

## **Contents**

Message from the Chair and Director	
Productive Landscapes	7
Green Livelihoods Alliance - forested landscapes for equity	8
Multi-stakeholder platforms in integrated landscape initiatives	9
The National Tree Growers Association in Ghana	10
Forest compensation by hydropower plants: does it work?	11
Ecosystem services: the impacts on communities and policies	13
Payment for Forest Environmental Services in Viet Nam	14
Food security and Indigenous communities: the contribution of traditional knowledge	16
Domestic Markets	17
Chainsaw milling project concluded after eight years	19
Operating legally is an option: Province Orientale, DR Congo	20
Capacity Building	21
Mainstreaming the High Conservation Value Approach	22
Strengthening intangible cultural heritage in Colombia	23
Learning about restoration and conservation of tropical dry forest in Colombia	24
Finances	25
General Board	25
Publications	26

## Message from the Chair and Director

Tropenbos International has continued to adapt its focus to evolving priorities in making knowledge work for forests and people. This is because conserving the world's remaining tropical forests can only be achieved by respecting the rights of the billion-plus people who depend on forested landscapes for their livelihoods.

'Forest landscapes for equity' is the aim of a new five-year project of the Green Livelihoods Alliance which began work in earnest this year, strengthening capacities of civil society organizations in nine countries. The Green Livelihoods Alliance is a partnership between Tropenbos International, IUCN-NL, Milieudefensie (Friends of the Earth Netherlands) and the Dutch Ministry of Foreign Affairs. In 2016, partners have worked with defined shared advocacy agendas with CSOs in southern developing countries, to influence policies that support sustainable and inclusive governance. But besides new activities, TBI also closed some projects in 2016...

After eight years, Ghana's Chainsaw Milling Project concluded. Multi-stakeholder dialogues were the main strategy, and this interactive learning platform involving all forestry-sector stakeholders proved to be a very effective tool for decision making amongst diverse and competing interests and expectations. In parallel, TBI DR Congo also supported the establishment of legal artisanal miller associations in seven territories, now paying taxes but also aware of their rights. Another great achievement was the setting up of the National Tree Growers Association in Ghana, to facilitate improved extension services on silvicultural practices, tree pricing, marketing and negotiation.

TBI Colombia concluded participatory research and indigenous community monitoring to document activities related to food security, generating alternative proposals for public policy based on traditional knowledge and local capacities. Participatory three-dimensional modelling of the Upper Suriname River area was also successfully completely. Taking three years, this assessed ecosystem services and agreed visions with the Association of Saamaka Authorities and 24 local communities. TBI Viet Nam presented results from a different study on impacts of 'payment for ecosystem services', finding that this improved local awareness of values and benefits of forests, but the policy was inflexible and incentives were weak. It recommended a performance-based monitoring system, and support to negotiations between service providers and buyers.

And onwards... In 2017, Tropenbos International will become managing partner in the CGIAR Research Program on Forests, Trees and Agroforestry, furthering its global reach. Impacts on the ground require influence at country level. And that's where TBI comes in, helping to connect hundreds of scientists with CSOs, ministries and local businesses. There are also many new projects starting, that continue to build on TBI's deep country-level experience.

The coming year will also see the launch of a new five-year strategy (2017-2022), supported by the results of a major self-evaluation undertaken in 2016. Involving all country programmes and a range of partners, conclusions and recommendations are now being transformed into strategic planning that will take Tropenbos International forward to its 30th anniversary and beyond.

**Tini Hooymans** Chair

Rene Boot Director





## **Productive Landscapes**

Productive landscapes provide a wide range of products and ecosystem services. They also meet the economic and environmental needs of present and future generations at the local, national and global level. Tropenbos International (TBI) aims to understand

the role of trees and forests as providers of goods and services in these landscapes. TBI develops strategies to increase the benefits of multifunctional landscapes for food security, ecosystem services and human well-being.

# Green Livelihoods Alliance - forested landscapes for equity

About 1.2 billion people — almost 20% of the world's population — depend on forested landscapes for their livelihoods. Many of these people are disadvantaged: their rights over land and natural resources are illdefined and far from assured. Forested landscapes are also crucially linked to the rest of the world. They provide natural services such as climate resilience, biodiversity, and food and water security. Despite the importance of protecting these services, almost one-third of the world's forests have disappeared, and another 20% of global forest cover is seriously degraded.

In 2016, Tropenbos International (TBI) began to work within the framework of the Green Livelihoods Alliance (GLA). The alliance is a five-year effort to strengthen the capacities of southern civil-society organisations in nine countries in the Global South. The goal is to support these organisations so they can influence policies and practices that achieve sustainable and inclusive governance of forested landscapes. In this first year, TBI partners in Bolivia, Ghana, Democratic Republic of Congo, Viet Nam and Indonesia worked with CSOs to define a shared advocacy agenda. They also analysed their capacities and agreed on a programme to build these capacities. TBI collaborates with IUCN Netherlands and Friends of the Earth Netherlands in this alliance, in a strategic partnership with the Netherlands Ministry of Foreign Affairs.

