

Case study

Investment of Verde Ventures Fund: Coffee farming in Guatemala and Mexico

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.

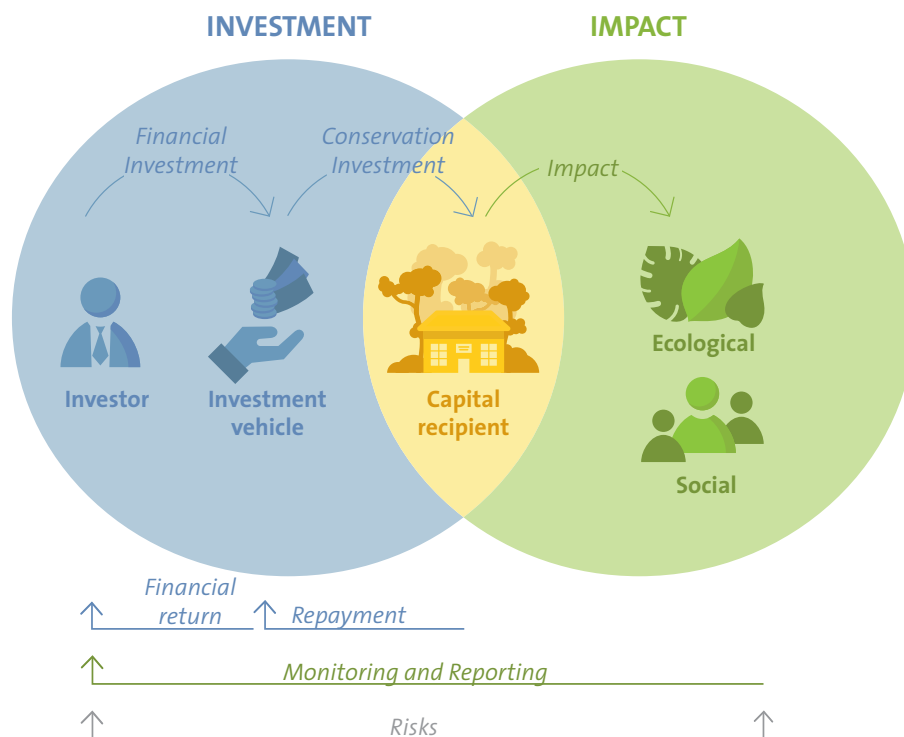
Detailed information about the project is available on the internet at:
www.ooverde.de
www.globalnature.org



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



WHAT ARE IMPACT INVESTMENTS?



INVESTMENT ANALYSIS



Investor

Structure of investors

Private capital: 40%; Public capital: 60%

Investors

Public

International Finance Cooperation (IFC); Overseas Private Investment Corporation (OPIC); French Development Agency (AFD), Global French Environment Facility (FFEM); KfW Development Bank

Private

Starbucks Coffee Company, Gordon and Betty Moore Foundation

Financial Return

1-10 percent; rate of return varies with the investor. In most cases the financial return is as much as 8-10 percent. As regards repayment there is no differentiation between public and private investors. The loan repayment period is around 8-10 years.

Risks for the investors

Debtor default due to political instability, disease and/or climate risks.





MEXICO



GUATEMALA



NATURE RESERVE

Investment vehicle

Issuer of the investment

Conservation International

Short description

The fund supports small and medium-sized enterprises which are working in the areas of ecotourism, coffee and cocoa, and which, in the opinion of the funding agency, make a positive contribution, through good management, towards the conservation of biodiversity.

Investment vehicle

Open credit funds. Most of Verde Ventures Fund's investments are priority secured credit agreements with a repayment period of 3-5 years. In addition to interest payments Verde Ventures Fund makes use of equity-like instruments such as "licence fees" in order to obtain a higher financial return when supported companies grow well.

Start of the investment

2001

Investment volume

23.4 million USD for a total of 51 capital recipients (in 2013).

