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
www.globalnature.org
WHAT ARE IMPACT INVESTMENTS?

INVESTMENT ANALYSIS

Investor

**Structure of investors**
100% private capital

**Investors**
Private investors are expected to buy at least one share in the cooperative. In the first year a share costs EUR 1,200. Annual increase of the entrance fee: approx. 3%. Payment can also be made in installments of EUR 25 per month.

**Investment period**
The cooperative is designed for long-term investment. An early withdrawal is possible so long as there is sufficient liquidity. However, since areas of forest are not sold or cleared just for member pay-offs, and because there are not many members, a withdrawal may be delayed.

**Financial Return**
No solid information is available as regards financial return. Waldmenschen eG expects an annual increase in the value of shares in the region of 4 percent to 5 percent. First distribution of dividends is expected after about 20 years; regular distributions are envisaged thereafter.

**Risks for the investors**
There are political-economic risks as well as risks associated with the internal workings of the cooperative. And members of the cooperative also bear the risk of a total loss of invested capital. The long waiting period before the first distribution and the possibility of a long delay before the credit balance is paid out in the case of withdrawal are additional potential risks.
Investment Analysis

Investment vehicle

Issuer of the investment
Waldmenschen Cooperative

Short description
The cooperative uses the capital invested by members to buy degraded land in Panama and restores it with plantations of native trees (825-1,100 per hectare). The concept of the “Generation Forest” allows for selective felling within the area after 12, 20, 25 and 30 years. New generations of trees are then planted in the resulting clearings. After the last thinning, only careful and selective harvesting takes place. One third of the area is designated as a nature reserve.

In the first year, Waldmenschen aimed to replant an area of 8 hectares. This area should continue to grow as the number of members increases.

Investment vehicle
Waldmenschen is based on the cooperative model. Investing members exercise their rights through resolutions and elections at general meetings.

Start of the investment

Investment volume
First year - EUR 192,000
Second year - EUR 300,000
Third year - EUR 800,000

Min - Max total lending for conservation
Not applicable

Risk protection
There are targeted measures for minimizing risk and assessing the extent to which risks can be managed: Risk of forest fires is reduced by fire protection and safety training for employees. The risk is assessed as only partially controllable, which is why the economic impact is cushioned by insurance. Risk of currency fluctuations can be minimized by liquidity reserves held in dollars.

Due Diligence
Selection of Futuro Forestal as partner: As a strategic partner of the cooperative, and developer of the Generation Forest concept with 20 years of experience as a forestry company in Panama, Futuro Forestal is entrusted with the overall management of the project areas. Selection of project areas: Various criteria, such as soil quality, topography, land use rights, etc., determine the selection of project areas. The assessment is carried out by Futuro Forestal, whose activities are monitored, in turn, by external auditors.

Monitoring
The soil quality is analyzed once before land purchase. And there is annual monitoring of the tree population.

A biodiversity study was carried out with grant funding. Annual reporting on the impact of Waldmenschen eG is planned in accordance with the Social Reporting Standard. Furthermore, Waldmenschen eG is seeking to obtain certification as a Benefit Corporation (B Corp).
With the capital from the sale of cooperative shares, land is acquired in Panama directly or through investment in project companies. Futuro Forestal is entrusted with the forestry activities.

**Interest rate on loans**
Not applicable

**Payment conditions**
Service contract with the forestry company regulates the terms and conditions. The financial plan of the cooperative is openly accessible to members.

**Project area**
Panama’s economy, with the second largest free trade zone, is dominated by the service sector. The countryside is largely characterized by tropical forest and agriculture (including livestock). Investment in reforestation is promoted politically in Panama. Law 24 provides investors with tax benefits and facilities for obtaining visas when investing in government approved reforestation projects. So far the main focus of forestry projects has been on teak.

The target regions for these projects are degraded areas or plantations in the districts of Colón, Chiriquí, Veraguas, and Darién in Panama.

Since these were not yet managed at the time of on-site impact analysis, the analysis of two existing investments served to investigate the implementation of the Generation Forest concept and the work of the forestry company Futuro Forestal.

The Santa Rita farm is the first Generation Forest scheme of Futuro Forestal and is located in Panama in the Colón district with a project area of 360 hectares. The second visited farm “Palmas Bellas” is located in the Darién district on the border with Colombia and covers an area of 570 ha. On an area of 220.7 ha, native trees and teak are being planted on pastureland – teak accounting for 90% of the production area. The remaining area is left to grow naturally.

