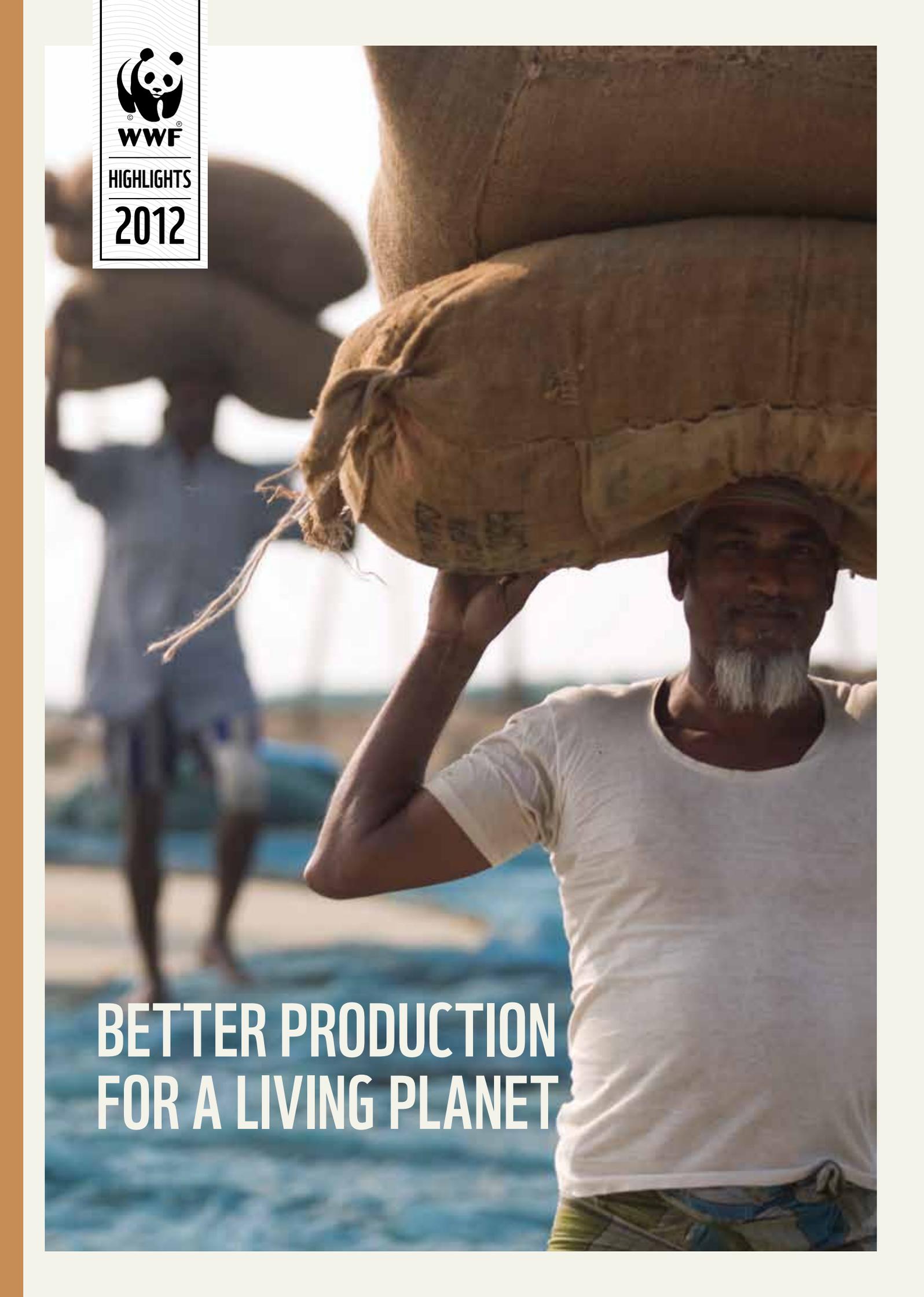




WWF

HIGHLIGHTS

2012



**BETTER PRODUCTION
FOR A LIVING PLANET**

Written and edited by WWF Market Transformation Initiative

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WWF is one of the world's largest and most experienced independent conservation organizations, with over 5 million supporters and a global network active in more than 100 countries.

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption.

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Palm oil is a leading driver for deforestation in Southeast Asia. But it does not have to be that way. Palm oil is also the most productive source of vegetable oil per hectare, it can sequester carbon and support poverty alleviation, if grown responsibly.

FOREWORD FROM WWF MARKET TRANSFORMATION INITIATIVE DIRECTOR

The challenge is to be smarter about how we produce and what we buy and sell

© WWF-Canon / Richard Stonehouse



Helen van Hoeven
Director
Market Transformation
Initiative

WWF has a long history of strategically engaging the private sector to achieve conservation goals. This collection of case studies illustrates how strategic engagement of commodity supply chains, from producers to brands and retailers, can create conservation impacts where they matter most. How working with logging companies can help save orang-utans, how working with fish farmers can help save whales, how small innovations in the way we cultivate sugar can help save reefs and how spending less on growing more cotton is good for dolphins in the Indus river and leaves the farmers with more money in their pockets at the end of the harvest.

With a population of roughly seven billion, we are currently using about 50 per cent more resources than the Earth generates. Estimates predict that by 2050 we will be close to 10 billion people. All will need food, clothes, shelter, water and energy.

As great as the challenges are, there is enormous potential to improve commodity production and, in the course of doing so, contribute to conservation of important ecosystems and to poverty alleviation.

The challenge is to be smarter about how we produce and about what we buy and sell. There are increasing examples that show that looking beyond the short-term, financial bottom line is not only good for communities and the environment that sustains us, but for business itself. After all, innovation has always been the defining force of successful business.

On the following pages you will find a selection of case studies of how businesses along the supply chain can contribute to conservation by better producing and sourcing the products they trade and sell. I trust that you will find these inspiring and I look forward to building on these experiences and joint achievements toward together accomplishing our vision of a world where people live in harmony with nature.

“As great as the challenges are, there is enormous potential to improve commodity production and, in the course of so doing, contribute to conservation of important ecosystems and to poverty alleviation.”

OUR STRATEGY

How WWF works to transform markets

1. The global challenge

Today, humanity uses the natural resources of 1.5 planets. Placing such unsustainable demands on nature has serious long-term consequences for biodiversity and ecosystems – and our demands are increasing. By 2050, the global population is expected to pass nine billion. The Food and Agriculture Organisation (FAO), has calculated that food production will have to increase by about 70 per cent to feed the world's future population¹. Already, 92 per cent of fresh water used is for agricultural production² and about 40 per cent of the habitable area of our planet is devoted to producing the commodities we consume³, and every year it encroaches a little further on natural habitats. So how can we supply the food, fuel, fibres and other raw materials that people need in a way that preserves our planet and leaves fresh water, a stable climate, clean air and areas of wilderness for future generations?

2. Our priorities

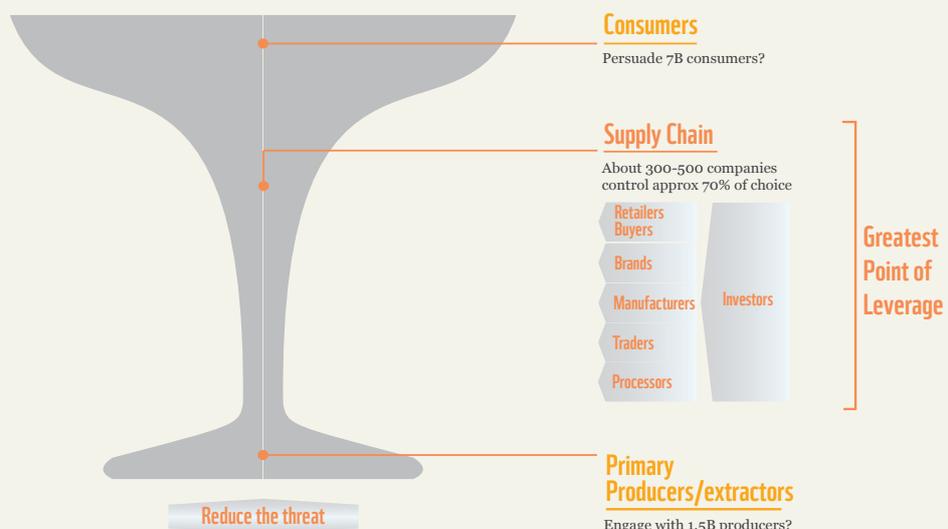
We concentrate on 15 commodities that have the greatest impacts on biodiversity, water and climate, particularly in the 35 places that WWF has identified as top priorities for conservation. Taken together, these priority commodities include the five largest drivers of deforestation, the main sources of greenhouse-gas emissions from land use, and the most important fisheries for aquatic biodiversity and food supply. They also have a critical impact on the livelihoods of hundreds of millions of people, and particularly on many of the poorest on the planet. But it is possible to improve the ways these commodities are produced, with environmental, social and economic benefits.

3. The strategy

The question is, how best to do that? Do we try to change the habits of seven billion consumers? Work directly with 1.5 billion producers? Our research reveals a more practical solution.

15 COMMODITIES WITH THE BIGGEST IMPACT ON AREAS OF GLOBAL CONSERVATION PRIORITY

TIMBER	WHITEFISH
PULP AND PAPER	TUNA
PALM OIL	FARMED SALMON
SOY	FARMED SHRIMP
COTTON	WILD-CAUGHT
SUGARCANE	FORAGE FISH
BIOENERGY CROPS	WILD-CAUGHT
BEEF	SHRIMP
DAIRY	



1 FAO. 2009. *Feeding the world in 2050*. Rome, Italy. [ftp://ftp.fao.org/docrep/fao/meeting/018/k6021e.pdf](http://ftp.fao.org/docrep/fao/meeting/018/k6021e.pdf)
 2 Mekonnen, M.M. and Hoekstra, A.Y. 2011. *National water footprint accounts: the green, blue and grey water footprint of production and consumption, Value of Water Research Report Series No. 50*, UNESCO-IHE, Delft, the Netherlands.
 3 Foley et al. (2011) Solutions for a cultivated planet. *Nature* 1045

GOALS FOR 2020

- ▶ HUMANITY'S FOOTPRINT DUE TO COMMODITY PRODUCTION FALLS BELOW 2000 LEVEL
- ▶ ZERO LOSS OF HIGH CONSERVATION VALUE HABITAT DUE TO COMMODITY PRODUCTION

IMPACT =
POSITIVE CHANGE
X
UPTAKE

MORE INFORMATION
PANDA.ORG/MARKETS

Our research shows that by shifting 20 per cent of demand, we can shift up to 50 per cent of production. Therefore, we work to influence the major companies with the biggest impact on commodity demand.

This can give us a real opportunity to shift a whole commodity market and reduce the impact from commodity production on key areas of global conservation importance. Thus, the linchpin of our strategy is to work with the biggest buyers of each commodity to shift their whole supply chain. If we can get enough of these companies to demand higher production standards, we can push commodity markets to a tipping point where sustainability becomes the norm.

4. Working with business

We target key businesses in the private sector to make conservation a core part of corporate agendas. There are three main strands to this strategy:

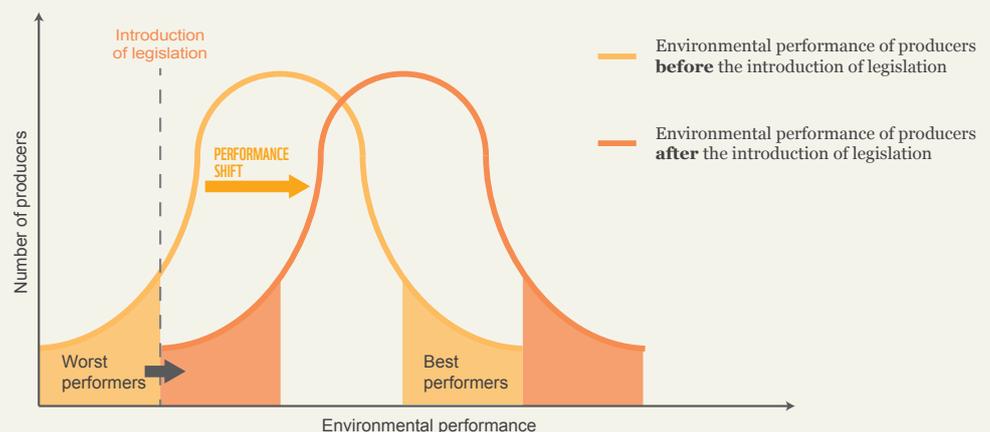
- **Multi-stakeholder engagement** – through sector roundtables that bring together expertise and interests from across the entire value chains from production to marketing as well as other interested parties such as producer groups and NGOs.
- **Corporate engagement** – where we work directly with the most important companies to transform their operations, engage their supply chains and reduce their footprint; and working with company platforms which allows us to achieve transformation at scale, faster.
- **Commodity finance** – influencing the investment decisions of the financial institutions that support global trade.