Min - Max total lending for conservation

Between 30,000 and 500,000 USD with an average of 180,000 USD.

Risk protection

Each project is rated according to seven risk indicators (liquidity coefficient, debt-to-equity ratio, value of loan cf. arrears with Verde Ventures, repayment record, liquidity of collateral, political risks, robustness of business plan) and put into one of three categories (high, medium, low). On this basis 5-15% of the invested capital is put aside in a reserve fund. Most loans are secured locally in accordance with local legislation.

Due Diligence

Regional: Priority region of Conservation International

Socio-ecological: Biodiversity criteria (ITBA) and social preselection criteria

Economic: Experienced management team, total company assets less than 5 million USD, sufficient cash-flow or growth potential to enable repayment of the investment within 3-5 years.

Monitoring

The loan recipients carry out an annual monitoring according to the IRIS (Impact Reporting and Investment Standard) criteria and additional criteria of Verde Ventures. State actors sometimes provide financial resources for baseline studies (household surveys), monitoring and ex-post evaluation. Verde Ventures Fund is evaluated by B-Lab according to the GIIRS (Global Impact Investing Rating System). The evaluation of the Fund's portfolio is carried out by an external auditor using information provided by the Fund, and measuring community development, environmental impact, working conditions, and management against various secondary criteria.



Capital recipient

Finca Irlanda, Finca Montegrande, Finca Hamburgo, and the Comon Yaj Noptic Cooperative in Mexico; Finca de Los Andes in Guatemala

Interest rate on loans

10%-11% (depending on risk assesement and benchmarking)

Payment conditions

Loans usually have a term of one year, with repayment due after the harvest season. In case of repayment difficulties, repayment is staggered. The coffee fincas must present a purchasing contract for the coffee or evidence of material assets (e.g. machines) as security for the loan.

Project region

The coffee plantations analysed in the case study, “Finca Irlanda”, “Finca Montegrande”, “Finca Hamburgo”, and the “Comon Yaj Noptic Cooperative” are located in the state of Chiapas in the south of Mexico, while the “Finca de Los Andes” is situated in Santa Bárbara, Suchitepéquez in southwest Guatemala. Since the end of the last century the region has been dominated by coffee cultivation, with plantations predominantly owned by German immigrants. It is a poor rural region which lacks infrastructure. All the fincas (family enterprises) and the cooperative (smallholder association) are located in or next to a biosphere reserve (“El Triunfo” and “Volcano Tacana”), and “Finca Los Andes” is designated as a private nature reserve. The fincas cover an area of 300- 630 ha, and the members of the cooperative cultivate a total of 1,040 ha.

Return generation

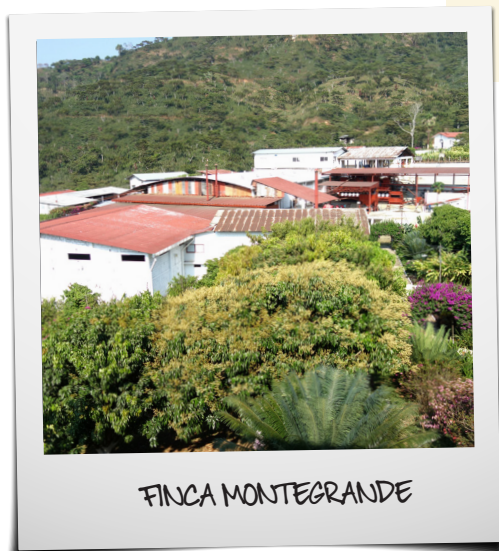
The four fincas and the cooperative generate most of their income through the sale of coffee. They are placing green as well as roasted coffee on national and international markets. All the coffee producers possess drying plants, fermentation tanks, hulling machines and warehouses, and also facilities for the grading and quality control of coffee beans. The degree to which there is further professional processing of the coffee beans varies between the various producers. On some fincas small quantities of cocoa, honey, macadamia nuts, quinoa, tea and cardamom are also cultivated. In the cooperative fruit trees are cultivated primarily to produce fruit for consumption within the cooperative. Two fincas are part of the “La Ruta de café” project which promotes ecotourism for people interested in coffee. All the fincas used the loans from Verde Ventures to cover the costs of harvesting, primarily the wages of harvest workers.



