

Market Survey on Possible Co-operation with Finance Institutions for Energy Financing in Kenya, Uganda and Tanzania



February 2010

Phyllis Kariuki

Kavita Rai

Other Contributors:

Felistas Coutinho, Anna Mulalo and Jon Gore (Tanzania)

Hidde Bekaam and Andrew Obara (Uganda)

Table of Contents

Acronyms.....	3
Executive Summary	4
1 Introduction.....	5
1.1 Study Outputs.....	5
1.2 Financing Models	5
2 Overview and access of the financial sector.....	6
2.1 The Financial Sectors	6
2.2 Overall Access to Financial Sector by Population	8
2.3 Rural versus urban access to Financial Access.....	9
3 Lessons on energy loans from selected Financial Institutions.....	11
3.1 Kenya - Muramati SACCO Kenya (Solar Home Systems)	11
3.2 Kenya - Faulu Kenya MFI (LPG)	12
3.3 Kenya - Small and Micro Enterprise Programme (Solar PV Lantern)	12
3.4 Kenya - Muramati SACCO (Mini-Hydro).....	13
3.5 Kenya - Githunguri Dairy Farmers / Oikocredit (Biogas).....	14
3.6 Kenya - Kenya Womens Finance Trust.....	15
3.7 Tanzania - FINCA Tanzania (Solar)	15
3.8 Tanzania - CRDB Bank (Solar).....	16
3.9 Tanzania - Tujijenge Micro Finance (Solar).....	16
3.10 Tujijenge Tanzania.....	17
3.11 Tanzania - SACCOS in Arusha previously under Promotion of Renewable Energy- (PRET)	17
3.12 Uganda - FINCA	18
3.13 Uganda Micro-finance Ltd (UML).....	19
3.14 Uganda - Grofin Uganda Ltd.....	19
4 Current obstacles and considerations for scaling up financing of energy products and services.....	20
4.1 Current obstacles for consumers.....	21
5 Possible Lending Models.....	22
G. Additional Lending model for Financial Institutions in consumptive (investment) lending (PRET Model from Tanzania)	28
6 Conclusion: Potential Financial Institutions for Partnership.....	32
6.1 Kenya	32
6.2 Uganda.....	34
6.3 Tanzania.....	37
7 Reference.....	38
ANNEX 1 – List of financial institutions with energy portfolio (or those with potential)	39
Kenya.....	39
Uganda	42
Tanzania.....	44
Annex 2: Conditions for lending for Microfinance institutions	45
Annex 3: Conditions for lending in Banks	46
Annex 4: Conditions for lending for SACCO.....	46

Acronyms

AFC	Agricultural Finance Corporation
ASCA	Accumulated Savings and Credit Associations
AMFI	Association of Microfinance Institutions
BDS	Business Development Service
BOT	Bank of Tanzania
BRAC	Bangladesh Rural Advancement Committee
CBO	Community Based Organization
CMC	Capital Micro Credit (a Web-based Microfinance platform)
DEEP EA	Developing Energy Enterprise Project in East Africa
FINCA	Foundation for International Community Assistance
GoU	Government of Uganda
GVEP-I	GVEP International (Global Village Energy Partnership)
IFC	International Finance Corporation
FI	Financial Institution
FOSA	Front Office Service Activities
KADET	Kenya Agency for Development in Enterprise and Technology
KCB	Kenya Commercial Bank
KPOSB	Kenya Post Office Savings Bank
KREP	Kenya Rural Enterprise Program MFI
KES	Kenya Shillings (1 USD = ~75KES)
KWFT	Kenya Women Finance Trust
LPG	Liquid Petroleum Gas
MFI	Micro-finance Institution
MSME	Micro, Small and Medium Enterprises
MyC4	Company that facilitates micro credits via the Internet to small businesses in developing countries.
NCKC	National Council of Churches of Kenya
NGO	Non Governmental Organizations
NMB	National Microfinance Bank
PRET	Promotion of Renewable Energy Tanzania
PRIDE	Promotion of Rural Initiatives and Development Enterprises
PVMTI	Photovoltaic Market Transformation Initiative
ROSCA	Rotating Savings and Credit Associations
SACCO	Savings and Credit Cooperative
SILC	Savings and Internal Lending Cooperative
SSBE	Small Scale Business Enterprise
SMEP	Small and Micro Enterprise Programme
TMF	Tujijenge Micro Finance
TZS	Tanzanian Shillings (1USD = ~1375 TZS)
UGX	Uganda Shilling (1 USD = ~1875 UGX)
UML	Uganda Microfinance Ltd.
VSLA	Village Savings and Lending Associations
WEDI	Women Enterprise Development Institute

Executive Summary

This report is a consolidated report of three market studies conducted in Kenya, Uganda and Tanzania to examine how GVEP-International could work with Financial Institutions (FIs) and Micro and Small and Medium Enterprises (MSME) so as to increase the access for investment finance and stimulate demand for energy products. It is part of a USAID funded Energy Sector Grants Program project.

The study generated data from conducting desk reviews and structured interviews with a variety of financial institutions. Among the institutions interviewed were Micro Finance Institutions (MFIs), Savings and Credit Cooperatives (SACCOs), Banks, Microfinance Wholesaler, Microfinance Advisory/Consultancy Organization, energy product suppliers and energy MSMEs.

Lending in all the three countries fitted mainly into 3 brackets:

- i. Financial institutions directly regulated by the Banks
- ii. Formal institutions such as MFIs and SACCOs, and
- iii. Informal lending organizations like Rotating Savings and Credit Organizations (ROSCAs).

Energy financing by all the above financial institutions that support the MSME sector is at infancy in all the three countries with Kenya slightly ahead of Uganda and Tanzania. Most commercial banks or MFIs do not have a specific energy portfolio but lend as part of the range of working capital and asset finance products. Currently, most of the end user finance in the energy sector is for solar lanterns or home systems, generally for domestic use.

The report expands on the current barriers to scale up lending for energy enterprises, which include, a) a lack of available financing at all levels; b) inadequate capacity within the lending institutions; and c) a lack of awareness of the technologies within the financial institutions as well as the consumers. While this report touches on all three of these constraints, the focus will be on the first constraint – the *lack of available financing* – and the steps necessary to stimulate the supply side financing for energy MSMEs.

For this study, surveys have been conducted in Kenya, Uganda and Tanzania, analysing 12, 13 and 8 financial institutions in the respective country.

Case studies provide examples of implementation but also show the difficulties and barriers that still need to be overcome in the relationship between financial institutions, energy retailers and consumers. Based on the experiences, 7 probable models of working with FIs, Suppliers and Service Providers are outlined in the report, with a conclusive section on potential FIs that could be approached for partnership on starting or expanding an energy portfolio. The existing opportunities are untapped as key challenges need to be overcome such as capacity building the FI and stakeholders, consumer awareness (market demand enhancement), quality product supply assurance and importantly, provision of necessary technical maintenance and back up support by the energy product suppliers.

1 Introduction

Access to clean energy technology and sustainable energy services can play an important role in rural and peri-urban development in East Africa. Often, the lack of adequate supply of capital to both energy entrepreneurs as well as the rural and peri-urban consumer is perceived as the critical restraint that prevents the widespread use of modern energy. This study was conducted to establish how GVEP International can work with Financial Institutions (FIs) and Micro and Small and Medium Enterprises (MSME) in order to increase the access for investment finance for energy MSMEs and stimulate demand through consumer financing initiatives. It is believed, that in due time, once an energy market is developed, FIs will assist the clean energy sub-sector at all levels with financial services to develop its full potential market in rural and peri-urban regions in East Africa. The study is an initial output of a project funded by the USAID Energy Sector Grants Program.

The purpose of the study was to review the available range of energy portfolios currently being financed by FIs and the challenges encountered to stimulate the supply side of access for energy MSMEs.

1.1 Study Outputs

The following were the key outputs expected from the study.

- Possible scenario of energy product portfolio
- Produce a list of FI's with a real interest to set up energy portfolios
- Determine appropriateness to taking part in the capacity building programme of lending structure to energy products
- Draw up different lending models and the conditions required with examples wherever information exists.
- At least 1-2 suitable lending models for approved/proven technologies specific to the three countries

1.2 Financing Models

The following financing models were to be considered as a base for the study and to come up with additional ones:

- Bank/MFI *lends to* Technology Supplier/Distributor *lends to* Consumers *and/or* energy entrepreneurs.
- Bank/MFI *lends to* MSME *lends to* end consumer
- GI Loan Guarantee > SACCO *lend to* Consumers.
- GI Loan Guarantee > Supplier/ Distributor *provide retail credit to* end consumers and entrepreneurs.
- Bank/MFI *lends to* MSME's (investment loans)

2 Overview and access of the financial sector

2.1 The Financial Sectors

Lending services to MSMEs are often provided by the following four sets of FIs:

- i. **Formal Institutions** who in this case represents commercial banks regulated and supervised by the Central Bank. Formal banks are often reluctant to make extended efforts for small loans and while there are notable exceptions, rural and peri urban clients often find that banks have complicated and lengthy procedures to access loans. Formal financial Institutions particular banks are not attractive to MSMEs especially start-up enterprises since entrepreneurs lack adequate collateral and credit history and therefore perceived as high risk by the mainstream banking sector.

In Kenya, as of June 2009, the banking sector comprised of 43 commercial banks, 2 mortgage finance companies, and 123 foreign exchange bureaus. The sector witnessed an increase in the branch network from 772 branches in June 2008 to 930 in June 2009 representing a growth of 20.5%. One microfinance institution, Faulu Kenya was issued with a license that allowed it to take deposits from the public. The bank also approved 29 business names of applicants seeking to operate as deposit taking MFIs. Assets of the banking sector rose by 15% from June 2008 to stand at KES 1,263 billion in June 2009, which included deposits at KES 954 billion. The banking sector in Kenya continues to be dynamic with many banks showing interest in lending to SMEs in Kenya.