The alliance was launched at a meeting in Amsterdam that involved around 25 partner CSOs from the nine GLA countries.

Tropenbos International will assume the role of knowledge broker within the alliance. It will highlight the importance of knowledge and multi-stakeholder decision making in influencing policies and practices. TBI will focus on land-use changes in a number of landscapes, and seek to strengthen the roles of CSOs in multi-stakeholder processes at a landscape scale. Research and information are an important aspect of this work and in addressing resource governance in these landscapes.

In the alliance, TBI will work with four of its country offices (Ghana, DR Congo, Indonesia and Viet Nam) and strengthen its links with Instituto Boliviano de Investigación Forestal, a Bolivian research NGO who it has worked with in the past. At the same time, the programme offers opportunities for TBI to begin partnerships with CSOs in four countries that are new to its work: Liberia, Nigeria, Uganda and the Philippines. In Liberia (as in Ghana and Côte d'Ivoire), the programme will align with TBI's new EU-funded programme on supporting non-state actors in these countries. In Nigeria and Uganda TBI is still identifying partners to participate in a programme that will focus on the effects of the expansion of oil palm plantations. In the Philippines TBI will strengthen CSO capacities related to the landscape approach and support a national dialogue on natural resource governance.





# Multi-stakeholder platforms in integrated landscape initiatives

Collaboration among multiple actors is an important part of the success of integrated landscape initiatives. An increasingly common form of collaboration is the multi-stakeholder platform. This coordination mechanism enables discussions, negotiations and joint planning about complex natural resource management issues, and it involves stakeholders from various sectors in the landscape. But are these platforms effective?

Over the course of 2016, Tropenbos International and EcoAgriculture Partners, together with other partners, developed and tested a simple and affordable method to aid the planning, monitoring and evaluation of multistakeholder platforms.

The method consists of three tools that can be used together or separately. The first one — looking ahead — helps to identify the priorities for future multistakeholder collaboration in the landscape. The second one — looking inward — focuses on the processes within an existing landscape in order to identify areas for improvement. The third tool — looking back — helps participants to identify the main outcomes of an initiative and compare them to the original objectives.

The method was tested trough two pilot projects: one in Kalimantan, Indonesia and one in Juabeso-Bia, Ghana. In Kalimantan the method was tested in a workshop with the members of the Sungai Wain multi-stakeholder management board. Sungai Wain is a forest remnant near the city of Balikpapan that provides highly valuable ecosystem services such as water to the city and to an oil refinery.

Participants in the workshop concluded that the method worked well to guide discussions among stakeholders. It also helped them talk about some of the sensitive topics that they would normally avoid, but which are crucial to the success or failure of their platform. The workshop participants acknowledged the role of the board and provided some suggestions for improvement. They also recommended that the management board of Sungai Wain be used as a model for other landscapes.

In Ghana the method was tested in the Juabeso-Bia landscape. A workshop with representatives of a variety of stakeholder groups included farmers, CBOs, NGOs, private companies, small-scale miners, various government agencies and park authorities. Since no multi-stakeholder platform existed in the landscape, the looking-ahead tool was used to guide discussions during the workshop. The aim was to provide participants with an opportunity to jointly identify priorities for future collaboration. Participants said that the workshop was a valuable first attempt to get stakeholders from various sectors of society together and to lay the foundation for future collaboration.

Based on these two pilots the method was further refined. In 2016 TBI published Guidelines: participatory planning, monitoring and evaluation of multi-stakeholder platforms in integrated landscape initiatives, which describes in detail the implementation of the tools. A scientific article on the method will be published in 2017.

## The National Tree Growers Association in Ghana









For many years, smallholder plantation developers in Ghana have existed in isolation, without an umbrella body that would articulate their concerns, provide them with marketing or extension services and represent them to government.

In 1996 an attempt to organise smallholder plantation developers in Ghana under such an umbrella was undertaken with the establishment of the National Union of Tree Growers Associations. However, the association failed to acquire national status by incorporating tree growers from the length and breadth of the country, and also had logistical and administrative problems. It is now defunct. In a bid to fill this gap Tropenbos International Ghana is bringing together smallholder plantation developers under a new platform: the National Tree Growers Association. It will provide a voice for tree growers and a way to express their concerns to the government, and will also stimulate smallholder investment in plantation development.

