



ForCES:

FSC is creating incentives for the preservation of valuable ecosystem services in responsibly managed forests

Executive summary of the final project report

February 2018



What is the problem?

Forest ecosystems are under threat from several factors, including deforestation – which results in the loss of around 13 million hectares each year – as well as fragmentation and degradation (CBD, nd). Much of this is due to the conversion of forests to agricultural land for food (FAO, 2016); other causes include overgrazing, shifting cultivation, and unsustainable forest management practices.

There is an urgent need to conserve and protect forest ecosystems and the ecosystem services we gain from them (see box). Approaches include: establishing protected areas such as national parks; the regulation of land use, forestry laws, and regulations; programmes to support community forestry; and the use of voluntary certification schemes, such as those offered by the Forest Stewardship Council® (FSC). Another promising instrument, which has gained prominence in recent years, is payments for ecosystem services.

Payments for ecosystem services

Payments for ecosystem services schemes are one way to fund the costs of forest conservation (Meijaard et al., 2011). Farmers, foresters, and landowners receive payments, or alternative non-monetary rewards, in return for managing the ecosystem(s) on their land in a way that maintains ecosystem services. Actions might be restorative, such as planting trees to regenerate a forest, or changing agricultural techniques to enhance the soil. They can also be preventive, for example excluding livestock from an area, or making efforts to reduce poaching.

The ‘buyers’ in such schemes can be the direct beneficiaries, national or local governments, or communities and individuals. And the number of such schemes worldwide is growing: there are now many market mechanisms that arrange payments between ‘buyers’ and ‘sellers’ of ecosystem services.

What are ecosystem services?

Ecosystem services are the benefits that we all receive from the planet’s natural processes and systems. Across the world, communities and individuals rely on specific ecosystem services for their livelihoods and well-being, while businesses of every size use the raw materials supplied by ecosystems to generate their wealth. And all of us depend on the food, water, and air that ecosystems provide.

The services included in FSC’s Forest Certification for Ecosystem Services (ForCES) project include: biological diversity conservation; carbon sequestration and storage; recreational services; soil conservation; and watershed services.



Certification of forest ecosystem services: a market-based mechanism that includes activities meant to guarantee to the beneficiary that the forest being managed explicitly maintains or enhances the provision of a given ecosystem service.

– Savilaakso and Guariguata (nd)

The ForCES project

While protecting ecosystem services has always been part of FSC certification,¹ FSC recognized the need for further incentives to manage forests responsibly. The aim of the ForCES project was to design and test an adaptation to FSC's certification system that could lead to new rewards for forest managers from the emerging markets for ecosystem services.

