

# Environmental Microfinance

## The Role of Microfinance in Environmental Projects: A Case Study



**Silver Upholders**

*Great Benefits*

### Silver Upholders and the Murchison-Semliki REDD+ project

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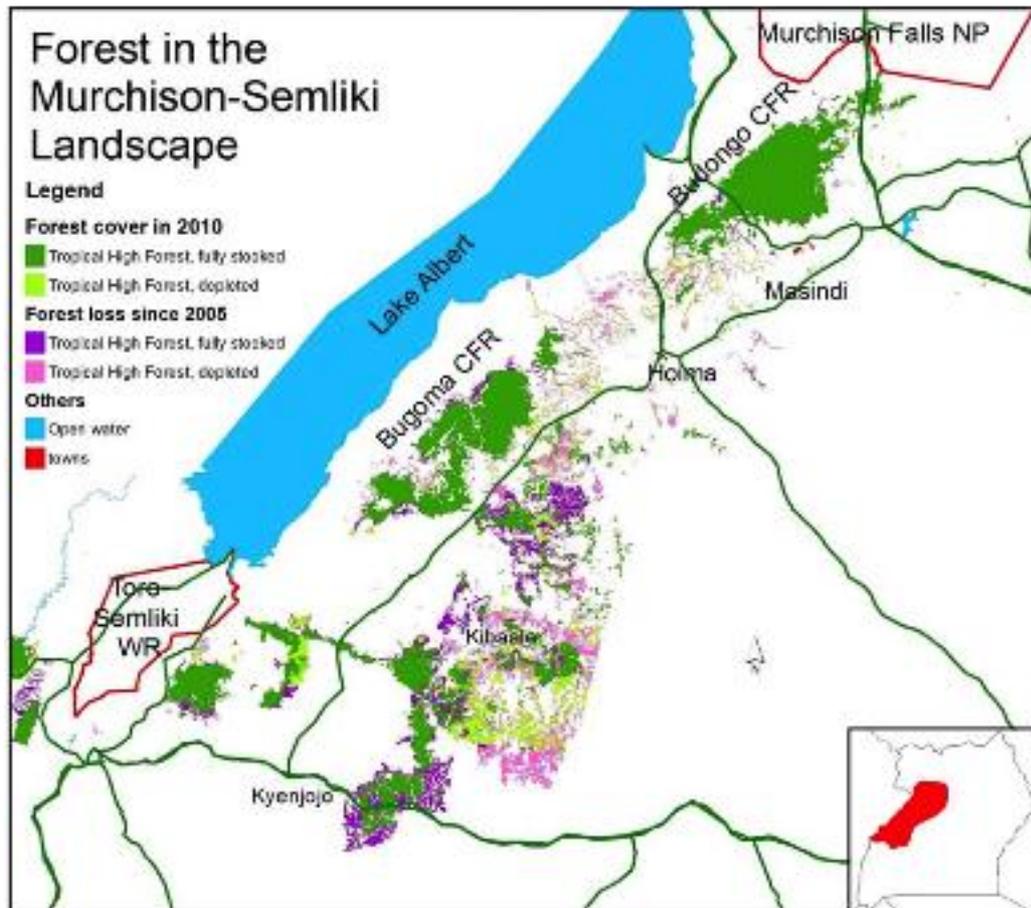


## Summary

Microfinance is increasingly being accepted as a viable and important tool for sustainable development. Silver Upholders, a growing microfinance company based in Kampala were approached and asked to be involved in a Reduced Emissions from Deforestation and forest Degradation (REDD) project, which started as a UNDP/GEF founded Conservation of Biodiversity in Albertine Rift Forests of Uganda project.

The project is expected to be endorsed by the Ugandan government before the end of 2012 and Silver Upholders were eager to identify the possibilities and challenges their involvement in the project would encounter. A research trip to the project area and meetings with

involved parties identified varying perceptions and



possibilities as to the roles microfinance could have in the project, and the feasibility of these are assessed.

This report was written: 1) to increase the understanding of NGOs planning on integrating small-to-medium size microfinance institutions into their projects, and 2) for the use of microfinance institutions participating in REDD+ projects elsewhere. Any suggestions or feedback will be greatly appreciated and may be sent to [silverupholders@gmail.com](mailto:silverupholders@gmail.com)

**Figure 1.** Map of natural forests in Murchison- Semliki area. Dark green: primary forest, lime green: secondary forest, purple: primary forest loss, light purple: secondary forest loss since 2005 (Leal *et al*, 2011)

## Background

### *Silver Upholders*

Silver Upholders is a growing microfinance institution providing micro-loans to women and groups with a low income who are operating or starting micro-businesses in the slums of Kampala. Currently these loans range between UGX 100,000 and UGX 2,000,000 (approximately £25- £500) and the typical businesses include small retail and grocery shops, poultry, urban agriculture, hair salons and seamstresses. The credit we provide is used to diversify and increase their business activities and in so doing help raise living standards and alleviate poverty in Kampala.

