeguards by both amending existing policies and introducing new legislation. Thanks to the momentum built, since 2011 a nationwide coalition of civil society, academia and the church has mobilised a powerful legal opposition to current mining law and large-scale projects. In one example, a petition calling for a stop to mining on the island of Palawan attracted almost 10 million signatures.

The coalition is now pursuing the passage of the Alternative Minerals Management Bill (AMMB) to address major gaps in the framework of the 1995 Mining Act. To be effective, the new law must ensure equitable sharing of mineral wealth by regulating mining in accordance with the development needs of the country, fair tax collection and the creation of a rehabilitation fund. Mining projects must be made to comply with all environmental laws, policies and international and multilateral commitments. The AMMB must also respond to emerging risks such as climate change, and – most urgently – address serious human rights and security concerns.

The campaign is supported by intensive capacity-building schemes, such as an internship programme run by Environmental Legal Assistance that enables law and science students to specialise in mining issues.

## Impacts on communities, nature and policy

- A 2012 amendment to the law included a moratorium on new concessions and a requirement for No Go Zones, leading to the suspension of more than 400 mining applications in Palawan.
- The Mt Mantalingahan Protected Landscape – a critical biodiversity and watershed area that was under threat of large-scale mining – is now protected, thanks in part to local community groups, local government units and the Palawan Council for Sustainable Development.
- Evidence provided on the social and environmental impacts of the Philex Mining Corporation's 2012 tailings dam collapse pressured the government to impose



National governments in mineral-importing countries have a key part to play. First and foremost they should examine their own supply chains to ensure that the base ingredients for their industries – including electronics – are responsibly sourced. They have a responsibility to provide support for local civil society organisations that are standing up for justice and sustainability, helping them to become adequately resourced and to gain a voice at the negotiating table. Bilateral pressure on governments whose destructive mining policies have made them the target of such advocacy efforts is also crucial for accelerating successful reform.

This applies equally to multinational companies and investors, which can exert huge influence by insisting on good practice from their mineral partners and listening to civil society concerns.



*“The [Fact Finding Mission] team fears further damage to the environment by mining will increase the threat to the country’s long-term food security and the survival of future generations of Filipinos.”*

*Mining in the Philippines: Concerns and conflicts, Report of a Fact-Finding Trip to the Philippines, 2007.*  
<http://www.piplinks.org/miningorfood>

- serious fines and penalties against the company, amongst others for violations of the Clean Water Act, and led to rehabilitation of the areas affected and compensation for the damage caused by the mine spill.
- Multi-stakeholder dialogue in Misamis Occidental resulted in a local ordinance prohibiting mining and linked local advocacy efforts to the national campaign on the AMMB.
  - National awareness of the need to reform has grown enormously, leading to the Philippines becoming a candidate for the Extractive Industries Transparency Initiative in 2013, and one of six pilot countries of the Wealth Accounting and the Valuation of Ecosystem Services programme – a global partnership aimed at mainstreaming natural resources in development planning and national budgets.
  - Partnerships and better coordination among civil society led to several mining reform bills being consolidated in the AMMB, which was re-filed in Congress in 2013. Support for the bill continues to grow among communities, organisations and lawmakers.

### Looking to the future

The passing of the AMMB in Congress will be key. Among other things, success here will overturn the escape clause that currently asserts that “all existing mining contracts, permits and agreements are valid, binding and enforceable”. A compliance assessment is being developed for the International Council on Mining and Metals (ICMM) to determine whether its sustainability principles are being met by Glencore-Xstrata in the fiercely debated Tampakan copper and gold mine in Mindanao. The final report will add extra pressure to proceedings.

Much of the challenge is based on unequal and distorted power relations between the mining companies, the government and local communities. But local voices speaking out and taking action against the injustice and very real dangers of the current system are making a difference. Improved laws and policies will usher in more widespread changes. Exploring options for engagements with the mining companies ready to set an example of more responsible mining may be pursued.

This concerted community-led advocacy campaign is helping civil society to effectively tackle one of the greatest threats to security and biodiversity in the Philippines, and lay the foundations of a more just and sustainable future for its people.

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## Sustainable value chains

**Civil society is coming together to protect the rights of local communities in South America, and to ensure the health of the ecosystems they depend on, by advancing the sustainable production and consumption of soy.**



THRIVING ECONOMIES



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SUSTAINABLE DEVELOPMENT

# Greening the economy – promoting sustainable soy

## Context and challenge<sup>1</sup>

Soy is one of the most important agricultural commodities in the world. The crop is a main ingredient of animal feed, and is also used for biodiesel. The European Union accounts for one-fifth of global soybean imports, one-quarter of which is procured by the Netherlands. In 2013, the Netherlands imported 8.3 million tonnes of soy – a harvest requiring a total surface area of 2.6 million hectares, the equivalent of about 80% of its own land surface.

For producer countries like Argentina, Brazil, Bolivia and Paraguay, the boom in soybean cultivation provides an important source of foreign exchange. Nearly 40% of all Argentinian exports are either soy or its derivatives. But this bonanza has severe social and environmental consequences. The expansion has eroded key portions of South America's natural capital as well as the livelihoods of many local communities. Impacts include:

- Overuse of agrochemicals is harming human health, wildlife and entire food webs. They pollute drinking water and threaten traditional sources of income such as fisheries and beekeeping.
- Soy has become a high-input monoculture, reducing ecosystem heterogeneity and resilience and displacing the traditional mix of maize, rice, oats and beans, which are key to food and income security.
- The Gran Chaco Americano – shared by all four countries and one of the planet's last wild biomes – is undergoing a rapid transformation due to agricultural expansion. Like the Amazon, this biome plays a critical role in maintaining the continent's climatic, hydrological, ecological and productive dynamics. In 2012 alone, major changes in land use transformed more than 500,000 hectares of natural vegetation to make way for agriculture – a deforestation rate of over 2,000 hectares per day.<sup>2</sup>
- In parts of Cordoba province in Argentina, 42% of wetlands have been drained in recent decades. In



Bañados del Rio Saladillo, 69% of wetlands have disappeared, along with ecosystem services such as basin discharge, flood protection, clean water, the storage of organic soil carbon, and forage for livestock.