The National Tree Growers Association was established through the project, "Developing

Mechanisms for Improved Landscape Productivity: The Case of Smallholder Forest Plantations," otherwise known as the Landscape Restoration Project (LRP). The association was launched in December 2016 during a workshop at the Forestry Commission Training Centre in Kumasi, in the Ashanti Region of Ghana.

The National Tree Growers Association will help speed up the restoration of Ghana's landscapes by facilitating improved extension services for its members. The strategies that it will use derive from the information generated during the LRP project about the need for more knowledge of modern silvicultural practices, tree pricing, marketing and negotiation skills.

The Landscape Restoration Project also provided support and training on legal issues, administration and best practices to three newly formed tree grower associations. One of the groups, the Offinso Tree Growers Association, received access to degraded portions of two forest reserves from the Forestry Commission of Ghana in the form of a lease to establish tree plantations under the Modified Taungya System.



## Forest compensation by hydropower plants: does it work?

In Viet Nam, primary forests have been converted on a huge scale to other land-use purposes, including hydropower plants, mining, rubber plantations and agriculture. A total of 76,040 ha of forestland nationwide were converted for hydropower development alone between 2013 and 2015. Although the national government requires hydropower enterprises to replant forest areas equal to those they convert, and to compensate local people for the losses they suffer, reforestation has been slow. By July 2016 these companies had accomplished only 44% of the reforestation required by the government (30,164 ha of the 68,209 ha).

Over the past several years TBI Viet Nam has been researching the impacts and implementation of policies related to forestland conversion, especially those related to hydropower plant development. In a workshop in December 2016 TBI Viet Nam presented the results to researchers, managers, hydropower enterprises and local authorities.

According to the results, one of the reasons for the slow rate of reforestation is that investors in hydropower projects don't include tree planting in their budgets, and thus fail to allocate the required funds for reforestation. In addition, some hydropower enterprises even though they have approved reforestation plans - postpone reforestation or fail to contribute to

the Vietnam Forest Protection and Development Fund (VNFF). The fund, which is managed by the Ministry of Agriculture and Rural Development, mobilises resources to protect and develop forests and support capacity building.

The rate of reforestation also varies among provinces. This is due to delays in issuing instructions regarding implementation, along with poor management of funds by the central government and ineffective collaboration between relevant agencies.

Moreover, management agencies, provincial VNFF staff and implementation units are still failing to make reforestation plans and plantation schemes part of provincial forest protection and management plans. In addition, the lack of specific regulations from the central government means that these organisations cannot effectively manage areas that have been reforested or develop a benefit-sharing mechanism for forest timber and other products.

The findings from TBI Viet Nam, combined with ideas from workshop participants, created a comprehensive summary of the costs and benefits of hydropower development in Viet Nam in recent years. This more objective and more accurate information can be used for policy improvement.











# Ecosystem services: the impacts on communities and policies

In 2014 TBI Suriname started working with the Association of Saamaka Authorities and with 24 Saamaka communities, comprising about 12,000 inhabitants, in the Upper Suriname River area. The goal was to support a land-use planning project that aimed to give the local community a stronger voice in decision-making with regard to spatial planning. From 2014 to 2016, TBI Suriname worked with community members, using participatory three-dimensional modelling (P3DM) to assess the state of ecosystem services and discussing visions for future development of the area.

TBI facilitated focus group discussions with community members. Topics included socio-economic factors and visions about how the area should develop in the future. The development of road infrastructure, commercial logging and collective land rights sparked lively discussions.

Participants also discussed the importance of various ecosystem services, past use of these services, and current changes in their use. Overall, community members considered the provision of food crops and drinking water to be the most important services. Other ecosystem services included the provision of timber, fish, game, plant material for making household items, firewood, oil from palm fruits, medicinal plants, liana and leaves as thatching material, and sand and gravel for construction purposes. Many people also indicated the importance of an ancestral bond with the land they live on and use.

The P3DM exercise also facilitated discussions about how different groups perceive land use. The men travel far from the village for hunting and logging, and have more knowledge of areas with primary forest; the women have more knowledge of agriculture plots and palm fruit resources closer to the village.

Many of the ecosystem services appear to be less available than in the past, for reasons that vary from

loss of traditional knowledge (due to migration during the civil war from 1986 to 1992), more intensive harvesting techniques of ecosystem products, greater awareness of the commercial value of certain ecosystem services, and the increasing influence of the wage economy on traditional lifestyles.

Changes in the use of ecosystem products are also due to the establishment of mini-markets. These make it more attractive for local people to purchase products instead of harvesting and processing comparable items themselves, which involves laborious effort. This change in use varied depending on how close a store was to a village.

TBI Suriname verified the information obtained during the assessment of ecosystem services by conducting transect walks. In addition, the P3DM map created by the participants was used to facilitate discussions on whether important ecosystem services were abundant, stable or degraded. The information collected on ecosystem services also supported discussions on community perceptions of future development of their area and the impacts of various land-use activities.

