

Green Assets Collateral Management GRACOMA 5th January 2013

Build a collateral management service through local forest stewards "watonza misitu" that will allow villagers to take credits on their trees as they grow.

1. Background

In the southern highlands of Tanzania planting trees has become an important venture by most small holder farmers. It is estimated that by now just as many trees are growing in the southern highlands that belong to small holder farmers as with the large plantations of Sao Hill (government) and Green Resources (private company). Smallholder plantations are a relatively new phenomenon, with the first plantings only about 12-15 years old. Availability of land is (still) not a problem in the area.

The GRACOMA idea was triggered when villagers were faced with the challenge to raise the capital for building dormitories for their children who are attending the secondary schools newly established by the government. Their idea is that the villages will designate land to be forests that are reserved for paying for the infrastructures they will need. This land is then planted with forest trees. The growing trees are then presented as collateral for infrastructure credits to be paid back when the trees are cut after 5-25 years (5 years energy, 25 years timber).

This idea then also spread to private tree plantings as collateral for productive credits. Such tree-credits were discussed for tractors, mills, small irrigation schemes, transport vehicles, solar electricity, windmills, micro-hydro turbines, warehousing structures, local bridges, etc.

Also, poor families can plant trees on school land instead of paying school fees because the school will be able to sell timber, etc.

In short it means: Poor households and youths could plant trees and get productive credits with their own growing trees as collateral.

However:

Nobody will provide credit on a collateral that takes at least 15 years to grow and mature, and is prone to a lot of risks such as illegal cutting, frequent fires, etc. The growing trees need to be reliably protected and monitored to pass due diligence procedures of creditors, ie. what is called "collateral management".

Therefore this business is now being built in Tanzania with the following unique selling proposition:

GRACOMA provides a full package of services that allow credit providers to be sure of correct collateral management of the growing forests on which they provide credits. This is done through real people on the ground who are well trained and supervised by GRACOMA. Strict monitoring is done using high-tech equipment along with on-the-ground monitoring, feeding into a database of remote sensing information and GPS-checked photo monitoring, plus legal documentation of plots. So a commercially viable network of trained people on the ground who have a monetary stake in the survival of the forest is combined with ICT-enabled monitoring. This combination provides the required security for trees to act as collaterals for credit.

2. Business Idea

Mtunza Misitu is a “caretaker of forests” in Swahili. In English “Forest steward”. A forest steward is not a forest guard. A forest guard only protects a forest from trespassing and maybe fire, while a forest steward actively and continuously nurtures and enhances a forest.

Business of Watunza Misitu (Forest Stewards):

Watunza Misitu are independent entrepreneurs based in villages. They sell their services to forest owners and creditors, eg:

- Assist in correctly registering forest plots, eg. on ownership, demarcation, etc.
- Advise on plantations, organize and supervise plantations
- Organize and supervise fire-protection measures
- Do replanting, pruning where necessary etc
- Enhance growth of secondary under-cover trees and other vegetation
- Organize anti erosion measures and spring and stream protection measures
- Enhance wildlife where applicable
- Organize selective harvesting for sustainable forestry (ie. no clear cutting, “plenter” techniques).
- Monitor and document status of forest with cameras from fixed monitoring points, with GPS etc. Send this data to GRACOMA.
- On behalf of forest owners supervise and control harvesting of non-timber forest products.

A Mtunza Misitu is paid each month/year for each tree still growing in the areas s/he is contracted to look after. It is estimated a fully equipped Mtunza Misitu can take care of average 20km² and up to 50km² of forests. This is a full-time enterprise. Payments are by the forest owner. If the forest owner got a credit on the trees, the payments to the Mtunza Misitu are made by the creditor as part of the credit. A Mtunza Misitu can also earn additional income from forest-related ventures such as bee-keeping, medicinal herbs, sustainable charcoal production, etc.

Business of GRACOMA

GRACOMA is a commercial company that franchises a network of licensed independent Forest Stewards. GRACOMA provides collateral management to creditors who provide credit to villages and single farmers on the forests they have planted.

The franchise services of GRACOMA to the Forest Stewards are:

- Training and coaching on the business of being a Mtunza Misitu
- Regular update of skills, new procedures, new equipment, etc
- A brand and its quality control
- Contracts between forest owners and franchised Forest Steward

GRACOMA sells the following branded services to the creditors and/or forest owners:

- Provide legal documentation and registration of stewarded forest plots
- Designate a registered and licensed Forest Steward to take care of the forest plots that are collateral for credits. GRACOMA does the contracting of the Forest Stewards on behalf of the credit providers.
- Facilitate credit agreements between creditors and forest owners
- Monitor credit usage
- Monitor and document status and progress of forests
- Monitor specific criteria for enhanced credits (eg. indicators for wildlife, rare plants, natural forest regeneration, etc).
- Insurances against losses to fires
- Assessments on credit worthiness of villages, rural entrepreneurs, private households, etc.

Financial flows and ideas:

- The business of each Forest Steward must earn enough to be an attractive income source for a committed person.
- Credit volumes can increase along with maturity of trees. But a credit will never be higher than 50% of the estimated value of the timber at harvest. This is in order to ensure a financial punch for the forest owner when harvesting, but also to cover risks.