- Median rural incomes have risen, but overall inequality has increased. Agricultural production is now mainly in the hands of large companies. In Bolivia, over one-half of the cultivated area is owned by a mere 3% of producers, while just 24% belongs to 84% of small producers.<sup>3</sup> Due to mechanisation, employment on large-scale farms is minimal and smallholders are often at a major disadvantage.
- Displacement of local communities causes reduced livelihood opportunities, poverty and sometimes forced migration.

## Taking an ecosystem approach

The ecosystem approach promotes the integrated management of land, water and living resources in a way that achieves mutually compatible conservation and sustainable use, and delivers equitable benefits for people and nature.<sup>4</sup> With Ecosystem Alliance support, civil society organisations have come together in Argentina, Brazil, Paraguay and Bolivia to empower local communities to defend their rights and protect the ecosystem services they depend on.

Collaborative action has focused on transforming the policy and regulatory framework currently guiding land use by:

- Monitoring land-use change.
- Advocating on a range of issues including health, the impacts of land-use change, land-use planning and monitoring, and law enforcement.
- Promoting healthy ecosystems and community participation as the basis for development.

Local partner organisations have mapped the networks of actors, conflicts and land tenure structures, and are using this data to inform the drafting of new environmental laws. On-the-ground projects are complementing this policy work to ensure maximum impact. Civil society groups work closely with affected communities to restore the function of degraded land wherever possible, and to protect remaining healthy wetlands from cultivation by co-creating and co-managing protected areas.

A parallel push in Europe has focused on:

- Reduction – less consumption of soy as feedstock and biodiesel.
- Responsibility – quality standards combined with participatory land-use planning.
- Replacement – substituting soy with more sustainably produced feed and fuel products.

The Dutch Foundation for Chain Transition Responsible Soy was designed to lead to 100% purchase of Round Table on Responsible Soy (RTRS) – or equivalent – certified soy in the Netherlands by 2015. Ecosystem Alliance members are monitoring developments closely to ensure that the bar is kept high.



*“An increasing number of giant production and buying companies are announcing their commitments to sustainable production, which includes no deforestation and no wetland conversion. Access to knowledge about trends and socio-economic and environmental impacts of the industry plays a vital role in this shift.”*  
Hernán de Arriba,  
ProYungas



## Impacts on communities, nature and policy

- In 2014 the Ecosystem Alliance and partners launched the Socio-Environmental Observatory on Soy (OSAS) to gather, produce, systematise and present knowledge essential to influencing local planning policies. It will continue to support the dialogue among actors from the private, public and non-governmental sectors, as well as the systematic monitoring of the impacts of soy expansion and production. Local civil society is now stronger and reliable data is available to the different parties along the entire value chain.
- The project has helped drive the introduction of improved legislation, including:
  - A ban on the proposed privatisation of the Paraná Delta in Argentina, which had threatened to lead to 500,000 hectares of illegal rice and soy cultivation.
  - An agreement to abolish two highly contaminating pesticides in Argentina by 2017.
  - Authoritative land-use plans, designed for a jointly managed ecological corridor crossing three provinces, that have been accepted at the provincial and federal levels. This should lead to the de facto protection from cultivation of hundreds of thousands of hectares of biodiversity.
  - Senate approval of the first-ever national law to establish minimum environmental standards for over 600,000km<sup>2</sup> of Argentina’s wetlands. Final approval is pending.
- Civil society partners are active participants in the RTRS, with real influence on decisions.

## Looking to the future

Governments, as well as the private and financial sectors, in both producer and consumer countries have a vital role to play to effectively transform the value chain in the soy sector. Ecosystem Alliance partners will continue to work in South America and Europe to help establish essential enabling conditions, including:

- Inclusive land-use planning.
- A strong regulatory framework that is implemented in both soy-producing and importing countries, and supported by adequate capacity at all levels.
- A level playing field for the private sector through the adoption of criteria generated by platforms such as the RTRS into mandatory standards.

- Financial incentives such as payments for ecosystem services, tax exemptions and low-interest-rate credits to produce soy sustainably.
- Efficient production and consumption of (soy-based) protein or energy.

Ongoing project activities include:

- Supporting local civil society to actively and effectively participate in relevant decision-making processes and fora.
- Facilitating dialogue among local and international business players, governments, and local communities, to ensure that both governance and certification standards are established in a way that respects and provides for the needs of local people.
- Promoting the trade of soy certified by RTRS, both to industry and consumers, and undertaking advocacy work aimed at making sure the EU Directive on Renewable Energy does not support soy biodiesel that comes at the direct or indirect expense of wetlands, forests and other sensitive areas.

Through these concerted actions, soy production and trade could become a responsible value chain, marrying profits with long-term benefits for both people and the ecosystems that provide us with so many essential services.

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**OSAS**

OBSERVATORIO SOCIO AMBIENTAL DE LA SOJA



## Civil society engagement

Ending the 'invisibility' of nature at all levels of economic decision making is essential if we are to build a sustainable, green economy.