5. Setting standards

We identify and share better practices for producing our priority commodities, particularly as part of multi-stakeholder initiatives that agree principles and set standards for more sustainable management practices. Through these, WWF participated in developing a number of credible, third-party certification schemes, such as the Forest Stewardship Council (FSC) and the Roundtable for Sustainable Palm Oil (RSPO). These standards aim to become the leading mainstream standards in sustainability and better management practices. They must be capable of preventing further environmental degradation and drive the whole industry toward better performance.

6. Continuous improvement

Ongoing improvement is an essential component of the certification schemes we support. Continuously raising voluntary standards lifts industry norms, while allowing the most progressive companies to distinguish themselves from those doing business as usual. It can also raise mandatory standards, which lift up the poorest performers. In the long term, we want to make sustainability a pre-competitive requirement: just as safety certificates are a prerequisite for selling electrical equipment, market access will depend on being able to verify that commodities have been produced within the Earth's limits.



SUMMARY OF CASE STUDIES

Around the world, WWF's work to transform markets is making a difference. From the Cerrado in Brazil to the forests of Borneo, wetlands in South Africa to the Great Barrier Reef, better production methods are having a positive impact on the ground and on the water. Successful engagement with key businesses – from promoting better management practices to building demand for certified products. And this in turn is beginning to have a wider impact, by raising awareness, influencing policy and regulations, and affecting trade flows.

The case studies in this publication, summarized here, show how.

Impact in the field

Examples of how better production practices has created measurable social and environmental impact.

Leveraging impact

Illustrates how WWF leverages better production standards strategically to achieve conservation goals beyond individual certified areas.

Strategies to transform markets

Examples of how the three strategies contribute to the overall goal of transforming entire markets across supply chains and trade flows.

1. Better production
2. Engaging private sector
3. Influencing financial flows

SUSTAINABLE BEEF

A global roundtable set up to promote better production practices throughout the beef industry.

Cerrado-Pantanal, Brazil
page 28

RESPONSIBLE AQUACULTURE

How is ASC certification going to reduce the impact of farmed fish production?

Meso-American Reef, Honduras
page 26

RESPONSIBLE TUNA

Example of how companies joined by a common vision can lobby Regional Fisheries Management Organizations (RFMOs) for better management practices.

page 16

RESPONSIBLE SOY

Illustrates how WWF uses the better production standards strategically to achieve its conservation goals working across trade flows and supply chains.

Cerrado-Pantanal, Brazil
page 18

IMPACT WHERE IT MATTERS: CHILE

Commodity markets are moving from a threat to an opportunity to conserve one of the planet's most important ecoregions.

Pulp and paper, farmed and wild-caught fish
page 20

SUSTAINABLE FINANCE

By attaching sustainability criteria to their lending and investment conditions, financial institutions are helping raise standards in critical markets.

page 34

PARTNERSHIP FOR CHANGE

A 10-year partnership between WWF and IKEA has led to transformational changes – from timber to cotton, to carbon and now looking into their customer's home.

page 32

ANALYSING SUPPLY RISK

By helping companies understand environmental risks, WWF ensures they focus their efforts where they can make the biggest conservation impact.

page 30

BETTER COTTON

Cotton farmers in Pakistan are increasing their income by reducing use of water and chemicals.

Indus River Dolphin
Indus Delta, Pakistan
page 6

SUSTAINABLE BIOFUELS

WWF is fighting destructive projects while helping to develop standards and incentives for better production.

Tana River Delta & Dakatcha
Woodlands, Kenya
page 24

SUSTAINABLE PALM OIL

Example of how WWF works through the standard setting organizations to continuously improve standards so they deliver conservation impacts.

New Guinea and Sumatra
page 22

RESPONSIBLE TIMBER

Sustainable forest management offers hope for Borneo's endangered orang-utans.

Orang-utan
Heart of Borneo - Kalimantan,
Indonesia
page 10

BETTER SUGARCANE

A project in Queensland is exploring ways to grow sugarcane more sustainably – and the Great Barrier Reef is benefiting.

Pacific Southwest - Great
Barrier Reef, Australia
page 8

RESPONSIBLE PAPER

A paper plantation has helped conserve a vital wetland and extend the habitat of endangered species.

Coastal East Africa - iSimangaliso
Wetland Park, South Africa
page 12

SMART FISHING

Solutions developed to satisfy MSC criteria have become legal requirements in the South African fishing industry.

Albatrosses
Off the coast of Fynbos,
South Africa
page 14



© WWF

COTTON

Cotton farmers in Pakistan are increasing their income by reducing use of water and chemicals.

“The Better Cotton Initiative has a big vision – to change the way cotton is grown everywhere. Levi’s shares that vision. We’re very appreciative of WWF’s pioneering work with cotton farmers in Pakistan, and support it financially and through our procurement practices. We’re very excited that better cotton will soon be finding its way into Levi’s jeans.”

Michael Kobori
Vice-President
Social and Environmental
Sustainability,
Levi Strauss & Co

“Irrigation used to be weekly,” says Jam Sarfraz. “Now we observe the plants and the soil, and only water when necessary. We used to apply fertilizers at every irrigation, but now we go for regular Cotton Ecosystem Analysis and only apply fertilizer and pesticides if we need to. By reducing expenses farmers are now getting a good income.”

Jam is one of around 40,000 farmers in Pakistan growing a commodity that hit the market in 2010: Better Cotton. In your IKEA furnishings or Levi 501s, Better Cotton and conventional cotton look and feel identical – but on the ground, when they grow, they’re very different.

CREATING OPPORTUNITY

Cotton is vital to Pakistan’s economy. It is the world’s third largest cotton grower, and cotton and textiles make up 55 per cent of its foreign exchange earnings. But the way cotton is usually produced can have severe environmental impacts.

Vast amounts of water are sucked from rivers like the Indus to irrigate cotton fields. It can take more than 4,500 litres of water to grow

a kilo of conventional cotton – enough for just one pair of jeans. Falling water levels threaten freshwater ecosystems, millions of people and the future of the cotton industry itself. Three-quarters of all pesticide use in Pakistan is down to cotton. This leads to river and groundwater pollution, and many people become ill or even die from pesticide or fertilizer poisoning.

In the Indus, falling water levels and pollution have caused numbers of the endangered Indus river dolphin to plummet to just 1,600. This is part of a worrying worldwide trend: WWF’s *Living Planet Report 2010* showed that populations of global freshwater species have fallen by 35 per cent since 1970.

In 2006, with support from IKEA, WWF began a pilot project to promote better ways of growing cotton. Due to its immediate success, the project evolved into a multi-stakeholder member-based organization called the Better Cotton Initiative (BCI). Through the initiative, Pakistani farmers had reduced their use of water by 37 per cent, pesticides by 47 per cent and chemical fertilizer by 40 per cent across over 170,000 hectares by 2010. With yields just as good, and an average increase in

WWF TARGETS

- 2015** 1 million metric tonnes of Better Cotton grown; 50% purchased by Better Cotton Initiative members and 50% available for other buyers
- 2020** 25% of cotton produced for the global market meets Better Cotton Initiative principles and criteria

PROGRESS

- 0.3% of global cotton is Better Cotton (based on data available as of February 2012); Estimates for April 2012 are close to 1%

PRIORITY COUNTRIES

Production

China, India, USA, Pakistan, Brazil, Uzbekistan

Markets

China, India, EU, USA

Present focal regions

India, Pakistan, West and Central Africa, Brazil

CONTEXT

Threats

- Cotton is the highest user of pesticides globally. Annually, across all agricultural sectors, about 20,000 deaths are associated with pesticide poisoning.

- Cotton production can also be associated with child labour, debt bondage, soil degradation, agrochemical use, and high water use.

Opportunities

Cotton is used by nearly every consumer on the planet and accounts for at least 40% of all textiles.

- The Better Cotton model can work as the mainstream solution for sustainability in the cotton sector globally.
- Farmers who produce Better Cotton commit to achieving principles which support poverty alleviation and/or environmental protection.
- By cutting the costs and reducing 'inputs' (agrochemicals and water), growing Better Cotton leaves farmers with greater profit.
- Better soil quality and reduced water use from growing Better Cotton allows for growth of food crops.

TRENDS

Demand drivers

Income, population, consumption

Future focus for success

BCI will focus on Pakistan, India, Brazil, and West and Central Africa (Benin, Burkina Faso, Cameroon, Mali, Senegal and Togo). BCI will also support development of Better Cotton in China and Central Asia.

income of 15 percent through reduced water and chemical use, working conditions and living standards have already improved in many communities.

BETTER MANAGEMENT PRACTICES

Irrigating just the furrows instead of whole fields. Digging organic matter back into the soil. Applying natural pesticides when and where they're needed, instead of spraying the whole crop, which kills beneficial insects as well as pests. Basic safety measures, like not entering a field for 24 hours after spraying.

Some of these are things that progressive farmers like Bilal Khan, Director of the Farmers Associates Pakistan – a BCI member – were already doing. WWF and industry partners worked with them and cotton scientists to help develop standards for growing Better Cotton, and to bring this knowledge to thousands of Pakistani cotton farmers. Most are very receptive, Bilal says.

"A good idea spreads like wildfire. Water is very expensive, especially if you're pumping it with a diesel pump. So if you can use 30 per cent less, that's a huge saving," says Bilal. "Some less ethical pesticide salespeople tell farmers that all bugs are enemies, so they're happy to discover that some are friendly."

CORPORATE COMMITMENTS

Bilal believes all cotton should become Better Cotton – and global demand can make that happen. WWF is working with industry partners like IKEA, Levi's, H&M, Adidas and Marks & Spencer – all BCI members – to increase both market demand and production.

"We've committed to using 100 per cent Better Cotton by 2015, and the likelihood of reaching that target is extremely high," says Guido Verijke, the man in charge of IKEA's global textiles business. "From our projects, we're already creating more capacity than we need ourselves."

The goal is to make Better Cotton a mainstream commodity – not an expensive niche product. "In the future, better cotton will be a precondition," says Guido. "Sustainability won't be something people will applaud – it will be something they expect."



The Better Cotton Initiative (BCI) exists to make global cotton production better for the people who produce it, better for the environment it grows in, and better for the sector's future.

bettercotton.org



© Cat Holloway / WWF-Canon

SUGARCANE

A project in Queensland is exploring ways to grow sugarcane more sustainably – and the Great Barrier Reef is benefiting.

“If we can prove the effectiveness of what Project Catalyst is doing for the Great Barrier Reef, it has the potential to be scaled up and replicated in other sugarcane-growing regions around the world. With sugarcane covering around 24 million hectares in more than 90 countries, it has the potential to make a massive difference.”

Michelle Allen
Public Affairs and
Communications Manager
Coca-Cola South Pacific

Think of threats to the Great Barrier Reef, and outdated land management practices are probably not the first things that comes to mind. Yet runoff from sugarcane and other farms near the coast can have a severe impact. Sediment can smother corals, chemical herbicides and pesticides poison reef species, and fertilizers destabilize nutrient levels. The resulting algal blooms form a breeding ground for the devastating coral-eating crown-of-thorns starfish.