FINCA HAMBURGO



HULLING MACHINE



FINCA MONTEGRANDE



“Agroforestry systems with high biodiversity and large areas of natural forest [...] foster biological pest management and crop pollination, maintain soil fertility, and protect the land from soil erosion and flooding.”



Ecological

Management of the project area

The shade conditions in the coffee plantations under study vary between: coffee seedlings planted under natural trees and shrubs (in two coffee fincas); crop combinations mostly with fruit trees (no production of timber or wood for biomass); and tree monocultures (shade trees in rows four meters apart) characterized by a small canopy in coffee plantations with a single tree species (for biomass) (in two coffee fincas). In the cooperative, coffee is planted together with fruit trees, because these make an important contribution to the farmer's diet. Native tree species are used for shading, except on one finca where eucalyptus trees are grown. The coffee producers plant the coffee plants along the contour lines – this reduces the risk of soil erosion and improves water absorption after heavy rainfalls. The coffee farmers also operate a strategic management programme for combating diseases and replacing the coffee plants. Various measures are taken to combat disease and control pests: the cultivation of varieties resistant to leaf disease (e.g. Bourbón, Sarchimores, Catimor); the setting of traps to combat the coffee borer beetle; and regular pruning of the coffee plants.

The entire project areas of two coffee producers are farmed organically (Finca Irlanda since 1928); two other coffee producers cultivate part of their land without using pesticides; while one coffee producer uses pesticides on the total crop area. Four coffee producers are certified with one or more of the following seals: Best Practices Starbucks, USDA Organic, JAS, Fair Trade, Demeter, Terranova, Rainforest Alliance, UTZ. Certification was desired but not required under the terms and conditions of the loan.

Biodiversity and conservation

All the fincas include areas of natural forest for the conservation of watercourses and biodiversity. The areas of natural forest differ in size from 4 ha to 505 ha (1,5- 67 percent of the respective project area).

Measures are taken not only to protect watercourses, but also to restore natural forest and to provide environmental education in cooperation with schools. And rangers are employed to patrol the areas of forest.

Many more animals, plants, fungi and micro-organisms are found in areas of agroforestry than in areas which have been cleared and used for intensive agriculture. The impact on biodiversity conservation varies across the agroforestry systems studied. The degree of impact depends on factors such as the diversity of shade trees and how far apart they are from each other, structural diversity within the layers of the forest (ground vegetation, shrub, lower and upper canopy) and the extent of natural forest areas, etc. Agroforestry systems with high biodiversity and large areas of natural forest, such as “Finca Irlanda”, “Finca Los Andes” and the “Comon Yaj Noptic Cooperative” foster biological pest management and crop pollination, maintain soil fertility, and protect the land from soil erosion and flooding.

Biodiversity monitoring

Monitoring is commissioned by Verde Ventures and carried out with support from the loan recipient. The monitoring of birds and frogs and the measurement of soil and waste water quality are often undertaken in cooperation with universities, and the data is made available to Conservation International. 144 bird species were identified in the “Finca Los Andes” nature reserve, which covers 364.5 ha. 240 bird species were registered in the natural forest in “Finca Irlanda” which covers 46 ha. And 258 bird species were recorded in the forest area of the “Comon Yaj Noptic Cooperative” which covers 505 ha. In the larger areas of natural forest there were also sightings of highly endangered amphibians (e.g. Plectrohyla avia, Agalychnis moreleti) and nationally protected big cats such as puma and jaguar.