THRIVING ECONOMIES



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FOOD SECURITY



WATER SECURITY



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SUSTAINABLE DEVELOPMENT

# The true value of ecosystems

## Context and challenge

"Human well-being is dependent upon 'ecosystem services' provided by nature for free. Such services include water provision, air purification, fisheries, timber production and nutrient cycling to name a few. These are predominantly public goods with no markets and no prices, so their loss often is not detected by our current economic incentive system and can thus continue unabated."<sup>1</sup>

Thus The Economics of Ecosystems and Biodiversity (TEEB) initiative makes the case that economic development models which do not recognise the value of natural capital – our stock of ecosystems – are incomplete and unsustainable. As such incomplete models inform most economic decisions today, we can expect the continued steady degradation of biodiversity and ecosystems around the world unless fundamental changes are made to the way we view and value nature. Ecosystem services and other non-marketed goods provide 50-90% of total livelihoods among poor rural and forest-dwelling households. Healthy ecosystems are literally 'the wealth of the poor'<sup>2</sup>.

The value of biodiversity and ecosystems must be mainstreamed in economic decision making at all levels to ensure more sustainable development pathways for all people, especially the poorest. Adopting an ecosystem approach to the management of natural resources is a logical step toward protecting the fundamental value of ecosystems and the vital services they provide.



FREDDY CHAVEZ

## Taking an ecosystem approach through civil society engagement

The ecosystem approach promotes the integrated management of land, water and living resources in a way that achieves mutually compatible conservation and sustainable use, and delivers equitable benefits for people and nature.<sup>3</sup> Ecosystem Alliance partners in several countries have applied valuation tools to make the case for such an approach. Examples include:



- In 2011, a partnership between IUCN NL and OxfamNovib brought together stakeholders from across the supply chain to address shrimp farming problems in Kalimantan, Indonesia. The local landscapes are of great ecological, social and economic importance yet their productivity and climate change mitigating potential are at risk from irresponsible shrimp farming, as is the food security and prosperity of several hundred thousand people. A series of assessments made a robust business case for aquaculture improvements. An integrated approach favouring more profitable and sustainable shrimp farming is now being introduced. (See side column, p2.)
- In 2014, the Alliance carried out a Socio-economic Analysis of Environmental Flows in Kenya's Tana River Basin, to assess the economic value of the positive and negative externalities related to different water-flows regimes. The study is also examining the incentives and conditions needed for different regimes to be adopted across the river basin. It is part of a wider cost-benefit analysis of sustainable transboundary river basin management aimed at strengthening the role of ecosystem values in policy and decision-making in the Tana River basin.
- Mangrove Capital is a project of Wetlands International and partners<sup>4</sup> that highlights the value of mangroves and provides knowledge and tools to those involved in their management. The goal is to ensure that mangroves play a greater role in protecting vulnerable coastlines and supporting local economies.
- With Alliance support, an analysis of the ecosystem services provided by the Lutembe Bay Wetland in Uganda used the TEEB methodology to attribute a monetary value to both the services and their loss. The aim is to (i) clarify the economic impact changes in the landscape have on different end users, and (ii) make recommendations to civil society and governments around wetland reclamation and pollution, the economic cost of which was estimated to be about US\$5 million per year.<sup>5</sup>
- In 2013-2014, three training workshops convened dozens of participants from partners across Asia and Africa to share techniques for mainstreaming the value of water and wetlands into decision-making and identify key allies to help shift how wetlands are currently valued. The training drew from the recommendations of the 2013 TEEB for Water and Wetlands Report.<sup>6</sup>



### Shrimp farming and economic valuation

Shrimp aquaculture is the world's fastest growing food production sector. While large-scale shrimp farming has provided some wealth, it is also associated with ecological damage, numerous disease and food safety problems, and the marginalisation of local people. On the basis of a valuation study, the Ecosystem Alliance is promoting an alternative, 'responsible' model that is better for both the environment and the bottom line.\* This new method offers farmers a higher return on their sales, as well as a new source of income in the form of carbon credits for mangrove reforestation. Moreover, the mangroves provide important ecosystem services such as clean drinking water, food and protection from tsunamis – all of which have a clear and quantifiable value. The project is opening up many opportunities for shrimp aquaculture to work as a positive force for conservation and enhance the lives of the poor.

\* A partnership of IUCN NL and OxfamNovib in the Netherlands, Wetlands International, WWF and Telapak in Indonesia, and SNV, IUCN and MCD in Vietnam.



*"The process of identifying nature's values... should be treated as a means to better communicate and take account of nature's importance in policy- and decision-making, with particular respect to human well-being and to the conservation of natural commons for reasons of inter- and intra-generational equity." (TEEB 2014)*



### Impacts on communities, nature and policy

- Indonesia shrimp farming
  - Estimated 15% higher productivity and quality of the shrimp farmed.
  - Increased income security through formalisation of resource use rights and potential price premium on Aquaculture Stewardship Council certified shrimp through access to certified retail market.
  - Better contracts with retailers and traders.
  - Increase in mangrove cover on the shrimp farm, improving nursery function for all fish and regulating and maintaining services such as coastal protection.
  - High quality, stable product stream for international retailers, investors and traders.
  - Increased tax revenues from shrimp exports and concession / licensing fees.
  - New finance streams opened up by mangrove conservation and/or restoration under REDD+.
  - Access to funding windows for nature conservation such as the Global Environment Facility.
- In Uganda, the Lutembe ecosystem has been shown to have a total annual economic value of US\$30 million, providing for the basic needs of 3,500 households. The economic costs of land reclamation and pollution were estimated to be US\$5 million a year, threatening water quality, agriculture, beneficial insects and the wetland's habitat services. Clear recommendations will guide multi-stakeholder dialogue and action toward optimal economic, social and environmental returns.
- The training workshops have built capacity across a range of government, business and civil society actors in Asia and Africa.