In Uganda, as of early 2010, there were 23 commercial banks with over 400 branches, 3 Microfinance Deposit taking institutions (Finca Uganda, Pride Microfinance and Uganda Finance Trust), 2 development banks (East African Development Bank and Uganda Development Bank), 4 Investment Banks, and 123 licensed foreign exchange bureaus, of which 92% are located in the capital Kampala.

In Tanzania, as per the Ministry of Finance, there are 20 licensed commercial banks of which 9 are foreign owned, 6 joint venture, and 5 locally owned. They operate under the guidance of the Banking and Financial Institutions Act of 1991, and are closely monitored and regulated by the Bank of Tanzania. The sector is largely private owned by local and foreign investors. Under the Act, banks are free to determine the level of interest rates based on market forces.

- ii. **Other formal financial institutions** who are not regulated by the Central Bank but are otherwise registered under various government laws. These include: Microfinance Institutions and Savings and Credit Cooperatives.

In Kenya, as at June 2009, it was estimated that commercial banks, MFIs, SACCOs and the Kenya Post Office Savings Bank (KPOSB) had over ten million accounts. The number of commercial banks down streaming their business to include microfinance business particularly to low income households and micro and small enterprises continues to increase

making the size of microfinance business to grow rapidly. The number of microfinance business practitioners operating in the country is largely unknown. However the Association of Microfinance Institutions (AMFI) as at 31st December 2008 had registered 45 members. Thirty-six AMFI members are retail MFIs with approximately 1.6 million active deposit accounts/clients. The value of total deposits held by AMFI members excluding commercial banks stood at KES 15.8 billion in 2008 with active loan clients numbering 1.3 million. Total loans disbursed during 2008 stood at KES 47.5 billion. These 36 AMFI members operated a total 825 branch offices in 2008.

The number of registered SACCOs as at December 2008 stood at 5,350. The SACCOs serve an estimated 6.19 million members with outstanding loan portfolio and shares and deposit base amounting to KES 105 billion and KES 177 billion respectively. SACCOs in the country have mobilized a large deposit base and hold 30% of the national savings in the country.

In **Uganda**, the Association of Micro Finance Institutions in Uganda [AMFIU] is the main umbrella organisation of MFIs in the country. It is a member-founded institution formed in 1996 and officially registered in 1999 under the NGO act as company limited by guarantee. The aim of AMFIU is to share experiences and promote professionalism in the Industry. Under AMFIU, membership as of April 2009 stood at 117 institutions, with 79 MFIs and 30 associated members supporting MFIs.

The Uganda Cooperative Societies Statute of 1991 and the Cooperative Societies Regulations of 1992 govern SACCOS in Uganda. SACCOs have been viewed as accelerators of development in the rural areas to the extent that in August 2005 the cabinet passed the SACCO Plan in order to develop infrastructure of SACCOs through Rural Financial Service Programs (RFSP). The number of registered SACCOs was 3881 in 2009 with mobilized savings of over 100 billion Ugandan Shillings and 5878 registered producer cooperatives as at 2009.

In **Tanzania**, the Semiformal and Informal FIs composed of Rotating and Accumulated Savings and Credit Associations (ROSCA's and ASCA's respectively), and other group (Village Savings and Lending Associations) or individual based schemes including shylocks. There are currently about 5300 regulated SACCOs. In addition, there are also the following:

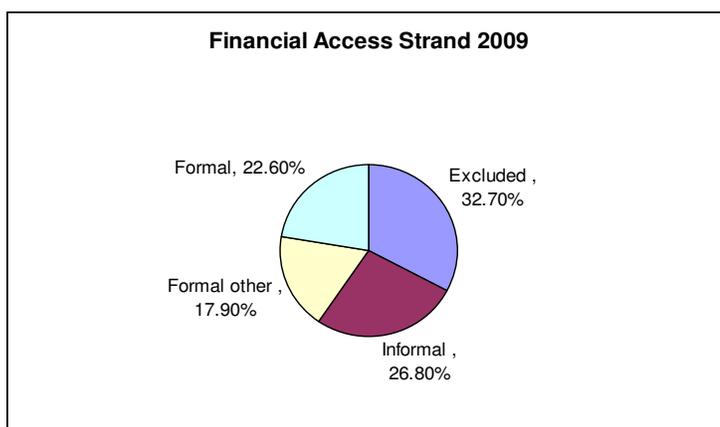
- Community Based Organizations (CBO) and NGOs that have financial schemes, which is classified as informal. According to the Central Bank of Tanzania, there are 53 Non-Governmental Organizations offering financial services, 1 financial service association in Mwanza region and a total of 45 Community Based Organizations¹.
- Government Programs/ schemes: The Central bank of Tanzania shows that there are 105 Government Programs and schemes in the financial sector.

¹ Data from *Tanzanian Microfinance Institutions Directory, 2005, Bank of Tanzania*. The numbers must have increased over the last years.

The Association of Microfinance Institutions in Tanzania (TAMFI) is the umbrella organization for Microfinance organizations and has a membership of thirteen organizations. According to the survey information sources, there should be a minimum of 30 MFIs operating in the country. Banks under TAMFI include: Access Bank, Akiba Bank, Dar es Salaam Commercial Bank and Mbinga Commercial Bank.

2.2 Overall Access to Financial Sector by Population

Most MSMEs meet their financial needs through these institutions in all the three countries. A 2009 FinAccess Survey report from the Kenyan Central Bank sought to examine access to financial services in **Kenya** by the adult population. It classified access using the following categories of institutions; access to formal, formal other, informal or those excluded from the three. *Formal* access was classified as use of bank, Postbank or insurance products, *formal other* was classified as the use of SACCOs and MFIs, while the *excluded* were those that did not have access to any of these categories.



Source: FinAccess Survey Kenya. 2009

Results from the survey showed that only 23% of the adult population in Kenya have access to *formal* financial services, 18% accessed *other formal* financial services, whereas 27% relied on *informal* financial services. Meanwhile a third of the population does not have any access to financial institutions is altogether *excluded*. The findings highlight the increasing importance of other financial institutions apart from the mainline commercial banks in reaching Kenyans. In comparing trends, the usage of non-bank financial institutions has more than doubled from 7.5% in 2006 to 17.9% in 2009, which can partly be attributed to the M-PESA payment system through mobile phones that was developed by Safaricom.

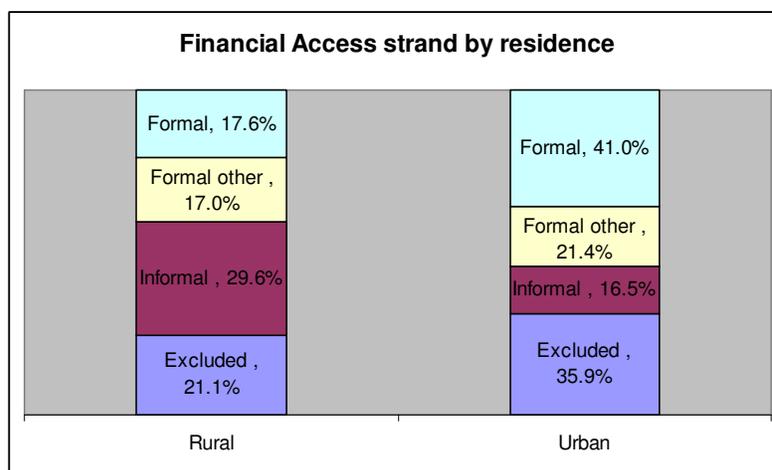
In **Uganda**, a 2007 Finscope survey² showed that 18% had access to formal FIs (Banks, MDIs), 3% had access to Semi Formal institutions (SACCOs and MFIs), 17% to informal groups (ROSCAs, ASCAs, and VSLAs) and 62% were financially unserved. Similarly, in **Tanzania**, a

² See <http://www.finscope.co.za/uganda.html>

2007 Finscope survey³ showed similar figures with 9% served by formal FIs, 2% by semi formal, 35% by Informal groups and the rest 54% were excluded.

2.3 Rural versus urban access to Financial Access

Access to financial services improved both in rural and urban areas; in urban areas access to formal institutions increased from 32% in 2006 to 41% in 2009. The majority of those living in the areas relied on MFIs, SACCOs and groups to access financial services (47%) with only 18% relying on formal institutions showing the growing importance of these institutions in rural areas.



Source: FinAccess Survey Kenya, 2009

The microfinance industry in Kenya comprises of institutions registered and regulated/supervised under different legislations:

- Commercial banks such as Ecobank or Equity Bank.
- Development finance institutions such as the Agricultural Finance Corporation (AFC) and Kenya Post Office Savings Bank (KPOSB).
- Deposit taking microfinance institutions such as Faulu Kenya.
- Non deposit taking microfinance institutions in different forms such as company trusts and NGOs, SACCOs, ASCAs and ROSCAs, and money lenders among others.

Structures in Uganda and Tanzania are comparable and can also be divided along the same lines: a formal banking sector, consisting of commercial banks and SACCO's and informal lending.

³ http://www.finscope.co.za/documents/2007/FSAC07_006.pdf

In **Tanzania**, the Finscope survey presented the following data for access in terms of rural and urban residence, much lower in than in Kenya.