Social

Local development

On average, between 70 to 250 workers live and work on the fincas throughout the year, while during the coffee harvest between 100 and 1,200 workers are employed temporarily. Almost all the seasonal workers on the Mexican fincas are from Guatemala; in the case of the cooperative the 200 members are responsible for the cultivation of the fields. The fincas operate largely autonomously, so that it is difficult for the local population to participate in the fincas' social and economic development. There are kindergartens, primary schools, churches and medical practice within the fincas. The local doctor takes care of minor injuries and preventative measures. Most of the fincas obtain their own power from small hydroelectric power plants. They also use wood from the coffee plantations for drying and cooking. The fincas which offer ecotourism possess their own accommodation and restaurants and also organize transport for tourists.

In comparison with the fincas, Verde Ventures' loan to the Comon Yaj Noptic Cooperative has a greater impact on the surrounding community. The cooperative increases the income of its 201 members; the farmers have been trained in ecological cultivation techniques; a hospital has been built in the district (Jaltenango); a women's group has been founded, which runs a restaurant and sells their own products; and a cooperative ecotourism project was started early in 2016. However, these developments are not directly connected with Verde Ventures' loan. Nevertheless, Verde Ventures' loan improved the cooperative's loan improved the cooperative's credit rating and facilitated access to further funds.

Working conditions

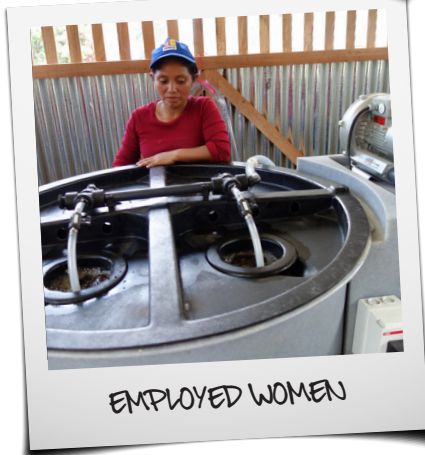
Seasonal workers and workers in the cooperative are paid according to how much they harvest: 5-10 Euro per day.¹ Full-time employees' wages depend on their position. The lowest paid workers earn 5-10 Euro per day. Women who are employed full-time (10-30 percent of women) receive the same wage, except on one of the fincas.² They often do other work, e.g. grafting coffee plantlets and tree nursery management. Protective clothing is worn when using pesticides, although the degree of protection varies between the fincas. Child labour is prohibited on all the fincas, but it was reported that children often work in the fields to support the family economy. Within the finca the workers live around 4-8 workers per room in larger apartment complexes or in huts with facilities similar to those in smaller communities. There are usually shared kitchens and some families who are working full-time have their own cooking area. The cost of food is around 50 Eurocents. On two fincas this is deducted directly from wages. Under these conditions there is no need for full-time employees to work on other fincas to secure their livelihood. Full-time employees are also insured by the state social security institution and are thereby entitled to medical care, provision of their basic needs, and some general social services.

Capacity building

Training is provided for the workers on the coffee fincas especially in coffee production (cultivation techniques, harvesting, disease control, quality control, etc.). The employees on the "Los Andes" finca receive additional training in craftsmanship, administration, book-keeping, organizational development or fish farming. The additional training is provided by an external consultant and is paid for by the coffee finca and the local authority (50 percent each).



KINDERGARTEN
FINCA IRLANDA



EMPLOYED WOMEN

"In comparison with the fincas, Verde Ventures' loan to the Comon Yaj Noptic Cooperative has a greater impact on the surrounding community."