“We’ve been branded as environmental vandals, and that hurts,” says Tony Bugeja, whose family has been growing cane near the Queensland coast for three generations. “We live on the doorstep of the reef, and we don’t want to harm it.” Besides, farm inputs are expensive: “When we put nutrients into the ground, we want to get the most out of them,” says Tony. “We can’t afford to have chemicals leave our property.”

RISKS

The Australian government’s Reef Rescue programme offers financial assistance to farmers in the reef catchment areas to cover up to half the cost of switching to more

sustainable farming practices. But changing established practices is a risk. The thousands of cane-growing families in the region often struggle to make a living; few can afford to invest in new methods and machinery without the certainty of an immediate return.

That’s where Project Catalyst comes in. A partnership between WWF, natural resource management groups Reef Catchments and Dry Tropics and Terrain, The Coca-Cola Foundation, the Australian government and local sugarcane farmers, the project supports farmers to trial, monitor and share information and knowledge on cutting-edge practices to improve farm management, water quality, landscape health, farm economic viability and social well-being of rural communities. These practices, which have been devised by the farmers with support from Project Catalyst partners, range from new cultivation strategies to equipment modifications. When the project began in 2009, 19 farmers were involved; there are now 73 growers who farm on more than 15,000 hectares.

Tony has trialled an automated controller to adjust the height of the cutting blade on the

WWF TARGETS

2015 10% of global sugarcane production will be Bonsucro certified

PROGRESS

1.4% of global sugarcane production is Bonsucro certified (April 2012)

PRIORITY COUNTRIES

Production

Brazil, India, China, Thailand, Pakistan, Australia, South Africa, Guatemala, Mexico, Colombia, Fiji

Markets

China, India, USA, EU, Japan, Brazil

CONTEXT

Threats

- Habitat conversion;
- Soil erosion and degradation;
- Agrochemical use;
- Water use and pollution;
- Greenhouse gas emissions;
- Labor and land tenure rights, health, payment (minimum wage and contracts) and training of workers.

Opportunities

- Potential to reduce habitat destruction and biodiversity loss in some of Earth's most precious natural places;
- Greenhouse gas avoidance and mitigation through biofuel production for fuel and plastics;
- Improve water quality and availability;
- Improve livelihoods.

TRENDS

Demand drivers

Consumption, population, income, biofuel policies

Future focus for success

Brazil, Fiji, Central America, Australia, India, Pakistan, Colombia, South Africa

harvester. Sugarcane harvesting machines cut the plant at ground level; a new stalk (or ratoon) then grows. The cutting height is crucial – cutting too deep leads to slower germination and less production. As well as giving a lower yield, smaller plants absorb less of the fertilizer in the soil, leading to increased runoff. Less growth also means less crop residue to provide mulch for the next ratoon – which in turn means more chemical herbicides, fertilizers and watering.

Usually the driver controls the cutter height but, explains Tony, soil variability makes this difficult: “Where we farm, you could have four soil types in one drill, so the height of the mound around the base of the plant constantly varies.” The automated cutter uses five sonar sensors to make sure the blade is always 15mm above ground level, no matter what the ground height is. This should encourage healthy regrowth, reducing the need for chemical inputs. Putting theory into practice is challenging, however, underscoring the need for proper field trials before new practices are adopted. In early tests, the machine's response was slow, a problem the manufacturers are now trying to correct.

POTENTIAL

Preliminary evaluations suggest many techniques Project Catalyst farmers are testing can improve productivity and profitability while reducing negative environmental impacts. In the first two years, the farms taking part have improved the water quality of 77.5 billion litres of runoff, significantly reducing the amount of nitrogen, phosphorous, herbicide and other pollutants flowing into the Great Barrier Reef.

The long-term goal is to replicate and build on these impressive results in the wider sugar industry, in Queensland and beyond. Bonsucro, the multi-stakeholder initiative which has set a global metric-based standard for more sustainable sugarcane production, will provide a platform to spread the outcomes of Project Catalyst.

Tony believes Project Catalyst has shown how farmers and environmentalists can work together toward a common goal. “At first we were getting nervous looks from people for working with WWF, but now more and more people are interested in what we're up to,” he says. “We must be doing something right.”



Bonsucro aims to improve the social, environmental, and economic sustainability of sugarcane.

bonsucro.org



© naturepl.com / Anup Shah / WWF

TIMBER

Sustainable forest management offers hope for Borneo's endangered orang-utans.

Orang-utans, one of humanity's closest relatives, are in danger of extinction. Borneo and the neighbouring island of Sumatra are the only places where orang-utans survive in the wild. But over the last two decades, orang-utans in Borneo have lost more than half their rainforest home. Logging and conversion of natural forest to agriculture and plantations have taken a heavy toll. Numbers have plummeted as Borneo's orang-utans have lost 80 per cent of their former territory.

While WWF wants to see more and better-connected protected areas for orang-utans, this is only part of the answer. The species' long-term survival will also depend on finding ways for economic activity to take place without damaging crucial habitats in production areas.

"Today, 70 per cent of the orang-utan population in Kalimantan [the Indonesian part of the island] lives outside protected areas," says Chairul Saleh, who coordinates WWF-Indonesia's orang-utan programme. "Their chances of survival are much higher if they live in an area that has an orang-utan conservation plan as an integrated part of its responsible forest management plan."

"We are confident that if SJM can demonstrate a concrete example of sustainable forest management and orang-utan conservation in the field, then other companies will enthusiastically follow."

IBW Putra
Operations Director
PT Suka Jaya Makmur (SJM)

RESPONSIBLE FOREST MANAGEMENT

One place that shows how this could be done is a forest concession of more than 170,000 hectares in West Kalimantan operated by PT Suka Jaya Makmur (SJM), a subsidiary of the Jakarta-based Alas Kusuma Group. A participant of WWF's Global Forest & Trade Network (GFTN) in Indonesia, SJM achieved Forest Stewardship Council (FSC) certification in June 2011 – with WWF and other NGOs' support.

"We decided to get FSC certified to strengthen our positive image and to prove our commitment to sustainable forest management standards," says IBW Putra, SJM's Operations Director. "We also believe that FSC certification increases our competitiveness in international markets and adds value to our products."

As part of the certification process, SJM worked with WWF to carry out a survey of orang-utans within the concession. They found hundreds of orang-utan nests, old and new, and spotted many individuals. Estimates suggest between 619 and 672 orang-utans are living within the concession – more than one per cent of the island's total population.

WWF TARGETS

2020 25% of global timber production is sourced from responsibly managed and/or credibly certified sources (FSC)

PROGRESS

12% of global timber production is FSC certified (based on data available as of February 2012)

PRIORITY COUNTRIES

Production

Indonesia, Malaysia, Brazil, West and Central Africa, Chile, Russia

Markets

China, EU, USA

CONTEXT

Threats

- Negative impacts on habitat, ecosystems and species loss, soil erosion, and carbon emissions (deforestation causes more carbon emissions than all global transport).

Opportunities

- Currently, over 400 million people live in or near forests, and up to a billion of the world's poorest people are dependent to some extent on forest resources for their survival;
- Conservation benefits from reduced illegal logging and forest degradation;
- Improved governance, ensuring sustainable forest products on the global market and safeguarding livelihoods.

TRENDS

Demand drivers

Income, consumption, urbanization

Future focus for success

Increasing certified forest cover in priority places such as Africa, Asia and Latin America; expanding FSC certification to cover all kinds of forests, including forest plantations, land tenure and forest-based products

The survey also found that almost half the identified tree species (222 out of 460) are orang-utan food sources.

Protecting important areas of habitat and reducing the impact of its logging is a requirement of SJM's certification. WWF has helped it design orang-utan conservation measures, which will form an integral part of the company's management plan. These include not cutting down fruit trees that provide food for orang-utans – which staff have been trained to identify and monitor – and avoiding areas with a high orang-utan population. The company is also taking steps to prevent poaching. These measures will continue to be monitored by WWF, and as part of future certification auditing.

INTEGRATED LANDSCAPES

Chairul believes that FSC certification can guarantee the conservation of vital orang-utan habitat.

“The integration of SJM's orang-utan conservation management with the FSC's sustainable forest management will effectively protect the orang-utan population in the logging concession,” he says.

WWF is now working with two other concessions in West Kalimantan belonging

to the Alas Kusuma Group, PT Wanasokan and PT Sari Bumi Delang, to conserve and connect important orang-utan habitats over a large landscape. The “Alas Kusuma Orang-utan Corridor” will cover an area of around 300,000 hectares.

This example illustrates the findings of a WWF report ‘Great Apes and Logging’ (2009), which shows that this is not an isolated example. The report indicates that protected areas are best able to support healthy great ape populations, but well-managed, FSC-certified responsible logging concessions in Africa and Southeast Asia can expand that protection.

FSC principles require selective logging and the protection of endangered species and their habitats as well as management to control hunting. Fruit trees, an important food source for great apes, are maintained and roads are kept closed to decrease illegal logging and hunting. Independent auditors monitor adherence to FSC principles every year for FSC certified forests.



The Forest Stewardship Council (FSC) is an independent, non-governmental, not-for-profit organization established to promote the responsible management of the world's forests.

fsc.org



© Mike Samways (2012)

PAPER

A well planned and managed paper plantation has helped conserve a vital wetland and extend the habitat of endangered species.

Beautiful Lake St. Lucia, Africa’s largest estuary, is one of the jewels of the iSimangaliso Wetland Park, the last remaining coastal wilderness in South Africa. A World Heritage Site, the park is home to elephants and rhinos, hippos and crocodiles, 525 species of birds and 1,200 types of fish.

It has also been the scene of bitter disputes between environmentalists and the forestry industry. Poorly located plantation forests on the western shores of Lake St. Lucia had reduced freshwater flows into the narrow estuary, increasing salinity levels and threatening the sensitive wetland ecosystems and the many species that depend on them. Years of mutual mistrust hindered both conservation efforts and economic growth.

ECO-BOUNDARY

That changed when the international paper and packaging group Mondi took over the coastal plantations, including those around Lake St. Lucia. To manage these areas, Mondi formed SiyaQhubeka Forests (SQF), in partnership with black economic empowerment organizations, the government and communities.

Mondi, as the controlling partner of SQF, worked with the government, environmental NGOs and the park authority to establish a 120km eco-boundary, separating the commercial zone, including SQF’s plantations and associated ecosystems, from the conservation zone, now incorporated into the World Heritage Site.

As a result of the eco-boundary agreement, 9,000 hectares of former state forest plantations (including 4,500 hectares allocated to Mondi) were transferred to the park. This land has now largely been rehabilitated to wetlands and grasslands, restoring soil and water conditions and encouraging biodiversity. A further 14,200 hectares of SQF’s commercial landholdings were officially incorporated within the park, a win-win for both parties.

“I was fortunate enough to visit the SiyaQhubeka Forests on a field trip following FSC’s 2008 General Assembly. I have to admit that I had no conception of what a model of effective commitment to local communities actually meant in practice until I saw it at work in reality. Mondi opened my eyes to what a company can achieve when taking seriously

“Well-designed and well-managed plantations that take into account protected areas, high conservation value areas and ecological networks can maintain biodiversity at the landscape level and contribute to sustained economic growth as well as social and environmental benefits.”

Peter Gardiner
Natural Resource Manager
Mondi

WWF TARGETS

- 2020** 25% of the global paper produced with virgin fibers is responsible and credibly certified, focusing on priority eco-regions
- 2020** 60% of global pulp and paper production uses recycled material

PROGRESS

- 5.6% of overall papers and board are FSC certified for their virgin fibre (based on data available as of February 2012)
- 53% of overall papers and board use recycled material (based on data available as of February 2012)

PRIORITY COUNTRIES

Production

Indonesia, Brazil, Chile, Russia, Japan

Markets

EU, China, India, USA

CONTEXT

Threats

- Forest conversion;
- Illegal harvesting;
- Social conflicts;
- Habitat conversion;
- Air and water pollution, solid waste.

Opportunities

- Protecting high conservation value forests;
- Transparency in the paper processing sector;
- Improving access to paper to expand education and information in developing countries.