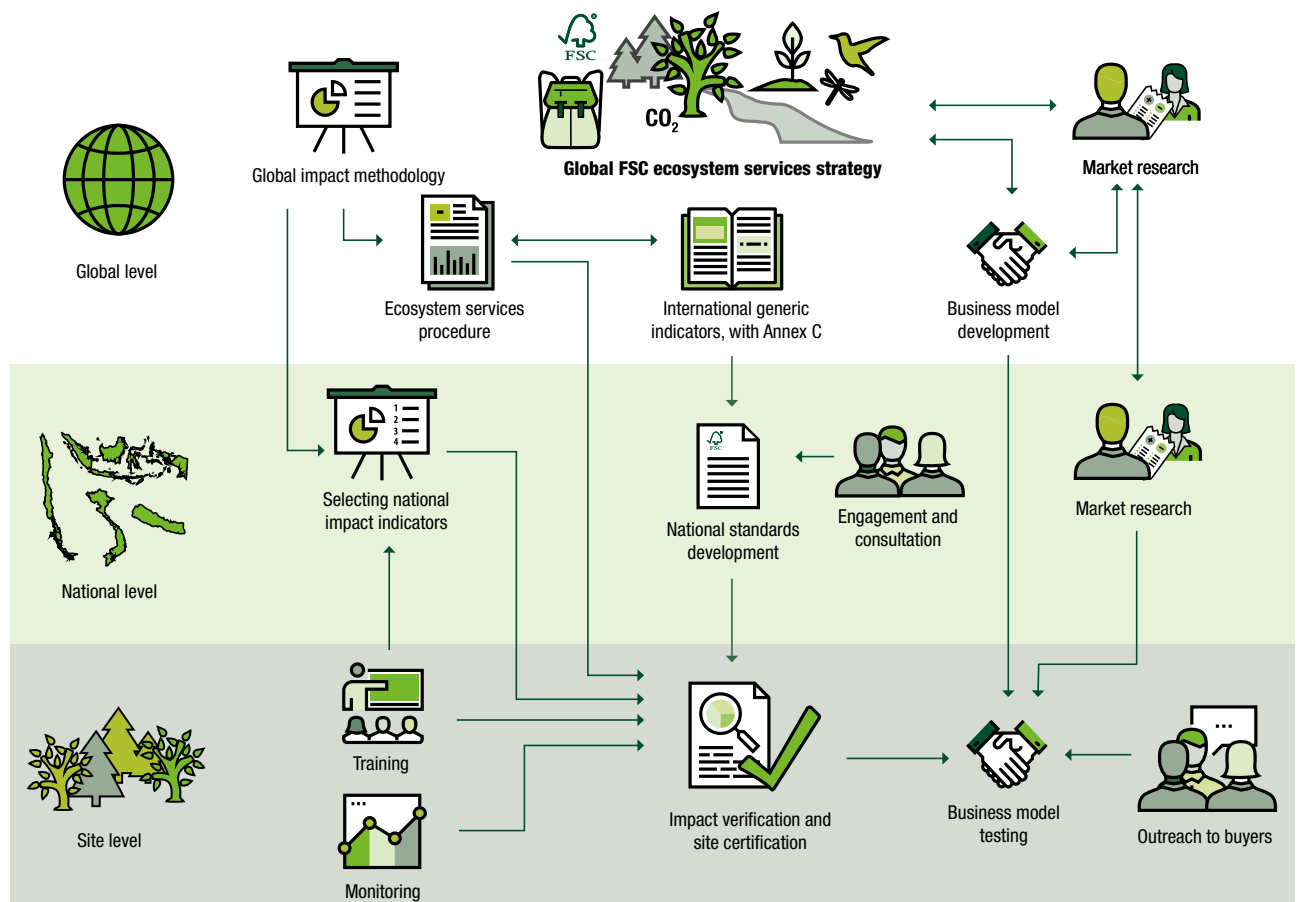
This was achieved through a range of activities at the global, national, and site levels (see Figure 1). These were run in collaboration with project partners – the Center for International Forestry Research (CIFOR) and UN Environment – and a number of country-level partners:

- Chile: FSC Chile; Astorga Consultores; GFA Certification; National Forestry Corporation (CONAF); Forestry Institute of Chile (INFOR); Bosques Cautín S.A.; Forestal Mininco S.A.; Pumalín Foundation; and Junta de Vecinos de Lajas Blancas

- Indonesia: WWF Indonesia; Ministry of Forestry; Lembaga Ekolabel Indonesia (LEI)
- Nepal: Asia Network for Sustainable Agriculture and Bioresources (ANSAB); Federation of Community Forestry Users, Nepal (FECOFUN); National Trust for Nature Conservation (NTNC); Relief International
- Viet Nam: Netherlands Development Organisation (SNV); Center for People and Forests (RECOFTC); Communal People's Committee (CPC); Department of Agriculture and Rural Development; Ministry of Agriculture and Rural Development; Ministry for Foreign Affairs of Finland; State Forest Company (SFC)

UN Environment, through a Global Environment Facility grant, provided the steady source of funding required to realize the project's objectives.

Figure 1. Putting the pieces together: the various activities of the ForCES project that together aimed to design a certification system to reward the stewardship of ecosystem services



1 See: <https://ic.fsc.org/en/what-is-fsc-certification>

Testing potential market tools for ecosystem services

Working at 10 pilot sites in four countries (Chile, Indonesia, Nepal and Viet Nam), the ForCES project tested a new ecosystem services procedure and market tools, which were developed after extensive market research.

The **ecosystem services procedure** will:

- provide FSC certificate holders with a common approach for demonstrating the **impact** of their forest management activities on one or more ecosystem services
- involve seven steps that link **measured outcomes** to the **forest management activities** undertaken, leading to **demonstrated impact**
- require forest managers to complete a publicly available **ecosystem services certification document**; this sets out the requirements for using market tools and will connect forest managers with markets for ecosystem services payments and investments.

