



Global  
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ORO VERDE  
Tropical Forest Foundation

# Case study

## Investment of Maderacre SAC: Sustainable forestry in Peru

Funding from public sources and non-profit donors is nowhere near enough to stop deforestation and conserve ecosystems. The mobilization of private capital is often seen as a possible means of financing nature conservation. "Impact Investment", a concept which has been widely promoted internationally, aims to combine positive social and ecological impacts with earning a financial return.

Against this background, OroVerde - Tropical Forest Foundation and Global Nature Fund carried out an analysis of the structure of Impact Investment schemes and their contribution to the conservation of biodiversity.

For this purpose, local case studies were conducted of five existing Impact Investment schemes in Latin America.

The social and ecological impact was analyzed against a set of criteria developed in collaboration with experts.



**This publication is the résumé of one of five case studies. The results are based on an on-site visit in April 2016, interviews, observations and a review of documents.**

**Detailed information about the project is available on the internet at:**

**[www.oroverde.de](http://www.oroverde.de)  
[www.globalnature.org](http://www.globalnature.org)**

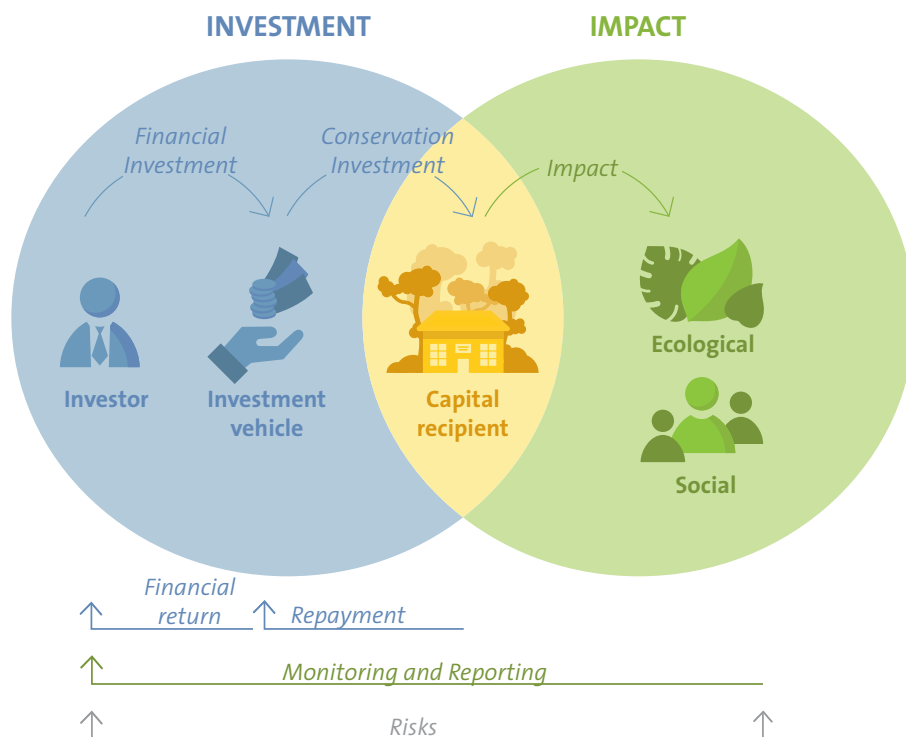


Federal Ministry for the  
Environment, Nature Conservation,  
Building and Nuclear Safety



Federal Agency  
for Nature  
Conservation

# WHAT ARE IMPACT INVESTMENTS?



## INVESTMENT ANALYSIS



### Investor

#### Structure of investors

100% private capital

#### Investors

Wong Group

#### Investment period

Long term asset for Wong Group.

#### Financial return

Return on equity. Amount unknown.

#### Risks for the investors

Main accompanying risks are associated with the management skills of Maderacre, currency risk, the market price of timber, security of electricity supply.

The Wong Group is 100 percent liable in case of insolvency and is using as security real estate in Lima, the value of which is equal to the value of the loans they receive from local credit institutes.







## Investment vehicle

### Issuer of the investment

Maderacre SAC (Maderera Río Acre) is both the issuer of the investment (receives equity capital from Wong Group) and the capital recipient.