TRENDS

Demand drivers

Income, population, consumption (in particular, product packaging)

Future focus for success

Increase transparency and environmental commitment of major pulp and paper producers globally and target buyers sourcing mainly from Indonesia, Latin America and Russia.

its obligations to FSC's principles," says Charles Thwaites, FSC UK Executive Director.

ECOLOGICAL NETWORKS

According to Professor Michael Samways of the Faculty of Agrisciences at Stellenbosch University, this pattern of combining appropriately located, well-managed plantations with protected areas provides mutual benefits. "One can visualize this rather like a starfish, with a central area and 'arms' of conservation area extending across the landscape in and among the production areas," he says. "These ecological networks are nature reserves in their own right. It is a win-win situation as the protected area is increased enormously in size while production can take place to provide economic security to the area."

As well as benefiting Lake St. Lucia's many birds and freshwater species, the project has extended the habitat of elephants, rhinos, cheetahs, buffalos and other game, allowing them to roam freely in the park and the commercial forestry area. Maintaining the integrity of natural ecosystems also benefits the commercial plantations, Professor Samways adds.

All SQF's areas are Forest Stewardship

Council (FSC) certified, and this plays an important part in monitoring the success of the venture. "The FSC certification provides a consistent high management standard and monitoring," says Peter Gardiner, who leads Mondi's work on responsible plantations. "This helps maintain and control the quality of the management over time."

Involving local communities and small growers in the plantation model has raised the levels of skills, education and viable small businesses in the area. In addition to providing jobs and technical forestry training to Khula villagers, SQF has promoted tourism in a part of Lake St. Lucia not previously accessible to the public. SQF supports small business initiatives such as honey production, nursery production and firewood collection, improving the livelihoods of local people. Mondi has run timber farming support schemes to enable local communities to grow and responsibly manage commercial tree plantations.

Mondi is a participant in WWF's New Generation Plantations project, which is developing and promoting principles and tools for ecologically, socially and environmentally sustainable plantations.



The Forest Stewardship Council (FSC) is an independent, non-governmental, not-for-profit organization established to promote the responsible management of the world's forests.

fsc.org



© Wim Van Passel / WWF-Canon

WHITEFISH

The MSC-certified South African Hake Trawl Fishery shows that responsible fishing means more than maintaining healthy fish stocks.

“We used to worry about the hake quota and that would be it,” says Russell Hall. “Now that’s just one small part of a much bigger equation. If you want to stay in this business long term you have to deal with every aspect of sustainability.”

Russell manages the trawling division of Sea Harvest, one of South Africa’s largest hake producers. He has been involved with the company’s vessels for more than 20 years, but today finds himself devoting more and more time to things that do not seem to concern the day-to-day business of running a fishing fleet.

Albatrosses, for example. The issue of seabirds getting caught up in fishing gear came to light when the South African Hake Trawl Fishery applied for Marine Stewardship Council (MSC) certification. A study found around 18,000 birds, including albatrosses, were being killed each year.

“It was a huge problem,” says Ross Wanless, who coordinates BirdLife South Africa’s work on seabirds in Africa. “Albatrosses are particularly vulnerable because they are large, aggressive birds that dominate the access to food, and so are more likely to become

entangled in the trawl gear. They are also of higher conservation concern, so the issue is most acute for them.”

Reducing seabird mortality was a condition of the fishery’s MSC certification. Working with WWF and BirdLife, the industry reacted quickly to introduce measures such as tori lines – colourful streamers flown from boats to scare the birds away. “Their introduction has reduced albatross interactions with fishing gear very significantly,” says Ross. As a result, what began as a voluntary initiative was incorporated into mandatory fishing permit regulations in 2006.

FURTHER IMPROVEMENTS

Despite these improvements, however, “it became clear that current regulations were not enough,” says Russell. “Unfortunately, it seems that by scaring the albatrosses away, we have opened the door for the smaller petrels and other species,” Ross adds.

This time, action was taken through the Responsible Fisheries Alliance (RFA) – a partnership WWF set up with four of South Africa’s leading fishing industry companies

“Markets and consumers today are more environmentally conscious. This is why the trawl industry pushed hard to obtain MSC certification for its target species, hake. The MSC label is very important to us as an exporter, so any issue that affects our accreditation is important.”

Russell Hall
Trawling Division Manager
Sea Harvest Corporation

WWF TARGETS

- 2015** 25% of priority whitefish fisheries are either MSC certified or seeking certification
- 2020** priority populations of Alaska pollock, cod, hoki, orange roughy, toothfish and hake are MSC certified, harvested without negative impact on the ecosystem and under implementation of a spatial area plan that protects vulnerable marine ecosystems.

PROGRESS

- 29% of global whitefish is produced sustainably and MSC certified (based on data available as of February 2012)

PRIORITY COUNTRIES

Production

Argentina, Chile, Canada, EU, New Zealand, Norway, Russia, South Africa, USA, China

Markets

European Union (Germany, Netherlands, Spain, United Kingdom), Canada, Japan, Norway, USA

Present focal regions

Southern Africa (South Africa and Namibia), Latin America (Chile, Argentina, Peru and Uruguay) Arctic Seas (Russia, Norway, USA), North Atlantic (Canada, EU), New Zealand

CONTEXT

Threats

- Overfishing due to unfit catch limits and illegal fishing;
- Fishing down the food web;
- Habitat destruction through use of unsustainable fishing gear;
- Subsidies to increase vessel capacity and failure to set science-based catch quotas and recovery plans;
- Wasteful discards and bycatch of marine birds and other mammal species.

Opportunities

Good management and responsible behaviour can result in:

- Sustainable fishing quotas;
- Reduced bycatch and discards;
- Supportive legislation, effective monitoring and control;
- Habitats and species protection;
- Sustainable sourcing through credible MSC certification.

TRENDS

Demand drivers

Income, population, consumption

Future focus for success

In the coming years MSC's whitefish work will focus on China, Japan, South Africa, Namibia, Chile, Argentina, Uruguay, Russia, Peru.

(Irvin & Johnson Ltd, Oceana Group Ltd, Viking Fishing Group and Sea Harvest Corporation) in 2009.

"A task team with representatives from each company, plus members of WWF and BirdLife South Africa, studied what more could be done to prevent interactions with seabirds," says Russell. They looked at issues like where and when the lines were deployed, how offal – which attracts the birds in the first place – was discarded, and even what colour the lines should be (yellow appears best).

"What works on one ship may not work on another," Russell explains. "The RFA engaged a consultant to see what was most effective for each class of vessel, spending time on 15 different vessel types."

The RFA and BirdLife brought their findings to the government, which updated the permit conditions with immediate effect. Ross is hopeful this will make a difference: "The new permit conditions will ensure a more effective bird-scaring line design is used, and that the lines are deployed as soon as there is any risk to seabirds – which should drop overall interaction rates, and albatross-specific rates still further." RFA members also have replaced heavily greased trawl wires with ones using a thinner lubricant, which are less likely to trap small birds.

RAISED AWARENESS

The RFA runs a responsible fisheries training course, developed by WWF, to help fishers and managers learn what an ecosystem approach to fisheries is all about. Several hundred people have attended, including many fishing boat captains and crew.

"It's created tremendous awareness," says Russell. "If skippers are interested, and coming back to you with issues and ideas, that's how things will be resolved. Good practices become daily habits."



The Marine Stewardship Council exists to contribute to the health of the world's oceans by recognizing and rewarding sustainable fishing practices, influencing the choices people make when buying seafood, and working with our partners to transform the seafood market to a sustainable basis.

msc.org



© Wild Wonders of Europe / Zanki / WWF

TUNA

Market pressure helped bring a tuna fishery back from the brink of collapse. Now WWF is working with scientists and tuna processors to make sure all tuna stocks are managed sustainably.

“A well-coordinated majority of the world’s tuna processors, joined with WWF, advocated for immediate conservation action, with the potential consequence that a majority of the world’s tuna processors would abandon transactions in bigeye from the eastern Pacific. That had never happened before.”

Susan Jackson
the International Seafood
Sustainability Foundation
(ISSF)

“Science demands a sharp reduction in the catch of bigeye tuna, but over the past decade this advice has been ignored,” warned Dr Simon Cripps, former Director of WWF’s International Marine Programme. “Once again the high seas are being fished out, and unless global intervention is effective, important fish stocks will be lost forever.”

Dr Cripps was speaking in 2007. The outlook was dire. Adult bigeye tuna are highly valued but instead fishing fleets were landing huge numbers of small fish. They were not worth much and the canneries did not really want them, but the cost to the species was immense, causing a more rapid and deeper decline in the bigeye stock.

In the eastern Pacific, the situation was especially bleak. The half-measures adopted by the Inter-American Tropical Tuna Commission (IATTC), the organization in charge of managing fisheries in the region, had done nothing to arrest the decline. In fact, for the previous two years there hadn’t been any conservation measures. A new approach was desperately needed.

INDUSTRY INTERVENTION

One of the key challenges to maintaining healthy tuna stocks is a lack of effective management. To address this, in 2009 WWF got together with marine scientists and key players in the tuna processing industry to form the International Seafood Sustainability Foundation (ISSF). The ISSF advocates for effective regional management structures, and that tuna fisheries move toward Marine Stewardship Council (MSC) certification. The MSC is the world’s leading certification and eco-labelling program for sustainable seafood.

The eight companies that were founding members, together controlled more than half the global canned tuna market. This gave the organization considerable clout – which it used immediately. In April 2009 ISSF announced that its members would stop buying bigeye tuna from the eastern Pacific unless the IATTC agreed to science-based conservation measures that would allow the stock to recover. The IATTC quickly buckled under this concerted pressure. It finally agreed to effective measures, including closing the purse seine fishery for two months a year,

WWF TARGETS

2020 75% of tuna catches from stocks of all seven principal market tuna species (skipjack, yellowfin, bigeye, albacore, Atlantic bluefin, Pacific bluefin and southern blue) worldwide are qualified for certification in accordance with MSC standards

PROGRESS

0.7% of global tuna caught sustainably and MSC certified (based on data available as of February 2012)

PRIORITY COUNTRIES

Production oceans

Indian Ocean, Pacific Ocean, Mediterranean Sea

Markets

Japan, USA, EU

CONTEXT

Threats

- Tuna are prone to overfishing, with some stocks approaching complete depletion;
- Unsustainable bycatch of non-target species, many of which have high conservation and ecosystem value, including sea turtles, sharks and small cetaceans.

Opportunities

- Improved regional fisheries management is critical to strengthening the governance of marine ecosystems;
- Poverty alleviation by transforming the economies of tuna fishing in the Indian and Pacific Oceans;
- Rights-based management and designing, financing and implementing international traceability systems can enhance the value of sustainable fishing practices and create incentives for fishers.

TRENDS

Demand drivers

Income, consumption, globalization

Future focus for success

Expand tuna-conservation to an ocean-wide approach moving beyond priority regions like Coastal East Africa (Indian Ocean) and Coral Triangle (western Pacific). Ramp up engagement with actors on all levels.

setting lower quotas for longline fishing and setting aside a large area to reduce the catch of small bigeye.

“The measures weren’t perfect, but they reduced the bigeye catch in the eastern Pacific Ocean. This helped to allow the stock to recover from heavy fishing pressure,” says ISSF President Susan Jackson. Following IATTC’s prompt action, the ISSF took bigeye tuna off its “red list” – but it is ready to intervene again if necessary. “The stock of bigeye is in better shape, but it’s still not in great shape and will be monitored closely,” says Susan. “Any sign of a decline in stock health will lead to a review of the Foundation’s position.”

INCENTIVES FOR COOPERATION

ISSF is building on its success with eastern Pacific bigeye tuna in other areas. In particular, it is campaigning for similarly effective conservation measures for bigeye, yellowfin and albacore tuna throughout the world’s oceans. It has been effective in getting stocks properly assessed, including previously unassessed stocks such as Mediterranean albacore and Indian Ocean skipjack. ISSF is also fostering collaboration among scientists and fishing crews to develop practical solutions for reducing bycatch – the

unintentional catch of small tuna and other species.

The number of companies involved is growing too – at the time of writing, it stood at 20, making up almost three-quarters of the global market. All have made commitments to sourcing responsibly and supporting the development of more sustainable practices.