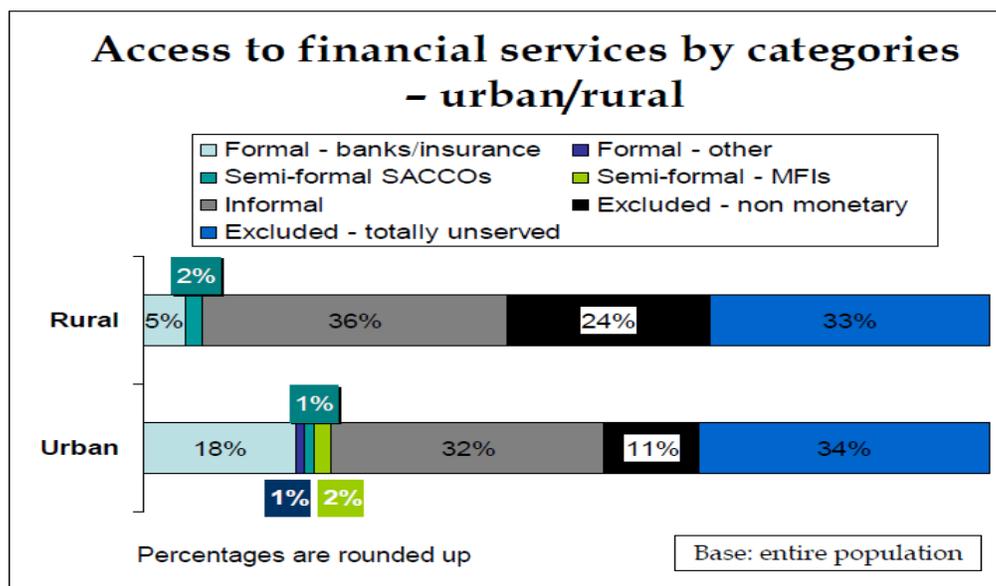
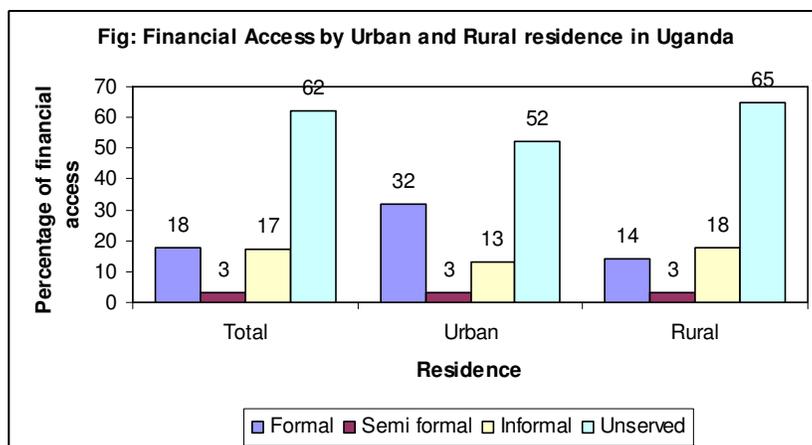


Chart 3-5: Access to financial services by categories - urban/rural

Source: Financial Sector Deepening Trust, Finscope E-Book, 2007, FSDT, Tanzania

The figures show a difference especially to access of formal institutions between the rural and urban areas. The survey showed that a quarter of the rural population and a tenth of the urban population use only non-monetary services and a large proportion continues to be un-served in both rural and urban regions. In **Uganda**, the figures (see below) are similar to Tanzania, with the high un-served population in urban areas, higher than in Kenya and Tanzania.



Source: Adapted from the Financial Access Survey for Financial Sector Deepening, Uganda, 2007, Steadman Group

The results of the survey showed that in the western region of Uganda, the population was four times more likely than those in Central Kampala to be included via the semi-formal sector

explained by the higher prevalence of SACCOs. Education was one of the key factors influencing the access to formal financial sector in all countries.

In Annex 1, some tables are presented on the relevant FIs in Kenya, Uganda and Tanzania and highlight some features of these examples, such as their lending products and requirements. It should be noted that these institutions have a variety of products available to the sector. The table therefore highlights features that are characteristic of their lending to micro and small enterprises.

3 Lessons on energy loans from selected Financial Institutions

3.1 Kenya - Muramati SACCO Kenya (Solar Home Systems)

In Kenya, the Muramati SACCO undertook the Muramati Solar Home Systems Project under the Photovoltaic Market Transformation Initiative (PVMTI) an initiative of the International Finance Corporation (IFC) and the Global Environment Facility (GEF). The PVMTI project at Muramati SACCO aimed at developing a retail and service network as well as providing loans to members of the SACCO to enable them to afford the purchase of a solar home system. The role of Muramati SACCO was to provide credit using its lending mechanisms. At the start of this project in 1998 the SACCO had 15,000 registered members, which was a strong point in its consideration to participate. The agreement of the project was that Muramati would provide the credit to its members for the purchase of the Solar PV systems and ASP Ltd., a solar company who would supply the solar panels.

Challenges encountered:

- The SACCO went out of its way to market and promote the project even flexing some of the loaning procedures to accommodate the project at times leaving itself exposed to risks coupled by the fact that the SACCO was the only one daring enough to expose itself to risk as it was the only SACCO piloting the project.
- In the project design, a supplier was allocated to the SACCO, implying that the SACCO could not deal with any other supplier. On the other hand the supplier was providing his supplies at market rates with an aim of maximizing returns. As the project evolved one challenge with this arrangement emerged. Members of Muramati felt that the supplier was more expensive than what other suppliers in the market were offering.
- The Solar Company that was supplying did not have the capacity to sustain such a project (selling PV panels, providing technical services, installing and fixing problems). There were notable gaps in the supply chain. Even though 10 local technicians had been trained there was not enough work to maintain them. In addition there were delays from the time the loan was approved and installation of the solar panel.

- Local capacity, supply networks, service and maintenance issues are very crucial for the success of such a project-we majored on provision of funds, partnerships and left out those mentioned factors and learned a hard lesson
- A lot of work was put to safeguard funds on both the side of Muramati and IFC but an enlightened end user appears to be the best safeguard. More work could have been put in training clients.

The lengthy process made most of the initial setups challenged by the present-issues like pricing, supply chains and networks as planned then could not stand the test of time.

3.2 Kenya - Faulu Kenya MFI (LPG)

Faulu Kenya MFI was able to create an LPG portfolio that saw the sale of 5,000 units of LPG gas cookers which were packaged and branded as a loan with an interest rate of 10% and a loan repayment period between 6 months and 12 months. Most of its clients were women. This portfolio recorded a 100% repayment rate.

Kenol/Kobil were the suppliers of the LPG cooking gas; Faulu provided credit to its clients as well as handling loan repayments and reconciliation.

Challenges encountered:

- Some problems were encountered in the distribution of the LPG because of the time lapse between the time a loan was approved and the distribution. Kenol/Kobil was working within its distribution network and therefore caused delays in the supply process. In cases where a delivery was to be made in a route their vehicles were not passing, Kenol/Kobil were not flexible enough to handle such situations.
- The demand started to get too high for Kenol/ Kobil to be able to deal with and especially in towns where they did not have an efficient distribution network in place.
- Faulu Clients started demanding for a variety of LPG gas cookers since Kenol/Kobil did not have filling stations in all towns in the country.
- Internal challenges of handling back office paperwork and reconciling accounts of the supplier/ Faulu and clients. More staff was hired to help in this while the supplier also had similar problems and had to create a department to handle this.
- Faulu Development Finance Officers (loan offices/credit officers) already had products that they were selling and saw LPG product as an addition to their work, therefore some of them were not keen on selling the product.

3.3 Kenya – Small and Micro Enterprise Programme (Solar PV Lantern)

The MFI Small and Micro Enterprise Programme (SMEP) have partnered with Solar World to offer solar PVs and have packaged a loan called Solar loan. SMEP has packed the solar product as a

consumer product where clients of SMEP can access a loan for a solar PV and a solar lantern. The solar PV loan features are as follows: KES 6,000 (~US\$80), loan duration of 6 months at an interest of 10% flat rate. The solar lantern is often sold cash at KES 2,500. Clients apply for the solar PV loan using the group guarantee method since the MFI uses the Grameen lending approach where clients pay either Bi- weekly or monthly. In addition SMEP uses its normal loan delivery channels to market and promote the solar loan. Solar World has installed demo kits at some of their rural branches for promotion purposes.

3.4 Kenya - Muramati SACCO (Mini-Hydro)

The Muramati SACCO has a portfolio that finances micro-hydro installations through funding community-based initiatives. The SACCO has funded 6 community mini-hydro projects at different phases of implementation. The Gatura branch has funded two mini hydro plants, the Kahatia branch funds two mini hydro plants and two mini hydro plants are funded by the Kiriani branch. Only one has been completed so far. The purpose of the mini-hydro projects is solely for consumption purposes; however the completed project at Kahatia is selling hydropower to the community health centre with hopes of distributing power to interested people in the community.

With overall costs for installations being high, completion of the mini hydro projects takes time, as members need to borrow money from the SACCO in phases. In most cases, members borrow money every year and pool their borrowed money into the project. The SACCO on the other hand loans money to individual group members based on ability to pay, which is mostly pegged to tea yield and payments. In addition the SACCO collects loan repayments directly from tea factories where those who have taken loans sell their tea crop. Tea payments are usually made to the farmers on monthly basis, a mini bonus payment is made to farmers in April while a main bonus payment is paid to farmers in September. The SACCO tailors its project payment loans around the mini bonus payout and the major bonus payouts therefore the loan is paid only twice i.e. with two repayments. Normally one third of the loan amount is deducted from the mini bonus payoff and two thirds of the loan is deducted in the main bonus payout. After the SACCO has recovered its loan amount it then gives members of the project another loan to continue with the project, this explains why the time it takes for the community to accumulate the necessary funds is as long as six years. In the implementation of the mini hydro projects, members of the group agree how much each person should put on the table at different phases and then each person borrows from the SACCO.