### *REDD+*

Deforestation: the permanent removal of forest to another land use type, and forest degradation: the reduction in forests' production capacity, through practises such as destructive logging, agricultural expansion and unrefined charcoal production techniques are responsible for almost 20% of global greenhouse gas emissions; more than the entire global transportation sector.

Reducing Emissions from Deforestation and forest Degradation (REDD) is an initiative using market and financial incentives, such as the carbon market, to discourage forest degradation and deforestation. For example, registered projects that verifiably reduce greenhouse gas emissions are awarded carbon credits that can be sold on the carbon market and raise funds for the project.

The '+' signifies firstly schemes that also include planting forest using native tree species and the secondly highlights co-benefits that range from conserving biodiversity to assistance directed at indigenous populations in the design of sustainable forest management plans aimed at improving livelihoods. REDD+ projects are more sensitive to the numerous services provided by forest ecosystems than Clean Development Mechanism (CDM) projects. Actors such as the World Bank and the UN as well as state actors are funding multiple REDD+ initiatives around the world.

## REDD+ Project in the Murchison-Semliki Area

### *Introduction*

The Wildlife Conservation Society (WCS) was subcontracted to assess the feasibility of REDD+ funding to conserve the last remaining private forests east of Lake Albert. This was part of a larger initiative to conserve the biodiversity in the Albertine Rift forests in Uganda founded through the World Wildlife Fund for nature (WWF) by the Global Environmental Facility (GEF) and the United Nations Development Programme (UNDP).

The REDD+ project area lies between Murchison Falls National Park and Semliki Wildlife Reserve in the West of Uganda (figure 1), which contains approximately 123,000 ha of natural forest with sizes ranging from 4 ha to 3,400 ha. These forests in districts of Hoima, Kibaale, Masindi, Buliisa and Kyenjojo are disappearing at a rate of 8,000 ha per year (Leal *et al*, 2011).

Subsistence farming and small-to-medium scale commercial farming are the leading drivers of deforestation in the region . Population pressure is the underlying factor that equates to a shortage of farmland, and coupled with a widespread lack of knowledge to increase the productivity of existing farmland, conversion of forest to agricultural land is prevalent.

The leading driver of forest degradation is unsustainable harvesting of timber which is frequently indiscriminate of tree species and age; this accentuates the reduced regeneration capacity of the degraded forests. The agents of this deforestation and forest degradation are the resident community members who own the forest; either directly or through allowing neighbours access to their forests (Leal *et al* 2011).

The feasibility report concluded that the carbon revenue generated by REDD would be insufficient to fund all the activities aimed at tackling the causes of deforestation and forest degradation, but in combination with planting schemes such as Plan Vivo and potentially donors to increase the productivity of current agricultural land, the aims of the project may be achieved.

WCS approached Silver Upholders to provide financial services to farmers and forest owners as part of an incentive package to encourage them to participate in the REDD+ project. In the feasibility report, microfinance was seen as important to capacity building in the project area as well as being a transparent and traceable route for carbon finance to reach the private forest owners.

#### *Current structure of environmental activities in the area*

To establish the current structure of activities in the project area and determine the role microfinance has to play in the project, Silver Upholders visited Hoima, one of the target areas of the project, and teamed up with Adrian Nel a PhD student studying community involvement in carbon forestry projects, and representatives of the Jane Goodall Institute (JGI) who are operating in the area. The NGOs primarily deal with private forest owners who are generally farmers by trade.

The current structure of NGO involvement in the project area consists of multiple NGOs working on their own projects with groups of private forest owners, for example:

- The JGI are helping the private forest owners develop their own sustainable forestry management plans. In addition they are providing local indigenous tree saplings for planting as well as quick growing and financially beneficial species such as Eucalyptus and Pine
- Heifer have been providing some farmers with cows
- The Chimpanzee Sanctuary and Wildlife Conservation Trust (CSWCT) have been implementing a Payment for Ecosystem Services (PES) scheme as part of their incentive package to persuade farmers to conserve and increase the c. 800 local chimpanzees' dwindling habitat.

The JGI, as a case in point, have formed Private Forest Owners' Associations (PFOAs) of which there are 13 in the project area encompassing over 1000 private forest owners. Each PFOA meets twice a year and can be mobilised through phone and radio messages for meetings such as the above-mentioned development of sustainable forestry management plans. These PFOAs should be the target for microfinancing services.