“Producers have a priority interest in sustaining the fisheries that sustain their way of life,” says Susan. “When producers join with scientists and conservationists to focus on evidence-based solutions, such a broad coalition of stakeholders can truly incentivize international cooperation and effective action. We’ve seen it happen.”

“Our main goal is simple – 100 per cent of global tuna stocks sustainably fished.”



INTERNATIONAL SEAFOOD
SUSTAINABILITY FOUNDATION

The International Seafood Sustainability Foundation (ISSF) exists to undertake science-based initiatives for the long-term conservation and sustainable use of tuna stocks, reducing bycatch and promoting ecosystem health.

iss-foundation.org



The Marine Stewardship Council contributes to the health of the world’s oceans by recognizing and rewarding sustainable fishing practices.

msc.org



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SOY

A combination of public pressure and behind-the-scenes engagement got UK supermarkets to improve their soy sourcing policies.

Successful campaigning often depends on getting the right mix of carrot and stick. WWF-UK's recent soy campaign is a case in point. The challenge: to create noise about a little-understood issue, and put concerted pressure on the nation's biggest retailers – while at the same time helping them to get to grips with a complex subject.

“We called up the seven big supermarkets a few months in advance to tell them we were launching a campaign and we'd like to meet with them – to get them up to date on the issues, and to listen to their concerns,” says Liz Callegari, Campaigns Manager at WWF-UK. “When a business hears they're going to be the target of a campaign, they're usually keen to meet.”

SAVE THE CERRADO

The campaign focused on Brazil's Cerrado. This huge expanse of savannah and woodland is home to five per cent of all life on Earth, and locks up vast amounts of carbon. Yet in the last few decades, half the Cerrado has been lost to agriculture – and soy is one of the main culprits. Around 80 per cent of soy is fed to

animals, and the vast majority of what the UK uses comes from South America. Demand for soy is soaring, increasing the pressure on vital ecosystems like the Cerrado.

The “Save the Cerrado” campaign brought the issue to public attention like never before. A hand-shadow film illustrating the importance of the Cerrado and its wildlife clocked up more than 155,000 views online and was picked up in many countries. A report, a press trip to the Cerrado and a business webinar also helped bring the issue into focus.

WWF aims to reduce the negative social and environmental impacts of soy production by supporting the Round Table on Responsible Soy (RTRS), a certification scheme that ensures soy production meets strict criteria designed to benefit people and nature. RTRS guidelines for responsible soy production include requirements that farmers respect the rights of local communities, treat workers fairly, and do not expand on native forest or other land that is valuable for conservation. Shortly before the first RTRS certified soy entered the marketplace in June 2011, campaigners, at WWF's urging, sent nearly

“One hundred per cent RTRS soy by 2015 is a challenging commitment, but we and our customers need to be confident that Waitrose is part of the solution, not the problem. By aligning ourselves with WWF on this issue, we know we are.”

Quentin Clark
Head of Sustainability and
Ethical Sourcing, Waitrose

WWF TARGETS

2020 25% of global soy production is Roundtable for Responsible Soy (RTRS) certified

PROGRESS

0.16% of global soy production is RTRS certified (based on data available as of February 2012)

PRIORITY COUNTRIES

Production

Brazil, USA, India, Argentina, Bolivia, Paraguay

Markets

China (largest importer globally), EU (Netherlands – largest importer in the EU), USA

Present Focal Regions

Amazon, Cerrado, Chaco region of Paraguay, Atlantic Forest (Brazil, Paraguay and Argentina), Argentina

CONTEXT

Threats

- Forest clearing;
- Loss of biodiversity, pollution;
- Disregard for community and indigenous rights, and displacement of smallholder subsistence crops;
- Capital intensive and large scale.

Opportunities

- The plant provides three main products: soy oil (for human consumption and biofuel), soybeans for human consumption and soy meal for animal feed;
- RTRS certification can work as the mainstream solution to drive responsibility in the soy sector globally;
- RTRS ensures safe working conditions;
- RTRS standards support good agricultural practices.

TRENDS

Demand Drivers

Income, population, consumption

Future focus for success

RTRS will further expand certification in Brazil, Argentina, Paraguay and India, and begin responsible production in Bolivia, and Uruguay. RTRS will focus on increasing both supply and demand for certified soy in China and the USA.

30,000 emails to the UK's seven leading supermarkets, asking them to commit to using 100 per cent RTRS soy by 2015.

"We warned them they'd be getting emails, and we were upfront about our demands," says Liz. "It was up to them to decide what they were going to do about it."

DRIVING DEMAND

The campaign achieved its first big success the day after it launched, when Waitrose announced its commitment to 100 per cent RTRS soy by 2015.

While this commitment was the most eye-catching, all the supermarkets have made progress. For some, that meant taking the first step of joining the RTRS and starting the process of examining their soy supply chains. Others have made encouraging time-bound commitments to sourcing responsible soy – and we expect RTRS will play a major role in these commitments. WWF believes the RTRS offers the most credible and robust standard currently available for responsible soy production, and the only one with the potential to transform the industry on a global scale.

WWF-UK is keeping the public informed – and the supermarkets on their toes – by publishing updates on its website. "It's vital these commitments lead to concrete action," says Liz. "We'll be watching and following up, and offering guidance and support when needed to make sure they do."

The first RTRS soy came on the market in June 2011. Close to one year later, in May 2012, nearly 150,000 hectares of soy plantations have been certified – equivalent to an area about half the size of Belgium. Commitments from major retailers are vital for increasing the area cultivated by responsible farmers – and therefore the amount of land set aside for conservation. WWF would like to see the entire soy industry become responsible – not only a niche market – and it is vital that pioneering retailers like Waitrose lead the way.

"Producers aren't going to pursue RTRS certification until they know people want to buy it," says Quentin Clark, who is responsible for sustainable sourcing at Waitrose. "Making this commitment is a great opportunity for businesses like Waitrose to show leadership by creating demand for RTRS soy and helping change the practices in the soy industry for the better."



The Round Table on Responsible Soy (RTRS) is an international multi-stakeholder initiative founded in 2006 that promotes the use and growth of responsible production of soy.

responsiblesoy.org



© Edward Parker / WWF-canon

IMPACT WHERE IT MATTERS: CHILE

Voluntary certification standards are driving conservation in one of the planet's most important ecoregions.

It is home to the planet's second largest temperate rainforest, where you'll find extraordinary tree species some more than 4,000 years old. In its many freshwater lakes, unique species thrive. The rich coastal waters support more than 50 species of marine mammals, including the world's largest animal, the blue whale.

No wonder southern Chile is among WWF's global priority places. There is an urgent need for concerted effort: Huge global demand has seen Chile's forests and fisheries exploited at unsustainable levels, threatening unique habitats and species. Yet the very markets that have driven this exploitation could hold the key to conserving Chile's natural treasures.

Chile supplies eight per cent of the global pulp and paper market, around 30 per cent of salmon, 13 per cent of forage fish and three per cent of whitefish. Most of what it produces is exported.

"This means Chilean producers are sensitive to global markets," says Ricardo Bosshard, Director of WWF-Chile. "If buyers in Europe and the US are demanding certification, then you have to be certified."

FOREST RESTORATION

The demand for paper certified by the Forest Stewardship Council (FSC) is transforming Chile's forestry sector. Two companies dominate the pulp and paper market in Chile: Arauco (the world's second largest pulp producer) and CMPC (the fourth largest).

"Driven by market pressure, the big companies have committed to FSC certification," says Rodrigo Catalán, who leads WWF-Chile's forest work. "It was an opportunity to start a dialogue with forest companies after a long period of conflict and virtually no communication."

In addition to working with WWF and others to bring their operations up to FSC standards, Arauco and CMPC have committed to restoring some previously forested areas that had been converted to plantations.

"Arauco and CMPC are now working on their restoration plans for a total area that we estimate should be around 45,000 hectares," says Rodrigo. "There is no previous experience in Chile, and very few cases in the world, of forest restoration at this scale."

"With three major commodities in one place, our ability to influence how and where they are produced has the potential to make or break other conservation efforts in southern Chile and in other countries of Latin America."

Ricardo Bosshard
Director, WWF-Chile

CHILE

Nine of the Global 200 Ecoregions extend into Chilean territory: Atacama-Sechura Deserts, Central Andean Dry Puna, Chilean Matorral, High Andean Lakes, Humboldt Current, Patagonian Southwest Atlantic, Patagonian Steppe, Rapa Nui, and Valdivian Temperate Rainforests/Juan Fernandez Island.

PRIORITY PLACE FOR CONSERVATION

- **Terrestrial Conservation** – The Valdivian Temperate Forest is the only temperate rainforest in South America. It is the second largest of the five major temperate forest systems in the world. The forest supports some of the oldest and largest trees on Earth.
- **Marine Conservation** – Exceptional oceanographic conditions cause high levels of productivity and biodiversity, including unique species such as shallow cold water corals.
- **Freshwater Conservation** – Chile possesses one of the biggest fresh water reservoirs on Earth.
- **Key Species** – Chile is an important feeding ground for priority species such as blue whales and is the home of the endemic Chilean dolphin.
- **Indigenous Communities** – More than 80% of the indigenous population is Mapuche. 250,000 live in rural zones of southern Chile, whose lifestyles and local economies depend on native forests and marine resources.

CONTEXT

Threats

- **Salmon Production** – Chile is one of the largest producers of farmed salmon globally, contributing more than 30% of global production. Salmon farming can have negative environmental and social impacts.
- **Fishing** – Chile is a major fishing country; 3% of the world's whitefish and 12.4% of forage fish come from Chile. Sustainable stocks cannot be reached at the current exploitation level.
- **Pulp and Paper Production** – Chile produces about 5.2 million tons of pulp and paper, which represents 8% of global pulp market and around 3% of all pulp production. Each year 120,000 hectares of native forest are cleared. About 80% of Chile's natural forests have been destroyed or degraded.

Opportunities

The adoption of best management practices as defined by WWF-supported standards can help reduce negative environmental and social impacts.

FISHING AND FISH FARMING

Similar developments can be seen in Chile's oceans and lakes. "Around two-thirds of Chile's fisheries are over-exploited, so we have extensively promoted MSC [Marine Stewardship Council] certification as a mechanism to achieve both environmentally sustainable and economically viable fisheries," says Mauricio Galvez, WWF-Chile's Marine Coordinator.

In June 2010, the Chilean hake fishery became the first to enter the MSC certification process, and WWF-Chile is an active stakeholder in this process.

"For the fishery to be certified will require fundamental changes in the decision making process and strong commitment to design and implement a Chilean hake fishery recovery plan," says Mauricio. The discussions around over-exploited Chilean fisheries have helped put sustainability on the agenda in a whole new way. Government fishery officials are now promoting MSC certification in other fisheries. "We are in a very early stage, but are confident the first MSC-certified Chilean fishery will be a catalyst for others to follow."

Good fishing practices promoted by the MSC should minimize negative impacts like discards and bycatch of marine mammals and

seabirds, and destruction of cold water corals. They will benefit the entire ecosystem.

WWF has also led the establishment of Aquaculture Stewardship Council (ASC) standards for responsible salmon farming. In a key step to protecting the ecoregion, Chilean companies are interested in applying these standards that reduce the environmental impact of salmon aquaculture, particularly by stopping production in high conservation freshwater lakes and marine areas.

"Standards like FSC, MSC and ASC mean that the production of these commodities, instead of being a threat to our ecoregion, are becoming an opportunity for real conservation in the field," says Ricardo.



WWF has worked in Chile for many decades. In 2002, WWF's presence was cemented with the establishment of an office for the Valdivian Ecoregion, in the city of Valdivia.

panda.org/chile



© James Morgan / WWF International

PALM OIL

A procedure introduced by WWF aims to ensure that new palm oil plantations do not replace forests and areas of high conservation value.

Widespread loss of tropical forest and unique biodiversity, skyrocketing carbon emissions, indigenous peoples forced off their land: as knowledge of the negative impacts of palm oil production has grown, so has demand for a better alternative. Within three years of hitting the market in late 2008, Certified Sustainable Palm Oil (CSPO) made up nearly a tenth of global supply. Many leading companies have committed not to buy palm oil tainted by deforestation.

