

FROM SEED TO PACKAGING

WHY COMPANIES SHOULD BE PART OF FOREST CONSERVATION PROGRAMS

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SUMMARY

1. Global forest overview according to Fao Global Forest Resources Assessment 2015.
2. Socioeconomic benefits from forests and human needs satisfied by the forests sector, by their contribution on wood products and other ecosystemic benefits.
3. APP's 'One Million Hectares' initiative.
4. Companies and conservation projects: case studies report about other conservation programs around the world.

GLOBAL FOREST OVERVIEW ACCORDING TO FAO GLOBAL FOREST RESOURCES ASSESSMENT 2015

FOREST OVERVIEW

Global Forest Resources Assessment 2015

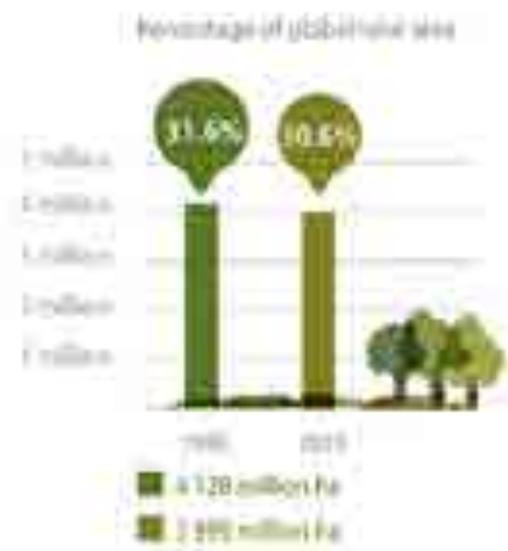
Key points

- Forests cover some 30% of the world's land area; ten countries – the Russian Federation, Brazil, Canada, the USA, China, Democratic Republic of Congo, Australia, Indonesia, Peru and India – account for 67% of total forest area.

- Net decrease in global forest area of 3% between 1990 and 2015, from 4128 M ha to 3999 M ha (129 M ha, an area almost equivalent in size to South Africa) .

- The annual rate of net forest loss halved over the 25 year period. Annual net forest loss averaged 3.3 million hectares from 2010-2015. While this reduced rate of net forest loss is encouraging, it should not be regarded as equivalent to reduced rates of deforestation: converting an area of natural forest into an intensively managed plantation will increase its timber production potential but will generally reduce its biodiversity.

- Loss of forest area was largely in the biodiversity-rich tropical forests, from 1966 M ha in 1990 to 1770 M ha in 2015. Net tropical forest loss over the last five years was dominated in South America by Brazil (984 K ha y), in Asia by Indonesia (684 K ha y), and in Africa by Nigeria (410 K ha y). However, the Brazilian and Indonesian loss rates were about 40% of the corresponding rates in the 1990s.



Source: Forest Resources Assessment (FRA) FAO 2015

Annual net forest gain/loss (ha) by country (1990–2015)

Source: FAO FRA 2015



Forest management programme

Global forest area managed for ecosystem services is also now at 25.4% of global total forest area and has changed little over the past 25 years. Among the twelve categories of protective forests, flood control, public recreation, and cultural services increased in terms of percentage of total forest area and the number of reporting countries.

Categories and sub categories (FRA 2015)	
SOIL AND WATER RESOURCE PROTECTION	ECOSYSTEM SERVICES
<ul style="list-style-type: none"> clean water coastal stabilization desertification control avalanche control erosion and flood control other control 	<ul style="list-style-type: none"> public recreation carbon storage cultural services other services

Public awareness of the importance of forest resources for functions and services other than production continues to increase as evidenced by the increase of protective forest designations and reporting in many countries.

Primary forest

Forests are rich in biological diversity, and home to more than half of the terrestrial species of animals, plants and insects. FAO warns that despite conservation efforts the threat of biodiversity loss persists and is likely to continue with deforestation, forest degradation - a reduction in tree biomass density from human or natural causes such as logging, fire, windthrows and other events - pollution and climate change all having negative impacts.

Currently, forest area primarily designated for biodiversity conservation accounts for 13 percent of the world's forest, or 524 million hectares, with the largest areas reported in Brazil and the United States.

Global primary forest loss of 1 percent per decade (and 4 times that in the tropics) is potential cause for concern.



Planted forest

Global planted forest area increased from 1990 to 2015, from 167.5 million ha to 277.9 million ha, with the increase varying by region and climate domain.

Of the 277.9 million ha of planted forests in 2015, 56% are in the temperate zone, 15% boreal, 20% tropical, and 9% subtropical.

Overall East Asia and Europe had the largest areas of planted forests, followed by North America and Southern and Southeast Asia.

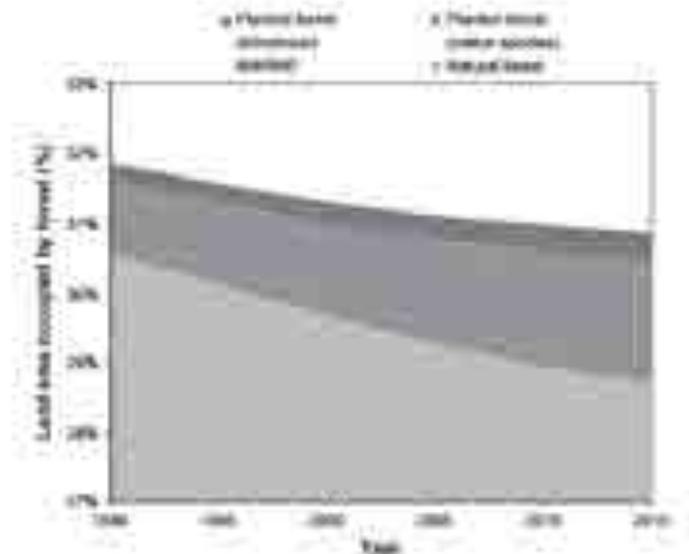


Fig. 4. Proportion of total forest cover made up of natural and planted forests and change with time

CO2 emissions

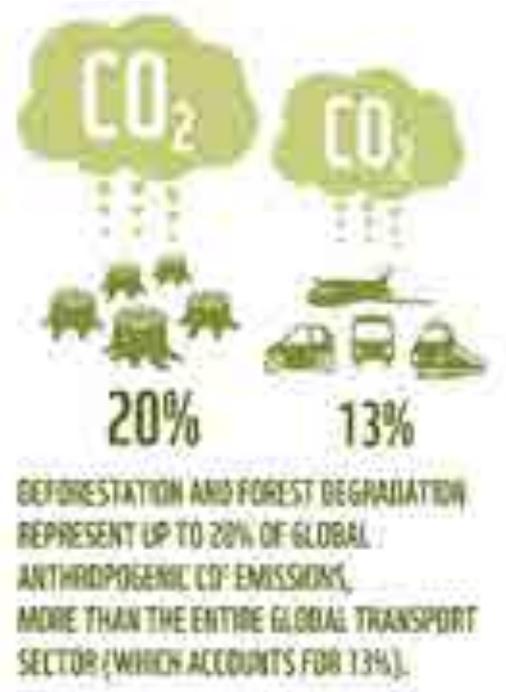
The world's forests store an enormous 296 billion tons (or gigatons) of carbon, says the FAO, but over the last 25 years they gave up 17.4 billion tons.

That translates into 2.5 billion tons of carbon dioxide per year. Granted, losses in the past five years are much lower, thanks once again to the declining rate of deforestation.