#### *The Perceived Roles for Silver Upholders*

The NGOs currently operating in the area are collectively known as the Northern Albertine Rift Conservation Group. They share common aims of encouraging private forest owners to conserve their forest by diversifying their sources of income and sustainably manage their current resources to reduce the pressure on the forest and hence conserve and increase the local indigenous flora and fauna. These NGOs are just acting as a catalyst to spark sustainable forest management but these projects are not indefinite and the NGOs will eventually pull out. Therefore microfinance has a long-term role not only in the provision of financial services to diversify and increase alternative sources of income but also in ensuring these private forest owners have long term sustainable support for these alternative sources of income.

Many of the local stakeholders including the private forest owners, the local Development Officer and a Forestry Consultant contracted by JGI had different views as to how microfinance could provide the greatest benefit with regards to the project:

- Many private forest owners interviewed anticipated using the loans for improving the forest through paying for saplings, and repaying when some saplings reached maturity and could be sustainably harvested. The timescales involved are a minimum of 8 years for Eucalyptus and can stretch to 100 years for local indigenous species. The financial viability of microfinance institutions funding planting schemes is doubtful.
- Using micro-credit to start or increase livestock businesses activities. Short-term loans of 20 or 40 weeks could be suitable, especially for poultry. The sale of poultry mature is one of the approaches to increase the productivity of the existing farmland.
- Using the loans to improve agricultural practises, such as for buying fertiliser and pesticides for increased yields on present farming land. Loans disbursed at the beginning of the growing season and repaid after harvest (generally 6months later) would be suitable. Provision of group loans for buying in bulk should also be considered.
- Providing loans to pay for beehives would help the farmers to diversify their income. Collaboration with a bee-keeping company that can provide training, the hives and associated equipment, as well as an established route to market would be essential. Currently Silver Upholders are in contact with Malaika Honey.
- Using the loans to start sapling nurseries containing cash species such as Eucalyptus and Pine as well as local indigenous trees to expand the forest. Sapling nurseries would need collaboration with appropriate NGOs or institutions experienced in the field to provide training in technical expertise.
- Many private forest owners and farmers lack financial literacy and business skills. Providing financial literacy, planning and budgetary training is crucial to enable the maximum benefits from diversifying their sources of income and reducing their dependence on the forest. The severe budgetary constraints of Silver Upholders' involvement in the project yield implementation challenges. Using field partners is one possible solution. Collaboration with the NGOs currently meeting and educating the private forest owners such as JGI could be a solution; Silver Upholders could train the field operatives in how to impart business skills and knowledge and the course could potentially be integrated into their current sustainable forestry management schemes.

- A long-term loan opportunity suggested was providing loans to promote harvesting, storing and processing medicinal herbs that can be found in the forests. Some of these herbs can be domesticated but again collaboration would be vital. Research institutions are important in finding uses and the domestication of indigenous flora, and expertise would be required in the establishment of processing factories and the marketing to local and international markets. As mentioned previously long-term loans are not financial viable for a microfinance institution the size of Silver Upholders. This kind of enterprise is likely to require a significant amount of investment and until it is up and running is unsuitable for Silver Upholders.
- On a similar long-term note but worth mentioning there is a potential for a huge growth in ecotourism in the area. The 800 chimpanzees in the Budongo and Bugoma areas could be a strong tourist attraction with the right infrastructure, and if the forest owners could establish a corridor forest between Bugonda and Bugoma, tourism could fuel the development of the area. Investment is necessary for feasibility studies, infrastructure, the establishment of trail networks and the training of guides. If ecotourism increased its presence in the area, the direct benefits to the local populations, as well as the small markets that would develop such as catering, local cultural tours and handicrafts would further benefit the regional development. Microfinance could have a significant role in the formation of the associated small markets.

### *Challenges*

Silver Upholders currently have 6 branches in the Kampala area and the loans provided are for urban micro business activities. The repayments of these loans are made on a weekly basis and hence the cash flow of the company is high. High cash flow is vital to a growing microfinance company especially when the demand for loans is greater than what the current capital can provide such as the current case with Silver Upholders. Medium and long-term loans repaid in a single end-of-term instalment, as agricultural and forestry loans generally are, would significantly reduce our cash flow and negatively impact upon our activities and clients in Kampala.

The logistics of Silver Upholders involvement in the project would be very challenging. The transport costs of having an outreach approach are already a huge cost in an urban environment and the transport costs in rural areas would be further accentuated. The rise of mobile money opens up some possibilities for the future of loan repayments but the disbursements of loans would necessitate opening at least a couple of Silver Upholders branches in the project area.