It is impressive progress for the Roundtable on Sustainable Palm Oil (RSPO), which WWF helped to set up in 2004. But with palm oil consumption expected to double by 2030, and triple by 2050, the biggest challenges are yet to come.

“The RSPO isn’t there to halt the expansion of the palm oil industry,” says Adam Harrison, WWF’s representative on the RSPO Executive Board. “The expansion of the palm oil industry will continue regardless – the laws of supply and demand will ensure as much. What the RSPO seeks to do is ensure that palm oil production is sustainable – both environmentally and socially. Part of that is making sure that land needed by wildlife and

people is not converted to new plantations.”

STRENGTHENING RSPO CRITERIA

To manage this risk, WWF and New Britain Palm Oil (NBPOL), a founding producer member of the RSPO, proposed a procedure to ensure RSPO principles are followed when they matter most: when a new plantation is established.

According to Simon Lord, sustainability director at NBPOL, the New Planting Procedure (NPP), introduced in January 2010, “clearly distances responsible oil palm producers from deforestation”.

“The expansion of palm oil plantations into primary forests and high conservation value areas is the single greatest source of controversy in the palm oil sector,” says Simon. “The RSPO’s credibility is closely linked to its ability to assure stakeholders that its members are not associated with such expansion.

“The RSPO Principles and Criteria prohibit new plantings that replace primary forest or any area containing one or more high conservation values. They also prohibit

“Palm oil production is going to expand. The New Planting Procedure aims to ensure it does so sustainably – without replacing primary forest and areas of high conservation value, while ensuring benefits to local communities.”

Norman Jiwan
Head of Department for
Social and Environmental
Risk Mitigation Initiatives,
SawitWatch

WWF TARGETS

2015 25% of palm oil bought is RSPO certified

2020 50% of palm oil bought is RSPO certified

PROGRESS

11.6% of global palm oil production is RSPO certified sustainable (based on data available as of February 2012)

PRIORITY COUNTRIES

Production

Indonesia and Malaysia (approximately 85% of global production), Congo Basin (emerging)

Markets

India, Indonesia, China (the three largest and fastest growing markets in the last decade), EU

CONTEXT

Threats

Palm oil is a leading driver of deforestation in Southeast Asia.

Opportunities

- Most productive source of vegetable oil per hectare;
- As a tree crop (lifespan 25-28 years) there is low impact from annual cultivation and the need for fertilizer, pesticides and water are reduced. Oil palm plantations can sequester carbon;
- Can alleviate poverty – palm oil production represents 4.5% of Indonesia's Gross Domestic Product, with 40% of Indonesian production coming from smallholders.

TRENDS

Demand drivers

Population, income, consumption, urbanization (associated with less time to prepare food)

Future focus for success

Palm oil plantation expansion will occur in Kalimantan and Papua (Indonesia), Sarawak (Malaysia), and Papua New Guinea. Prospects for oil palm development in Africa (especially originating from China and Southeast Asia) and Latin America.

new plantings on local people's land without their free, prior and informed consent. The NPP provides assurance that these criteria are being met, and draws a line in the sand between sustainable and non-sustainable producers."

LONG-TERM ADVANTAGES

Sipef is one producer determined to belong to the former category. The Belgian agro-industrial company followed the NPP for a new site of around 7,000 hectares in Bengkulu, Sumatra, Indonesia, a province where oil palm cultivation is growing fast. Olivier Tichit, General Manager for Environment and Conservation at Sipef, believes the NPP offers a long-term advantage.

"When you engage thoroughly with communities at the outset, a company is much more likely to avoid problems around land tenure claims later on," he says. "And on the environmental side, if you carry out a good quality HCV [High Conservation Value] assessment as early as possible, you can plan your development a lot better, as you know clearly how many hectares you can and cannot plant – it's much more efficient."

Following the NPP means the most environmentally and socially valuable areas will

remain undeveloped – around 12 per cent of the land in the case of Sipef's new site. This includes a 50m-wide section of degraded forest which connects a conservation area in its existing concession with a government-protected forest, providing a wildlife corridor for gibbons. Sipef will be responsible for actively managing this, protecting it from encroachment and illegal clearing.

There are business benefits too, says Adam: "The retailers and manufacturers at the top of the supply chain know that choosing suppliers that follow the NPP is the only sure-fire way to ensure that there is no deforestation involved."

WWF also works toward innovative solutions that would direct palm oil development away from forest areas and make degraded lands more attractive.



The Roundtable on Sustainable Palm Oil (RSPO) transforms markets to make sustainable palm oil the norm.

rspo.org



© Mauri Raukari / WWF-canon

BIOFUELS

We’ve fought against damaging biofuel developments – but can we help create a sustainable biofuels industry?

“Bioenergy can make an important contribution to providing access to sustainable energy for all. Credible sustainability standards, such as the one developed by the RSB, help manage risks on a project level and promote best practices among producers and processors, complementing sound regional and national energy planning and policy.”

Martina Otto
Head of Policy Unit,
Energy Branch
United Nations
Environment Programme

On the face of it, a project to supply renewable energy that could bring rural jobs and much-needed economic growth in a developing country sounds like just the sort of project WWF would support. But when large-scale biofuel plantations were proposed near the Kenyan coast, WWF joined other conservation and human rights NGOs, led by Nature Kenya, in campaigning against them.

“The proposals would have seen thousands of hectares of forests, woodlands and wetlands converted to monoculture plantations of jatropha, a shrubby tree whose oily seeds can be used to make biodiesel,” says Kiunga Kareko, Coastal Kenya Programme Coordinator at WWF Kenya. A 164,000-hectare development was planned for the Lower Tana River Basin, a sensitive floodplain ecosystem. Another project in the Dakatcha Woodlands 130 km south of the basin would have destroyed some 50,000 hectares of some of Kenya’s last coastal forest.

UNSUSTAINABLE DEVELOPMENT

“Both areas are important habitats for wildlife, including birds, mammals and reptiles, and provide vital ecological services

such as fresh water to local people,” says Kiunga. “In addition, research has found that, far from being a climate-friendly alternative, this jatropha-based biodiesel would actually result in increased carbon emissions. This would emanate from destruction of woody and herbaceous plants to make way for jatropha.”

There were social and economic issues as well as environmental ones. Communities discovered that their land had been leased at incredibly low rates to foreign-owned firms, without any proper consultation. Besides this, while WWF projects have shown that jatropha hedges can provide a useful source of fuel at the community level, the economic viability of growing it on this scale in East Africa is at best unproven. “We presented evidence to the Kenyan government showing how a jatropha project, which cleared a huge portion of the coastal forests of Tanzania, had collapsed within three years,” says John Salehe, an east African conservationist who worked for WWF at the time. “Its legacy was a ruined habitat and desperate communities.”

Kenya’s National Environment Management Authority (NEMA) listened, and advised the government against allowing jatropha

WWF TARGETS

2015 15% of global bioenergy production meets WWF requirements as defined in RSB, BONSUCRO, RTRS, RSPO and FSC by 2015

PROGRESS

<1% of global biofuels are third-party certified sustainably produced by standards set by RSB, RSPO, RTRS and Bonsucro

PRIORITY COUNTRIES

Production

Tanzania, Mozambique, Madagascar, Brazil, Argentina, Colombia, Indonesia, Malaysia, China, Russia

Markets

China, EU, USA

CONTEXT

Threats

- Habitat conversion;
- Unsustainable water abstraction;
- Carbon emissions;
- Pollution of soil, water and air;
- Food security.

Opportunities

- Potential to reduce habitat destruction and biodiversity loss in some of Earth's most precious natural places;
- Potential to reduce greenhouse gas emissions;
- Rural development opportunities;
- Reduce energy dependence.

TRENDS

Demand drivers

Income, consumption, urbanization, changes in government policy

Future focus for success

China, Mozambique, Madagascar, Tanzania

plantations in the coastal region. The Dakatcha proposal has been stopped, and the Tana Delta project cut back to a 10,000-hectare pilot, which still faces strong opposition. WWF is now working with Nature Kenya, individual conservationists, other NGOs and the government to develop a long-term land-use plan for the delta.

SUSTAINABLE BIOFUELS?

But while the threats in coastal Kenya may have receded, biofuels are not going away. Indeed, they have an important role to play in WWF's vision of a shift to 100 per cent renewable energy. The challenge is to ensure that increased biofuel cultivation does not come at the expense of food production or replace land needed by people and nature. Building a market for sustainable biofuels is key to this.

The 10 per cent by 2020 EU target for renewable energy in the transport sector will be largely achieved through the use of biofuels. The expansion of European biofuels use has been widely blamed for driving "land grabs" and unsustainable developments like those in Kenya. To address environmental and social concerns, the EU decided that biofuels must comply with one of its recognized certification schemes. While this is a step in the right direction, the schemes it recognizes vary in

terms of performance and credibility. Pressure from NGOs and the private sector is still needed to improve regulations and ensure that biofuels are produced in an environmentally and socially responsible manner – which should complement environmental and development priorities in the regions where they are grown.

The most comprehensive and ambitious of the recognized schemes is the Roundtable on Sustainable Biofuels (RSB), a multi-stakeholder organization of which WWF is a member. The RSB's principles and criteria include avoiding negative impacts on biodiversity and ecosystems, reducing greenhouse-gas emissions by at least 50 per cent, maintaining water resources, improving food security, and contributing to social and economic development.

"Schemes like those proposed for the Tana Delta and Dakatcha Woodlands would never get off the ground if the RSB principles and criteria were applied," says László Máthé, who coordinates WWF's bioenergy work. "The RSB is, at present, the only scheme that credibly addresses all the environmental and social issues associated with bioenergy. We hope governments and industry around the world will adopt and implement these standards."



The RSB provides and promotes the global standard and certification scheme for socially, environmentally and economically sustainable production of biomass and biofuels.

rsb.epfl.ch



AQUACULTURE

Responsibly farmed shrimp and salmon: a taste of things to come.

A small corner of Nicaragua’s Lake Apoyo used to be home to a tilapia farm. But then some of the fish escaped from the farm. The non-native species wiped out one of the lake’s vital food plants. The whole ecosystem collapsed. In 2000, the farm closed, just five years after it had opened. It has taken a decade for the lake to begin to recover.

The tragedy of Lake Apoyo is just one example of the devastating impact unsustainable fish farming can have on the environment. While this tragedy presents a cautionary tale, it also highlights the challenge of feeding over nine billion people expected to be living on this planet by the middle of this century, while still maintaining the planet’s natural resources.

When done responsibly, fish farming (aquaculture) presents a solution to meeting the increasing food demand of a growing global population. Farmed seafood already accounts for more than half of all the fish and shellfish we eat. According to the United Nations Food and Agriculture Organization, most of the increase in seafood production will be seen in the aquaculture industry, given that much of the world’s marine fish stocks are either fully exploited or overfished. So the

question is not whether aquaculture is a viable option to feed the planet, but rather, can it be done responsibly?

CHANGE IN THE WATER

The answer is yes. A few hundred kilometres northwest of Lake Apoyo, tilapia is farmed in a very different way than it used to be farmed in the lake. At Regal Springs’ Aquafinca farm in Honduras, the water’s chemical composition is continually monitored to ensure oxygen and nutrient levels remain stable. Fine mesh cages prevent fish from escaping. Strict guidelines are followed to maintain the fish’s health and welfare, reducing the risk of disease and need for antibiotics. Feed derived from threatened fisheries is prohibited – in fact, the farm produces more fishmeal and fish oil from its waste than it consumes.

“Our philosophy has always been to have a business that is sustainable for the long-term in an environmental and social sense,” said Martin Sukkel, Regal Springs’ Chief Operating Officer. “If we screw up the water, we’re screwing up our own farming environment. If your horizon is five or ten years, you may not care – but we want to be here indefinitely.”

“For Costco, because of our size, we need to begin planning now for how we’ll be sourcing in five or ten years. We expect to significantly increase the amount of tilapia we sell, and we need high quality. The only way to ensure we can do that is to make sure we use credible, sustainable sources.”