Still, these data clearly show that deforestation is making global warming worse. And it's a significant slice of the world's total emissions, which were 32.3 billion tons of carbon dioxide in 2014, according to the International Energy Agency.

Thus, reducing deforestation rates remains a key weapon for combating global warming — and while the battle may be turning on this front, it definitely is not over.

<http://wwf.panda.org> 2015



Durban 2015

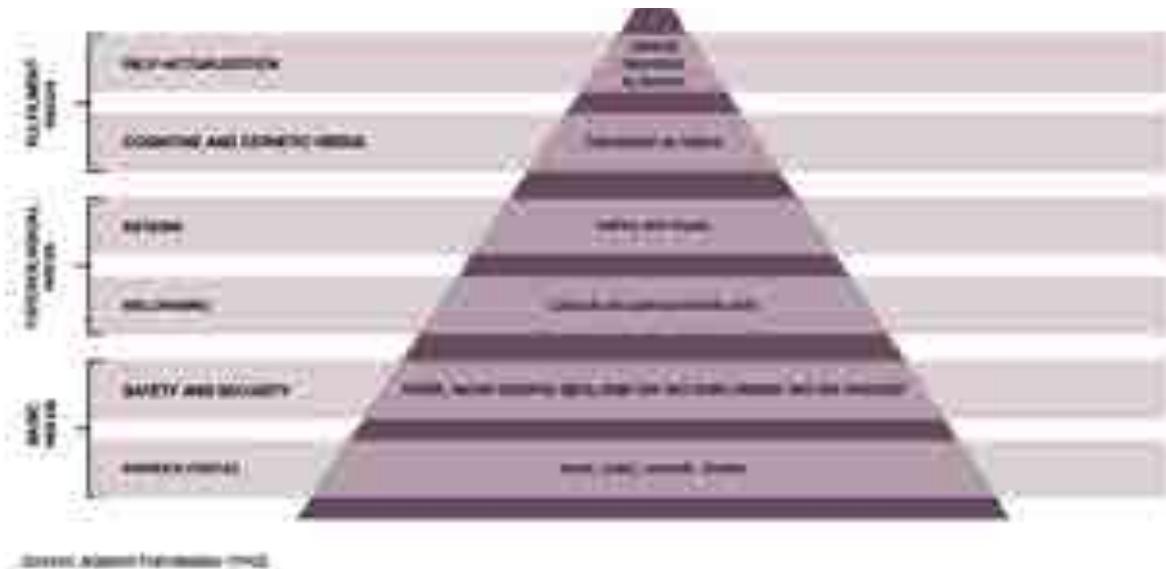
The XIV World Forestry Congress offers the following vision for forests and forestry as a contribution to achieving the 2030 Agenda for Sustainable Development, and a sustainable future to 2050 and beyond:

- Forests are more than trees and are fundamental for food security and improved livelihoods. The forests of the future will increase the resilience of communities by: providing food, wood energy, shelter, fodder and fibre; generating income and employment to allow communities and societies to prosper; and harbouring biodiversity. They will support sustainable agriculture and human wellbeing by stabilizing soils and climate and regulating water flows.
- Integrated approaches to land use provide a way forward for improving policies and practices to: address the drivers of deforestation; address conflicts over land use; capitalize on the full range of economic, social and environmental benefits of integrating forests with agriculture; and maintain multiple forest services in the landscape context.
- Forests are an essential solution to climate change adaptation and mitigation. Sustainably managed forests will increase the resilience of ecosystems and societies and optimize the role of forests and trees in absorbing and storing carbon while also providing other environmental services.

**SOCIO-ECONOMIC
BENEFITS FROM
FORESTS: HUMAN
NEEDS SATISFIED BY
THE FOREST
SECTOR, BY NON
WOOD PRODUCTS AND
OTHER ECOSYSTEMIC
BENEFITS**

Human needs

Socioeconomic benefits from forests are the basic human needs and improvements in quality of life (higher order needs) that are satisfied by the consumption of goods and services from forests and trees or are supported indirectly by income and employment in the forest sector.



At the bottom of the pyramid are the basic physiological needs for food, water, warmth (energy) and shelter. Forests provide a number of goods and services that can be used to meet some of these needs.

Above this comes safety and security. Forests may contribute to human health in a number of ways (e.g. the collection of medicinal plants and the use of woodfuel to boil and sterilize water) and may also help to reduce the risk of natural disasters (floods, landslides, etc.). Forests do not directly contribute to security, but the policy and legal framework related to the access and use of forests may contribute to providing secure property rights and basic law and order in forest areas.

Cultural and spiritual uses of forests can contribute to meeting some psychological needs; and measures that attempt to ensure fair and equal access to forests, the sharing of forest benefits or an increase in forest benefits received by the poor can support a more just and equitable society.

A focus on the distribution of human well-being in society has been a major feature of measures to support socioeconomic development in recent years. At the middle and higher levels of the hierarchy of needs, the connections to forests are likely to be less direct and more difficult to measure. For example, the presence of forests and wood products in a country may help to support a connection between people and nature and owning a forest or working with forests and nature may contribute to self-actualization.

Employment

The socio-economic benefits from forests are mostly derived from the consumption of forest goods and services. The number of people that use forest outputs to meet their needs for food, energy and shelter is huge. In addition, large (but currently unknown) numbers may benefit indirectly from the environmental services provided by forests. The number of people that benefit from income and employment generation is relatively small, although if informal activities are included, this nevertheless reaches the tens – if not hundreds – of millions.

The forest sector contributes about \$600 billion annually to global GDP and provides employment to over 50 million people



Health

There are numerous ways in which the use of forests and consumption of forest outputs may lead to health benefits.

The most obvious benefits are the use of medicinal plants as a source of traditional medicine and the use of woodfuel to boil and sterilize water.

Having a high quality living environment and access to forests for recreational use may also have beneficial effects on health, both physical and mental. This is increasingly recognized as important in developed countries, but the benefits are difficult to measure and likely to be locationspecific.

2.4 billion people cook with woodfuel



Source: State of the world's forests 2014

There are significant direct links between biodiversity and modern healthcare (Newman and Cragg 2007):

- Approximately half of synthetic drugs have a natural origin, including 10 of the 25 highest selling drugs in the United States of America.
- Of all the anti-cancer drugs available, 42% are natural and 34% semi-natural.
- In China, over 5,000 of the 30,000 recorded higher plant species are used for therapeutic purposes.
- Three quarters of the world's population depend on natural traditional remedies.
- The ginkgo tree led to the discovery of substances which are highly effective against cardiovascular diseases, accounting for a turnover of US\$ 360 million per year.
- The 2007 IUCN Red List of Threatened Species identified a significant increase in species under threat during this decade. It estimates that 70% of the world's plants are in jeopardy (IUCN 2008).
- Hundreds of medicinal plant species, whose naturally occurring chemicals make up the basis of over 50% of all prescription drugs, are threatened with extinction.