The participatory process has received positive responses from participants. It stresses the need for inclusive, participatory initiatives in decision-making in productive landscapes. TBI Suriname is now preparing recommendations for policy makers on topics such as land rights, participatory land-use planning, traditional knowledge and capacity strengthening (for both local people and government officials), and how these relate to traditional land use and lifestyles.

At an event in Paramaribo in 2016, community members presented the map and associated information to policy makers. They asked for formal recognition by the government of the map and for acknowledgement of traditional activities of the Saamaka shown on the map.



## Payment for Forest Environmental Services in Viet Nam

Since 2008 the Government of Viet Nam has conducted pilot programmes that compensate forest owners for the costs of protecting forests and providing related services, also known as Payment for Forest Environmental Services (PFES). These programmes were carried out in the country's Central Highlands region. Due to the fact that the policy was new to most forest actors — from local authorities to the central government — implementation has encountered challenges.

For example, PFES policy is not based on a market approach, where buyers and sellers negotiate prices, amounts and payments. The lack of transparency in payment processes and the limited capacity of government agencies have also been constraints during the first stages of PFES implementation. In addition, policy makers at the national level lack information about the impacts of the policy on local livelihoods and forest protection.

From 2015 to 2016 Tropenbos International Viet Nam implemented the project "Analysis of the Impacts of the Policy on Payment for Forest Environmental Services and its Outlooks in Viet Nam." It is working in partnership with Hue University's Quang Tri Branch to assess and analyse PFES performance and efficiency.

The main findings of TBI Viet Nam's research were presented during a workshop in October 2016 in Hue City (see below). Researchers found that the policy has improved local people's awareness of forest values and forest-derived benefits. They also pointed out policy gaps; for instance, the policy has not created strong incentives for local forest service providers to become involved in forest protection and management if they merely protect and manage the forest for a fee. In addition, the policy has failed to be flexible in a changing environment. For example, the rising price of coffee and pepper in recent years has resulted in the conversion of forest land to coffee and pepper plantations. Further, PFES payments are too small to compensate forest owners for the economic gains they would realise from clearing forest. Two recommendations were derived from the research: establish a performance-based monitoring system; and develop a mechanism that supports negotiations between the service providers and buyers in order to meet the needs of each party.

After the workshop, TBI Viet Nam accompanied national television reporters to the field for them to double-check the information shared at the workshop. The reporters' interviews with local community members confirmed the fact that low payments — around US\$20 per person per year at Tan My village,



Phong Dien district, Thua Thien Hue province — has discouraged local people from being involved in forest protection and development. As a result of the field

trip, a documentary film was broadcast on the regional and national channels to update the public about the status of PFES implementation.

In October 2016, TBI Viet Nam and the Fund for Forest Protection and Development of the Thua Thien Hue province jointly organised the workshop "Evaluation of the Payment for Forest and Environmental Services Policy in the Central Highlands Region, and Making Policy Recommendations." The workshop provided an opportunity for representatives of state management agencies, researchers, individuals and organisations working in the agroforestry field, enterprises and beneficiary groups — from the local to the central level — to share their experiences and discuss the constraints they faced during the implementation of the PFES policy.





# Food security and Indigenous communities: the contribution of traditional knowledge

Food security in indigenous communities is the subject of political debate at the local and national level in Colombia. Traditional knowledge of cultivated and wild plants, including their symbolic aspects and especially the knowledge held by indigenous women, is relevant to the debate and to the preservation of traditional practices. Therefore, it is important to not only document this knowledge, but to strengthen and share this knowledge within the communities, and with the academic and governmental institutions related to food security.

During 2016 TBI Colombia provided support to indigenous people to use local research methods to document traditional activities related to food security such as chagra (traditional agricultural plots), hunting,

fishing and the concept of forest as a food provider. The research involved participatory methods for community monitoring of the daily food consumption by several dozen families settled in the central Caquetá River area. As a result of these community monitoring activities the sharing of information between elders and youth in the communities has been strengthened.

The results obtained have been used to analyse the food situation in indigenous contexts and to generate alternative proposals to address food security based on traditional knowledge and local capacities. The information generated has been compiled and published in four documents. These will serve as a reference for decision making and for improving public policy on food security in indigenous territories.



### **Domestic Markets**

Increasingly, international trade and market instruments are being used to promote the responsible production of commodities that originate in multipurpose landscapes. Although the international dimension of the timber trade is widely known, the importance of sustainable trade to the domestic and international markets — which provide livelihoods and fuel local development — has only recently been recognized.

In recent years TBI has directed its efforts to supporting timber-producing countries in assisting the forest sector to supply legal lumber to the domestic market and to search for alternative From illegal to legal: livelihoods for illegal chainsaw millers.



