### Looking to the future

Unless we 'value the invisible' and make economic decisions based on a true understanding of the value of ecosystems and the associated implications of development options, poor decisions will continue to be taken at untold economic, social and environmental cost. There are many ways to contribute:

- Valuation of ecosystems is not an end in itself.

Governments and business should understand the role of natural capital and ecosystem services in economic growth and prosperity, and the risks associated with their loss. Policies, regulations and the fiscal context should be geared toward improving ecosystem integrity according to their total value.

- Governments and businesses should support civil society to facilitate multi-stakeholder engagement processes and address conflicts of interest. Trade-offs must be recognised and addressed transparently. Clear property rights should be awarded to primary stakeholders and traditional stewards of ecosystems.
- Governments, business and civil society should build and share knowledge and capacity on ecosystem valuation, and empower local communities to stand up for their lawful interests with respect to ecosystem values.

A Green Economy, which fully takes into account the immense value of biodiversity and ecosystems, is essential to 'future proof' corporate and governmental strategies and secure a sustainable development trajectory.

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## Civil society engagement

Water security in Africa requires that existing policy frameworks be matched with effective implementation. Key to success is multi-stakeholder collaboration wherein an empowered local civil society is able to voice the needs of communities and advocate to policy makers for sustainable water resource management.



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SUSTAINABLE DEVELOPMENT

# Communities at the heart of river basin management

## Context and challenge

Africa is a continent of large rivers and lakes, vast wetlands as well as ground water resources. Extensive river basins are home to three quarters of the continent's population. Yet two thirds of Africa is classified as 'arid' or 'semiarid', meaning that water is frequently scarce. Water resources are often overexploited and are being depleted faster than the recharge rate. A range of factors from population growth, pollution, rapid urbanisation and poor planning to desertification and climate variability play a role in undermining the hydrological cycle and ensuring that millions of people suffer from lack of access to clean, affordable supplies of this essential resource.

The good news is that the policy foundations are solid. The Africa Water Vision for 2025<sup>1</sup> describes a future where the use and management of water resources for poverty alleviation, socio-economic development, regional cooperation, and the environment are both equitable and sustainable. In 2007 the African Network of Basin Organizations was designated as a sub-committee of the African Ministers' Council on Water to promote Integrated Water Resources Management (IWRM) (see box). As river basins are often shared by several countries, special attention was given to addressing the need for enhanced transboundary management.

What is often lacking, however, is effective implementation. Despite the 90+ agreements aimed at cooperatively managing transboundary water resources and many more plans at the national level, in practice there are few effective institutional arrangements for cooperation between users. Procedures to avoid or resolve disputes over water are largely absent. Another critical ingredient often missing is active community engagement through stakeholder collaboration. This is essential to creating an enabling environment for the co-management of the water resources upon which livelihoods depend.



JAN KAMSTRÄ, IUCN/NI

## Taking an ecosystem approach

The ecosystem approach promotes the integrated management of land, water and living resources in a way that achieves mutually compatible conservation and sustainable use, and delivers equitable benefits for people and nature.<sup>2</sup> The Ecosystem Alliance has worked closely with civil society partners in Africa to ensure that ecosystems are at the heart of a participatory and inclusive dialogue on achieving water security and integrated management by translating policy into practice. The Alliance's strategy focuses on building trust, shared knowledge and a common vision.

Key to realizing these goals is the Afriwater Community of Practice (CoP). This platform for learning and exchange was initiated in 2011 when Alliance partner Both ENDS convened a group of African civil society practitioners to share experiences around IWRM in an effort to upscale the encouraging results of collaborative action. Through the CoP, twelve civil society organisations from 6 countries support enhanced community participation in IWRM processes through:

- Supporting and promoting the development of river basin management processes with the strong and sustained participation of local communities, in cooperation with relevant officials, water experts and private sector stakeholders;
- Engaging actively with river basin organisations in their respective countries;
- Promoting the conservation of mangroves, floodplains and riparian forest as a foundation for sound river basin management;
- Increasing the capacity of local actors to engage and influence water management policies and water-related investments;
- Supporting a strengthened African civil society network for river basin planning according to the principles of the Negotiated Approach<sup>3</sup>.

Since 2014, the CoP secretariat has been hosted by Alliance partner JVE International in Togo.

Exciting work is also under way at the field level:

- Alliance partners the Benin Environmental Educational Society (BEES), Nature Tropicalé, and Le Centre Régional de Recherche et d'Education pour un Développement Intégré (CREDI) have established a number of community based protected areas in Benin's Ouémé Delta. The aim is to conserve and restore biodiversity rich areas which play an important role in water regulation and climate adaptation.
- In the Volta Basin in Ghana, the Development Institute helped set up a local committee for the management of the Dayi sub-basin and successfully introduced small scale irrigation as an adaptive response to climate change.



JOSEA S. DOSSOU-BODJRENOU, NATURE TROPICALE



Integrated Water Resources Management (IWRM) is defined as “a process which promotes the coordinated development and management of water, land and related resources, in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.”<sup>1</sup> The rationale is to ensure efficient and sustainable development and management of the world’s limited water resources and to cope with conflicting demands.

*‘...an Africa where there is an equitable and sustainable use and management of water resources for poverty alleviation, socio-economic development, regional cooperation, and the environment’. The Africa Water Vision for 2025: Equitable and Sustainable Use of Water for Socioeconomic Development\**

- In the Mono Basin, JVE Togo and JVE Benin have put sustained participation into practice through extensive consultations with basin communities and the creation of a Citizens’ Forum as a platform for continuous dialogue and the development of bottom-up policy proposals.
- Senegal’s Forum Civile assists communities in defending their access and user rights to water resources in the lower delta of the Senegal river, currently under threat from large scale investments for food and biofuel production.
- BEES is closely involved in a project supporting the development of a new water institute to better enable Benin in managing future water challenges. The Society represents the voice of local communities in the set-up of the institute.