The two groups in Gatura have a membership of 900 members; the two groups in Kahatia have a membership of 100 members while the 2 groups in Kiriani have a membership of 5,000 members. The groups in Kiraini are building a big dam and have received a grant from their local Community Development Fund (a Government devolved fund) to support their efforts though each member individually borrows from the SACCO.

The SACCO has advanced a total of KES 3 million to the mini hydro projects and still has pending applications from other members to fund the same.

Challenges encountered:

The biggest challenge to the members is that it takes a long time to complete a mini hydro project. The SACCO on the other hand is not willing to lend the whole mini hydro project amount up front because of risks associated with funding community projects, and owing to the fact that the projects are for consumption.

The SACCO only lends to individuals who then need to pool their funds, instead of lending to a group or a project. Loan guarantees from donors could potentially have a big impact and encourage SACCOs to lend to such larger projects.

3.5 Kenya - Githunguri Dairy Farmers / Oikocredit (Biogas)

The Githunguri Dairy Farmers Co-operative Society started in 1961 and has a membership of 12,000 smallholder dairy farmers. It is located in Kiambu a peri-urban area. Milk collection, processing and marketing is the core activity for Githunguri Society but it also provides other services, such as feedstock supply stores for its members. The society approached Oikocredit for a loan of KES 70 million to purchase milk processing machinery. This increased the capacity of the milk processing and resulted in higher income for the society and the farmers. With more income the society, it set aside a portion of the loan from Oikocredit to lend to farmers for the installation of biogas digesters.

Loan agreement: Oikocredit gave the society a loan of KES 70 million payable in 3 years at an interest rate of 10% with quarterly repayment instalments. The loan was fully secured using the processing plant machinery as security. Additionally the board members gave personal guarantees to further secure the loan. The arrangement was such that the capacity building arm of Oikocredit were charged with the responsibility of monitoring the loan to make sure it was utilized for the right purpose.

The beneficiaries were about 500 smallholder farmers out of 12,000 members who received loans for installations of biogas digesters. The society recovered the loan at source from milk payments to the farmers and paid back the loan in 3 years as had been agreed with Oikocredit.

Challenges encountered:

- Initially some farmers were reluctant to take the loan because they were not sure if the biogas would work and allow them to repay the loan. After 500 farmers installed biogas the demand for the same increased and is still increasing among farmers.
- Lack of awareness of the biogas technology and very few capable companies that can handle installation and maintenance.
- The management of the society is not keen on accessing another loan to fund biogas to its members partly because the board of directors do not want to guarantee the loan and they now want to focus on their core business of milk packaging. Additionally, biogas loans were generated as a side product.

3.6 Kenya – Kenya Womens Finance Trust

Kenya Women Finance Trust (KWFT) is a woman led MFI with membership of over 200,000 women. It was established in 1981. KWFT has clustered the country into 9 regions with 111 offices, 72 units and 39 desks. This has made KWFT to serve its members better as financial services have been taken to the grassroots level. KWFT works mainly with low income groups. In addition, they had initiated a renewable energy programme supported by IT Power with funding from Shell Foundation. The pilot project was labelled a success where over 5000 women accessed LPG for cooking, over 250 households installed solar PV systems and 13 LPG enterprises have been set-up. The project has so far been mainstreamed as one of the core product of KWFT. By virtue of dealing with low income people in the rural areas, provision of modern energy services is core and plans to scale-up the initiative is on.

Challenges encountered:

KWFT experience in enhancing energy access agenda has been faced with the following challenges:

- Poor quality products that have been eroding the consumer confidence. For example, they were promoting solar lanterns but the quality was so poor that the number of returns was so high and they had to withdraw the product.
- Lack of sufficient and qualified technicians in the field who could be used to install the systems. As most of the solar companies are based in Nairobi, delivery of orders takes time before the consumer can have solar PV installed.
- Lack of technical knowledge and awareness of appropriate technologies available. For example, how to take advantage of abundant clay that is used for making ICS liners; Misconception that LPG is more expensive than kerosene.
- Affordability: High upfront cost of modern energy technology – could only be solved through distributed payments.
- Access: Supply chain development – all the key companies dealing in solar products are based in Nairobi with dealers' network in major towns, there is a need to enhance access to energy products.

3.7 Tanzania - FINCA Tanzania (Solar)

In Tanzania, FINCA and CRDB Bank have tried to lend to energy enterprises through pilot tests that lasted two years each but both faced the problem of requiring collateral from the users or businesses as borrowers mostly came from low end income earners in the rural areas without adequate assets to pledge. FINCA also did not consider the equipment that was bought, such as solar PV systems, as part of the collateral, which made it very difficult for customers to meet the banks requirements. Also as so often, buy-in by the bank staff was lacking as the energy products were more complicated to manage than their regular products.

Challenges encountered:

- The only successful example in Tanzania that has achieved some scale was the '*Promotion of Renewable Energy in Tanzania*' (PRET) project in 2007/2008 but it was very short lived and so continuity by market forces also quite limited. Local capacity, supply networks, service & maintenance issues were found to be crucial for the success of such a project.
- The lengthy process made most of the initial setups challenged by more pressing issues like pricing, supply chains and networks that did not work out as planned. The local solar industry is fast on taking up projects and giving a lot of lip service to proper supply linkages and networks but are thoroughly wanting on the depth of management, service delivery and objectives-most of them will rush to get a piece of the cake but will run away fast and label things as failed when required to break sweat to get the coveted cake.
- Success or failure of such a project requires a thoroughly efficient localized network of supply, installers, service & maintenance as other factors to which a lot of emphasis was laid play only a peripheral role.

3.8 Tanzania - CRDB Bank (Solar)

CRDB Bank is one of the largest commercial banks in Tanzania. The Bank provides commercial banking services to individuals and small to medium sized corporate clients. Its total asset valuation is over USD 1 billion and maintains over 54 branches in all regions of Tanzania. CRDB provides salary loans, individual loans to those with productive businesses and with adequate collateral, and to well run profitable SACCOS.

The interest in lending to energy dealers was brought up in a UNDP project that provided a cash guarantee of TZS 60 million so that CRDB could lend to energy dealers in Mwanza. The dealers would need to have a profitable business and with adequate collateral. Individual loans were designed for this following their regular individual lending products.

Challenges encountered:

The entrepreneurs that applied for loans had no collateral or bankable business plans. However, the CRDB needed to abide by the BOT regulations regards securing of loans before disbursement. This led to only one person being able to borrow money in year one, and in year two the guarantee was passed on to SME lending instead, leading to 5 loans, using a different commercial loan model for individual customer. Repayments for four out of five have been good. Very small amounts of loans were applied for that did not make business sense to provide considering the appraisal efforts undertaken.

3.9 Tanzania - Tujjenge Micro Finance (Solar)

Tujjenge Micro Finance is a company that provides microfinance to its customers in its four branches, Dar es Salaam, Kyela, Musoma and Bunda. It currently serves a total of 3,000

customers with an outstanding portfolio totalling 500 million TZS. Tujijenge is currently testing asset lending of solar equipment in its Kyela branch under the stewardship and sponsorship of Micro Energy International. They are using a two handed model whereby TMF provides financing on one hand, and SEF Trust provides Technical assistance for sizing, installation and after sales service. TMF provides salary loans, individual business loans and group loans.

Challenges encountered:

- FIs lack of knowledge about technology, cannot advise customers accordingly
- Lack of knowledge about sizing of solar systems
- Lack of reliable local technicians
- Lack of financing

3.10 Tujijenge Tanzania

Tujijenge Tanzania is a microfinance institution working out of two branches and serving over 10,500 customers all in Dar es Salaam. Tujijenge Tanzania solicited for debt finance from E&Co so that the company could continue to provide financing to the Arusha communities after the PRET project ended. Financing from E&Co has been approved so the company is ready to start operations in Arusha focusing on renewable energy technologies. Tujijenge Tanzania is not yet providing energy loans but hopes to start in 2010.

Renewable energy financing fits into key value to work towards a sustainable environment. It is also an opportunity to help improve people's lives as their mission is to improve lives through microfinance. They will focus on both consumer and productive solar loan systems. Lending model that Tujijenge Tanzania will use is to lend to end users through groups and SACCOS and to link up with dealers and suppliers like Chloride Exide and D.light.

Challenges encountered:

Staff exposure and understanding of the energy product is limited. The high cost of monitoring and access to finance the solar loans are still challenges that Tujijenge Tanzania are trying to overcome. .

3.11 Tanzania - SACCOS in Arusha previously under Promotion of Renewable Energy- (PRET)

The PRET project was owned and funded by the Ministry of Minerals and Energy (MEM) with financing from BMZ and overseen by GTZ regarding the operational management. The plan for the project was that it was managed by someone appointed by GTZ who was supposed to work hand in hand with ELCT energy department and leave the operations running under a local unit, unfortunately this did not happen due to numerous challenges faced in getting management in place, so the project was closed after its life of 3 years. PRET worked with 18 SACCO's regarding the financing of solar equipment. 465 household systems were directly installed. The SACCO's

that took part had typically at least 100 members each, and total deposits of at least TZS 5 million. Teacher's SACCOs seemed to do better than average because of the steady monthly income from salaries. The top four currently active were contacted to gauge their interest in taking part in solar financing with support in capacity building and awareness and all four were positive. The SACCOs financed their members and each had their own repayment terms that suited their members. The SACCOs worked closely with the technicians and dealers that PRET had trained and developed a relationship with.