PESTICIDES

CONCLUSION



„For a regional development an investment is necessary to promote upper-secondary education and further education for the employees and their families.“



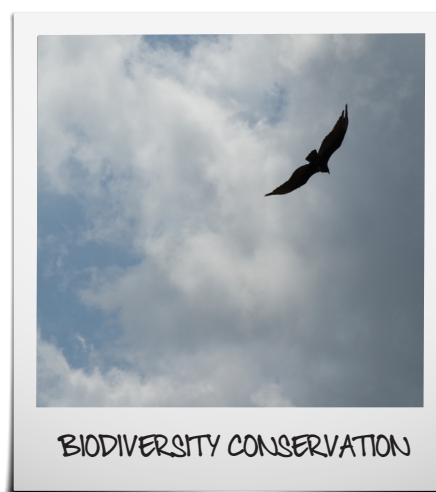
Investment vehicle

Despite risks such as political instability, disease, and climate risks, the repayment rate of Verde Ventures Fund's loans amounts to 92,5 percent (of the entire portfolio). Since the credits are paid in US dollars, losses due to changes in currency exchange rates are borne by the capital recipient and this may make repayment difficult. The investors receive a quarterly financial report detailing financial performance, risk management, and any significant problems. If there are any defaults on repayments, no distinction is made between public and private investors. Part of the capital (5-10 percent) cannot be invested in projects, but must be kept in a bank account as security against loan defaults. Verde Ventures Fund's administrative expenses, averaged over four years, were under 5 percent. Verde Ventures Fund's credits – with a loan period of 6 months to 5 years – enabled the coffee producers to cover the costs of harvesting in the short term. The coffee producers in this case study had some difficulty accessing external capital during the period of the loans and Verde Ventures' credits improved their credit rating. The funding of an evaluation to measure the impact of the loans proves to be a challenge. The cost of an evaluation is not included in Verde Ventures Fund's budget, nor do the investors provide additional funding for it. The entire fund's impact is assessed according to GIIIRS, but this currently serves as a standard reporting system for the comparisons of funds rather than a critical impact assessment.