**Return generation**
Revenues are generated through the sale of timber. Waldmenschen is aiming to cultivate and process agroforestry products.
**Ecological**

**Management of the project area**

The project area of the first Generation Forest scheme on the Santa Rita Farm covers 360 ha and consists mainly of secondary and natural forest. Reforestation using native species according to the Generation Forest model is undertaken in clearings or in degraded parts within the area. The establishment of a mixed forest with different generations is intended to create a permanent forest, which is much more like natural forest than monoculture plantations. This protects soil, water and habitats for animals. The native species include mahogany, yellow cedar and rosewood.

On both the farms visited, a risk management system for protection against fires and pests has been implemented. Responsibilities are clearly defined and the tasks of the day are carried out in small groups of two to four persons. The groups are composed of experienced and new staff. Each day all employees receive brief instruction, e.g. on how to use a machete. The instruction is planned and organized by the farm manager.

**Biodiversity and conservation**

Existing areas of natural forest are conserved on both farms, and buffer zones are maintained along rivers and streams. The area of the Santa Rita Farm consists of 100 ha reforested land and 225 ha natural forest and has high biodiversity. Santa Rita Farm boasts the greatest variety of species with 121 different plant species. On the other hand, only 14 different species were recorded on the Palmas Bellas Farm (mostly Teak). In addition, an endemic plant species (bromelia) has been found in Santa Rita outside the boundary of the cultivated areas. 22 bird species were registered in Santa Rita as part of a biodiversity study and 29 at the Palmas Bellas Farm including some that are classified as endangered by the Panama Ministry of the Environment.

Due to the size and poor accessibility of the Santa Rita farm, endemic species have not yet been surveyed systematically. Staff and night vision cameras nevertheless make it possible to get an overview of the species present. Newly discovered tree and plant species are identified and captured. The knowledge of the indigenous people is also helpful for the identification of local flora and fauna.

To protect biodiversity, staff are not allowed to hunt animals within the project area. Intensive training is provided to build capacity for the maintenance of trees and pest control. In cases of pest infestation, the trees are kept under observation until the use of pesticides is considered necessary. Chemicals, including glyphosate, are applied according to FSC guidelines by trained employees. Protective clothing is provided.

**Biodiversity monitoring**

Futuro Forestal as the forest management company examines the soil quality before buying a project area. This is followed by an annual survey of the diameter and timber height of all the trees. For this purpose, monitoring plots have been planted for each tree species within each tract of land.

In 2015, Futuro Forestal commissioned ANCON, a Panamanian association for the conservation of nature, to conduct a biodiversity study. The purpose of the study, which was financed by a donation, was to investigate the natural regeneration of the plant species and some of their pollinators and seed dispersing creatures (birds only) on the farms.
**Social**

**Local development**

Some of the staff at the farms of Futuro Forestal are employed on a permanent basis, but most of them have temporary contracts of 3-6 months and rarely come from the local villages. Many of the workers return to Futuro Forestal each year. Most of the staff are indigenous people from the district of Chiriquí or Bocas del Toro and not from local villages. This can be attributed to the small number of local villages in the area (Darién) and increasing migration of young workers to towns and cities, as well as the practice of subsistence farming. The local population benefits through the use of infrastructure created by Futuro Forestal (paths, bridges, waterways).

In order to maintain both formal and informal land use rights, when new project areas are being selected, on-site visits by an external lawyer are conducted at the outset. Such dialogue helps to prevent possible disputes with local people over land use rights.

**Working conditions**

Of the 15 people employed in Santa Rita, only two have a permanent position. The others have flexible temporary contracts which allow them to interrupt the contract at their own request during the sugar cane and coffee harvest. This model is especially used by the indigenous employees. They work on different plantations for several weeks during harvesting periods in order to do better paid jobs. Some of the employees have been working for Futuro Forestal for many years. For the new planting and expansion of project areas, additional temporary employees are recruited.

At the beginning of the dry season, 25 people were employed at Palmas Bellas Farm. At the time of the on-site visit, there were only 11 employees, 2 of whom had permanent contracts. During the dry season, when there is only maintenance work to be done, this is carried out by a smaller number of employees.

The employees at the lowest salary level receive the statutory minimum wage of USD 366 per month plus a food coupon of USD 26 to USD 50, depending on their length of service with Futuro Forestal. In addition, the employees are provided with social insurance, preventive health checks, and free housing. Protective clothing is provided. Wages are paid every 15 days and the food coupon cannot be used for purchasing alcohol or cigarettes. This helps to ensure that employees send part of their wages to their families and also encourages a healthy diet.