These SACCOs are located in off-grid areas so the need for solar financing cannot be over emphasized for both consumer and productive lending purposes.

Challenges encountered:

- Lack of adequate deposits to finance the big upfront costs
- Accessibility of local technicians to provide advisory support is limited
- Fake products on market
- Enforcement of guarantees placed by dealers

3.12 Uganda – FINCA

FINCA Uganda Ltd, started in 1992 and is a private limited company registered as a microfinance and micro deposit taking institution that provides services ranging from village banking and working capital, solar and gas loans, village phone loans, savings accounts, special loans, micro-health loans and money transfer services. It has over 150,000 clients in Uganda, mostly women. FINCA provides solar (approximately 600 in portfolio) and LPG loans to its clients. FINCA loans on average amount to USD338. Loan terms are upto 2 years maximum. FINCA also provides business management skills to its potential and existing clients. While it envisioned that clients would use the SHS to power their homes, many clients used the SHS in their businesses. In a number of cases, clients actually developed new business lines, such as cell phone charging services. FINCA has room to develop other products under the vibrant product development unit.

Challenges encountered:

- The financing needs for energy products require long loan tenure.
- Quality assurance of products and services
- Conditional Financing making the cost of credit lines high.
- Lack of technical knowledge by the MFI in assessment of energy needs.
- Meeting end users expectations.

In 2009, FINCA Uganda in association with Micro Energy Credits (MEC) started a carbon financed energy portfolio but the feedback received during this study period was that the process was very detailed and cumbersome. Results have yet to be seen.

3.13 Uganda Micro-finance Ltd (UML).

In 2005, UML a private share company was officially launched, eight years after the United Microfinance Union (UMU) began operations as an NGO. UML offered micro leasing as a convenient way for low income people to acquire assets; equipment, machinery and motor vehicles without requiring Collateral. Uganda Micro Finance Ltd. was bought by Equity Bank in 2009. UML in partnership with the Bank of Uganda and the Private Sector Foundation (PSF) supported the rural electrification programme by financing solar energy systems through micro leasing. The home Improvement loans were tailored to the promotion of solar usage in the rural homes. Under this arrangement one could acquire solar equipment for business and domestic purposes with the equipment purchased serving as the collateral. The client was required to pay to UML a small deposit of 20% of the cost of the solar system in addition to the set up fees and insurance for the equipment. UML would then purchase the equipment from the solar dealer and instruct the dealer to install it at the client's premises. Once the system is installed and certified, the dealer was paid. The lease period ran from 6 to 24 months.

However, the **challenges** of lack of quality of equipments, lack of knowledge amongst UML staff on the solar products and technology, and the high costs of solar equipments were some of the main problems they encountered leading to the failure of the energy portfolio. In addition, product guarantees were rarely passed on to the consumers. In addition, the resale value of the solar products was poor – in general Uganda has an active second hand market (consumers ranked solar PV lowly in comparison to other household goods which can be sold quickly to save the family). On the other hand the micro-financiers, for the same reasons, categorized solar PV as carrying a high credit risk. During the study, UML Management was keen to start another energy portfolio as they have learnt lessons from the previous one.

3.14 Uganda - Grofin Uganda Ltd

Grofin Uganda is a private company that deals with fund management. They manage funds for Shell foundation, Deutsche Bank among others. As fund Managers, Grofin provides capital to business persons who may not be able to get financing through the normal banking system. They offer loans and business development assistance. Grofin offers capital from USD 50,000 up to USD1,000,000. With the Shell foundation fund, they have a target of offering at least 40% of all Shell funds to energy businesses.

Challenges encountered:

- Have many requirements hence they end up raising the interest rates to over 25-28% per annum.
- With energy SME development, Grofin finds that most energy Enterprise are micro in scale and operate way below the Grofin USD 50,000 lending limit.

4 *Current obstacles and considerations for scaling up financing of energy products and services*

In the section above, the challenges encountered by all the Financial Institutions that operated or are operating energy portfolio show some commonalities and there needs to be much more support provided both to the FIs as well as the enterprise or the clients. Some of the key considerations for the financial institutions in providing energy solutions are:

- **Concerns on the quality and reliability of the equipment provided:** This was the most common obstacle that an FI faced. Poor quality products eroded the consumer confidence. Also, FIs were flooded with the return of the equipments if quality was poor and this became a problem. One of the key steps that an FI needs to take in seeking new partnership is to make sure that the quality of equipment supplied and a compulsory guarantee period becomes key considerations.
- **Risks with supplier arrangements:** The FI should consider more than one supplier as was experienced by one of the FI in Kenya. The lone supplier was maximising his returns and members felt that the supplier was more expensive than others in the market. However, having more than one or two technology product supplier could be complicated, and if this is the case, needs to be well designed, and product ranges needs to be defined with appropriate guarantee periods.

The FI needs to be also aware that any supplier company/ies chosen have a wider range of network branches in the regions or countries they are operating in. Often, companies that did not have sufficient capacity to sustain a portfolio particularly after sales services delayed the installations and loan approvals. This was common both to solar and LPG portfolios.

- **After sales service:** As most of the suppliers are based in urban areas, the FIs who serve a large number of rural clients in Kenya were concerned that certain equipment had to be brought all the way to Nairobi in case of a technical breakdown. The ability of the company to provide technical services especially in the rural towns was of concern and needs to be addressed. The importance of after sales service was pointed out by all the FIs specifically in the solar and biogas portfolio.
- **Affordability:** In Kenya energy financing to the small and micro entrepreneurs among those institutions surveyed ranged at KES 25,000 (US\$ 300) for a period of one year on average. Energy solutions must therefore be affordable to the majority of these entrepreneurs. The high upfront costs of some of the technologies can be solved through distributed payments.
- **Collateral:** If loans get bigger and above the range of SACCOs, the ability of the client to provide collateral for the loans granted becomes important. However, some of the banks are willing to explore the option of guarantees provided by a partner so that it can expand its lending to the sector without taking the additional risk associated with lending to an unknown field.

- **Training** and raising awareness of the technologies, both for the clients and the financial institution staff is important in order to set up energy portfolios in these institutions and overcome perceptions of low quality equipment. The lack of technical knowledge by the MFI in assessment of energy needs often makes it an additional activity thereby deterring them from continuing an energy portfolio.
- **Local capacity, supply networks, service & maintenance** issues were found to be crucial for the success of such a project. In Kenya, a lot of work was put to safeguard funds for Solar Home Systems from Muramati SACCO with IFC support but an enlightened end user was found to be the best safeguard. More work should have been put in training clients.
- **Energy Portfolio as a special activity:** One of the problems with this concept is that the FI could promote the product and make flexible arrangements for the energy portfolio. This could expose the FI to risks. One SACCO did not want to take the portfolio further as they thought that it was not a core activity and wanted to focus their loans on their own activities. Sustenance of energy portfolios have always been an issue.
- **Time scale for large energy projects:** End use consumer financing and financing larger energy projects can be very different. While energy product financing such as solar home systems, LPGs or biogas may be done within shorter time periods, large project financing such as a hydro project will definitely take a longer time span first to build the project and then returning the loans. It was found that for such cases, loan guarantees from donors could potentially have a big impact and encourage the FIs to lend to larger projects.
- **Long term vision required.** The financing needs for energy products are bigger and require long loan tenure. For this to be effective, the energy portfolios need to be designed with a longer term vision. Most FIs are under pressure to do small deals on loan guarantees supported by a particular donor over a particular period of time. They are therefore short lived and often not sustained, mainly because of some of the challenges mentioned above.

4.1 Current obstacles for consumers

- **Lack of adequate deposits** to finance the big upfront costs
- **Accessibility** of local technicians to provide advisory support is limited
- **Lack of adequate awareness and knowledge on reliable equipment/products**
- **Fake products** on market
- **Enforcement of guarantees** placed by dealers
- **Consumers preferences of financial attributes**
 - Loan size should cover all costs of turnkey system
 - Should be of 12 to 24 months repayment period
 - Should have warranty on all parts
 - Should have after service as part of the package
 - Repayments should be monthly or for areas depending on agriculture should be lump sum during harvest.

5 Possible Lending Models

One of the main outputs of the study has been the development of a number of financing models that could be stimulated. A strong recommendation is that GVEP-I take a flexible approach to managing the fund, so that it is tailored to the needs of specific types of business e.g. retail /producer and type of energy product e.g. consumable / durable. To achieve this, the following ranges of 7 models are proposed. Each pays particular attention to roles of each potential party involved, and their incentives to participate, as well how to minimize the rise of default.

Product Financing (Solar, Institutional Stoves, Biogas, LPG)

The following models target provision of credit for energy products; either to retailers, consumers, or producers.

A. GVEP-I Guarantee > Urban Product Dealer > Rural Enterprise

The model aims to increase uptake of imported energy products (e.g. solar lanterns, or solar home systems) by providing products on stock to rural enterprises, so that they can retail products to end-consumers. A number of energy products imported into Kenya by urban product dealers are believed to be in high demand in rural areas. However, many consumers cannot readily access them since retailers/installers with the capacity to stock products simply do not exist. By enabling urban dealers to provide stock on credit to rural retailers this barrier can be overcome.