### Short description

Through the investment of the Wong Group, Maderacre (formerly 50,000 ha timber concession and a small sawmill) was amalgamated with 7 other concessions, with a second larger and more efficient sawmill, and a new drying kiln to produce FSC-certified timber ready for export. The expansion of sustainable forest management should reduce land pressure in the project area and improve the living conditions of the local community. Financial return is generated by selling finished and semi-finished timber products, residues for charcoal and carbon credits. The investment of the Wong Group using real estate in Lima as a loan guarantee enabled Maderacre to obtain loans to finance the improvement of efficiency.

### Investment vehicle

Investment by the owner themselves. Shareholders are the Wong Group and some former owners of Maderacre SAC.

### Start of the investment

2011

### Investment volume

USD 40 million

### Min - Max total lending for conservation

Not applicable

### Risk protection

The Wong Group is 100 percent liable in case of default and is using as security real estate in Lima, the value of which is equal to the value of the loans maderacre receives from local credit institutes.

### Due Diligence

Internal Due Diligence process of the Wong Group focusing on financial, legal and technical aspects. The Wong Group hired an independent forestry consultant and a legal consultant to audit respectively the forest management plan and the legal status of the company before the acquisition.

Furthermore, the Wong Group was attracted by 1) FSC certification providing premium timber prices, 2) carbon credits as additional benefit, 3) no pending sanctions on Maderacre. The Wong Group decided to invest in Maderacre after 2.5 years of negotiations with Maderacre shareholders.

### Monitoring

Financial monitoring only. Ecological monitoring should be ensured by FSC certification and validation under the Verified Carbon Standard (VCS) and Climate, Community and Biodiversity Standards (CCBA).





## Capital recipient

Maderacre SAC. Some former owners have retained their shares.

### Interest rate on loans

Not applicable to the equity investment by the Wong Group.

### Payment conditions

The Wong Group is the principal owner of Maderacre SAC and provides as security real estate in Lima that made it possible to obtain loans for the development of Maderacre. The Wong Group's investment enabled Maderacre to obtain loans (long-term credit) totalling USD 22 million from two Peruvian lending institutions (Cooperativa Abaco and Cooperativa Pacifico).

### Project area

The investment project is situated in Peru, in the Madre de Dios region in the southeast of the country, close to the borders with Brazil and Bolivia.

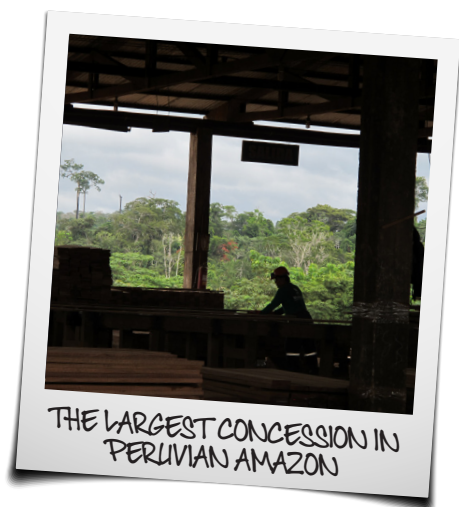
The Peruvian Amazon forest is subject to the allocation of forestry concessions, agricultural expansion, new road construction, illegal gold mining, and exploitation of oil and gas deposits. Taken together, these developments are resulting in an annual loss of 94,000 ha of forest. And the rate of deforestation is expected to increase. In Madre de Dios the largest economic sector is mining, which is often illegal and represents about 50 percent of the economy.

Maderacre has been operating since 2002 and manages a timber concession of 50,000 ha and a small sawmill for initial roundwood processing.

Through the Wong Group's investment in 2011 Maderacre was amalgamated with Empresa Agricola Gramas that combined 7 concession contracts with a total managed forest area of 220,335 ha, the largest concession in the Peruvian Amazon. There are two sawmills (established in 2012 and in 2015) able to process 50,000 m<sup>3</sup> of roundwood.