<http://www.teebweb.org/>

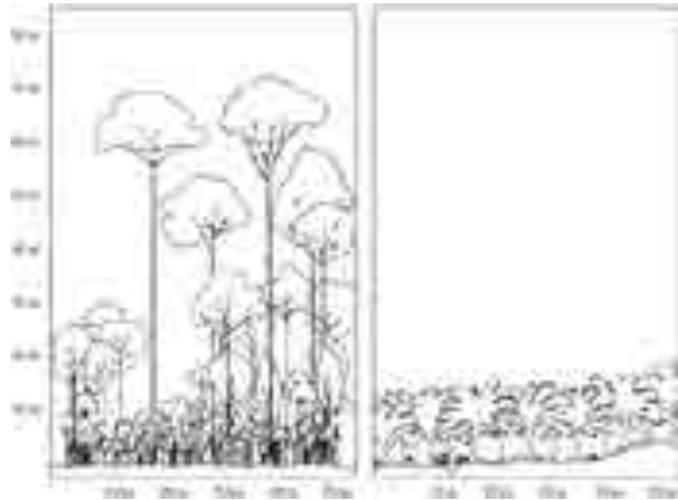


Primary forests

While forests are recognized as important for biodiversity and protected areas are doubtless important for biodiversity conservation, not all forests are equal in terms of the diversity they support and the quality of the ecological functions they provide. Primary forests are globally irreplaceable with unique qualities that make significant contributions to biodiversity conservation, climate change mitigation, and sustainable livelihoods (Foley et al., 2007; Gibson et al., 2011), and with particular importance in tropical areas.

Gibson et al. (2011) reviewed 138 studies of primary forests to determine impacts of primary forest loss and/or disturbance on overall biodiversity in the tropics and found that secondary forests have demonstrably lower overall biodiversity, leading the authors to conclude that primary forests are irreplaceable reserves of tropical biodiversity.

In many cases, the persistence of threatened and endangered species appears to be dependent upon the availability of intact primary forest.



Lateral sections through primary forest (Danum Valley Conservation Area, Sabah) and oil palm plantation (Sabahmas, Lahad Datu, Sabah).

<http://rstb.royalsocietypublishing.org> 2011

Bio-economy

The forest sector is in a unique position to be at the forefront of an inclusive, low-carbon, bio-economy. Bio-based packaging is already countering food loss and waste. It is also improving food safety for consumers and reducing persistent marine pollution by replacing plastics. Other forest products are also making their mark. Responsible forest biotechnology to increase tree productivity and resilience is now a reality. Oils and sugars from trees are being used as liquid biofuels and green chemicals.

Bio-composites derived from wood are used for purposes ranging from vehicle and medical applications to sustainable building (Durban 2015).

According with recent studies, forests cover nearly 30 percent of the Earth's land area (Keenan et al., 2015), containing 80 percent of terrestrial biomass and providing habitat for over half of the world's known terrestrial plant and animal species (Shvidenko et al., 2005; Aerts and Honnay, 2011).

Recognition of the value of forest services, such as erosion protection and pollination, is essential to sound decision-making. If the value of services provided is not measured or recognized, economic and policy decisions affecting forests will be based on incomplete information.

This is critical for the sustainable provision of many services, from essential services for food security and agricultural productivity such as erosion protection and pollination, to recreation and other amenities that forests provide to people (State of the world's forests 2014).

ASIA PULP & PAPER'S 'ONE MILLION HECTARES' INITIATIVE

Indonesia overview

Indonesia ranks amongst the most important Megadiversity Countries in the world with very high levels of biodiversity and endemism (Mittermeier et al., 1997). Even though Indonesia covers 1.3 percent of the total land mass of the world, the country is home to at least 10 percent of the global plant species, 25 percent of fish species, 16 percent of amphibian and reptile species, 17 percent of bird species, and at least 12 percent of mammal species.

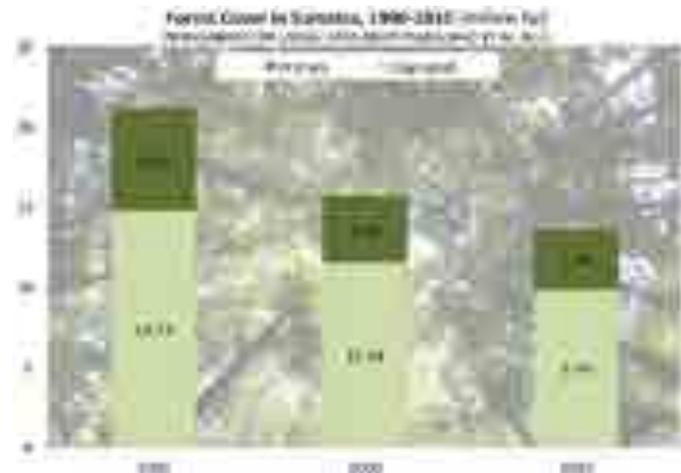
Despite boasting wide diversity, 1,225 of flora and fauna species found in Indonesia are globally threatened, including mammal (185), birds (131), amphibian (32), mollusks (282), invertebrates (282), and 408 plant species (IUCN, 2014).



<http://rainforests.mongabay.com/0301.htm>

Indonesia alone reported a 3.4 M ha loss of primary forest from 2000 to 2015, which is half the 6 M ha Landsat-derived primary forest loss estimate for Indonesia reported by Margono et al. (2014).

While some of the discrepancy between the 3.4 M ha reported to FRA and the 6 M ha derived from landsat is certainly methodological or definitional and hinders direct correlation between the two, it's clear from both that Indonesia is losing primary forest at an alarming rate. Kessler et al. (2005) reported distinct declines in species richness of both vegetation and wildlife when Indonesian forests were converted from primary states to other forested states, suggesting that biologically, even if the loss of primary forest is not a loss of forest cover in general, in Indonesia it represents a distinct loss of biodiversity.



<http://news.mongabay.com/2012/08/rainforests-decline-sharply-in-sumatra-but-rate-of-deforestation-slows/>

APP engagement

In February 2013, APP transformed its business model and implemented a zero deforestation policy across its supply chain. This business model shift was designed to eliminate deforestation from the company's operations enabling APP to meet growing demand for sustainably sourced pulp and paper products whilst ensuring the long-term commercial success of the business.

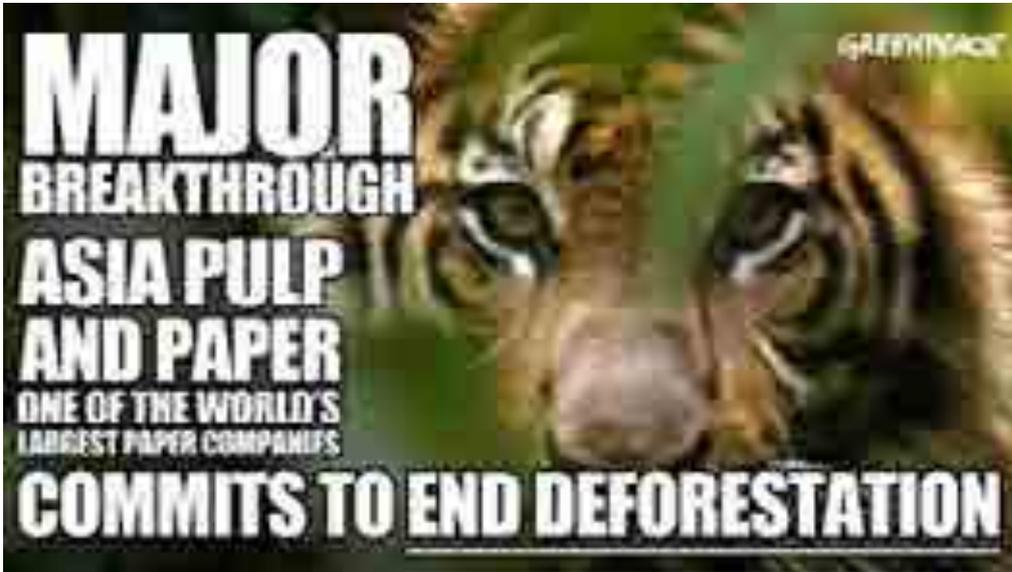
A central tenet of their Forest Conservation Policy is the importance of applying a landscape approach in forest protection and management. This implies bringing together central and local government, private companies operating in different sectors in the landscape, civil society associations and local communities, to provide a greater understanding of the issues. APP engaged a team of global experts, with expertise in water and peatland management in Southeast Asia, to begin work to gather information and data to help identify areas inside APP supplier concessions that require immediate intervention.