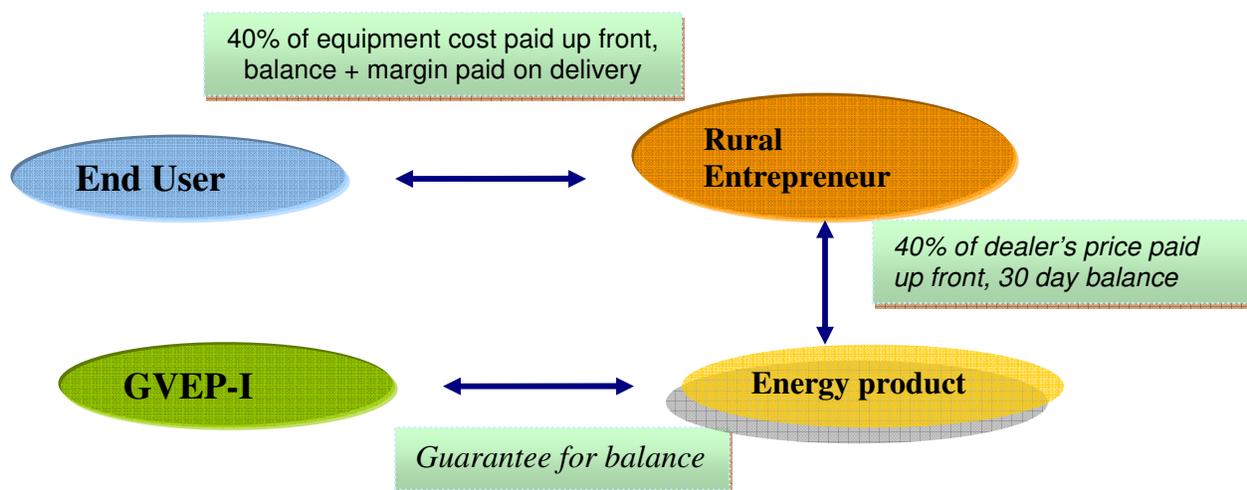


Figure 1: Dealer Guarantee Model

Incentives to participate:

- *For End-user.* Can buy a system without having to pay for it all up front.

- *For Rural Micro-enterprise:* Can better meet client needs (i.e. more sales) and develop relationship with trusted supplier. **N.B.** Cannot make profit until receives payment from customer.
- *For Urban Product Dealer:* Sells more systems and develops relationships with more clients whilst risk of default is minimized. N.B. Consider ensuring guarantee covers only value of stock, not lost profit if there is no payment

B. GVEP-I Guarantee > Bank > Urban/Rural Producer > Consumer

In this model producers would be supported to produce more durable energy products (such as institutional stoves or biogas systems) by receiving a bank loan to cover the cost of production on proof of demand from customers. The producer could choose to pass on the credit to trusted customers (e.g. schools, institutions). This would increase uptake since institutions (schools) may not have cash up front, but could fund product from energy savings.

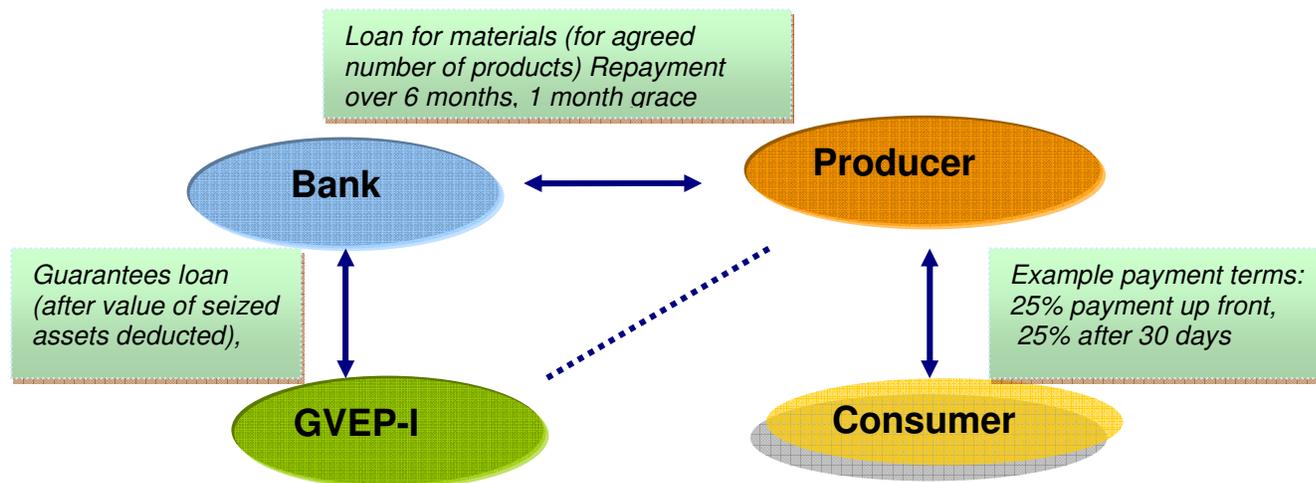


Figure 2: Producer Product Guarantee Model

Incentives to participate:

- For end-user: Can get needed energy product on finance. Quality/efficiency of equipment is assured. N.B. Asset can be seized in event of default
- For producer: Can increase sales to trusted customers. N.B. does not make profit until customer has paid back
- For bank: Gets more business N.B. guarantee should be structured so bank does not profit unless producer pays back loan

C. GVEP-I Subsidy > MFI > Consumers

In this model GVEP-I would directly provide a 1-off 'smart-subsidy' to assist an MFI in setting up an energy portfolio. A number of MFIs are known to be interested in offering targeted energy product loans direct to their customers (e.g. biogas, solar home systems), but are facing barriers to starting up. For example, the subsidy could fund a dedicated marketing/training officer to start up the programme within the MFI. It is believed that uptake of energy products by consumers is currently limited by knowledge of and availability of financing, and therefore such a scheme with a large MFI with national presence could work well.

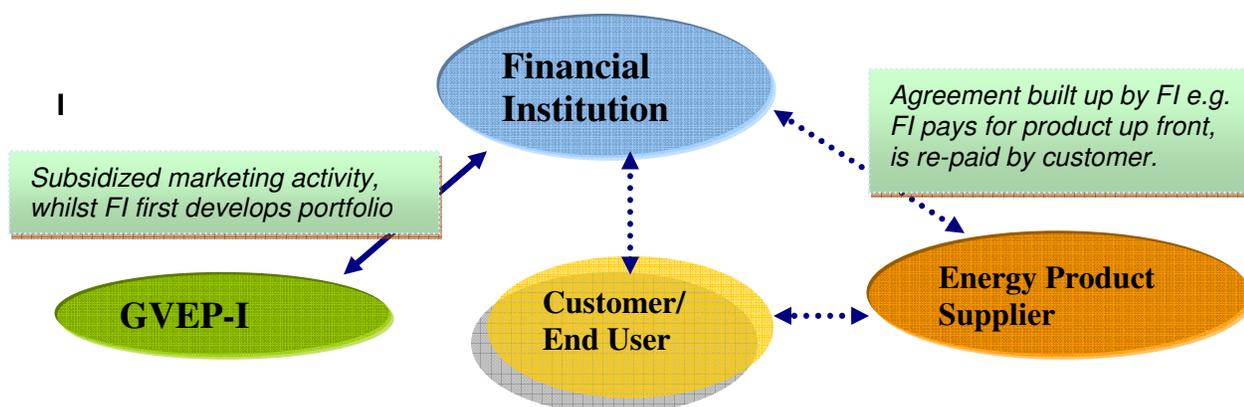


Figure3: Smart Subsidy to Financial Institutions

Incentives to participate:

- End-User: Can now get the energy product up-front and re-pay over fixed period of time (e.g. from cost-savings)
- MFI: Is able to make money/fulfil objectives by selling energy products – after given initial stimulus

D. GVEP-I On-Lending Fund > MFI > Consumers

Another way of working directly with MFIs would for GVEP-I to provide wholesale credit for on lending, restricted to an energy portfolio (or indeed go through another agency to provide this). Again, if GVEP-I works with a large national MFI, such an approach could have a big impact. It may be necessary to pay a fee to the FI for managing the fund. Incentives to participate:

- End-user: Can now get energy product up-front and re-pay over fixed period of time (e.g. from cost-savings)
- MFI: Makes money from lending GVEP-I's money to customers, builds portfolio it can take over

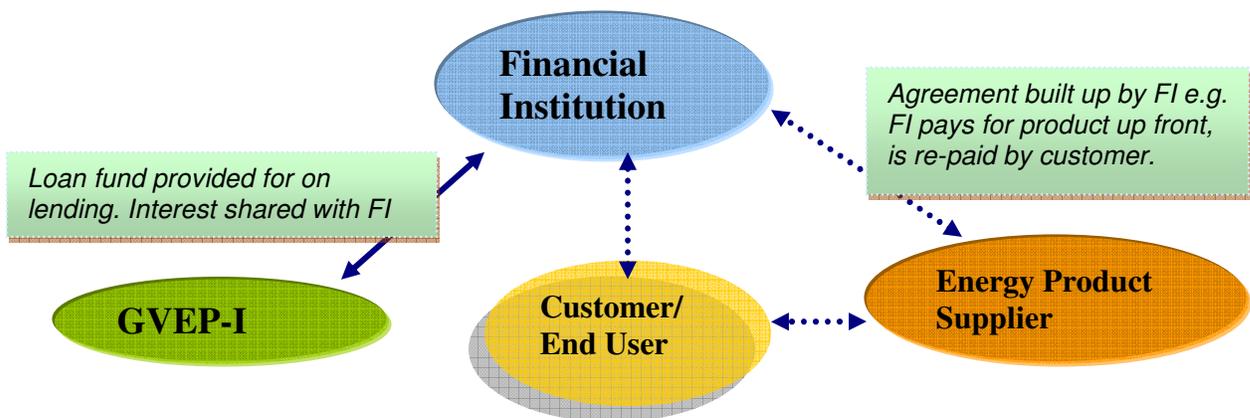


Figure 4: On-Lending by FIs

Asset Financing (briquettes, ICS liners)

The following models are based around enabling producer SMEs to expand through financing of key assets such as machinery.