Employees are legally entitled to an annual four-week holiday which they often use to visit their families. Futuro Forestal tries to retain more productive workers by offering them small houses. Their families can then move to live near the project or they can at least stay in a separate house when visiting.

At the time of the on-site visits, no women were working on the farms. In the nursery and the administration the proportion of women is much higher.

**Capacity building**

Futuro Forestal approaches the challenge of retaining skilled staff by sponsoring school education and/or other training (e.g. obtaining a driving license).

Short periods of training each day deal with various aspects of the work and with safety in particular. There are also regular longer training sessions in skills such as methods of cultivation, the use of tools and machinery, safety at work, fire protection, etc. Employees are trained separately in the use of chemicals.
CONCLUSION

"The financial return [...] is a secondary consideration in relation to the positive ecological and social impact of the investment."

**Investment vehicle**

The Waldmenschen Cooperative is aimed at private investors, foundations and other investors who seek to make an impact through their investment, i.e. those who not only seek a moderate, long-term financial return but are also interested in reforesting degraded land in Panama. The inclusion of institutional investors and unlimited scalability is due to the low and late first distribution of a return improbably. Due to the small size, at least initially, and liquidity issues, termination of membership may not be straightforward or easily possible, but this is clearly indicated in the cooperative’s prospectus.

Overall, Waldmenschen is characterized by high transparency. In addition to detailed documents and a description of the accompanying risks, the financial plan of the cooperative and a cash flow model of the Generation Forest are also provided. The financial return (the first dividend being payable after 20 years) is a secondary consideration in relation to the positive ecological and social impact of the investment. The Waldmenschen Cooperative is trying to adapt the investment vehicle to the structure and characteristics of an intact forest. This distinguishes the concept from investments which try to adapt the forestry to the mostly short-term planning horizon of investors.

**Impact**

Overall, Waldmenschen creates jobs, and the Generation Forest model is ecologically beneficial compared to business-as-usual activities such as teak plantations and agricultural use. In addition, the designation of 30 percent of the project area as a nature reserve is also viewed positively.

Futuro Forestal nurtures its employees and tries to manage the areas sustainably by adhering to FSC standards and minimizing the use of chemicals. For example, the concept of the Generation Forest with native tree species, multiple generations of trees, and nature conservation areas is also regarded positively by the Panamanian association for conservation of nature, ANCON, although the association would rule out the use of glyphosate altogether.

Waldmenschen’s business plan identifies rural poverty as a challenge to be met by the cooperative by providing training and long-term employment for the local population. However, this goal is only partially met, because of the high number of limited-term contracts in Futuro Forestal. On the other hand, the fact that many workers are re-employed each year is to be seen as a positive factor.

Standard monitoring of ecological and social impacts of investment is not well established at Futuro Forestal. Futuro Forestal’s social impact is assessed by Benefit Corporation (B Corp) certification. Waldmenschen eG also aims to obtain B Corp certification. The biodiversity study which has been commissioned provides an initial overview of the different levels of biodiversity in the various project areas, but does not provide a comprehensive picture because of its focus on plants and birds. Further surveys at regular intervals are required in order to assess the impact of the investment.
INVESTMENT

- Cooperative shares
- Service contract

Retail investors Waldmenschen eG

IMPACT

- Sustainable forest management
- Capacity building, health improvement

Futuro Forestal

INVESTMENT IMPACT

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<thead>
<tr>
<th>Service contract</th>
<th>Cooperative shares</th>
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<tr>
<td>Retail investors</td>
<td>Waldmenschen eG</td>
</tr>
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INVESTMENT IMPACT

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<thead>
<tr>
<th>Income from the sale of timber</th>
<th>Dividend after 20 years</th>
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<td>Forest fires, pests</td>
<td>Total loss, illiquity</td>
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Financial Return

Monitoring & Reporting

- Social Reporting Standard
- Annual tree monitoring; One-time biodiversity study

Risks

- Political instability, management skills

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 The Social Reporting Standard is a guide to outcome-oriented reporting for non-profit organizations (http://www.social-reporting-standard.de/en/) developed by Social Reporting Initiative e.V. Benefit Corporation provides a framework and certification for companies wishing to benefit society and their shareholders. B Corp was developed by B Lab which is a non-profit organization (https://www.bcorporation.net/).

Images: I. Armien, Futuro Forestal (p. 2,3,4,5,7); A. Knöchel, Waldmenschen eG (p. 6)