Of the **market tools** developed through the ForCES project, several are nearing completion and are listed in the second draft² of the ecosystem services procedure, including:

- **promotions associated with FSC trademarks** which communicate demonstrated impacts on ecosystem services to potential buyers
- **promotions associated with FSC trademarks** that relate to the sponsorship of demonstrated impacts
- **ecosystem services claims (1)** that can be included within the scope of a forest management certificate and passed along the supply chain in association with forest products, leading to the on-product labelling of ecosystem services impacts
- **ecosystem services claims (2)** that are attached to a tradeable asset, such as a carbon credit.

Further tools may be developed in the future, including an **intangible product** that represents a demonstrated ecosystem services impact, which could be sold directly to interested buyers.



Tree carbon measurement, Charnawati, Nepal



FSC had a sturdy system for the certification of forests, with many safeguards in place. This is what payment for ecosystem services schemes need; it made sense to build on this, not start from scratch.

– Max Zieren,
Regional Focal Point and Task Manager
Biodiversity, UN Environment

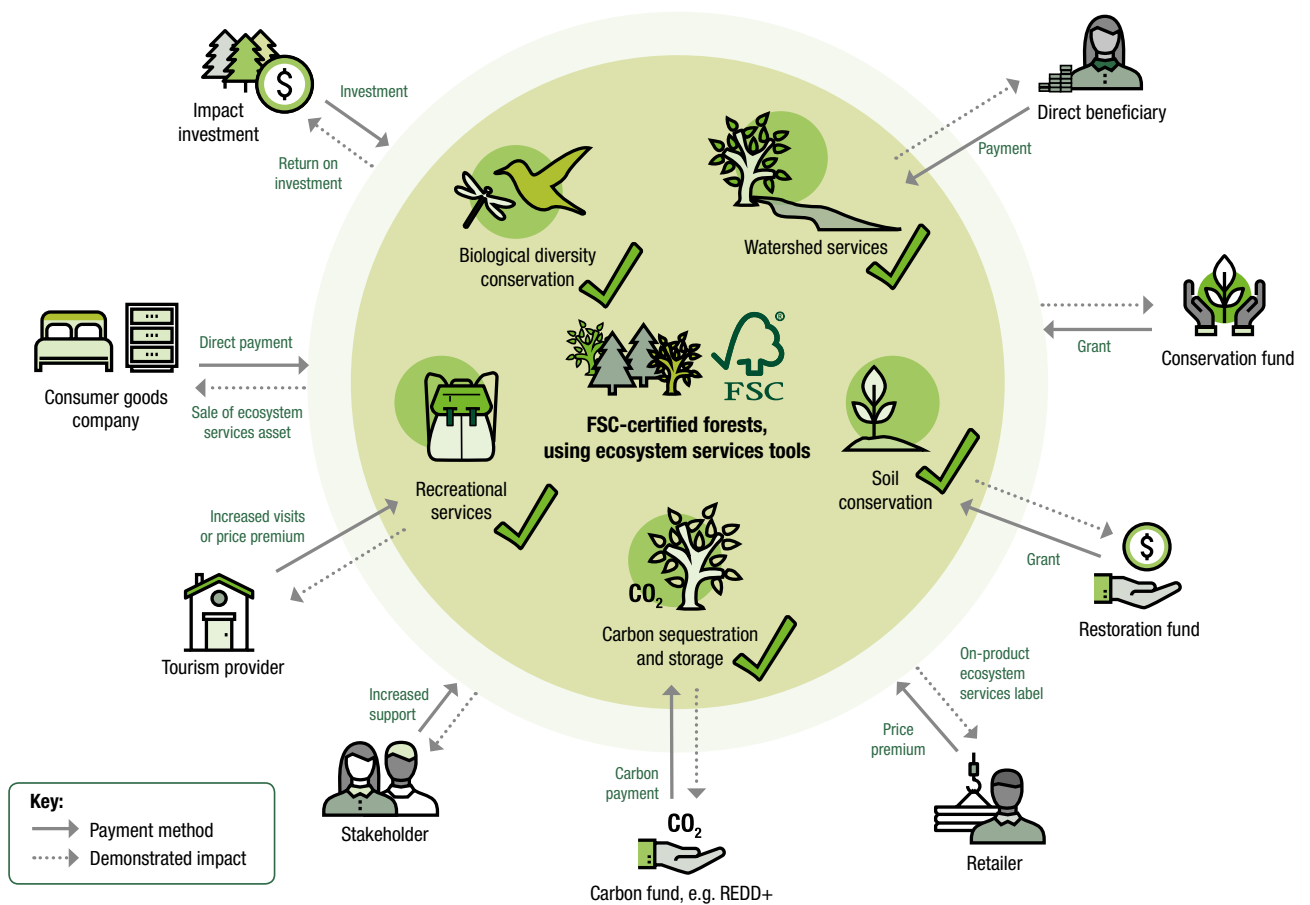
² This draft is due for approval by the FSC Board in March 2018.