# Chainsaw milling project concluded after eight years

After eight years and the conversion of more than 200 illegal chainsaw millers into artisanal millers Ghana's Chainsaw Milling Project came to an end in 2016. The project found alternatives to chainsaw milling through a multi-stakeholder dialogue. The dialogue assessed the reasons behind illegal logging and piloted the artisanal milling concept as an alternative to chainsaw milling and as the solution to providing legal wood to the country's domestic market.

The multi-stakeholder dialogue was the main strategy used by the project. This interactive learning platform involved all types of stakeholders within the forestry sector. It proved to be an effective tool for decision making amid diverse views and competing interests and expectations. Through the well-managed process, the project bridged the differences between competing actors (chainsaw operators and forest managers) within the domestic timber sector. The discussions provide two tangible outputs: 1) a policy for supplying legal timber to the domestic market; and 2) a public procurement policy on wood and wood products. It was also through the platform that artisanal timber milling was identified as the legal alternative to illegal chainsaw milling. In 2015 the MSD was taken over by the National Forest Forum Ghana.

The project activities led to stronger and better organised associations of Small and Medium Forestry Enterprises. They are now able to represent themselves effectively at district, regional and national forums and in discussions on forestry issues. These groups include trader associations, artisanal milling groups, woodworker groups and agroforestry associations.

The concept of artisanal milling (ATM) was defined as small-medium scale milling of timber from specified

legal sources by a trained, certified, registered and licensed Ghanaian artisan, using licensed mobile sawmilling equipment that excludes any form of chainsaw machines, capable of recovering at least 50% of dimension lumber from logs, for the domestic market only. This may be processed on site or off site.

Models of ATM, together with training modules, were developed and piloted in eight communities. A total of 257 artisanal millers have been trained. Five ATM groups are currently operating and supplying legal lumber to the domestic market.

Not all illegal chainsaw operators could be transformed into artisanal millers. Therefore, the project also piloted alternative livelihood options such as agroforestry and commercial charcoal production in four communities. The project trained four groups, made up of about 250 former chainsaw operators, in agroforestry. These groups were supported to obtain access to almost 300 hectares of degraded forest lands to develop tree plantations under the Modified Taungya System. About 60 former chainsaw operators were also trained in commercial charcoal production and provided with access to material for charcoal production.

To continue the work already done by the project and to broaden its results, a new project is being launched in 2017: "Upscaling Artisanal Timber Milling to Improve the Supply of Legal Lumber to the Domestic Market." This project, funded by the Food and Agricultural Organization, seeks to consolidate the artisanal timber milling concept in Ghana by piloting it in more communities and expanding its scale of implementation. Another goal is to find solutions to constraints to the adoption of artisanal milling.

## Operating legally is an option: Province Orientale, DR Congo









Artisanal millers from seven territories of the former Province Orientale are now organised in legal associations (in 2015, the province was subdivided into four new provinces). The loggers now operate according to the law and pay taxes to the state. In addition, they are now aware of their rights and duties and better able to defend themselves against and reduce mistreatment by civil servants. These are the results of the efforts made by TBI since 2014 to promote legality and develop the artisanal logging sector in DR Congo.

TBI DR Congo created and supported associations in Aru, Bafwasende, Isangi, Kisangani, Mahagi, Mambasa and Ubundu. In 2016 TBI DR Congo carried out a campaign to create awareness of and to disseminate the new forest regulations, and provided training on the creation and management of logging associations.

The project also carried out advocacy activities to promote the rights and interests of artisanal loggers at the provincial and national level. A policy brief was presented to policy makers that outlined the lessons learned and outcomes and made recommendations to address the challenges in the artisanal logging sector. Partly as a result of these advocacy activities the country's Prime Minister has authorised artisanal loggers to export their timber.

To build on these achievements a new project started in the second half of 2016. Its goal is to formalise, strengthen and support the artisanal logging activities of the members of the seven existing associations and make them more profitable. Initial activities included surveys to establish a baseline regarding the knowledge, attitudes and practices of artisanal loggers. They also included a campaign to explain how artisanal logging initiatives can be transformed into legal Small and Medium Forest Enterprises. The project also provides support and guidance to volunteers who are willing to transform their informal activities into legal enterprises.