As a result of that work, APP has committed to immediately retire 7,000 hectares of commercial plantation areas in Riau and South Sumatra province. Furthermore, APP is also currently building hundreds of dams and thousands of canals across our concessions, and have recently completed 400 of these dams on concessions in South Sumatra and Riau.

APP also formally announced the restoration and protection of 1 million hectares of forest across Indonesia -equivalent to the total area of their plantations in Indonesia.



2012



2013

ASIA PULP & PAPER'S "FOREST CONSERVATION POLICY"

- **No deforestation:** No plantation development by any supplier will take place without independent HCV and HCS assessments
- **Reduction of greenhouse emissions:** Forested peatland is protected from development
- **Respect for local rights:** We have introduced Free, Prior and Informed Consent (FPIC) in our operations to protect indigenous communities
- **Transparency:** Our operations are monitored by our independent partner – The Forest Trust (TFT) and the wider NGO community and openly available through our dashboard

2013

ONE MILLION HECTARES PROJECT

28th April 2014, APP announced a new program to support the conservation of one million hectare of rainforest across Indonesia, strengthening our FCP commitment.

2014



2015

Belantara Foundation

Belantara foundation is designed to provide a vehicle and structure for the coordination of conservation activities across the landscapes identified in April 2014 by Asia Pulp & Paper Group (APP), which established the Foundation and works within each designated landscape, and partners including WWF and Greenpeace. The Foundation was set up to work alongside APP's 'One Million Hectares' initiative.



Belantara's work includes:

- Supporting natural forest restoration and the protection of endangered animals (the Sumatran tiger, Sumatran elephant and orangutan) in Sumatra and Kalimantan.
- Supporting conflict mitigation between communities and the endangered species.
- Supporting studies to improve and strengthen sustainable landscape management.
- Supporting community empowerment programs and strengthening local economies, especially where they rely heavily on natural resources.

Belantara foundation approach

Belantara foundation use a landscape conservation approach to protect and restore the rainforests and other important ecosystems in Indonesia.

This holistic approach means all conservation efforts made by different groups on the ground should be coordinated to achieve maximum success and minimize overlap of projects or repeated work. To best achieve this, support, advice, funding and ground-level implementation must involve a broad mix of groups.

Landscape conservation is a systematic process which maintains the quality and health of ecosystems at an ecologically meaningful level. There will always be parts of the landscape that became a focal point for conservation action, but at the same time these will only thrive if surrounding areas are managed in a way that is consistent with the conservation goals.

In the ten landscapes that have been identified by APP and their partners, there are ecosystems dominated by wetlands, including mangrove forests, peat swamp forests, and freshwater swamp forests. Other ecosystems include lowland rainforests and heath forests. The landscape conservation activities of the Belantara Foundation will focus on efforts to maintain, and restore these ecosystems while advancing sustainable development and communities.

12,5% of global wetlands are involved in Belantara foundation projet.

The landscapes



The ten priority landscapes are among the most ecologically valuable, yet simultaneously threatened, in Indonesia. APP has an influential presence in all, through its pulpwood suppliers' concessions and their associated operations, although our commitment extends well beyond their borders. The ten priority landscapes are:

1. SENEPIS.
2. GIAM SIAK KECIL-BUKIT BATU (GSK-BB).
3. KAMPAR PENINSULA.
4. PADANG SUGIHAN.
5. KERUMUTAN.
6. BUKIT TIGAPULUH.
7. BERBAK-SEMBILANG.
8. DANGKU-MERANTI.
9. KUBU.
10. KUTAI.

Programs

1. Development of a conservation masterplan in 10 landscapes across Sumatra and Kalimantan (2015).

Others programs are the results of this work

2. Community-based degraded forest restoration in Giam Siak Kecil, Riau. Location: GSK-BB, Riau.

Program period: 3 years (2015-2018).

3. Community-based degraded forest restoration in Berbak-Sembilang, Jambi.

Location: Taman Hutan Raya Tanjung, Jambi. Implementing Team: Collaboration between Local, National NGOs and Local Government Institution. Program duration: 3 years (2015-2018).

4. Community-based degraded forest restoration in Dangku, Sumatra Selatan.

Implementing Team: Collaboration between Local, National NGOs and Local Government Institutions. Program duration: 3 years (2015-2018).

5. Community-based degraded forest restoration in Sugihan, Sumatra Selatan.

Implementing Team: Collaboration between Local and National NGOs.
Program duration: 3 years (2015-2018).

6. Study of Orangutan population and distribution in Kubu (West Kalimantan) and Kutai (East Kalimantan).

Location: Sungai Jenu Protected Forest (West Kalimantan) and Muara Kaman Preserved Forest (East Kalimantan). Program duration: 2 months.

7. Study of distribution of tigers and other endangered species in Dangku, Sumatra Selatan.

Location: Industrial forest in Dangku (South Sumatra). Program duration: 6 months.

8. Profiling of human-tiger conflict (HTC) in several landscape in Sumatra.

Location: Senepis, Giam Siak Kecil, Semenanjung Kampar, Kerumutan, Bukit Tigapuluh, Rimbang Baling, Berbak Sembilang and Dangku. Program duration: 3 months.

9. Community-based conflict mitigation between tigers and humans in Kerumutan, Riau.

Program duration: 12 months.

10. Community-based conflict mitigation for Sumatran Elephants in Jambi.

Location: Bukit Tigapuluh, Kabupaten Tebo and Tanjung Jabung Barat, Jambi. Program duration: 12 months.

11. Study population distribution and quality of Orangutan habitat sanctuary.

Location: Muara Kaman Sedulang Nature Reserve, Kutai National Park. Program duration: 6 months.



Degraded forest restoration programs

The 4 Community-based degraded forest restoration programs will be developed in different ways but the participation of the communities is the central point of each program:

- **Giam Siak Kecil, Riau;** The aim of the program is to develop a forest restoration model through planning and community involvement. This project will form part of the Conservation Village Model (Model Desa Konservasi) in Bukit Batu Wildlife Reserve.
- **Berbak-Sembilang, Jambi, and Dangku, Sumatra Selatan;** Central to these programs will be the planting of high economic value trees and the utilization of non-wood forest products which will improve the welfare of the surrounding community, decrease encroachment and illegal logging.
- **Sugihan, Sumatra Selatan;** Community and local civil society groups will be invited to engage in education on the benefits of forest restoration. Through the program, we expect to form partnerships that will help in the prevention and management of forest fires and the optimum management of water resources around the forest.

All of the programmes will be implemented by a collaboration between Local, National NGOs and Local Government Institution.

Wildlife population programs

The 6 wildlife-based programs concerned 3 important animals living in the area (Orangutan, Tigers and Elephant).