Ken Kimble
Asst. GMM
Costco

PROGRESS

The ASC salmon and shrimp aquaculture standards will be finalized in 2012. There is no third-party ASC certified salmon or shrimp aquaculture yet.

PRIORITY COUNTRIES

Production of salmon

Norway, Chile, UK

Production of shrimp

China, Thailand, Vietnam, Indonesia

Markets

USA, Japan, EU

CONTEXT

Threats

- Aquaculture industry must reduce dependency on fishoil and fishmeal, a key feed ingredient, representing a third of the global fish harvest;
- Risk of disease and parasite outbreaks between farmed and wild fish, and among farms;
- Pollution or depletion of local waterways, including salinization in the case of shrimp farming;
- Excessive use of chemicals such as antibiotics, fertilizers and pesticides can have unintended consequences for marine organisms and human health;

- Habitat conversion;
- Farmed species escape can impact genetic diversity of wild species.

Opportunities

- ASC certification encourages improvements to coastal zone and small pelagic fisheries management;
- Well-managed aquaculture can be part of the solution to feeding the planet, as future increase in seafood production will come from the growing aquaculture industry as many marine fish stocks are overfished;
- The growth of aquaculture is linked to innovation in production methods and technology, a good environment in which to enact change around reducing impacts.

TRENDS

Demand drivers

Consumption, population, income

Future focus for success

Focus on producers working in the places WWF cares about most.

Regal Springs' Aquafinca farm shows this commitment in action. The farm is the first to meet the standards of the Tilapia Aquaculture Dialogue – a set of measurable standards for responsible aquaculture developed by WWF and other environmental organizations, scientists, retailers and producers, to achieve change in the water. Once certified, fish from Regal Springs' four farms – which together produce nearly six per cent of tilapia traded globally – will carry the Aquaculture Stewardship Council (ASC) label, the hallmark of responsible aquaculture.

BETTER CHOICES

Several retailers have already expressed interest in stocking ASC-certified tilapia. And better choices in farmed seafood will not end there. The ASC will manage the global standards and certification programs for 12 farmed seafood species groups, including shrimp and salmon.

WWF has identified farmed shrimp and salmon as priority commodities, as they have a significant potential for negative impact on the places and species WWF seeks to protect. Through the Aquaculture Dialogues, WWF is working with stakeholders across the farmed shrimp and salmon supply chains to develop and implement standards to reduce the

potential negative environmental and social impacts of these commodities.

While the ASC label may still be a new concept, progress seen with tilapia is just a taste of what's to come for the aquaculture industry as more companies view sustainability as a precompetitive issue.

“ASC certification may be a competitive advantage for us for a few years, but it won't be in the long term, and we don't want it to be,” Martin says. “Food safety standards aren't a competitive advantage – they're just a condition of doing business. Sustainability standards should be the same. Sustainability is not easy, and it looks expensive, but it's a very profitable investment if you're prepared to look long term.”



The ASC's mission is to transform aquaculture toward environmental and social sustainability using efficient market mechanisms that create value across the supply chain.

asc-aqua.org



© Adriano Gambarini / WWF-Brazil

BEEF

With ever-increasing demand causing deforestation and environmental degradation, how can the planet stomach our appetite for beef?

At Millennium Farm in the Brazilian Cerrado, cattle rancher Thimoteo Lobreiro raises two sorts of animal. A half-tonne beef steer is hard to miss, but to see the other you need a microscope. Thimoteo grows cultures of efficient microorganisms which, when sprayed onto fields, help to restore soil fertility. Healthy soil means healthy plants, and healthy plants mean healthy cattle.

On nearby ranches, the situation is different. Overgrazing damages the vegetation and the underlying soil structure, leading to erosion and poor quality pasture. Farmers become dependent on chemical fertilizers and weed killers, and may need to buy expensive seeds and extra cattle feed. But even as the land is becoming less productive, demand for beef is on the rise, pushing cattle and feed crops into other ecosystems. In Brazil, cattle production is the single biggest threat to the Amazon rainforest, and responsible for half of all greenhouse gas emissions associated with land use.

Thimoteo avoids overgrazing by regularly rotating cattle between different areas of pasture. This gives the grass a chance to regenerate naturally and establish healthy roots, nourished by a regular concentrated

dose of manure from the herd. Production costs are around 40 per cent lower than on conventional ranches, but productivity is higher: the animals are able to eat grass all year round and grow quicker, and the meat tastes better. In between the microbes and the cattle, plant life, insects and birds are flourishing too.

LEADING LAND USE

The innovations at Millennium Farm are being supported by a partnership between WWF-Brazil and Embrapa Beef Cattle, part of the Brazilian Ministry of Agriculture, which aims to promote better management practices for beef production in the Cerrado. It's one of a number of beef projects WWF is working on around the world, from the Florida Everglades to the plains of Namibia, from Argentine pampas to Swedish meadows. The locations and production methods could hardly be more different, but all of them aim to show how beef can be produced in a more sustainable way.

The significance of beef production is hard to overstate. "This is the commodity that covers the greatest percentage of the Earth's surface," points out Ruaraidh Petre of sustainable

"Beef production isn't going to decline. So we urgently need to improve how production takes places and how we use land."

Ruaraidh Petre
Regional Director at
Solidaridad Southern Africa /
Chair, Global Roundtable on
Sustainable Beef

WWF TARGETS

2020 10% of global beef production will be certified sustainable

PROGRESS

The Global Roundtable on Sustainable Beef was recently launched; beef production has not been certified sustainable yet.

PRIORITY COUNTRIES

Production

USA, Brazil, EU, China, Australia, India

Markets

USA, Russia, Japan, EU

Present Focal Regions

Amazon, Cerrado, Chaco region of Paraguay and Argentina

CONTEXT

Threats

- Habitat conversion;
- Overgrazing – decreased plant biodiversity, low residual plant cover and soil erosion;
- Greenhouse gas emissions;
- Water and air pollution;
- Impacts from feed production (grass versus grain-fed);
- Indigenous livelihoods tied to beef production.

Opportunities

- Reduced greenhouse gas emissions;
- Conservation;
- Improved food safety and nutrition.

TRENDS

Demand Drivers

Income, population, consumption

Future focus for success

Continued work in Brazil, Australia and the USA – major producing countries – are of particular importance. India, which is projected to be the largest exporter of beef in 2012, and China, due to its increasing production and consumption of beef, are also important.

development organization Solidaridad. “Around a third of the world’s useful land is used for grazing or to grow feed crops for beef.”

With the world’s population growing and beef consumption increasing, that area is increasing still further. That means more natural habitats being converted to farmland – particularly as existing pastures become degraded and less productive. Damaging side effects include erosion, silted-up rivers and chemical run-off.

NEW TOOLS TO HELP SOLVE THE ISSUE

In 2010, WWF convened some of the biggest players in the beef industry to form the Global Roundtable for Sustainable Beef (GRSB). They included the world’s biggest beef buyer, McDonald’s; the biggest beef retailer, Walmart; and two of the largest beef traders, JBS and Cargill. Also represented on the GRSB are producers, leading NGOs including Solidaridad, The Nature Conservancy and the Rainforest Alliance, and regional sustainability initiatives such as beef roundtables in Brazil and Australia.

The GRSB’s vision is of “a world in which all aspects of the beef value chain are environmentally sound, socially responsible and economically viable.” Achieving this will

mean minimizing impacts on climate, water, land use and biodiversity; improving animal welfare and producer livelihoods; and sharing, promoting and adopting better management practices. Because of the huge variation in beef production methods, a global sustainable beef standard is likely to be a long way off. The first step for GRSB is to catalyze and coordinate national and regional programmes, which may include certification schemes.

“The roundtable brings the interests of diverse stakeholders together to solve a common problem,” says Ruairaidh, who chairs the GRSB. “It’s an issue for big businesses, which understand that unsustainable production is a big threat to the industry. It’s an issue for the many small producers who are trying to make a living on marginal land and need help to get ecosystems functioning again. And because beef production uses such a large area of land in almost every ecosystem, it’s a vital issue for all of us.”

This is an important tool to address the negative impacts of beef rearing and complements other initiatives, such as the development of better management practices in field projects, the development and maintenance of areas for conservation and raising awareness about better consumption.



The Global Roundtable for Sustainable Beef (GRSB) is multi-stakeholder initiative that recognizes and respects the important role a sustainable beef supply chain plays in feeding the growing global population.

sustainablelivestock.org

WWF TARGETS

The Supply Risk Analysis Tool can help companies:

- understand risks to biodiversity associated with commodity production and procurement, and develop action plans to reduce those negative impacts;
- understand the relative risk and opportunity within a supply chain to develop an action plan to reduce the footprint of a commodity's production on a global scale.

IMPORTANCE

Research has found that in some sectors, including the food and beverage industry, the majority of a company's environmental and social risk exists outside of its four walls – in its greater supply chain and typically in the production of raw materials (United Nations, Water Footprint Network, Environmental Science Technology, Forest Footprint Disclosure).

PRIORITY PLACES

The Supply Risk Analysis Tool ensures that companies understand environmental and social risks in the places where commodities are produced and especially in those places that WWF cares about most – where priority species and biodiversity could be negatively affected.

CONTEXT

Threats of non-certified commodity production

- Land conversion and loss of habitat and biodiversity;
- Higher greenhouse gas emissions;
- Soil degradation;
- Water impacts including eutrophication and acidification;
- Improper use of pesticides and higher levels of toxicity;
- Improper animal care practices;
- Labour rights violations;
- Negative impacts on local and indigenous communities (e.g. loss of land, improper consultation on issues and planning).

Opportunities

- Engage with multi-stakeholder initiatives to further best practices and on dialogue regarding the future of products;
- Ensure expansion of responsible production as population is estimated to grow beyond nine billion by 2050;
- Reduce reputational risks and maintain brand value.

TRENDS

Focus on working with key companies on their supply chains in order to reduce impacts on the places and species WWF cares about most.

“Sometimes people are surprised to hear who WWF is working with. But if we want to transform markets and indeed whole sectors, then we have to work with the big players – those that have major impact,” says Jeff.

“Our risk assessment work advances our environmental mission by helping companies understand their impact on key global conservation priorities, including issues like biodiversity, carbon emissions and water. It makes them think about the effects of their sourcing, and then we can determine how to address them.”

One company that is taking action as a result of the risk analysis is McDonald's. “WWF's Supply Risk Analysis Tool enables us to navigate sustainability concerns, prioritize our use of resources and see where we need to concentrate our efforts within the supply chain,” says Francesca DeBiase, Corporate Vice President of Worldwide Supply Chain Management. “It helps us quantify and focus, and gives us the information we need in working with our supply chain partners.”

McDonald's is making efforts to mainstream sustainability as evidenced by its public commitment to increase the amount of agricultural raw materials for its food and packaging products that come from sustainable sources. WWF's Supply Risk Analysis Tool

helped McDonald's identify five products as particularly significant: beef, poultry (which includes soy, much of which is used as chicken feed), palm oil, coffee, and packaging.

Identifying risks is only the start of the process for a company. Next steps could include joining roundtables, making commitments to purchase verified sustainable products, mapping their supply chain or working with their suppliers. McDonald's, for example, is using its position as the world's largest beef buyer to raise the profile of sustainable beef and is one of the leading champions for the Global Roundtable on Sustainable Beef.

“At McDonald's, we aim to use our scale, scope and talent to make a positive difference for children, families, communities, and the planet,” says Francesca. “WWF's Supply Risk Analysis Tool has helped us focus our efforts on areas where we can have a real influence.”



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PARTNERSHIP FOR CHANGE

A 10-year partnership between WWF and IKEA has led to transformational changes – from timber to cotton, to carbon and now looking into their customer’s home.

In the Swedish city of Kalmar, a group of families is trying out ways to reduce waste and energy bills around the house. In Pakistan, thousands of cotton farmers have reduced the water and chemicals they use to grow their crops. In Romania, nearly a million hectares of state forest have been certified by the Forest Stewardship Council – a concept that, just 10 years ago, was virtually unheard of.