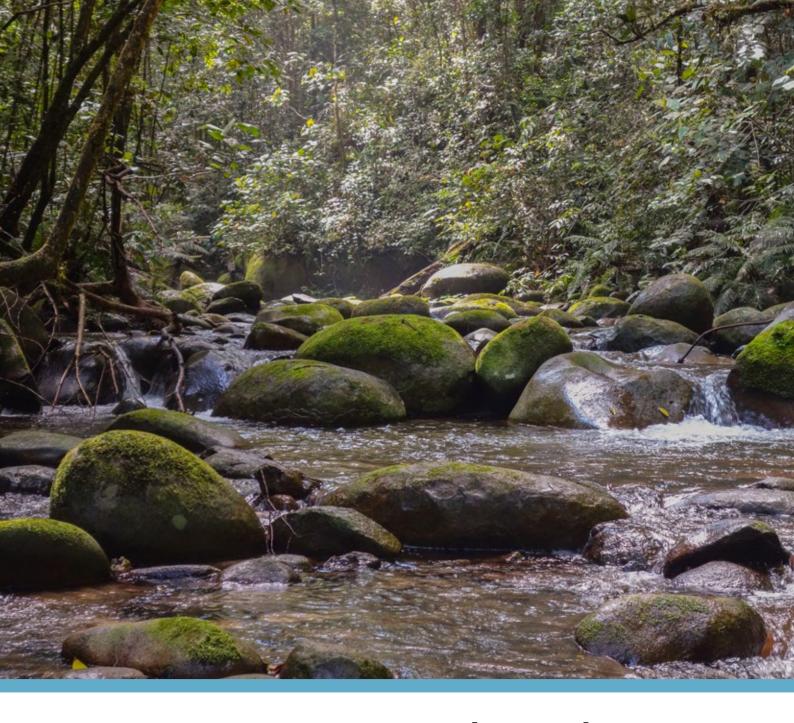
Both projects have been developed with the financial support of the Food and Agricultural Organization.



## **Capacity Building**

Through organizational strengthening and capacity building, TBI works to support key national forest sector organizations so that they will be better able to produce and use information to fulfill their mandates. TBI provides training to large numbers of professionals

working in the forest sector, including policy-makers and regulators as well as members of forest-dependent communities and staff of universities and research institutes.



# Mainstreaming the High Conservation Value Approach

Forest management units are being developed in Indonesia and will be key to sustainable forest management in the country. Their success largely depends on the capacity of forestry staff, who need knowledge of and skills in various technical and managerial aspects.

One important skill is the ability to identify and manage High Conservation Value Forest (HCVF). In September 2016 the workshop "Pengarusutamaan Nilai Konservasi Tinggi Hutan (HCVF) dalam Penguatan Kapasitas KPH" (Mainstreaming HCVF in Strengthening Capacity of KPH) was organised by the Indonesian-German Forests and Climate Change Programme (FORCLIME), with the support of TBI Indonesia. During the workshop staff from forest management units, government and local NGOs received training and improved their capacities related to HCVs. With the increased capacity of staff in Forest Management Units, knowledge of HCVF will no longer be limited to NGOs and private companies, whose sole objectives are product certification and commercialisation.

# Strengthening intangible cultural heritage in Colombia

Safeguarding intangible cultural heritage is a priority in Colombia. It requires an understanding of communities, territories and the interactions between cultural agencies. Since 2015, TBI Colombia has worked with the Colombian Ministry of Culture to strengthen the capacities of cultural agencies to carry out projects related to intangible cultural heritage. A certificate course was developed on understanding and management of the intangible cultural heritage; it was directed to public employees in the cultural sector. Participants were trained in the concept of intangible cultural heritage and made acquainted with the debate about this matter at the local, national and international levels.

As part of this capacity-strengthening process a digital library was developed. It provides access to reference materials and guidelines to various actors at the local level who are developing plans to safeguard cultural heritage in their regions. In addition, TBI and the ministry published a publication presenting the range of experience in implementing the policy for intangible cultural heritage in the country. These outputs have been used extensively in various virtual courses in Latin America.









# Learning about restoration and conservation of tropical dry forest in Colombia

One of Colombia's scarcest and most threatened ecosystems is the tropical dry forest in the Caribbean region. In past years, many strategies for its restoration and conservation have been initiated; they included environmental, social and production initiatives. In 2016, in a new endeavour, TBI Colombia developed activities to strengthen research by local communities, and provided assistance on teaching methods to schools, technical education institutions and universities. The topics are related to the environmental aspects and management of this ecosystem.

TBI Colombia developed workshops to formulate school projects about knowledge, conservation and sustainable use of the tropical dry forest. It also assisted

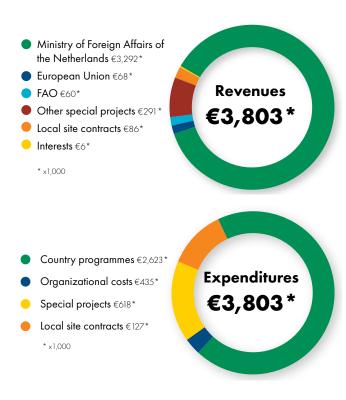
in the design of teaching materials that include local experiences, local research, technical and scientific information, and new perspectives. At the end of the project methodologies for action research were established and a range of teaching materials for capacity building related to this ecosystem were published.