### Return generation

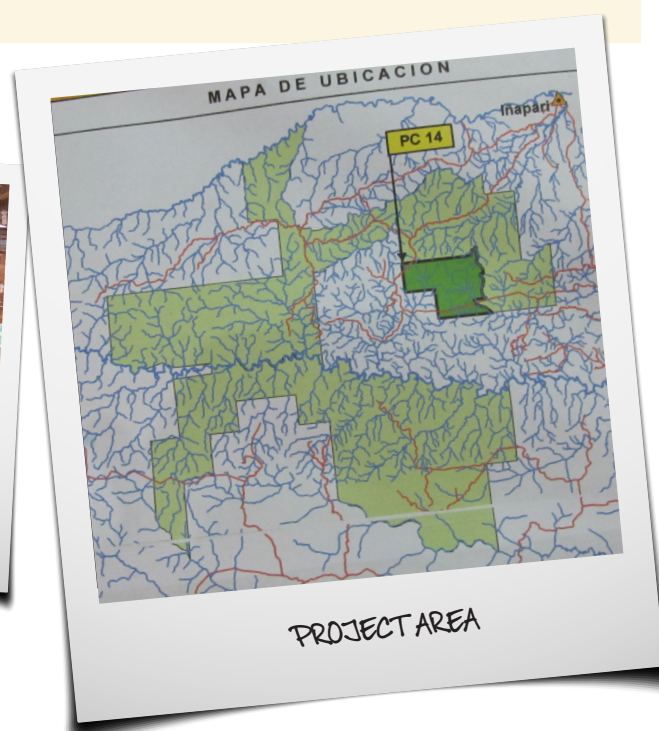
The income of Maderacre SAC is generated by selling semi-finished and finished timber products, residues for charcoal and carbon credits.



THE LARGEST CONCESSION IN PERUVIAN AMAZON



SAWMILL



PROJECT AREA



*“The activities for conservation of biodiversity are implemented as requested by FSC standards.”*



## Ecological

### Management of the project area

95 percent of the area (209,412 ha) is under natural forest management, 5 percent (10,903 ha) are conservation areas, 0.01 percent (20 ha) is taken up by the sawmills. The 50,000 ha of the former Maderacre have been included in the Madre de Dios Amazon REDD Project since 2009. All species are native. The forest inventory identifies 160 species for potential timber use. Of these only 40 are commercially viable in the short term and are therefore systematically inventoried. The company is harvesting 1 tree every 2 ha every 20 years. The average biomass harvested per hectare is between 4 m<sup>3</sup> and 5 m<sup>3</sup>. The harvesting intensity is defined in order to ensure that there are enough trees of each species for the following rotation cycle. 10-20 percent of young trees are selected after the inventory on the basis of phenotype quality. They are then released instead of being harvested. Maderacre holds the oldest existing FSC FM certificate in Peru (since January 2007) with 10 independent audits approved so far. Observations and corrective action requests (CARs) from FSC audits have been decreasing over time, while investments and know-how have grown every year, especially since the Wong Group investment. Only one has poor environmental management been observed at the newly established processing plant. There was no targeted waste recycling, spills of residues (including waste engine oil) and several permanent pools of stagnant water (potential source of mosquitoes and disease).

### Biodiversity and conservation

According to the FSC Forest Management standard HCVFs (High Conservation Value Forests) 1, 2 and 4 are present across the whole forest management area (100 percent of 220,335 ha) . 5 percent (10,903 ha) of the concession area is identified as a conservation area. It is therefore not subject to harvesting operations. There is no harvesting within 25m of HCV water sites. This distance increases to 28m in the case of trees which are considered

to be of greater value because they have a large diameter (an indication of the size and vitality of the tree) and /or the form or structure of the canopy indicates that they play an important part in the water cycle. There is no harvesting within 50m of HCV fauna sites.

The whole forest management area provides important ecosystem services for the towns of Iñapari with its 1,500 inhabitants and Iberia with around 4,000 inhabitants.

The project aims to reduce land pressure from illegal mining activities and expansion of agriculture in Madre de Dios, and to ensure sustainable forest management of timber concessions. Whilst forest plantations are now being established in Madre de Dios with teak as the main species, Maderacre is focusing on native species. And in the project area no pesticides, fertilizers, GMOs or potentially invasive species are used. Activities for the conservation of biodiversity are implemented according to FSC and CCBA standards.

### Biodiversity monitoring

During the forest inventory all HCV sites (e.g. biodiversity hot spots such as clay licks, permanent water bodies, springs, etc.) are mapped. In 2005 and 2011 the biodiversity assessment found more than 150 animal species, 19 of which were endangered. Furthermore, the company implements an environmental impact assessment plan. The company regularly monitors the borders of the concession and maintains signs to mark the borders. Illegal harvesting and illegal hunting occur rarely. Besides the monitoring required for FSC and CCBA certification, the Wong Group does not arrange for any other monitoring to be done.





## Social

### Local development

The project not only facilitated the sustainable forest management of timber concessions and the production of finished and semi-finished timber products, but also improved the living conditions of local communities through job creation. The Wong Group's investment amalgamated 7 concessions which were not professionally managed with Maderacre and created jobs in the timber sector. Furthermore, the Wong Group's investment enabled Maderacre to generate additional resources for the management of the area and the expansion of sustainable forest management.