Developing new business models

To add value for certificate holders, the new FSC ecosystem services tools must enable certificate holders to convert demonstrated impacts from their management activities into direct benefits. As part of the ForCES project, each pilot site developed a business

model for how forest managers would be rewarded – financially or otherwise – for their efforts. Figure 2 provides an overview of the different business models, including those developed at the pilot sites and other potential models.

Figure 2. Business models for FSC ecosystem services tools



Success stories

While the pilot phase of the ForCES project was intended to test the new ecosystem services procedure and market tools, several of the pilot sites achieved significant successes, establishing working agreements between buyers and sellers of ecosystem services and securing the very first FSC-certified claims for ecosystem services.

Protecting carbon-rich forests at Huong Son, Viet Nam



In March 2017, GFA Certification GmbH verified that forest carbon stores are being maintained in the Huong Son Forest. The certificate holder can use this claim for 18 months, after which the site will have to align with FSC's ecosystem services procedure (once it is approved). The next step is to identify a list of potential buyers and donors for this claim.

A successful business model in Charnawati, Nepal



The Charikot Drinking Water and Sanitation Users Institution has signed a contract with the upstream community forests in

Charnawati, Nepal, and started monthly payments for water from the forest – based in part on compliance with the draft FSC ecosystem services procedure.

Adding value through biodiversity claims in Indonesia



Research at the PT. Ratah Timber site in Indonesia had revealed high levels of biodiversity compared with other logged forests that did not implement the same

low-impact management activities. The company is seeking financial sponsorship of the verified impacts of these activities on the conservation of natives species diversity and the maintenance of forest carbon stocks.

Working together to protect biodiversity in Chile



Through the ForCES project, landowners and plant collectors at Cholchol-Imperial in Chile agreed on the rules for the sustainable

collection and management of medicinal plants found within the plantation, which are used in Mapuche cultural medicine. All sides now work together to protect this valuable biodiversity. The effective protection of these plants, and of the traditional Mapuche culture, has been verified according to the draft ecosystem services procedure.

Building on success: a verified scheme in Lombok, Indonesia



Forests in the Mount Rinjani ecosystem in Indonesia protect the springs and catchments that provide clean water for the residents of the

city of Mataram. Through the ForCES project, the maintenance of forest cover resulting from watershed restoration activities was verified, adding value to an established scheme in which residents contribute towards activities that help regulate the supply of water from the catchment.

Better forest management equals cleaner water in Cuenca Río Mechaico, Chile



In this FSC-certified forest in Chile, watershed services are being restored through a series of measures aimed at improving water quality. These

include improved cattle management and agricultural management practices to prevent these activities affecting water quality and supply. This claim has recently been verified and will be used to promote the creation of a private watershed restoration fund.

What did we learn?

The ForCES project team, from international partners to those at site level, encountered many challenges along the way. These provided many valuable lessons, which will inform the way forward for FSC's work on ecosystem services.

All sites need a business model, monetary or otherwise. A good business case for the extra charges being applied makes it easier to find a buyer.

There is interest in certification for ecosystem services. Businesses, governments, and institutions are willing to pay extra for the guarantee that ecosystem services are being maintained.

Market offerings need to be tailored to buyers. Buyers' motivations vary, as does the form of product that they want to buy. Designing offerings with specific sources of demand in mind is important.

The system must be flexible. The ForCES project aimed to target emerging ecosystem services markets in the medium to long term. The growth of these markets during the project's lifetime, especially those for payment for water services, shows that this vision was correct.