E. GVEP-I Loan Guarantee > Bank > MSME

In this model, producer SMEs are supported to expand their business, leading to the more efficient delivery of energy products to customers. In many rural areas, availability of energy products such as briquettes or even improved stoves is low. Such a model could help overcome this barrier.

Incentives to participate:

- End-user: Increased availability of energy products, at better prices
- Micro-Enterprise: Can increase production/profits. N.B. if there is default on payment, assets can be seized by bank
- Bank: Gets more business, expands micro-banking whilst risk of default is mitigated. N.B. if there is default guarantee could be structured to ensure bank does not make a profit

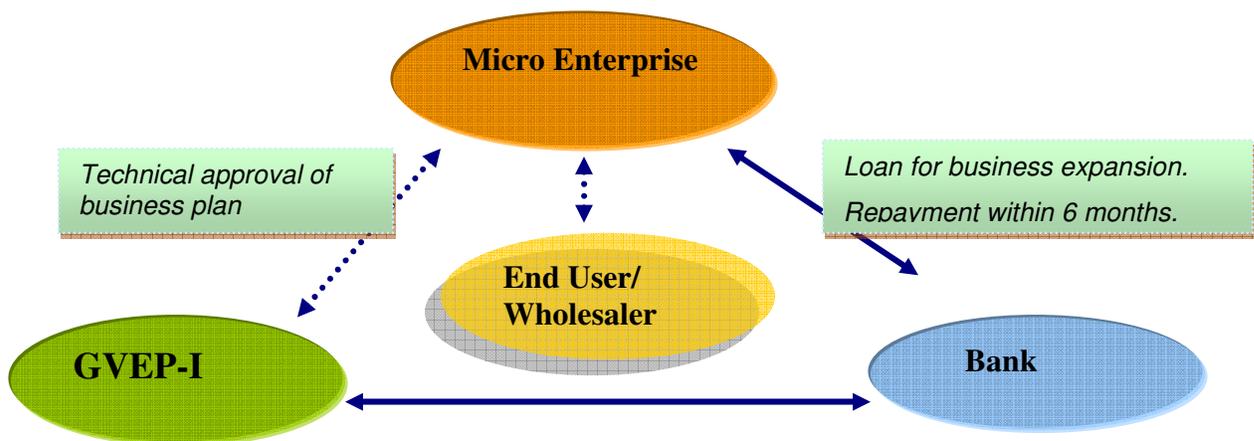


Figure 5: Business Expansion Loan Guarantee Model

F. GVEP-I Loan Guarantee > Bank > Equipment Manufacturer > MSME

A variation of the model is to work with manufactures of equipment who in turn work with micro enterprise in need to equipment to expand their enterprises(e.g. briquette press manufacturer). In a similar way to model B, a bank loan could be facilitated covering the material cost of the equipment

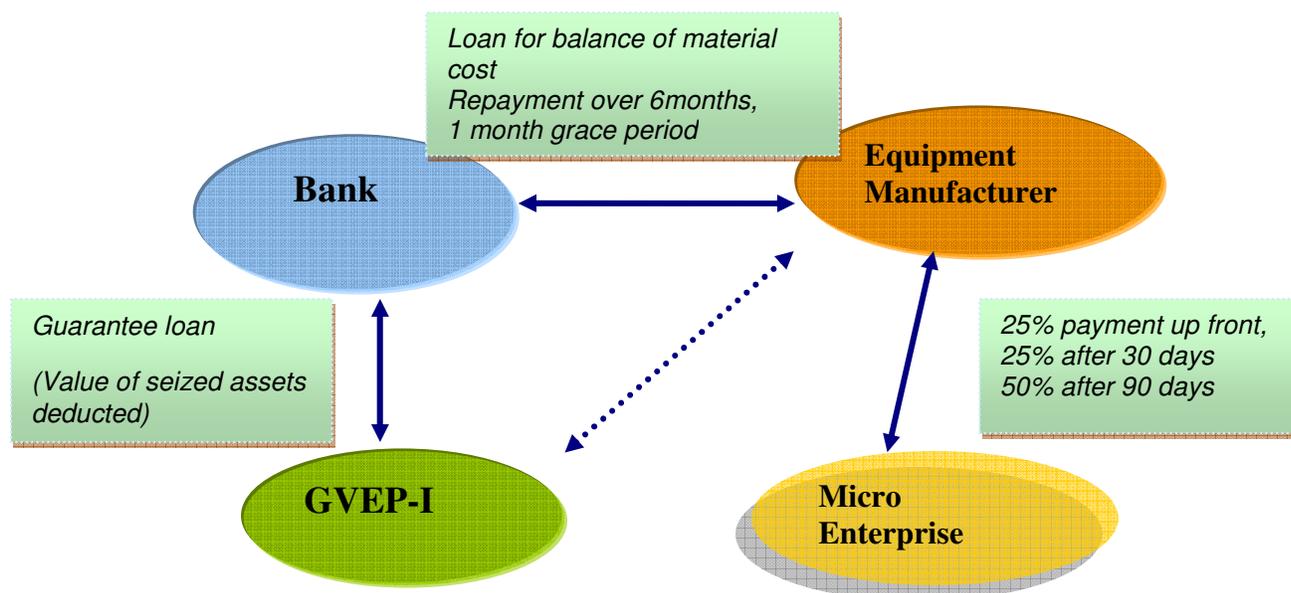


Figure 6: Machinery Loan Guarantee Model

Incentives to participate:

- Micro-Enterprise: Can get needed equipment on finance. Quality/efficiency of equipment is assured. N.B. Asset can be seized in event of default
- Equipment Manufacturer: Can increase sales to trusted customers. N.B. does not make profit until customer has paid back
- Bank: gets more business. N.B. guarantee could be structured so that bank cannot make profit unless manufacturer pays back loan

Summary of Models

	A) Dealer Guarantee	B) Producer Product Guarantee	C) Smart-subsidy to MFI	D) On-lending by MFI	E) Business Expansion Guarantee	F) Machinery Guarantee
Linkage with USAID project:	Enable financing for Entrepreneurs	Enable financing for Entrepreneurs Number of Households / Micro-enterprises with access to affordable modern energy products	Number of Households / Micro-enterprises with access to affordable modern energy products	Number of Households / Micro-enterprises with access to affordable modern energy products (Enable financing for Entrepreneurs	Enable financing for Entrepreneurs
Technology targeted:	Solar (e.g. 50W home lighting systems, lanterns)	Institutional Stove, Biogas	Solar, Biogas, LPG	Solar, Biogas, LPG	ICS Liner, Briquette (e.g. liner firing kiln / mixing equipment / compaction machine / working capital)	Briquette, Sustainable Charcoal (e.g. briquette press, high-efficiency charring retort)
Loan giver:	Urban product dealer	Bank	MFI	MFI	Bank	Bank
Loan receiver:	SME, Retailer	SME, Producer	Consumer	Consumer	SME, Producer	SME, Equipment Manufacturer
End-user:	Rural households: e.g. off-grid rural areas near to small towns	Rural and peri-urban institutions and households			Rural and peri-urban households and institutions	

G. Additional Lending model for Financial Institutions in consumptive (investment) lending (PRET Model from Tanzania)

FI & Rural FI > Energy Technology Supplier > Rural Energy Service Provider > Client

The model tried out in Tanzania by the GTZ project – Promotion of Renewable Energy in Tanzania (PRET) can be divided into two specific sections: Market development and Market expansion.

Market Development:

The typically urban-based supplier is reluctant to take initiative to reach out to the rural client. This must be understood because of the high costs involved to reach out to a rural clientele with low purchasing power. The rural client is in a similar dilemma, which has to undertake the trouble to reach to a distant place, often unfamiliar and has insufficient knowledge of buying products that may be advantageous. Additionally, the cost of such an endeavour restricts the effectiveness of such a notion.

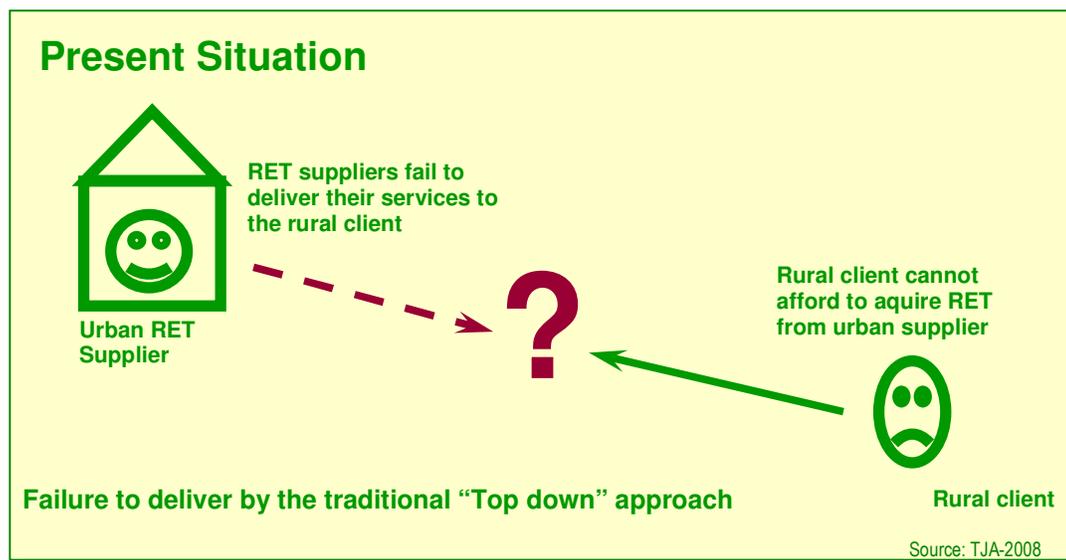


Figure 7: Gaps in current supplier client models

To solve the dilemma in an energy-specific setting the following approach can be employed:

A **Rural Energy Service Provider (RESP)**, can be an individual, or a business, be it an existing diversifying or a start up, or any other construction as long as the following criteria are met:

- A RESP must be within reach of the rural client.
- A RESP must be able to strike a deal with the supplier who is typically based in an urban location. Such deal includes the supply of goods and - ideally – payment can be delayed for an agreed period of time.