### *Potential Payment Scheme*

In a feasibility study for REDD prepared by WCS and JGI, a payment scheme for delivering carbon finance to the forest owners was mentioned and in a further meeting with the Wildlife Conservation Society the following scheme was suggested:

- If the REDD+ project is successful in its application it receives 5 years worth of carbon credits
- Silver Upholders receives 5 years of carbon finance that it invests into their Kampalan microfinance activities
- Each forest owner can then either receive their carbon credit entitlement for that year or use it as a security for a larger loan/ long-term loan

- The interest earned through the advanced carbon credits used in short-term Kampalan loans would help fund the larger loans to the forest owners, the teaching of financial literacy and business skills, as well as support new Silver Upholders branches in the project area.

This payment scheme could potentially enable Silver Upholders involvement in the project to be financially viable. However there are numerous uncertainties. The project is still in an implementation phase and as such has not been yet registered to be validated. After which in five years Certified Emission Reductions can be generated. Currently, in the absence of an international treaty on REDD+, credits earned through conservation of existing forests can only be sold on the voluntary market, which has been slow. In each REDD project a buffer amount of credits is reserved, which is a protective measure to mitigate the risks of reversals, i.e. unintentional deforestation due to e.g. wildfires.

Projected carbon revenue has been calculated based on historic deforestation between 2005 and 2010, and using a landscape average of 275tCO<sub>2</sub>e per hectare. With a deforestation rate of 8600 ha per year the annual emission is 2.3MtCO<sub>2</sub>e which represents a monetary value of 7.1M USD (gross at the current carbon price of 3USD per credit). The total amount of forest is some 123,000 ha and which will all have been cleared by 2015, which a total landscape emission of 101MtCO<sub>2</sub>e representing at total of 303M USD. The revenue going to the individual PFO will depend on the quality and quantity of the forest.

Despite these large numbers, the revenue is insufficient to finance the incentive package to tackle the deforestation drivers such as agriculture. Therefore, for the implementation phase of the project donor money is needed and some funding has been secured from the Waterloo Foundation in Wales, and other funding will be from Norway, but which is pending on endorsement by the government of Uganda as it has been for over a year now.

### *Feasibility Questionnaire*

Silver Upholders commissioned a detailed feasibility questionnaire to be drawn up to assess the local private forest owners and the financial viability of involvement in the project. The administration of the questionnaire is to be paid for by WCS. The project proposal by WCS is waiting to be approved by the Ugandan government before funding can come through. The budget for the administration of the questionnaire is approximately UGX 8 Million (£2000).

## Conclusions

The REDD+ project is currently stalled waiting for approval by the Ugandan government, and there are many stages still to complete before it approaches full implementation including carbon finance. Silver Upholders have tried to figure out how to establish themselves in the area before the project is underway. Unfortunately everything seems to be happening extremely slowly which is understandable with these kinds of projects where delays can occur at any stage.

To provide the services and financial products that would really benefit the private forest owners, farmers, communities and the project overall, a large amount of capital is required. Silver Upholders has a high cash flow and cannot afford to finance these products and services alone. With regards to the proposed payment scheme no promises have been made and no contracts signed, therefore there is a big 'if' not only as to whether the payment scheme of carbon finance to the forest owners could be paid through Silver Upholders, but

also whether or not it would facilitate the products and services in question. Patience is required until the project progresses and more definite information is available.

The project is a pilot and due to the payment of carbon credits to private forest owners rather than national governmental organisations, there are no comparable projects that have been fully implemented, therefore adaptability and innovation are vital. Aside from attempting to collaborate with Malaika Honey there is little else Silver Upholders can achieve in regards to the project until the project itself is off the ground. It would draw resources away from an expanding setup in Kampala and would have severe knock-on effects on Silver Upholders' existing clients.

When the project is implemented and the funding becomes available, Silver Upholders should carry out the feasibility questionnaire. In addition if the delivery of numerous years of carbon finance to the private forest owners could be paid to Silver Upholders in a lump sum and then distributed to the forest owners annually, the interest on the large single instalment earned through Silver Upholders' urban microfinance activities *could* yield social benefits and poverty alleviation in both urban and rural areas as well as fulfilling their role in the REDD+ project by helping conserve and increase Uganda's natural and diverse forests.

### *References*

Leal, M. E., Akwetaireho, S., Nangendo, G., & Plumptre, A. J. 2011. *Murchison-Semliki Landscape: Feasibility Study for REDD*. Unpublished Report to the UNDP/GEF Conservation of Biodiversity in the Albertine Rift Forests of Uganda Project.