The study of the wildlife population aims to calculate the number and distributions of orangutans (Kubu Landscape) and tigers (Berbak National Park and Sembilang National Park) to help the management of the landscape, the decision process about further restoration programs and to find alternative locations for orangutan (Muara Kaman Biosphere Reserve) still trapped in the plantation area that need to be rescued and moved to forested area.

The analysis of the existing human-tiger conflict data in Riau Province, Jambi and South Sumatra aims to identify and describe the characteristics of human-tiger conflict incident patterns and to provide predictions of spatial and time-related incidents over five years. The community empowerment program will include advice and practical help on barricading/housing livestock to prevent attacks from the tigers.

The programs about conservation of wild elephants and their habitats, creates opportunities for local communities to protect their property while supporting this wildlife conservation – therefore achieving positive outcomes for both elephants and people.

All of the programmes will be implemented by a collaboration between Local, National NGOs and Local Government Institution.

**COMPANIES AND
CONSERVATION
PROJECTS:
CASE STUDIES
REPORT ABOUT OTHER
CONSERVATION
PROGRAMS AROUND
THE WORLD**

Companies and conservation projects



Avon

Who	AVON
Where	INDONESIA & BRAZIL
Partner	WWF & THE NATURE CONSERVANCY
Main theme	PULP AND PAPER SUPPLY CHAIN AND REFORESTATION



Avon Products, Inc is the world's largest direct seller of beauty, fashion and home products, with more than \$11 billion in annual revenue. As one of world's largest catalogue producers and consumers of paper products—distributing product brochures in more than 120 countries—Avon can drive sustainable solutions throughout the pulp and paper supply chain. Recognizing its potential to generate positive outcomes in many of the world's most valuable and threatened forests, Avon is working with WWF in two key areas. As a member of WWF's Global Forest & Trade Network (GFTN), Avon is helping to drive sustainable solutions in the pulp and paper supply chain.

Similarly, Avon's is engaging its own customers in halting deforestation through a unique education campaign called Hello Green Tomorrow. Avon's Hello Green Tomorrow campaign is actively supporting WWF's reforestation efforts in Indonesia and in Brasil. In more than 50 countries the campaign is raising funds and building awareness to help end deforestation and restore critically endangered rainforests.

Results:

- Avon has committed to purchase 100 percent of its paper from independently certified or post-consumer, recycled-content sources by 2020, with a preference for Forest Stewardship Council (FSC) certified paper through the Avon Paper Promise. As of 2011, 74 percent of Avon's brochure paper met the Avon Paper Promise commitments, and approximately 25 percent of paper used in Avon's product brochures is sourced from FSC certified forests.

View more at: <https://www.youtube.com/watch?v=klLz-l7g5w8>

- Avon has enabled the planting and protection of more than 4.5 million trees in three key locations in Brazil: the State of Espirito Santo State, Anhembi and Porto Feliz municipalities in the State of Sao Paulo. In 2014, Avon funding facilitated the restoration of 513 acres of forest in Brazil and the planting of 525,000 trees in the Espirito Santo State, resulting in the sequestration of approximately 63,000 tons of CO₂.

- Avon has supported WWF's New Trees program, a six-year reforestation program focused on community-based planting, monitoring and maintenance of more than 148,000 tree seedlings on five priority locations covering more than 370 hectares of degraded forests across the Indonesian islands of Borneo, Sumatra, Java and Lombok. These trees are estimated to absorb more than 6,000 tons of CO₂ over the next 10 years.

Fiji water

Who	FIJI WATER
Where	FIJI
Partner	CONSERVATION INTERNATIONAL
Main theme	FOREST CARBON PROJECT

Conservation International has worked in Fiji for over 15 years to help landowners invest in forest conservation rather than forest destruction. The Nakavandra Forest Carbon project was initiated in 2008

- Generate real, measureable and verified offsets to meet FIJI Water's carbon negative commitments from 2008-2010.
- Create a buffer area around the Nakavandra Range rainforest to expand critical habitat for endangered species such as the Giant Forest Honeyeater.
- Establish a first of its kind community restoration project that would enable local community landowners the opportunity to participate in the emerging carbon market, and alternative livelihoods through jobs from restoration activities (in the short term) and sustainable harvesting of timber (in the long term).
- Integrate other income generation activities such as agroforestry, ecotourism and beekeeping as additional incentives for the communities to participate in this initiative.

An initial 500 community members have been engaged in the project to complete restoration of the degraded grasslands and abandoned sugar cane farms. The local communities carry out the planting and manage the mixed-use forest.

Results:

- Upon consultations with the local communities (the carbon owners), the study team determined that a community-based restoration model would serve as the best way to ensure long term success for this project. The model incorporates planting hardwood timber species (e.g. mahogany, teak) on sites to allow for income generation for the community landowners. Restoration of using native species is conducted on steep slopes.

- Orienting the reforestation toward income-generating species provides significant community benefits and secures community support, which is critical for project success. Restoration with these species will also provide soil retention and protect watersheds. The project provides one of the first community-owned activities in Fiji that integrate production of both carbon benefits and community livelihoods.

- As of 2011, 426 ha of degraded lands have been restored. 850 hectares are expected to be planted by 2014.

- Multiple benefits generated by the project will be validated by a third party against the Climate, Community, and Biodiversity Standard. The carbon benefits generated by the project over 30 years will be verified against the Verified Carbon Standard (VCS).

Sony

Who	SONY
Where	INDONESIA
Partner	WWF
Main theme	PAPER SUPPLY CHAIN, FOREST CONSERVATION PROJECT

The goal of this project to enable the local residents to maintain their livelihood by sustainable methods, and to save forests and endangered species in entire Sumatra. The conservation of forests in Sumatra is therefore also linked to the prevention of global warming.

Sony is supporting the whole assortment of activities implemented by the WWF in Sumatra, including its tree-planting program, survey of forests and wildlife, elephant patrols, and program for improvement of local agriculture.

The project activities are centered on Bukit Barisan Selatan (BBS) and Tesso Nilo (TN) National Parks. These parks are home to wildlife at high risk of extinction, such as the Sumatran rhinoceros, elephant, and tiger.

Sony products are in extensive use on the site of the survey conducted by the WWF of the habitat for these animals.

The data collected from these survey activities is of precious value. Besides serving as a key source of information for checking whether or not problems are occurring at the site and assisting in the control of illegal activity, they are vital for communicating the on-site situation to the rest of the world.

Results:

- In 2011 and 2012, Sony and the WWF planted a total of about 32,000 saplings of 12 tree species native to restore the original forest, and manage the seedlings for a period of five years. WWF has planted trees on 90 hectares in Bukit Barisan Selatan National Park and 85 hectares in Tesso Nilo National Park.
- The staff holds a workshop on education for sustainable development (ESD) at elementary and junior high schools in the area. The purpose is to instill in local residents an awareness of the importance of environmental preservation, and to get the entire area involved in activities to protect forests. The 2014 workshop attracted the participation of 30 teachers from 26 elementary and junior high schools. These teachers imparted the ESD education method to other teachers in their schools, so that it was learned by about 70 teachers. In addition, a cumulative total of about 900 students have taken the ESD class so far.
- To prevent wild elephants from approaching villages, the WWF is conducting patrols of forests. In Sumatra, patrols are made by mahouts (elephant trainers) astride trained elephants to uncover illegal activity in national parks such as occupation of land and poaching, and to keep wild animals away from villages near the parks where people live. In 2014, the patrols managed to prevent the intrusion of wild animals into residential areas in 229 cases. The program includes the development of female mahouts and spread of the patrols to other areas having problems with the intrusion of wild animals. With Sony's assistance, the number of patrol staff increased to six in 2013. The patrols have had effect; there have been no unfortunate encounters between the wild animals and villagers since the start of this patrols.
- In WWF's Forest Conservation Project in Sumatra, efforts are also being made to help local residents make a better living without illegal logging or other such activity. Examples are the promotion of eco-tourism and the introduction of organic cultivation for agricultural products already being produced in the area.