Linking them is a long-running partnership between WWF and IKEA. Over the course of 10 years, joint projects have led to changes across the spectrum – from transforming practices in regions where suppliers are based to inspiring customers to reduce their own environmental impact. The partnership focuses on the two commodities IKEA uses most, timber and cotton (see page 10 and 6 respectively), along with climate change.

RESPONSIBLE FORESTRY

The partnership began in 2002 out of a shared desire to increase the volume of wood available from well-managed forests. “We had committed ourselves to sourcing all our wood from responsible sources,” says Anders

Hildeman, IKEA’s Global Forestry Manager. “But in the markets where we operate, there simply wasn’t enough certified wood available.”

IKEA sources much of its timber from Eastern Europe. It all began working with WWF to promote responsible forest management in seven countries in Europe and Asia and Romania was one of them.. At the time, the idea that forest management should include environmental and social aspects was unfamiliar in the region. There was little market demand for FSC-certified wood, logging practices took little consideration for threatened species and local communities, and there was a thriving grey market in timber of unknown origin.

The partnership has provided information, training, tools and technical assistance to help forestry staff work toward certification. It has also engaged with IKEA suppliers and other businesses to build demand for FSC-certified wood, and lobbied government to provide supportive legislation for responsible forest management. Over 700,000 hectares of forest in Romania and more than 200,000 hectares in Bulgaria are now FSC certified,

“IKEA wants to make a positive difference and that is why we are working hard to help millions of people to live a more sustainable life at home, secure more renewable energy and protect raw materials. While we have made great progress, together with our suppliers, customers and expert partners like WWF, I know we can do even more.”

Steve Howard
Chief Sustainability Officer
IKEA Group

WWF IKEA CONSERVATION PARTNERSHIP

WWF and IKEA started working together in 2002, focusing on advancing responsible forest management. Timber is the key ingredient in IKEA's furniture. The partnership then expanded to include cotton – another key ingredient in IKEA's products. The third pillar of the partnership is the reduction of greenhouse gas emissions.

Currently WWF and IKEA are running field projects focused on three main areas:

1. Responsible forest management

- combat illegal logging;
- support forest certification;
- promote responsible timber trade;
- map and protect High Conservation Value Forests;
- support responsible forest management.

2. Better cotton production

- reduce use of water, pesticides and fertilizers;
- increase farmers' gross margins;
- help farmers produce Better Cotton.

3. Addressing climate change

- find market transformation opportunities to provide low carbon solutions;
- search solutions that can contribute to reduce GHG emissions in society;
- engage stakeholders through the value chain.

and responsible forestry practices are in operation across a much larger area. A new timber-tracking system has made it extremely difficult for wood that is not legally harvested to enter the market. A toolkit for mapping high conservation value forests has been developed and more than 100,000 hectares of high conservation value forests have been identified in the region, including some of Europe's last old-growth forests.

Anders believes that, by working together, IKEA and WWF have been able to achieve far more than either could alone: "WWF has the networks, competence and credibility. This combined with our in-house forestry knowledge and ability to create the market pull is what motivates suppliers to go in this direction," he says. The partnership now works on forest projects in 11 countries, where it has helped trigger a widespread shift to responsible forest management. "In the last few years, we've more than tripled the share of FSC-certified wood we use, even as the business has grown," says Anders.

FROM SUPPLIERS TO CUSTOMERS

Building on its success with motivating suppliers, the partnership has now begun looking in the other direction – toward the customers. WWF and IKEA have recently

IKEA TARGETS FOR 2015

90% of IKEA's sales value will come from home furnishing products classified as 'more sustainable'

100% renewable, recyclable or recycled materials in home furnishing products

50% improved efficiency of energy and water consuming products (compared to 2008 market average)

IKEA PROGRESS

Certified timber in IKEA range

16.2% share of FSC-certified wood in the IKEA range

Better cotton in IKEA textiles

23.8% share of Better Cotton in IKEA's overall cotton use

Energy efficiency

51% of the electricity needed to run all IKEA buildings comes from renewable energy sources

IKEA COUNTRIES

Better cotton production

India, Pakistan, China, Turkey

Certified timber production (FSC)

Eastern Europe, Russia, China

More information on:

www.panda.org/ikea

IKEA Sustainability Report: http://www.ikea.com/ms/en_GB/about_ikea/read_our_material/index.html

begun exploring ways to enable and inspire IKEA's customers to live more sustainable lives.

A joint project, currently at the pilot stage, is working with nine families in Sweden and IKEA co-workers in China to look at ways people can reduce their ecological footprint at home – from how the way they store food can reduce the amount they waste, to how they can use their furnishings to improve insulation.

"Some families have already reduced non-recyclable waste by 50 to 70 per cent, and have also substantially reduced their food waste," says project leader Ann-Sofie Gunnarsson. "It doesn't need complicated, expensive or super-technological solutions – we can change a lot with simple things together with changed behaviour."

With more than 600 million IKEA customers worldwide, the cumulative effect of these simple things could be huge.

The partnership between WWF and IKEA is one example of a number of long-term global partnerships between WWF and the private sector to help achieve conservation objectives.



© Brent Stirton / Getty Images / WWF-UK

SUSTAINABLE FINANCE

By attaching sustainability criteria to their lending and investment conditions, financial institutions are helping to raise standards in critical markets.

Financial markets depend on a steady flow of key natural resources to support the global economy. An eroding environmental resource base poses both acute and systemic risks to investors for which many are not fully prepared. Issues like water security, climate change and biodiversity loss present risks and opportunities that can have a material impact on profitability. In the food and fibre (or “soft commodities”) sectors especially, sustainability is now a mainstream concern for companies and, increasingly, their financial backers.

“There’s a sound business case for sustainability,” says William Bulmer, Director for the Environment, Social, and Governance Department at the International Finance Corporation (IFC), the private sector arm of the World Bank Group. “That could include cost savings from using resources efficiently, avoiding reputational risk, and access to markets.

“Clients are increasingly coming to us for environmental and social advice as well as financing. Almost 80 percent of our clients say they find our environmental support is important to their business.

There’s also a strong correlation between financial performance and performance on environmental and social issues – we’ve found there’s an 11 per cent higher return from companies that demonstrate high environmental and social standards. And our standards have a real and positive impact on the lives of people in developing countries – from creating safer working conditions, to cleaner water, to more effective community engagement.”

CREDIBLE STANDARDS

The IFC recently updated Performance Standards on Environmental and Social Sustainability, which define its clients’ responsibilities for managing environmental and social risks. These require companies involved in the production of soft commodities to use practices consistent with credible voluntary standards – such as the Marine Stewardship Council (MSC) or the Forest Stewardship Council (FSC) – or be on track to do so.

These voluntary standards, and others that WWF has helped develop, demonstrate that a company recognizes sustainability as a

“The way WWF works constructively with business is essential. The only way to solve issues is by working in partnership.”

William Bulmer
Director for the Environment,
Social, and Governance
Department at International
Finance Corporation (IFC)

WWF TARGETS

2020 The banking system finances global soft commodities in a robust, sustainable, and profitable manner, meeting the world's growing needs for food and fiber while preserving precious environmental resources

PROGRESS

Currently witnessing a convergence among global investors toward the use of credible standards as a key lending and investing threshold for soft commodities.

CONTEXT

Threats

- Higher business risk and sub-optimal outcomes among investees from poor environmental and social performance;
- Unanticipated exposure to macro-risk from underlying resource scarcity and volatility;
- Reputational risks to banks and investors from exposure to negative practices.
- Loss of access to markets reduce financial performance of investee company.

Opportunities

- Better-informed decisions based on better understanding of environmental and social risks reduces lending risks and creates new opportunities for banks;
- New financial products and services based on sustainable production and trade;
- Better client relations and more repeat business for banks
- Higher value creation for investors.

TRENDS

Risk and opportunity drivers

Population, income, resource scarcity, food security

Future focus for success

Engage with major domestic banks in key emerging markets, due to their close involvement with priority commodities and places

business issue, is managing it well, and sees business opportunities from sustainability.

The impact could be vast: the IFC's Performance Standards form the basis of the Equator Principles, adopted by over 70 financial institutions worldwide.

"We know our standards are a global benchmark," says William. "Of course we want to see good results on individual projects, particularly in globally important areas like West Africa, Indonesia, and the Amazon. But our aim is to transform whole sectors to manage their operations sustainably, to protect habitats, and to prevent biodiversity loss everywhere."

SUSTAINABLE SUPPLY CHAINS

With guidance from WWF, the Dutch bank Rabobank – the largest agricultural financier in the world – has attached similar sustainability conditions to its investments. These cover issues such as biodiversity, natural resources and food security. They include social and environmental standards for 12 sensitive sectors: aquaculture, biofuels, cocoa, coffee, cotton, fishing, forests, mining, oil and gas, palm oil, soy, and sugarcane.

"WWF acted as our sounding board on these issues," says Richard Piechocki from Rabobank. "The philosophy, science, and expert opinion of WWF were brought into our policy."

"Developing policy is difficult," adds Richard. "And implementing it is even more difficult. We're very glad to have our partnership with WWF worldwide, as it means we can show staff and stakeholders examples of how standards and policies are applied in concrete projects on the ground."

Richard has seen how voluntary standards are helping to transform these sectors.

"The RSPO is a good example. The whole supply chain is increasingly convinced they have to buy certified palm oil – the most important players expect it, farmers know corporates will request it. The RSPO standard provides a common view and a common language. That makes it much easier for banks to ask clients to comply."

In deciding which projects to finance, banks have a crucial role to play in shifting markets toward sustainability, Richard believes: "Banks can make the difference."



With three quarters of all wild fisheries fished to their maximum or beyond, aquaculture can help satisfy some of the growing demand for seafood and thereby help take pressure off wild populations. Over the past 30 years, aquaculture has grown nearly 10% per year and now represents more than half of the seafood consumed.

ANNEX: OVERVIEW OF CREDIBLE, THIRD-PARTY STANDARD SCHEMES SUPPORTED BY WWF

Commodity	Multi-stakeholder initiative / Standard setting system	website	Launch of Organization	Launch of Standards	Logo
Timber	Forest Stewardship Council (FSC)	www.fsc.org	1994	1994	
Pulp and paper	Forest Stewardship Council (FSC)	www.fsc.org	1994	1994	
Whitefish	Marine Stewardship Council (MSC)	www.msc.org	1997	1999	
Tuna	Marine Stewardship Council (MSC)	www.msc.org	1997	1999	
Cotton	Better Cotton Initiative (BCI)	www.bettercotton.org	2005	2007	
Palm oil	Roundtable on Sustainable Palm Oil (RSPO)	www.rspo.org	2003	2008	
Soy	Roundtable on Responsible Soy (RTRS)	www.responsiblesoy.org	2004	2010	
Sugarcane (sugar, ethanol and molasses from cane)	Bonsucro	www.bonsucro.com	2004	2010	
Biofuels	Roundtable on Sustainable Biofuels (RSB)	www.rsb.org	2007	2011	
Farmed Salmon	Aquaculture Stewardship Council (ASC)	www.ascworldwide.org	2009	tbd	
Farmed Shrimp	Aquaculture Stewardship Council (ASC)	www.ascworldwide.org	2009	tbd	
Beef	Global Roundtable for Sustainable Beef (GRSB)	www.sustainablelivestock.org	2012	tbd	
Tropical Shrimp <i>(to be activated in WWF workstream)</i>	Marine Stewardship Council (MSC)	www.msc.org	1997	1999	
Forage fish <i>(to be activated in WWF workstream)</i>	Marine Stewardship Council (MSC)	www.msc.org	1997	1999	
Dairy <i>(to be activated in WWF workstream)</i>	tbd	tbd	tbd	tbd	



In the wake of the UN Conference on Sustainable Development in 1992 (Rio Summit), concerned business representatives, social groups and environmental organizations jointly established the Forest Stewardship Council (FSC). Its purpose is to improve forest management worldwide. At the time it was the first multi-stakeholder, standard setting and labeling organization. In the meantime, similar organizations have been established for other commodities following its example.

THE WWF NETWORK*

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