### Impacts on communities, nature and policy

- Thanks to the protection and rehabilitation work in the Mono River in Benin, over 100 hectares of mangrove have been replanted and 12,000 hectares of natural infrastructure benefit from improved local governance.
- Local Alliance partners from Benin have been central to transboundary biosphere reserve in the lower delta of the Mono River. This multi-year project is financed by the GIZ (German Federal Enterprise for International Cooperation) and supported by IUCN NL. The creation of the reserve is a consolidation and scaling up of initiatives started by Alliance partners, notably on community based conservation areas around flagship species such as marine turtles, hippopotamus and the Sitatunga swamp antelope.
- As part of the Dayi basin management plan in the Volta Basin in Ghana, over 25,000 hectares of Community Managed Conservation Area is being realised for the conservation and restoration of the upstream forest areas.
- In 2014, the governments of Togo and Benin set up the Mono Basin River Authority, including all stakeholders in the decision-making processes. The JVE teams in both Togo and Benin were thus enabled to speak on behalf of civil society more broadly to protect and fulfill their rights, and to propose and negotiate viable long term strategies toward integrated resource use. JVE and partner civil society organisations will monitor the developments closely to ensure that community voices

are heard and local participation becomes a reality in the Mono River Basin.

- In 2014, the African Network of Basin Organizations (ANBO) invited AfriWater CoP representation to the validation meeting of ANBO’s ten year Strategic Plan and five year Action Plan. This was evidence of ANBO’s new commitment to include all relevant stakeholders in all stages of planning and implementation. Together they made a joint commitment toward (i) developing bottom-up and participatory water resource management plans in African basins, conducting analysis of stakeholders and the needs of local water users (including communities, private sector, and ecosystem); and (ii) strengthening civil society practitioners.

### The way forward

With a number of participatory fora and processes now officially established, a key challenge for government authorities and other leaders within these institutions will be to ensure the proactive inclusion of all stakeholders, including an empowered civil society. Local empowerment takes time. Therefore the process toward inclusive local participation in water management in Africa will require long term financial and human investment in building local capacities and management structures. Governments, donors and private sector partners must move focus on a broader water security agenda. A participatory, bottom-up approach to planning and implementation should replace the predominant top-down processes which have been common thus far.

Success will be the realisation of integrated water resources management on the ground, resulting in improved water security and health of Africa’s wetland resources for the long term.

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National Committee of The Netherlands



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## Restoration of natural capital

An innovative approach to financing conservation is building long-term income and water security for hundreds of families by protecting rainforests and reducing flood risks. It is now being replicated across the region and featuring in global climate negotiations.



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# Communities working together to protect their water supply

## BOLIVIA

### Context and challenge

Central Bolivia, where the Andes meet the Amazon, is one of the most biologically diverse regions on Earth, rich with lush rainforests. Here, people's livelihoods are closely intertwined with nature, but a lack of cooperation between upstream and downstream communities in the vast Rio Grande catchment was creating a lose-lose situation.

Water from the 57,000km<sup>2</sup> catchment is needed to irrigate the valuable agricultural lands of the Santa Cruz lowlands, but this vital ecosystem service is jeopardised when – in the absence of economic alternatives – people upstream are forced to cut down forests to make space for cattle. The resulting flooding is decimating downstream agricultural production and has caused €250 million of damage since 1992<sup>1</sup>. Cattle farming also pollutes adjacent rivers, leading to the contamination of downstream water sources, causing disease as well as missed school and work opportunities for the neighbouring villagers. Precious forest biodiversity is being destroyed to make way for low-productivity upstream agriculture that threatens the health and livelihoods of people downstream.

Hydrological analysis clearly showed that protecting the remaining forests could help reduce the severity of the flooding, as well as safeguarding the many other ecosystem services provided by the forests such as carbon capture, non-timber forest products, and cultural values.

### Taking an ecosystem approach

The ecosystem approach promotes the integrated management of land, water and living resources in a

way that achieves mutually compatible conservation and sustainable use, and delivers equitable benefits for people and nature.<sup>2</sup> In this case, an Ecosystem Alliance project worked with local communities to pioneer a new approach to watershed management, focusing on Amorbó's cloud forests: 'Acuerdos Recíprocos por Agua' or Reciprocal Watershed Agreements, a bottom-up version of the traditional 'payment for ecosystem services'. Since 2004, such agreements have conserved thousands of hectares of biodiversity-rich forest and helped reduce poverty and insecurity in the participating municipalities.

Reciprocal Watershed Agreements are based on two simple axioms: 1) protecting upstream forests will help maintain both the quantity and quality of water supplies; and 2) downstream water users should contribute to this protection by compensating people upstream for leaving natural vegetation intact.

Between 2004 and 2010, ground-breaking watershed agreements expanded more than ten-fold to protect around 5,000 hectares of forest. Since the launch of the joint Ecosystem Alliance programme in 2011, growth has been explosive. By 2013, 22 municipal governments and water cooperatives had joined the movement. More than 30,000 downstream users were compensating 1,500 families upstream for protecting 87,000 hectares of forested 'water factories'. Compensation came in the form of barbed wire, cement, fruit tree seedlings, bee-keeping equipment, piping, water tanks and roofing materials. People are experiencing first-hand the tangible social and economic value of maintaining healthy, functioning ecosystems.