Danone

Who	DANONE
Where	SENEGAL, INDONESIA, INDIA
Partner	THE RAMSAR CONVENTION ON WETLANDS, IUCN
Main theme	MANGROVE RESTORATION PROJECT

In 2008, Danone, the Ramsar Convention on Wetlands and the International Union for the Conservation of Nature (IUCN) created the Danone Fund for Nature with the following objectives: restore degraded ecosystems, redevelop local economies and combat climate change.

A successful mangrove restoration pilot project in Senegal motivated Danone to open up the fund to outside investors. The Danone Fund for Nature thus evolved into an independent entity in 2011 and was rebranded as the Livelihoods Carbon Fund. Nine other companies have since joined this fund: Schneider Electric, Crédit Agricole S.A., Michelin, Hermès, SAP, CDC Climat, La Poste, Firmenich, Voyageurs du Monde.

Following the success of the first fund, a second investment fund was launched in 2015- the Livelihoods Fund for Family Farming (Livelihoods 3F). Its mission is still the same- restore ecosystems in order to sustainably improve the incomes and livelihoods of rural communities. However, the return for the fund's investors goes beyond carbon credits. The main goal of this second fund is to help companies sustainably transform their supply chains with smallholder farmers.

Results:

strong social and environmental impacts that these projects deliver to the local communities: to date, 470,000 people have already benefited from the Livelihoods' projects (200 000 people in Senegal, 250,000 in India and 20,000 in Indonesia).

Senegal results:

Senegal has about 185,000 hectares of mangrove estuaries of Casamance and Sine Saloum.

The project is to accelerate the resettlement of mangroves in areas where it does not happen spontaneously, by planting mangrove species of *Rhizophora* in dangerous areas.

The restoration of an ecosystem producing fishery resources (fish, shellfish) and wood is the main benefit expected.

The association Oceanium is active since the late 90s in defense of the marine environment, the management of artisanal fisheries and in the creation of marine protected areas. It started replanting of mangroves in 2008, of 173 hectares. With support from Danone and now Livelihoods Fund, it increased to 1,700 hectares in 2009 and 4900 hectares in 2010 and 2011 with a carbon potential of 0.36 million for 20 TeqCO₂. End 2012, the initial target of 6,000 ha was exceeded to reach 10,000 ha of mangroves replanted in an exceptional level of social mobilization (350 villages involved, 200,000 people).

The project was validated by the UNFCCC Board. The approval of the Senegalese authorities (LoA) was obtained in March 2011. This approval is subject to a tripartite Memorandum of Understanding of 10 years between Livelihoods, oceanium and the Senegalese government.



Danone

LIVELIHOODS partners:



Maison du monde

Who	MAISON DU MONDE
Where	INDIA, INDONESIA
Partner	THE FOREST TRUST
Main theme	RESPONSIBLE WOOD SUPPLY CHAIN

Results

- Pilot projects in India to train and support local shisham farmers , to create clear and responsible supply chains and to support local communities.
- Now, nearly 800 farmers in Punjab and Haryana have joined a group with us and Mdm which provides free seedlings, advice on management and a link to global markets. The partnership with Mdm also covers teak from Indonesian forests.
- TFT are helping Mdm to share the story of their shisham and other wood products in a transparent and creative way. Anyone with a smartphone can scan the QR code on each piece of MDM furniture to find out where it's from and how it was made. This interaction is made possible by our SURE Technology.



Kering

Who	KERING
Where	ASIA
Partner	ITC, IUCN
Main theme	PYTON CONSERVATION

Results:

- Contributing to the improved sustainability of the python trade and helping facilitate industry-wide change. The 3 years programme of will focus on the analysis and recommendations around sustainability, transparency, animal welfare and local livelihoods for the python trade. The data and findings will contribute to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) process, which supports a framework for countries to manage their trade in endangered species such that it contributes to local livelihoods and does not threaten the survival of species in the wild. Results and recommendations from the 'Python Conservation Partnership' will be made available as public reports and peer-reviewed scientific articles to stakeholders to improve management across the trade.
- The research will cover five key areas:
 - Monitoring wild capture to improve sustainable sourcing
 - Differentiating between captive-bred and wild animals through innovative technology
 - Developing and promoting the highest standards of animal health and welfare
 - Exploring ways to improve captive breeding
 - Better understanding the impacts of the python trade on local livelihoods



3M

Who	3M
Where	USA, CHINA, SOUTH AMERICA
Partner	THE NATURE CONSERVANCY
Main theme	CONSERVATION PROJECT

Results:

- 3M has contributed more than 20 million dollars to preserve priority habitats on which people and nature depend.
- 3M relies on the Conservancy to provide science-based conservation solutions to key ecosystems around the world.
- 3M is helping to protect:
 - Minnesota's Tallgrass Aspen Parkland
 - Minnesota's Ordway/Glacial Lakes
 - Texas's Lower Rio Grande Valley
 - Texas's Davis Mountains Preserve
 - Brazil's Atlantic Forest
 - China's Chongming Dongtan
 - Maya Forest



Some examples:

- In 2013, a gift from the 3M Foundation allowed the Conservancy to acquire and protect 130 acres of land in Alabama at the northern edge of the Bankhead National Forest, part of a top conservation priority in the Cumberland and Southern Ridge and Valley ecoregion. This section of the Warrior Mountain range features incredible biological diversity and some of the best remaining stands of old-growth cove hardwood forests on the Cumberland Plateau. Many of the plants and animals found here occur nowhere else on Earth.
- Also in 2013, 3M donated \$500,000 for work with Indigenous Peoples in the Amazon. The project had several key goals, including advancing the National Indigenous Territorial and Environmental Management Policy, as well as advancing a new Corporate Practices Standard, and advancing REDD+, an approach to fund conservation based on the value of forests to the global climate. Already, 32 pilot Indigenous Territories are writing management plans and Nature Conservancy staff have hosted events with more than 30 major companies, finance corporations, Indigenous organizations, and government agencies to draft the Corporate Practices Standards.
- 3M support has also been a crucial component of forest conservation efforts in Minnesota. The Minnesota Forest Legacy Partnership was able to use contributed funds to acquire key land holdings within the Koochiching-Washington Forest that were desirable targets for development and adjacent to public lands. This acquisition was a key component of a larger conservation easement effort to protect working forest lands that provide significant benefits.

IKEA

Who	IKEA
Where	RUSSIA,CHINA,DANUBE AREA,BOSNIA, BALTICS, MEKONG AREA, INDONESIA
Partner	WWF
Main theme	RESPONSIBLE FOREST MANAGEMENT

Results:

- Making responsible forest management the norm across the forest sector with eight joint projects in ten different countries. These have helped improve forest management in Europe and Asia, and contributed to the certification of around 35 million hectares of responsibly managed forest.
- Indonesia PROJECT 2011 – 2017:promoting responsible forest management, through direct involvement with the industry and community forestry producing both timber and rattan. the partnership seeks to increase the FSC-certified area and to better implement the FSC Chain of Custody (CoC) system among IKEA suppliers.. To promote trade of timber sourced from community forests in Indonesia, the project is piloting group certification, promoting fair trade and certification of FSC Controlled Wood.