- Credit defaults are recovered at harvest time of the trees. The remaining 50% allow to not only recover the capital but also the additional accumulated interests. Whatever remains goes back to forest owner. Forest owners don't lose ownership of land.
- Credits always include the full costs of the stewardship by the contracted Forest Steward and the services of GRACOMA.
- Note that a credit does not have to go the full duration of a plantation (ie. at least 15 years). The growing forest stands as a collateral also for short-term loans. After repayment of a short-term loan, a next larger loan can again be taken up on the same forest. If there is a default, the trees remain in custody of GRACOMA until the loan is repaid with interests.
- Note also that the older the trees, the higher the credit can be, but for shorter periods. Older trees can guarantee a higher loan.

3. Operations:

- Each Forest Steward is equipped with a motorbike, a GPS-linked digital camera and ICT-connectivity from the field to GRACOMA.
- Each Forest Steward has his/her own forests that are credited, eg. for purchase-lease of the motorbike, etc. The own forests are monitored by a neighbouring colleague.
- The Forest Stewards are networked and mentored by GRACOMA to allow peer-to-peer learning for sustained capacity building and participatory R&D. GRACOMA manages and operates the exchange network for its franchisees.
- GRACOMA operates an extensive database that can be directly fed from the field by the Forest Stewards with monitoring data for each contracted forest plot.
- Every six months GRACOMA makes a status report to creditors for each contracted plot.
- GRACOMA is in close contact with forest research organizations and with the processing industries (not only timber, also energy, volatile oils, wild fruits, bee-keeping, etc) and with the conservation agencies. GRACOMA also does its own research or collaborates in research efforts to explore profitable and yet sustainable small-holder forestry and community forestry.
- A major exploration by GRACOMA is how to manage the fires required in agricultural operations and reduce the risks of their spreading to trees. And of course in how to prepare for effective and efficient fire-fighting. Also mechanisms for insurance policies against fire are explored and implemented by GRACOMA
- Status of contracted forest plots is monitored through diverse channels that must combine to give a correct picture, ie: regular photo monitoring on the ground by Forest Stewards with photos linked to GPS data, satellite imagery and aerial photography, possibly also drone-photography, on-site visits by GRACOMA staff, cross-site visits among the franchisees, etc.

4. Legal

- The Forest Stewards hold a simple registration with TIN with their district
- GRACOMA is presently a locally registered small company and will grow into a shareholder company

5. Launching

GRACOMA was launched as a small local company by Bahat Tweve in Mafinga, coached by RAVI. At present the two first Watunza Misitu are recruited, both from Magunguli village. They have begun to build the operational elements of the GRACOMA service, ie. plot registration, monitoring and experimentation in small holder forestry for both timber and energy, etc. It is foreseen that both of them become future trainers/coaches of further Watunza Misitu. It is envisaged that they will come to the Emmental in Switzerland to study and learn the practical aspects of mixed smallholder plenter-management of forests. For this already connections exist between the Emmental and Magunguli with the intention of a long-term partnership.

As a first phase the operational details of GRACOMA and the Watunza Misitu are being explored and implemented with an action-research kind of approach ("Participatory Technology Development"). It is estimated that this pilot effort must include about 5-10 initial Forest Stewards who each get a training and then are contracted to be stewards of a designated forest (estimated at about 1km² each to begin with, later expanding up to 20km² per Forest Steward). The continued regular coaching of the Forest

Stewards must show how GRACOMA will operate the mechanisms of continuous participatory R&D and the learning peer exchange.

Simultaneously the documentation and monitoring for the first forests is being explored and implemented.

Also, to explore and test the operations, first credits must be forthcoming, both for community forests (eg. for paying for a dormitory of a secondary school or for a drinking water supply scheme or irrigation infrastructures) as well as for individual credits such as for trucks or motorbikes, etc. The credits to the initial 5-10 Forest Stewards of the pilot shall be the very first credits, eg. for purchase-lease of motorbikes.

6. Scaling up

Will only be attempted after initial pilot has shown what the challenges are. It is expected that capacitation and credit-tracking will be the main bottleneck. In both cases the peer-exchange platform is expected to be of crucial importance to provide the required capacity building in a complex rural environment. When scaling up it is foreseen that the operation of the credit facility to forest owners will have to be a separate effort to be split from the core GRACOMA business of collateral management. However, for the duration of the pilot phase a close integration of credit disbursement and collateral management is in order to see how the interactions work out.

7. Role of RAVI

RAVI is the incubator for this venture. This means RAVI provides conceptual and procedural support, linkages to interesting methods and persons and institutions, financial channels for getting started and coming up with an investment proposal for commercial investors to come in. RAVI itself aims to have a commercial stake in GRACOMA, either with equity or otherwise. However, the majority of shares in GRACOMA shall be owned by Tanzanians.

8. Next steps

1. The already initiated efforts will continue at whatever level and speed is affordable with the local funding that is available.
2. RAVI searches for grants or social venture capital to be able to do the experimentation and the capacitation of the Watunza Misitu and build and test the operational procedures of GRACOMA. Detailed proposals and their budgets can be provided.
3. RAVI searches for loans to provide first credits based on growing trees as collaterals (eg. credits for trucks, pumps, dormitories, irrigation, etc). Here too detailed proposals can be provided.

This concept note belongs to RAVI and Bahat Tweve and will only be discussed with any outsider if both agree to discuss it with that outsider.