Sandy Rojas Natura technician explains meteorological monitoring in Moro Moro



Ambooró National Park

In 2009, Fundación Natura partnered with Rare Conservation and 10 Andean institutions to promote new Reciprocal Watershed Agreement initiatives in additional countries. Within three years, 10 municipal programs in Colombia, Ecuador and Peru had developed local sustainable financing mechanisms founded on this model and put 15,000 more hectares under conservation agreements. The lessons-learned will be synthesised into a toolbox to help more communities design their own agreements in the future and take a proactive role in the preservation of their natural capital.



Children's views of the importance of water to life

*"By creating and strengthening new institutional structures, we have helped communities to focus on the social component of water conservation. Prior to the project, landowners did not act as conservationists, nor did they interact with their neighbours to discuss and act on conservation issues. We have created communities of conservation in which, for the first time, people are talking and acting together about better protecting their environment."*

Nigel Asquith,  
Director of Policy  
Fundación Natura,  
Bolivia

## Impacts on communities, nature and policy

- A self-sufficient conservation financing mechanism has been developed and rolled out.
- More than 17,000 hectares of upstream forests have been conserved for the long term.
- Deforestation rates inside the watershed agreement areas have been reduced.
- Incomes of 445 families among some of the poorest communities have increased by over 10%.
- Gender integration in decision-making has been measurably improved.
- Communities are empowered to negotiate their own compensation schemes for forest conservation and watershed management, leading to balanced agreements between equals.
- Upstream environmental service providers have an institutional structure through which to negotiate future agreements with local water users or international carbon buyers.
- Santa Cruz city now has capitalised a trust fund, with a contribution pledged by the government.
- In their preparations for the United Nations Framework Convention on Climate Change COP17 in 2011, the Bolivian government proposed "... that non market based approaches, such as joint mitigation and adaptation approaches for the integral and sustainable management of forests as a non-market alternative that supports and strengthens governance ... could be developed".<sup>3</sup>
- In the REDD+ negotiations, Bolivia has promoted 'Sustainable Forest Life' – a non-market based mechanism for mitigation, adaptation, restoration, and 'climate compatible' economic development.

Staff at Bolivia Nature are also advising the Mexican Forestry Commission, the Peruvian Ministry of the Environment, and the Beijing Forest Society as they develop and refine new payment for ecosystem services programs. It is hoped that this will prompt other governments to see the benefits of taking an ecosystem approach with the help of such initiatives.

Governments in the global north have a role to play in encouraging such local civil society efforts including by providing financial support to their often stretched budgets and ensuring that civil society is given a voice in relevant international fora. All governments and businesses must examine their approaches and supply chains and ensure that their trade policies and practices are fully sustainable and respectful of social rights and norms. This project shows how a local community intervention can reverberate throughout an entire region and even take on global significance.

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## Further reading

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## Looking to the future

Scale-up initiatives are focusing on changing social norms around conservation and helping potential participants to appreciate how they can contribute directly to community well being and build a secure future for their families. The project is creating engaged and committed 'communities of conservation'.



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## Ecosystem based adaptation

**Most initiatives by local communities to adapt to climate change are both effective and sustainable. Their efforts and needs must be placed at the center of the response to climate change. This requires that local actors have the financial and institutional means to engage in relevant decision making processes and have access to climate finance.**



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# Empowering local climate adaptation action

## Context and challenge

Around the world, communities are dependent on ecosystems whose natural resources are degraded due to increasing pressures from population growth, unsustainable land and water-use practices and extraction. Climate change impacts are posing additional stresses, leading to even greater cumulative loss of essential ecosystem services. When the natural resource base deteriorates, those who most heavily rely on it for their subsistence and livelihoods are the first to be affected. Deliberate action is thus needed to maintain, nurture and enhance ecosystem capacity in the face of extreme weather events and slow onset hazards that characterise climate change.

Ecosystem-based adaptation (EbA) to climate change is defined as “the sustainable management, conservation and restoration of ecosystems to provide services that help people adapt to both current climate variability, and climate change. [It] contributes to reducing vulnerability and increasing resilience to both climate and non-climate risks and provides multiple benefits to society and the environment.”<sup>1</sup> To succeed, this approach must be supported and mainstreamed at all levels of sectoral and development planning and implementation.



The Green Climate Fund (GCF) was formally established as an instrument of the United Nations Framework Convention on Climate Change in 2010. It is expected to be the primary finance channel to support developing countries in adopting climate resilient development pathways. However, there is a risk that much of the fund will be channeled through international financial institutions like the World Bank, as well as the private sector. These actors tend to focus on large-scale projects in which the poor often do not benefit or are negatively impacted. Another risk is that GCF-accredited institutions entitled to receive funds fail to take into account the needs and knowledge of local communities and the role of civil society. In this case, it is feared that the money may not end up where it is most needed and likely to be most effectively used: with the people directly impacted by the effects of climate change.

## Taking an ecosystem approach through civil society engagement

The ecosystem approach promotes the integrated management of land, water and living resources in a way that achieves mutually compatible conservation and sustainable use, and delivers equitable benefits for people and nature.<sup>2</sup> As with most development initiatives, the success of EbA relies on local community involvement in planning and implementation, and clear acknowledgement of the overall political context and existing resource use conflicts. Local knowledge is also key to informing planning processes. Not only does it provide vital insights, it can facilitate community-based management of adaptation measures, which has been shown to improve their success in building the resilience of both human communities and ecosystems to climate variability and long-term change.<sup>3</sup>

With support from the Climate Development and Knowledge Network<sup>4</sup>, the Ecosystem Alliance has worked to ensure that critical funding is available for EbA measures and local participation, including:

- Active participation of Alliance partners in the GCF Board meetings with a view to ensuring that funds will be directly accessible to stakeholders – local authorities, civil society organisations and knowledge institutions – to design and implement EbA strategies.
- Working to build and amplify the voice of Southern civil society in GCF negotiations.
- Supporting civil society from Argentina, Benin, Ghana, India, Indonesia, the Philippines and Togo to negotiate with the GCF at the national level and advocate for local access to funds for community-based EbA.
- Training 40 partner organisations from South East Asia and Africa on an integrated approach to EbA.
- Implementing and strengthening concrete EbA measures in the field. See the example in the text box and refer to the cases under further reading below.