Social objectives such as better access to education (guided tour of the processing plant, workshops at a secondary school), capacity building, community development, employment generation, and better health are pursued by various actions. One measure to raise awareness about the value of well-functioning ecosystems is the creation of a comic for local children. To improve workers health, information and guidance on vaccines is provided as well as personal protective gear. And there is local provision of primary health care.

### Working conditions

The company employs 200 "permanent" workers, although the vast majority only have renewable short-term contracts (6 months to 1 year). An additional 100 seasonal employees work in the forests. A further 30 employees are employed by one subcontractor in timber extraction. The proportion of women in the workforce is less than 1 percent in the harvesting and processing facilities, but over 50 percent in the company offices.

Most of the workers and contractors earn more than the living wage<sup>3</sup>. Maderacre uses the minimum wage as a base and adds a productivity bonus (on average 15-20 percent extra per month). Workers are also provided with food and rooms inside the processing plants. As of today, forestry workers have 26 working days, and 4 days

holiday, including 3 free Sundays, per 30-day shift. All workers receive 15 salary payments per year paid through the banking system and the contract includes social security payments. The fixed salaries provide greater income security; before the Wong Group investment the timber industry workers in the region were paid only for the days that they worked. Overall, working conditions have improved since Wong Group began the investment in 2011.

### Capacity Building

The acquisition by the Wong Group was not followed by specific training or capacity building in relation to forest management. The established capacity building is part of the management practices of the former Maderacre business as well as a requirement of the FSC certification process. Maderacre provides training in forest management and best practices for resource management in general. On the other hand, the acquisition by the Wong Group injected consistent business management capacities, which are essential to the proper local addition of value to timber products.

The advantage of the involvement of a large corporation is that Maderacre is benefiting from additional human resources that provide support in terms of negotiation of loans, insurance, accounting and financial management.



WORKING CONDITIONS

WORK SAFETY



CAPACITY BUILDING



ROOMS

# CONCLUSION



*“[...] employment conditions have improved substantially since the 2011 acquisition and the investment facilitates a landscape conservation approach.”*

## Investment vehicle

The investment represents one of the most significant in the forestry sector in Peru in recent years, resulting in the creation of the largest aggregate natural forest concession in Peru amounting to 220,335 ha. This private investment by the Wong Group aims to raise a total of USD 35 million from further investors, such as the Peruvian Government, or through the banking system. As of today, loans (long-term debt) totaling USD 22 million have been obtained from two Peruvian lending institutions thanks to the guarantee provided by the Wong Group.

The investment makes it possible to scale up forest management and timber processing activities in order to obtain high added value products in the core of the Amazon forest 1,800 km from the nearest harbor.

The former managers of Maderacre were entrusted by the Wong Group with the management of the whole forest area. Information about special requirements for the management of the project area is not available.