Examples of achievements

- The rattan production potential has been surveyed in 21 villages and eight sub-districts in Katingan, and an inventory of rattan species and their utilisation together with local NGOs has been carried out. Also, the partnership has supported a survey of the market and trends in the rattan processing industry.
- WWF has prepared a pilot cultivation plot to demonstrate responsible rattan farming practices and conducted a number of workshops and training sessions on sustainable rattan production.
- In Java, around 6,000 hectares of forest have been verified of its legality.
- WWF GFTN is working with professional foresters' Community Forest and Trade Alliance (CFTA) to help establish a community trading group in Java.
- WWF is working to establish group certification for a community forest in Ponorogo, Eastern Java to help forest farmers, who are potential IKEA suppliers, to become FSC-certified.
- WWF GFTN is working with two IKEA suppliers to increase internal capacity building through FSC Chain of Custody (CoC) Coaching Clinic to improve their traceability systems.
- IKEA suppliers have been supported to achieve SVLK certification (the Indonesian Timber Legality Assurance System), a mandatory legal compliance for exporters from Indonesia.
- In collaboration with TRAFFIC, the project has conducted trainings on FLEGT, legality and export requirements for GFTN members, IKEA suppliers and buyers at an international timber trade fair in Jakarta, Indonesia.

http://wwf.panda.org/what_we_do/how_we_work/businesses/business_partnerships/ikea2.cfm

Coca Cola company

Who	COCA COLA COMPANY
Where	CENTRAL AND SOUTH AMERICA, CHINA, ARTIC REGION
Partner	WWF
Main theme	CONSERVE THE WORLD'S FRESHWATER RESOURCES AND POLAR BEAR HABITAT

Results:

making responsible forest management the norm across the forest sector with eight joint projects in ten different countries. These have helped improve forest management in Europe and Asia, and contributed to the certification of around 35 million hectares of responsibly managed forest.

Indonesia PROJECT 2011 – 2017:promoting responsible forest management, through direct involvement with the industry and community forestry producing both timber and rattan. the partnership seeks to increase the FSC-certified area and to better implement the FSC Chain of Custody (CoC) system among IKEA suppliers.. To promote trade of timber sourced from community forests in Indonesia, the project is piloting group certification, promoting fair trade and certification of FSC Controlled Wood.

Examples of achievements

- Helping to ensure healthy, resilient freshwater basins in the Mesoamerican Reef catchments in Mexico, Belize, Guatemala, and Honduras and the Yangtze River basin in China.
- improving environmental performance across the company's supply chain, integrating the value of nature into decision-making processes, and convening influential partners to solve global environmental challenges.
- Beyond the global partnership, WWF and The Coca-Cola Company collaborate locally in dozens of countries to create a more water-secure future.
- Through Arctic Home Campaign WWF has been able to engage in research in the high Arctic above Canada and Greenland, where it is believed that summer sea ice will persist the longest. WWF also is collecting important information on the Arctic ecosystem and working with Arctic residents and governments to develop a conservation plan in this "Last Ice Area." The first two years of Arctic Home raised over \$3 million in donations for WWF's work on this initiative.

<http://wwfcocacolapartnership.com/about-us/>



Patagonia

Who	PATAGONIA INC
Where	PATAGONIA
Partner	THE NATURE CONSERVANCY
Main theme	FARMING PROTOCOL, GRASSLAND CONSERVATION

Results:

- In 2013, \$50,000 sponsorship was funneled toward grasslands regeneration projects, covering the costs of educational events in the Patagonia region, such as teaching farmers sustainable grazing practices and how to measure the health of their land.
- Patagonia Inc. contributes through a purchase agreement that encourages ranchers to raise and graze their sheep in a way that supports the long-term health of the grasslands, and is the first company to sign on and buy sustainable wool from the region.
- Apply the GRASS (Grasslands Regeneration and Sustainability Standard) sustainable grazing standard in 15 million acres of Patagonian grasslands by 2018 is making sound progress. GRASS provides a certified method of sustainable grassland management, aiming at achieving conservation goals and ensuring that thousands of sheep graze without destroying this unique ecosystem. Through this standard, native grasslands will be regenerated and restored.
- Provide scientific expertise and monitoring to ranchers.

View more at:

<http://www.nature.org/ourinitiatives/regions/southamerica/argentina/howwework/the-nature-conservancy-celebrates-5-years-in-patagonia.xml>

H&M

Who	H&M
Where	CHINA
Partner	WWF
Main theme	WATER SUPPLY CHAIN AND YANGTZE RIVER CONSERVATION



Results:

- Assess all water-related aspects of the H&M value chain using wwf's water stewardship and water risk filter tools.
- Raise awareness and improve responsible water use throughout the supply chain – ensuring H&M becomes a leader in water stewardship in the fashion industry and inspire others to follow.
- Support for WWF's water conservation projects in the Yangtze River basin. Covering less than one fifth of the nation's area, the Yangtze River Basin feeds one third of the Chinese population. Wetland Conservation Network consists of 39 nature reserves and wetland parks, which cover a total area of 1.65 million hectares of wetlands in the central and lower Yangtze Basin. Six wetland nature reserves have been selected as pilot sites to demonstrate effective wetland management approaches and to serve as demonstration sites for other network members.

HSBC

Who	HSBC
Where	CHINA, SOUTHEAST ASIA, SOUTH AMERICA, AFRICA
Partner	WWF
Main theme	RIVER CONSERVATION

Results:

- WWF and HSBC have been working together since 2002 to help secure the world's freshwater resources. Under the HSBC Water Programme we are working with local authorities, businesses and communities to implement new practices and policies that are helping to protect rivers in five priority freshwater places; the Yangtze (China), Ganges (India), Mekong (southeast asia), Pantanal (Brazil) and the Mara (Kenya, Tanzania). Collectively these basins are home to nearly one billion people and some of the world's most endangered species.
- Creating healthy rivers, that support thriving ecosystems, as well as local businesses and communities by: Tackling erosion, Reducing pollution, Ensuring water is used efficiently by all, promoting sustainable fishing and agriculture.