WIMBERT HILF/GERMAN



### Coastal livelihoods resilience

For years, fishers were getting poorer in Hinatuan Bay, Surigao del Sur in the Philippines. Catches were falling and climate-related storm surges were destroying the oceans' nurseries: the mangroves and coral reefs. So the communities took action. To protect and restore the mangroves that are central for food, income and coastal protection, the Center for Empowerment and Resource Development helped fishers form a Mangrove Nursery Committee. New sanctuaries set up by the fishers groups have improved catches from ~1 kilo to 5-8 kilos per day within a few years. Seaweed farming was introduced as an alternative (or additional) livelihood option and has become a major income source. Over 400 men and women are now seaweed farmers, earning at least as much as they did in capture fisheries. Even better – the farms act as de facto fish sanctuaries. Initial studies suggest that seaweeds may even be carbon sinks. The dual trend of declining livelihoods and biodiversity has been reversed and the track set for a more secure, sustainable future. *Contributing to livelihood resiliency in coastal communities: Making Seaweed production Climate Adaptive*, CERD Inc. Jovelyn T. Cleofe, 2013.



### Impacts on communities, nature and policy

- The GCF Board has recently made some key decisions to help support EbA and local access, including:
  - Agreeing to pilot a programme of Enhanced Direct Access – i.e. the decentralisation of control of resource allocation from the Board to the national level – in 2015.
  - Acknowledging the importance of country ownership and gender mainstreaming in all GCF modalities and decisions.
  - The GCF Adaptation Results and Performance Management Framework now explicitly targets “Increased resilience and enhanced livelihoods of the most vulnerable people, communities, and regions”, as well as “Improved resilience of ecosystems and ecosystem services.”<sup>5</sup>
- Civil society is actively engaged with policy makers and processes to inform national priority setting and decision-making structures with local insights. In the Philippines and West-Africa, for example, Alliance partners are providing direct input to national Board Members. In Argentina Fundación M'Biguá has formally joined the working group for elaborating the National Climate Change Strategy.
- Following the training, Alliance partners have started integrating EbA in their field work, increasing the resilience of both the ecosystems and the people dependent on them.

### Looking to the future

The GCF Direct Access modalities under negotiation must go beyond the national level to include sub-national and non-state actors in decision-making, and a sufficient part of the national budget should be dedicated to local level climate activities. This requires inclusive discussions in countries receiving GCF funding, as they are responsible for developing processes to ensure multi-stakeholder participation and country ownership.

Decision-makers at national and international levels must recognise the vital role of community livelihoods in developing and implementing adaptation measures.

Public investments in the communities' adaptive capacities and ecosystem resilience are necessary. Conversely, governments and businesses must avoid policies and investments – such as large-scale dam projects and mining – that further reduce the adaptive capacities of people or ecosystem resilience.

To build a strong, integrated approach to adaptation which effectively engages the local population and relevant stakeholders, civil society must be adequately funded and empowered to understand how climate-related hazards impact on their livelihoods and ecosystems and how healthy ecosystems can help increase the resilience of communities. They must be given the support they need to voice their knowledge and insight at the negotiation table. Only then can they play a crucial role in the design, implementation and monitoring of effective, context-specific and sustainable climate adaptation programs.

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## Sustainable value chains

Civil society in Indonesia is uniting to address deforestation and growing land-use conflicts through community organisation, legislative reform and international advocacy. By securing tenure rights, communities are protecting their long-term food and income security and the future of the tropical rainforests that are lungs of our planet.



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SUSTAINABLE DEVELOPMENT

# Securing land tenure rights and sustainable land-use planning in Indonesia

I N D O N E S I A

## Context and challenge

Indonesia boasts the world's third largest area of tropical rainforest. But high deforestation rates mean that vast areas of rainforest are being lost every year. The main driver of this loss is export-led agricultural expansion, including for the production of palm oil. Approximately 90% of the world's palm oil is produced in Indonesia and Malaysia. Today palm oil is found in over 50% of the packaged products in our supermarkets. The area of Indonesia covered by oil palm plantations has more than doubled in less than 10 years to cover an estimated 7.7 million hectares<sup>1</sup> (the combined size of the Benelux countries). One 2013 study concluded that Indonesia lost a staggering 15.8 million hectares of forest between 2000 and 2012.<sup>2</sup> Plans to dedicate increasing quantities of palm oil to biofuel production are adding to this demand.

The impacts on ecosystems of Indonesia's palm oil expansion are devastating and far-reaching. One-quarter of plantations are grown on peat soils previously covered by swamp forests. Indonesia's peat swamps are sparsely populated, and thus popular for establishing large plantations – but they are not suitable. The clearance and drainage of the rich organic soils causes subsidence, which results in flooding that can turn them into wastelands. The deforestation of the peat swamps leads to rapid biodiversity loss and is robbing rare species – including orangutans and Sumatran tigers – of large areas of their natural habitat. Moreover, peat destruction, peat fires and forest clearing have helped turn Indonesia into one of the most significant greenhouse gas emitters in the world, and thus a major contributor to climate change.<sup>3</sup>

Almost 65 million people – one-quarter of the Indonesian population – depend directly on forests for their livelihoods. However, as there is often no official recognition of community rights to access or use the natural resources, the government can allocate their land for development, including for large-scale plantations. The resulting land-use

conflicts are increasing in number, frequency and intensity.<sup>4</sup> Overlapping and chaotic forest land-use classification systems work to the advantage of private sector plantation developers at the expense of the rights and livelihoods of forest-reliant people.<sup>5</sup>

## Taking an ecosystem approach

The ecosystem approach promotes the integrated management of land, water and living resources in a way that achieves mutually compatible conservation and sustainable use, and delivers equitable benefits for people and nature.<sup>6</sup> With the support of the Ecosystem Alliance, Indonesian civil society has come together in Sumatra, Kalimantan and Papua around a suite of related projects to stop the expansion of oil palm production on high-conservation-value lands, and to secure the rights of local communities to the natural resources which are so fundamental to their food, income security and culture.