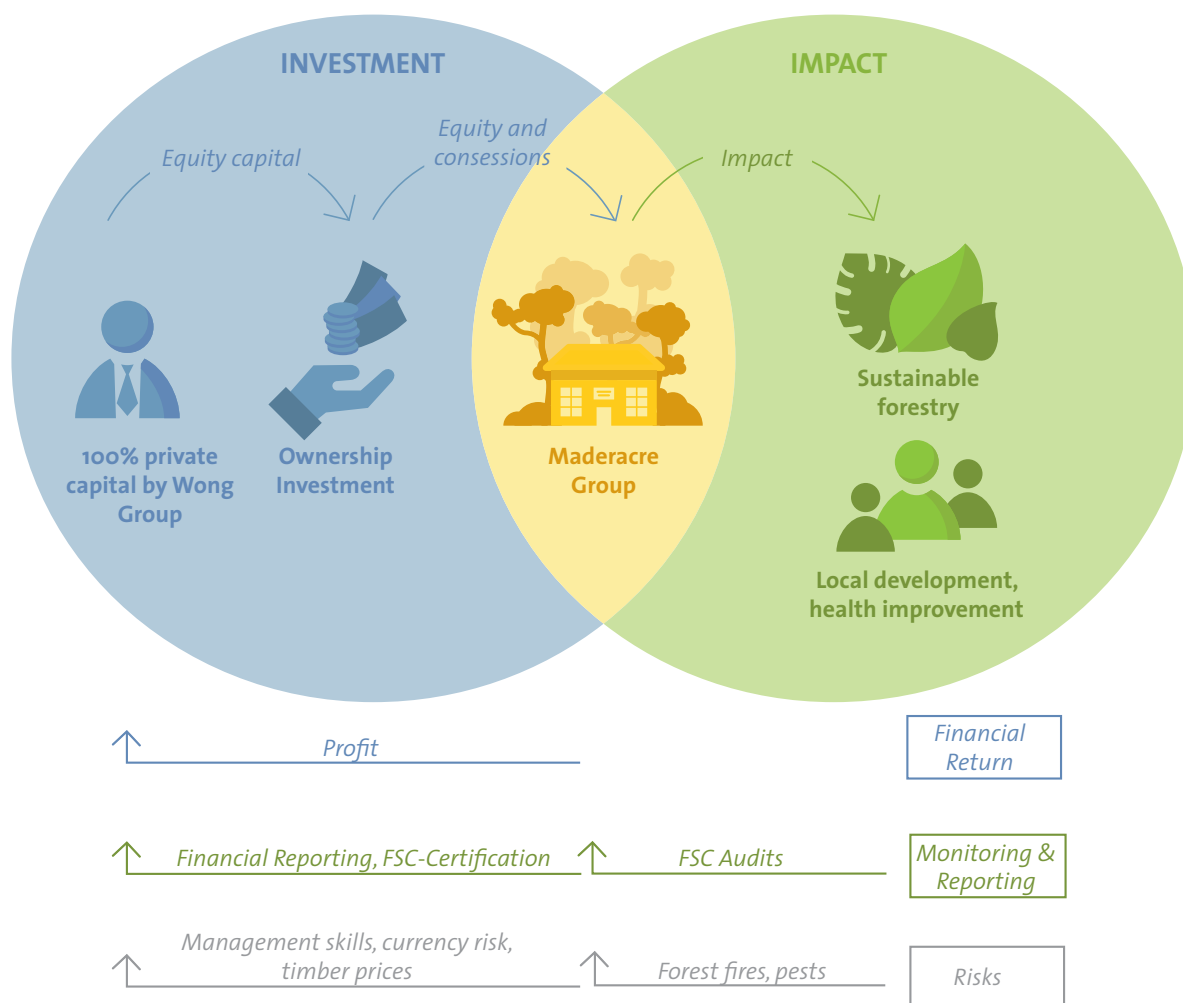
## Impact

The local production of high added value products is probably one of the few strategies that ensure the maximization of social and environmental benefits: in fact, employment conditions have improved substantially since the 2011 acquisition and the investment facilitates a landscape conservation approach. In addition, the investment is counting on FSC certification to ensure the highest social and environmental standards and is contributing to the mitigation of climate change thanks to the Amazon REDD+ Project. Furthermore, the rapid growth of the forest management area was not accompanied by environmental damage, as is often the case.

Overall, the investment has a positive environmental and social impact on the Madre de Dios region. However, all the efforts to improve conservation measures and living conditions for the local community are due to the requirements of FSC certification or the initiative of Maderacre management themselves. The Wong Group does not initiate any further environmental or social impact.



# CONCLUSION



## Disclaimer

Please read this information carefully: Investments are associated with risks, which could result in an extreme case in a total loss of equity. The information provided by us are no economic valuation and do not represent a purchase request or investment recommendation. Any and all liability is excluded, also consequential damages such as financial losses. Our texts do not in any case make individual advice and careful consideration of the offered investments dispensable.

Since the case study has been carried out, changes may have been occurred which could not be taken into consideration in the final publications.

For the sake of readability we have avoided the use of both masculine and feminine pronouns. We consider the use of the masculine pronoun to be gender-neutral and intend it to be inclusive of both genders.

## Further Information

<sup>1</sup>Schroeder, 2009: Project Maderacre & Maderyja Madre de Dios Amazon REDD project. Available at: [www.greenox.com](http://www.greenox.com) /FAO, 2009: State of the world's forest 2009.  
<sup>2</sup> HCV1 are forest areas containing globally, regionally or nationally significant

concentrations of biodiversity values (e.g. endemism, endangered species, refugee). HCV2 are forest areas containing globally, regionally or nationally significant large landscape-level forests. HCV4 are forest areas that provide important ecosystem services.

<sup>3</sup> Minimum wage in Peru is 850 PEN/month ≈ 250 EUR (October 2016)



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