The materials comprise a printed guide and a series of eight digital modules that provide technical information and local knowledge of the ecosystem, as well as educational experiences and exercises. They are aimed at teachers of secondary schools and trainers of the National Learning Service in the region.



## Finances

During 2016 TBI received programme major funding from the Directorate General for International Cooperation of the Ministry of Foreign Affairs (DGIS) of the Netherlands, the European Union and the Food and Agriculture Organization (FAO). A range of other donors also supported TBI's work. TBI's partners in the programme countries provide substantial contributions in kind, in the form of office space and/or equipment, or make available researchers or relevant expertise. These contributions allow TBI to continue its activities to improve the sustainable management of tropical forests for the benefit of people and biodiversity.



### Major funding partners

Directorate General for International Cooperation of the Ministry of Foreign Affairs (DGIS) of the Netherlands

European Union

Food and Agriculture Organization

### Other funding partners

Alexander von Humboldt Biological Resource Research Institute, Colombia Barito Group Indonesia Colombian Ministry of Culture Gesellschaft für Internationale Zusammenarbeit, Germany

International Union for the Conservation of Nature
Norwegian University of Life Sciences, Norway
Patrimonio Natural, Colombia
PT Fajar Surya Swadaya, Indonesia
UNESCO
Utrecht University, the Netherlands
USAID / Engility
World Wildlife Fund

### **General Board**

TBI is governed by an international General Board composed of respected Dutch and international experts drawn from the research, policy, business and development communities.

#### Prof. B.J.M. Arts\*

Professor, Forest and Nature Conservation Policy Group, Wageningen UR, the Netherlands

#### Prof. E.H. Bulte\*

Professor, Development Economics Group, Wageningen UR, the Netherlands

### Dr. J.R. Cobbinah

Chief Research Scientist, Forestry Research Institute of Ghana (FORIG), Ghana

\* Member of the Executive Board

### Dr. G. Gryseels

Director, Royal Museum for Central Africa, Tervuren, Belgium

### Dr. C.M. Hooymans\* (Chair)

Former Governing Board, Netherlands Organisation for Applied Scientific Research (TNO)

### Prof. M.J.A. Werger\*

Professor Emeritus, Plant Ecology and Biodiversity, Utrecht University, the Netherlands





### Landscape

Sayer, J.A., Margules, C., Boedhihartono, A.K. et al. "Measuring the effectiveness of landscape approaches to conservation and development." Sustain Sci Vol 12, 3 (2017): 465–476. doi:10.1007/s11625-016-0415-z

Kusters K., M. de Graaf and L. Buck. Guidelines: Participatory Planning, Monitoring and Evaluation of Multi-stakeholder platforms in integrated landscape initiatives. Wageningen, the Netherlands: Tropenbos International, 2016

Purwanto, E. An Anti-Encroachment Strategy for the Tropical Rainforest Heritage of Sumatra: Towards New Paradigms. Yogyakarta, Indonesia: Tropenbos International Indonesia and UNESCO, 2016

McElwee, P., Van Hai Thi Nguyen, Dung Viet Nguyen, Nghi Huu Tran, Hue Van Thi Le, Tuyen Phuong Nghiem and Huong Dieu Thi Vu. "Using REDD+ Policy to Facilitate Climate Adaptation at the Local Level: Synergies and Challenges in Vietnam." Forests Vol 8, 1 (2017) 11. doi:10.3390/f8010011

Purwanto, E. Managing Indonesia's Remaining Forest: Compilation of Opinions 2014-2016. Yogyakarta, Indonesia: Tropenbos International Indonesia, 2016

Wetlands International, Tropenbos International.
Can Peatland Landscapes in Indonesia be Drained
Sustainably? An Assessment of the 'Eko-Hidro' Water
Management Approach. Ede, the Netherlands:
Wetlands International and Tropenbos International,
2016

Likwandjandja Mupira, J., R. Ibofa Modiri et C. Benneker. Système d'Organisation et de Gestion Socio-économique des Ménages Ruraux en Province Orientale, RD Congo. Kisangani, RD Congo: Tropenbos International RD Congo, 2016

### **Domestic Markets**

Kakelengwa, B., Benneker C., P. Matata et L. Muganguzi. La foresterie Communautaire Cace aux Dynamiques Locales de la Gestion des Forêts à l'Est de la RD Congo. Kisangani, RD Congo: Tropenbos International RD Congo, 2016 Likwandjandja Mupira, J. et R. Ibofa. Approche Bottom-up comme Gage du Développement Rural. Kisangani, RD Congo: Tropenbos International RD Congo, 2016