The program is shaped around four themes:

- **Land maps and land policies:** Civil society is supporting several government initiatives – such as the proposed 'One Map approach' – toward improving the regulation of maps and accompanying land rights. These should lead to new policies that will amplify the voices of all stakeholders and provide opportunities for community organisations to participate in decision making.
- **Moratorium:** In May 2011 Indonesia signed a letter of intent with Norway to impose a two-year moratorium on new concessions, prohibiting licences to convert primary forests and peat lands. The Ministry of Forestry produced regularly revised moratorium maps, which were verified and updated by Indonesian civil society groups. The moratorium has since been extended to 2015.
- **Tenure rights:** Recent reforms have included regulation of tenure rights and the formalisation of Community-Based Forest Management. Forest areas can now be awarded the status of *Hutan Desa* (Village Forest) or *Hutan Kemasyarakatan* (Community Forest), giving the community the right to manage the forest and utilise its resources for 35 years. This will protect vital ecological and economic sources of livelihood, and avert the threat of both industrial plantations and mining. Ecosystem Alliance advocacy has empowered some of the most marginalised people in society by organising management groups, providing training, facilitating access to policy makers and helping with applications for Village or Community Forest status.
- **Responsible plantations:** The Roundtable on Sustainable Palm Oil (RSPO) was established in 2004 to promote and mainstream the production and use of sustainable palm oil. The involvement of Ecosystem Alliance partners has included facilitating meetings between representatives of affected communities and relevant companies, coordinating civil society input into various steps in the process, and catalysing the establishment of a Dispute Settlement Facility.





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**RSPO Dispute Settlement Facility**  
 In response to increasing land conflicts between local-indigenous communities and plantation companies, the Ecosystem Alliance, in partnership with Oxfam Novib, helped establish a land Dispute Settlement Facility within the RSPO. The Facility aims to assist communities and plantations to resolve conflicts through external mediation. The RSPO formally endorsed the multi-stakeholder initiative in 2013. Since then, the Alliance has supported several projects that empower local organisations and communities to negotiate with palm oil companies and defend their rights.

Parallel international action has included advocacy focused on the European Union Renewable Energy Directive and the UN Framework Convention on Climate Change, including in the context of REDD+ negotiations. The Alliance has helped its Indonesian partners to attend international policy meetings such as the Conference of Parties to the Convention on Biodiversity, the Rio+20 UN Conference on Sustainable Development, and the Association for Women's Rights in Development.

### Impacts on communities, nature and policy

- A successful advocacy campaign improved the moratorium and extended it to 2015.
- Village Forest permits have been awarded to 30 villages in Sumatra, with 41,000 hectares directly attributable to Ecosystem Alliance work and far more in total.
- The West Sumatra Provincial Government has committed to establishing 500,000 hectares of Community-Based Forest Management forest between 2012 and 2017, supported by a new service center for communities and stakeholders.
- The Governor of South Solok District allocated 1.2 billion rupiah (€77,000) toward implementing a Long-Term Village Forest Management Plan.
- Indonesia's Ministry of Forestry has committed to improving the Village and Community Forest policies.
- Indonesian and Filipino partner organisations have developed an ecosystem based adaptation strategy that includes monitoring and lobby of the Indonesia Climate Change Trust Fund and the Green Climate Fund, as well as training on Climate Change Vulnerability Assessment.
- Jambi and West Sumatra Province devised Provincial Strategies and Work Plans for REDD+, highlighting the Village Forest status scheme as a key option for implementation.
- The EU has included criteria to prevent biofuel production at the expense of wetlands and peat lands in its Renewable Energy Directive.
- In April 2013, the RSPO adopted a new set of Principles and Criteria, including for the production of palm oil on peat land.
- In August 2014, the final draft of the Indonesia National Interpretation of these Principles and Criteria was completed in a joint effort by oil palm companies and civil society organisations.

### The way forward

With the moratorium extension ending in mid-2015, urgent work is needed to review and potentially renew this commitment, and to extend its coverage. For example, significant areas of high-carbon forest classified as 'secondary forests' are not yet covered and many peat lands are not yet adequately mapped. Action is also needed to review, revoke or relocate existing concessions on forests and peat lands, and to pursue ongoing work on legislative reform, verification of maps and coordination.

Under this umbrella, the vital work on tenure rights must continue. More resources are required if the project is to be effectively scaled-up to the level needed. The Village and Community Forests are a relatively new instrument for granting tenure rights that could be greatly expanded, and there are many ways in which civil society organisations can assist communities in acquiring tenure security under these and other policies.

Internationally, the project will promote the implementation and enforcement of the 2013 RSPO Principles and Criteria. The Ecosystem Alliance encourages all national governments to take action to link their own sustainability commitments to both uptake of certified sustainable palm oil in the market and their obligations under relevant international negotiations or conventions, such as the Convention on Biodiversity, the UN Framework Convention on Climate Change and REDD+.

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