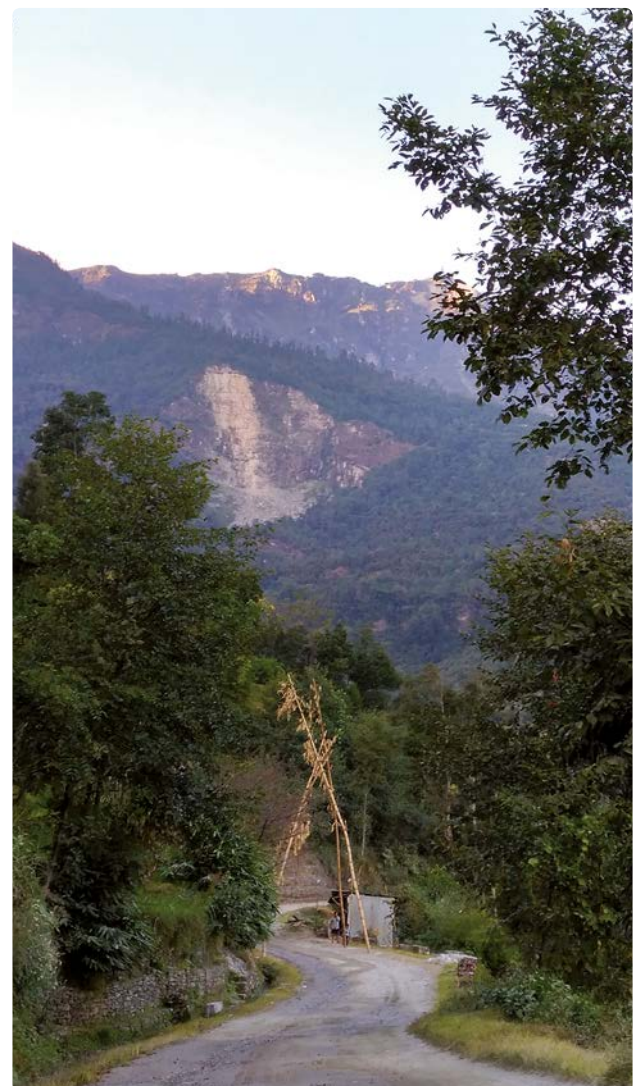
The new certification tools and business models being incorporated into the FSC system ... will guide forest owners and certification bodies, as well as potential beneficiaries ... on how to target, measure, and benefit from the certification of forest ecosystem services.

– Max Zieren, UN Environment

The way forward

In some countries, partners are now embarking on ambitious initiatives to turn business models into self-sustaining systems. These include co-founding a watershed restoration fund (Chile), reforming national policies on payments for ecosystem services (Indonesia), and further diversifying sources of revenue for ecosystem services (Nepal). At other sites, the focus is on the promotion and marketing of ecosystem services claims to attract payments or investments.

Following the closing of the project, the next step for FSC is to finalize the ecosystem services procedure and market tools. In 2018, FSC's focus will be on launching and promoting the market tools with the greatest demand, and supporting forest managers to deliver verified ecosystem services impacts.





As the project draws to a close, we are faced with fewer questions about how to do this, and excitement about the potential future impact of what we have created.

– Chris Henschel, FSC Ecosystem Services Programme Manager and ForCES Project Director

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Meijaard, E., Sheil, D., Guariguata, M.R., Nasi, R., Sunderland, T., and Putzel, L. (2011) *Ecosystem Services Certification: Opportunities and Constraints*. Occasional Paper 66. Center for International Forestry Research, Bogor.

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Further information

Our mission is to ensure *Forests For All Forever* by promoting environmentally appropriate, socially beneficial, and economically viable management of the world's forests. We are asking forest managers, certificate holders, certification bodies, businesses, governments, financial institutions, and investors to

demonstrate their commitment to responsible forest management, reducing deforestation, and to preserving ecosystem services, by helping us develop and promote FSC's ecosystem services tools, and supporting or investing in ecosystem services markets.

Join us!

We are looking for interested parties – **forest managers, businesses, and governments** – to:

- use the forthcoming **ecosystem services procedure** to demonstrate impacts
- explore new ways to reward those who are preserving forest ecosystem services.

For more information, contact:

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To find out more about the ForCES project, and download the final ForCES project report, visit: <http://ic.fsc.org/ecosystemservices>

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