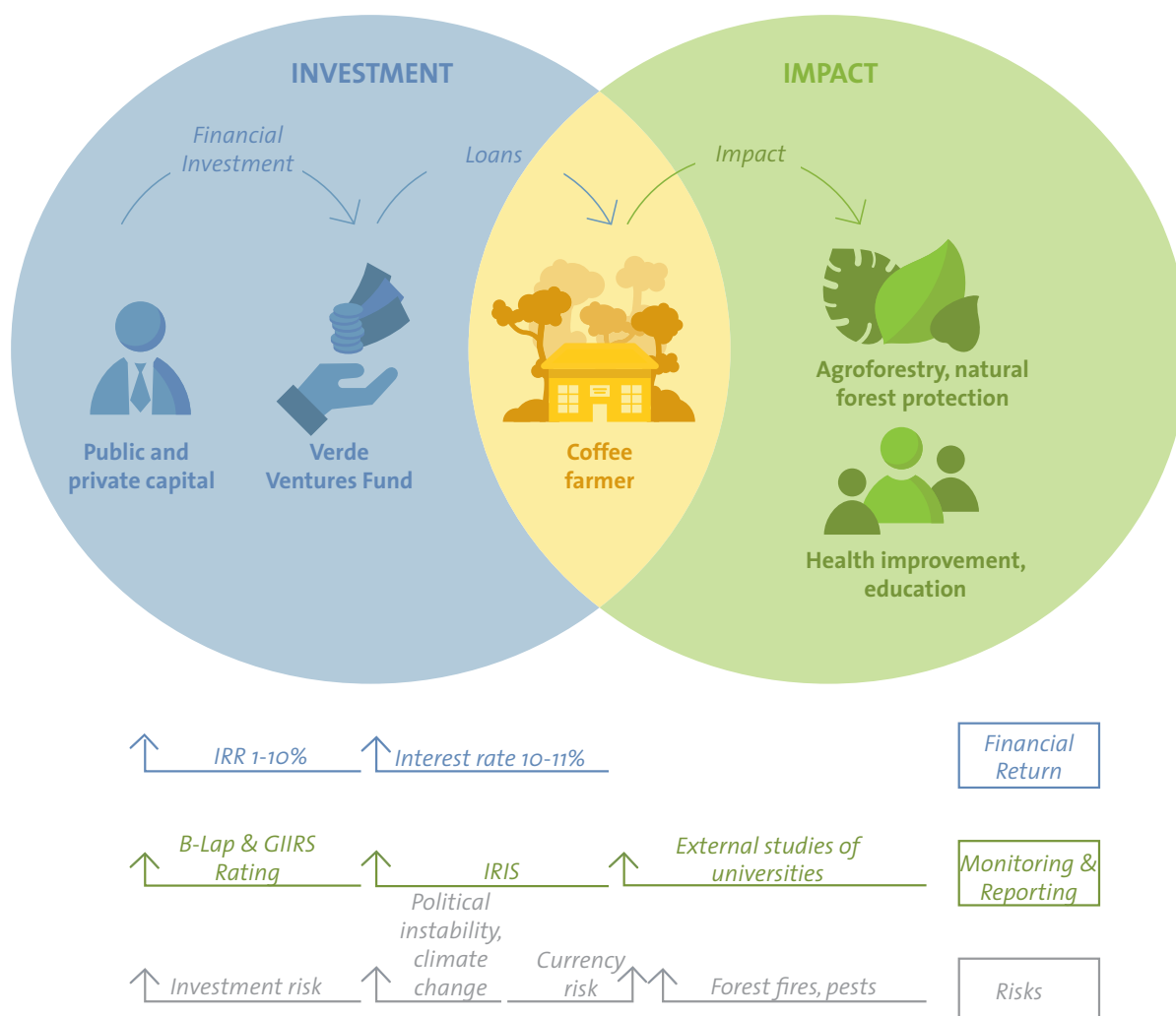
Impact

Many of the coffee fincas evaluated in this study have a strong history of commitment to sustainability. Verde Ventures Fund's loans alone did not catalyze these commitments, but have helped the finca owners to sustain the environmentally and socially beneficial practices already in place. In at least one case natural forest covers more than 50 percent of the total area of the finca studied. And the agroforestry system of cultivation improves water storage and reduces soil erosion in areas of high biodiversity. Verde Ventures Fund's credit terms were not focused on the coffee producers' performance in terms of protection of forests and biodiversity, but were largely adapted to be in line with their existing performance. However, it would make sense to use the provision of credit to promote biodiversity-friendly behaviour on the part of loan recipients in terms of certification, preservation and natural forest and/or diversification of shade trees.

The fincas' social conditions are assessed as generally positive. Wage levels exceed the minimum wage and the building of social facilities such as schools and churches ensures that the employees enjoy good conditions. Child labour during the harvest season has to be seen in a critical light. With the exception of the cooperative, the coffee fincas operate independently of their surrounding communities. Therefore, the provision of loans to the coffee fincas does not promote local development of the region, which is affected by extreme poverty. Regional development would require investment in advanced secondary and further education for the employees and their families.



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

¹ 0,70 Euro/Kilo and around 5 EUR per Box picked coffee cherries.

² Minimum wage in Mexico = 3.80 EUR/day (87 MXN);

in Guatemala = 10.10 EUR/day (81.87 Q). 58% of the population receiving a minimum wage in Mexico live in poverty and 12% in extreme poverty (Mancera et. al 2015). In Guatemala minimum wages must be increased to 30% in order to get a „Box of comestibles“ (cansata basica alimentaria).



OroVerde - Tropical Forest Foundation

Burbacher Straße 81 · 53129 Bonn
phone +49 228 24290-0 · fax +49 228 24290-55
www.oroverde.de · info@oroverde.de



Global Nature Fund (GNF)

International Foundation for Environment and Nature
Fritz-Reichle- Ring 4 · 78315 Radolfzell
phone +49 7732 99 95-80 · fax +49 7732 99 95-88
www.globalnature.org · info@globalnature.org