Kakelengwa Mbilizi, B. et A. Maindo Monga Ngonga. La Gestion Locale de la Redevance Coutumière Relative à l'Exploitation Forestière. L'Autorité Coutumière Face à l'Exigence Populaire de la Redevabilité en Province Orientale/RD Congo. Kisangani, RD Congo: Tropenbos International RD Congo, 2016

Maindo, A. et J. Likwandjandja (Eds). Les Ménages Périurbains de Kisangani (RD Congo) et l'Exploitation Forestière Artisanale : la Survie en Jeu. Kisangani, RD Congo: Tropenbos International RD Congo, 2016

### Capacity building

Ministerio de Cultura, Fundación Gaia Amazonas, Tropenbos Internacional Colombia y Parques Nacionales Naturales - Dirección Territorial Amazonia. Metodologías para la Salvaguardia de la Cultura y Gobernanza. Bogotá, Colombia: Ministerio de Cultura, Fundación Gaia Amazonas, Tropenbos Internacional Colombia y Parques Nacionales Naturales - Dirección Territorial Amazonia, 2016

Acevedo, A. (eds). Materiales Educativos Sobre Uso y Conservación del Bosque Seco Tropical en el Caribe Colombiano: una Guía para Facilitadores. Bogotá, Colombia: Tropenbos Internacional Colombia y Fondo Patrimonio Natural, 2016

Ulloa-Delgado, G.A. Aspectos Ecológicos del Bosque Seco Tropical en el Caribe Colombiano. Bogotá, Colombia: Tropenbos Internacional Colombia y Fondo Patrimonio Natural, 2016

Autores varios. Manejo de Cuencas Hidrográficas como Estrategia para la Implementación de Corredores de Conservación-Producción en Áreas de Bosque Seco en el Caribe Colombiano. Bogotá, Colombia: Tropenbos Internacional Colombia y Fondo Patrimonio Natural, 2016

Acevedo Osorio, A. Diseño Predial Agroecológico: una Herramienta de Planificación para la Producción y Conservación del Bosque Seco Tropical. Bogotá, Colombia: Tropenbos Internacional Colombia y Fondo Patrimonio Natural, 2016

Castillo Franco, J. y J. Ceballos Freire. *Recuperación* del Suelo. Bogotá, Colombia: Tropenbos Internacional Colombia y Fondo Patrimonio Natural, 2016

Leiton, A.A. Semillas y Biodiversidad de los Sistemas Agrícolas en Contextos de Bosque Seco Tropical. Bogotá, Colombia: Tropenbos Internacional Colombia y Fondo Patrimonio Natural, 2016 Navas, A. Sistemas Silvopastoriles. Bogotá, Colombia: Tropenbos Internacional Colombia y Fondo Patrimonio Natural, 2016

Estupiñán-González, A.C., V. Andrade, G. Galeano y R. Bernal. Hacia el Uso Extractivo y Sostenible de la Palma Amarga en el Municipio de Piojó, Atlantico. Bogotá, Colombia: Tropenbos Internacional Colombia y Fondo Patrimonio Natural, 2016

Salamanca, B. Recuperación de Árboles Maderables del Bosque Seco. Bogotá, Colombia: Tropenbos Internacional Colombia y Fondo Patrimonio Natural, 2016

© Tropenbos International, 2016

Editorial coordination: Juanita Franco

Contributors: Bernice Agyekwena, Lisa Best, Juanita Franco, Maartje de Graaf, Clara Hernandez, Rudi van Kanten, Koen Kusters, Irene Koesoetjahjo, Alphonse Maindo, Joachim Maya, Edi Purwanto, Carlos Rodriguez, Nguyen Thi Quynh Thu, Hans Vellema, Roderick Zagt.

Final editing: Patricia Halladay

Design: Juanita Franco

Photo credits: cover: @Beptt/Adobe Stock - Sumatra, Indonesia; pages 2-3: Roderick Zagt - Sulawesi, Indonesia; page 4: OChristian Vinces/Adobe Stock -Amazon, Peru; page 6: @Worachata-Sodsri/Adobe Stock - Viet Nam; page 9: ©Anujak Jaimook/Adobe Stock - Thailand; page 10: TBI Ghana - Ghana; page 11: Roderick Zagt - Viet Nam; page 12: Ivan Karnadi - Suriname; page 14-15: Roderick Zagt - Viet Nam; page 16: Carlos Rodriguez - Amazon, Colombia; page 17: ©Hilmawan/Adobe Stock - Indonesia; page 18: TBI Ghana - Ghana; page 20: TBI DR Congo, province Orientale, DR Congo; page 21: Carlos Castillo - Guasca, Colombia; page 22: Roderick Zagt - Sumatra, Indonesia; page 23: TBI Colombia -Colombia; page 24: TBI Colombia - Colombia; page 25: Juanita Franco.