View more at: <https://www.youtube.com/watch?v=ywNWWWVTRhJI>

Mondi

Who	MONDI GROUP
Where	SOUTH AFRICA, RUSSIA
Partner	WWF
Main theme	RESPONSIBLE FORESTRY, PACKAGING AND PAPER PRODUCTION

Results:

- Three-year strategic partnership (2014 to 2016) that focuses on promoting environmental stewardship in the packaging and paper sectors. The work of the partnership will focus on minimising the impacts of Mondi's operations on forests, climate and water, sharing our initiatives and encouraging sustainable practices in the industry.
- The WWF Mondi Wetlands Programme : initiated in 1991 with the aim of supporting social change for improved wetland sustainability practices with a variety of landowners and users. It has been catalytic in initiating wetland conservation in South Africa, by pioneering the conservation of wetlands outside protected areas and influencing national wetland policy.
- Identifying and protecting the last remaining large intact forest landscapes (IFLs) in Russia: One of five "agreed" intact forests has since been registered for protection.
- Mondi is also a founding member of the New Generation Plantations Platform. This concept envisions forest plantations that maintain ecosystem integrity, protect high conservation values and are developed through effective stakeholder participation while contributing to economic growth and employment.

http://d2ouvy59p0dg6k.cloudfront.net/downloads/wwf_mondi_fact_sheet_final_1.pdf

Wal-mart

Who	WAL-MART
Where	BRAZIL
Partner	CONSERVATION INTERNATIONAL
Main theme	FOREST CONSERVATION

Results:

- In 2009, Walmart's Brazilian operations partnered with CI to provide funding for a biodiversity conservation project in Brazil's Amapá National Forest. This \$1.5 million, five-year partnership seeks to transform the 414,000 hectares (over 1 million acres) of forest into a model of tropical forestry management and sustainable use of Amazon resources.
- The project will focus on three areas: the improvement of forest management; the preparation and implementation of a comprehensive Management Plan; and the elimination of non-sustainable activities through substitution of more environmentally-friendly alternatives.
- Among other benefits, the program will eventually prevent the release of 458 million tons of carbon, protect 183 million trees, and provide employment, education, and business opportunities to thousands of local people.
- CI is currently working with Walmart to undertake an analysis of its palm oil footprint and to create a plan for how they can implement their commitment to source 100% sustainable palm oil for all Walmart-brand products by 2015.

http://d2ouvy59p0dg6k.cloudfront.net/downloads/wwf_mondi_fact_sheet_final_1.pdf

Michelin

Who	MICHELIN
Where	INDONESIA
Partner	WWF, FRANKFURT ZOOLOGICAL SOCIETY, THE ORANGUTAN PROJECT
Main theme	FOREST CONSERVATION ADJACENT RUBBER PLANTATION THAT SHOULD REMAIN UNDEVELOPED FOR ELEPHANTS

Results:

- In August 2015, WWF received licenses to manage 100,000 acres of forests bordering Bukit Tigapuluh National Park that been originally earmarked for logging concessions
- Identify key forest within the company's adjacent rubber plantation that should remain undeveloped for elephants and other wildlife.
- Monitor forest crimes through on-the-ground investigations and satellite imagery. Findings will be shared with the public, media and national and global forest product buyers.
- Gathering the best-available visual data using drones to map traditional village land rights and uses to inform the next phase of the project when indigenous communities are invited to become shareholders in our company.
- Selling rubber to Michelin that has been harvested in the concession.
- Studying the income-generation potential of non-timber forest products like rattan and honey.

ROYAL CARIBBEAN

Who	ROYAL CARIBBEAN
Where	PHILIPPINES, GLOBAL OCEANS
Partner	WWF
Main theme	SEAFOOD SUSTAINABILITY, BUILD GLOBAL AWARENESS ABOUT OCEAN CONSERVATION

Results:

- five-year global partnership to help ensure the long-term health of the oceans.
- 2020 environmental sustainability targets for the company that include:
 - Reduce greenhouse gas emissions by 35 percent by 2020.
 - Responsibly source 90% of its wild-caught seafood by volume from MSC certified sustainable fisheries, fisheries in full assessment for MSC certification, comprehensive Fishery Improvement Projects (FIPs), and/or sourced from International Seafood Sustainability Association (ISSA) member companies.
- Royal Caribbean also will financially support WWF's global ocean conservation work through a \$5 million philanthropic contribution during the partnership, and will collaborate with WWF to build global awareness about ocean conservation issues among its millions of passengers. RCL also made a separate, \$200,000 donation to WWF Philippines in support of conservation programs in the Donsol area.

OTHERS PROJECTS & COMMUNITIES BENEFITS

The Rainforest Trust

Lomami national park

Location: Lomami basin, Dem. Rep. of Congo

Size: 2,193,948 acres

Key Species: Bonobo (EN), Forest Elephant (VU), Okapi (EN), Lomami Red Colobus, Congo Peafowl (VU)

Habitat: Savanna to equatorial closed forest

Threats: Bushmeat hunting, ivory poaching

Action: Creation of Lomami National Park

Local Partner: Lukuru Wildlife Research Foundation (LWRF)

Approximately 100 small villages are scattered throughout the buffer zone surrounding the proposed park. Local economies are based upon subsistence agriculture, hunting, and fishing.

The local partner, Lukuru Wildlife Research Foundation has formed close, collaborative partnerships with the seven ethnic groups surrounding the proposed park. The most productive and durable interactions have resulted from local hires and LWRF has employed, at various times, over 90 local people from 38 villages.

Seven communities on the border of the proposed park now host operations with LWRF. In addition to salaried positions, residents have supported LWRF in many informal and unpaid ways as well, including working as informants and advisors.



Upper Guapiaçu River Basin

Location: Upper Guapiaçu River Basin, State of Rio de Janeiro, Brazil

Size: 455 acres

Key Species: Woolly Spider Monkey (EN), Puma (LC), Red-billed Curassow (EN)

Habitat: Lowland and montane rainforest

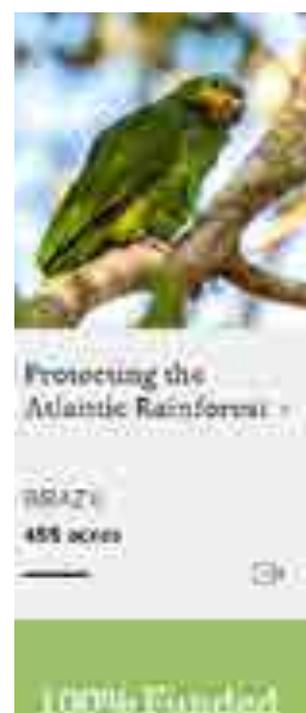
Threats: Expanding development pressures and increasing urbanization

Action: Purchase 455 acres of forest and pasture to expand the reserve and create necessary wildlife corridors

Local Partner: REGUA

REGUA recognizes that it can only succeed in its mission by working with local communities. With an active education and community outreach program, as well as workshop offerings for university students, REGUA has demonstrated a long-standing commitment to involving local citizens in their conservation work.

All of REGUA's nine forest guards come from the local villages. Some of REGUA's best guards have experience as hunters and are excellent trackers; these guards play an instrumental role in successfully deterring poachers from the REGUA reserve.



OTHERS PROJECTS & COMMUNITIES BENEFITS

African Parks

Parks and employment

- African Parks represents an innovative African solution to Africa's conservation challenges. Through entering into long term partnership agreements with Governments, we take direct responsibility for managing and financing national parks to ensure their survival.
- The African Parks mandate often requires total rehabilitation of a park, including the re-introduction of animal species that have become locally extinct. Our conservation approach combines habitat management, wildlife introduction and monitoring programmes, as well as related research.
- Depending on size, each of our parks employs between 80 and 250 local staff in permanent positions and many others benefit from temporary employment opportunities. Currently they employ nearly 1000 people in remote rural regions of Africa, directly contributing to the support of some 8 000 dependents.
- The establishment of tourism lodges and other commercial enterprises create further employment opportunities. For every tourism bed created, an additional 2-3 direct job opportunities are created, providing an economic stimulus for the entire region.

<http://www.africanparks.eu/>



Akagera, Rwanda



Majete, Malawi



Chinko, CAR



Liuiwa Plain, Zambia



Bangweulu, Zambia



USE OUR PAPER, WE PLANT MORE TREES.