- A RESP must be able to handle precise and effective communication and be able to arrange transport of goods to his location. Ideally, there is a close cooperation with the supplier who puts goods on a bus and the bus notifies the RESP when the destination is reached.
- A RESP must be able to market itself in the rural setting
- For technical services, which require expertise, which he is not capable of, the RESP must have technicians available (on demand). The technicians act in many cases as go-in-between RESP and Client and do extend the outreach of the RESP. The technician also may derive their living from other activities.
- Goods and services of the RESP are paid for strictly in cash or equivalent in other commodities, but never on credit. Thus the economic survival of the RESP is insured.
- It is assumed that, especially at an early stage that such an enterprise is providing a limited income, which must be supplemented by other economic activities or subsistence farming.
- The rural client may make use of the goods or services as s/he deems fit, may it for consumptive use or to boost his economic activities.

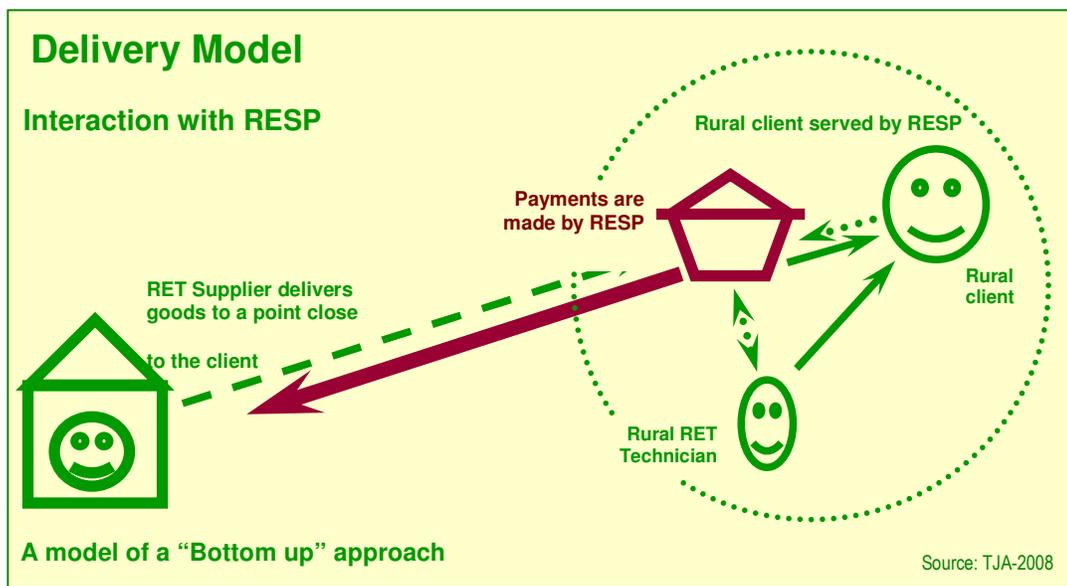


Figure 8: Bottom up model

Market expansion: The **function of the FI** needs to be two-fold:

- To enhance cost-effectiveness through facilitation of joint consumer / investor purchases – thus generating business of scale. This makes it attractive for the energy business to move to remote areas without having to burden an individual client with the high resulting costs.
- To enhance the purchasing capacity of the individual client through extension of credit for consumptive or investment purposes.

In addition, it must be pointed out that the reasons for failure of energy portfolio was because credit was extended without insuring that prior a market was well developed⁴. The results of the model show that if the market becomes well established, rapid expansion would follow after credit has been extended to the rural and peri- urban consumer/investor.

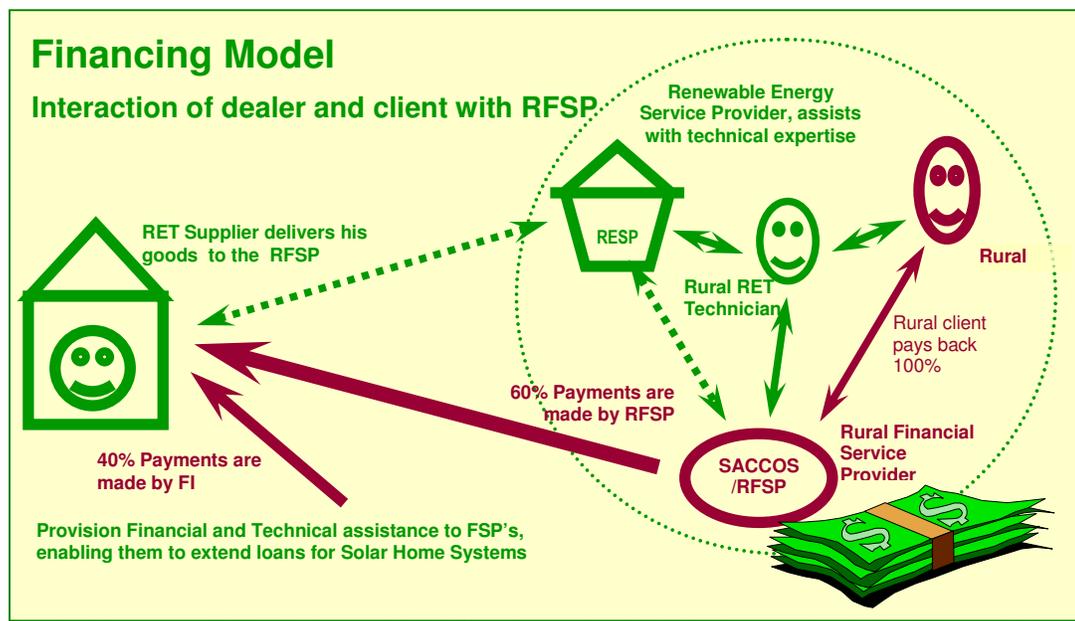


Figure 9: Dealer/client with RFSP Model

Beside the provision of credit, the FI can and must play another important role, that of acceleration of business by setting the stage for joint purchases of the client / members. As an illustration of how this can work, consider the sale of a Solar Home System (SHS):

If one individual buys a SHS, costs of logistics are high. The logistics and installation costs per unit are reduced significantly if 10 SHS are installed simultaneously. To make this three-party business successful, close cooperation is required: Initially agreements of cooperation need to be drawn up between the FI, supplier, and the RESP. Besides supplying goods, the Supplier and the RESP will be available for awareness creation activities at level of the SACCO/ rural FI leadership, and after successful negotiations will explain at meetings of the SACCO's/ Rural FI members the advantages of the goods and services offered. It is of great importance that the technical aspects and also the limitations of the products and services offered is laid out clearly.

In order to avoid burdening the client unduly, the client should first be encouraged to mobilize as much cash as possible. It is important that a credit does not go beyond prudent limits both in volume and time. The remaining balance is then arranged for as a credit, which will be paid back as per the terms and conditions, laid out by the FI.

⁴ FINCA Tanzania in connection with Umeme Jua (2005) , NMB in connection with SIDA/MEM in Tanzania (2005), UML in Uganda (2007) and others.

The role of GVEP-I/ Support Organisation: The role of GVEP-I or any support organisation can be compared to that of a catalyser. Some of the crucial inputs that can act as catalysers are as follows:

Awareness creation: While awareness creation is required at all levels in the chain, the possible most important point to start with is the urban-based supplier of technology, raw materials, goods and services. A number of such suppliers must be willing to supply goods (in principle) once the other mechanisms are in place. The next step would be to invite local individuals for awareness creation and subsequent training in the required skills both business and technical to become a RESP. It will be ideal to recruit such persons who have a proven record either or both in rural business or technical jobs relating to the technology required for Energy Technology and Services. The initial address is local Financial Institutions.

Entrepreneurs who show an interest to cooperate with the promotion effort will then introduce the Energy concepts to their clients and members. A critical part of the training will be to require the candidates to acquire clients. This may then be the starting point for a business. This stage can be reached without much expenditures or capital input from side of the RESP-to-be. Walking with the trainees through a step-by-step process will reveal soon those who are successfully acquire clients and achieve subsequent sales, and those whose comment is 'I tried very hard, but ...'

GVEP-I/ Support Organisations might need to provide funding for samples and demonstration units so as to generate demand by showing samples of goods. Other trainings include:

- Business training
- Technical training
- Consumer education

6 Conclusion: Potential Financial Institutions for Partnership

Energy financing is a frontier little explored by the financial institutions serving the micro and small enterprise market as well as consumers in Kenya, Tanzania and Uganda. There is little understanding of what comprises energy financing apart from some experience with lending for solar energy because companies providing solar solutions have been aggressively marketing their products to the financial institutions. There has been an odd portfolio tried out with biogas and LPG products.

The financial institutions however are reluctant to increase their lending to the energy sector and would value a working partnership. As outlined above, some of the key concerns from their perspective are the quality and reliability of equipment. Often awareness of the various energy technologies or services that exist is lacking and the financial institutions are thus refusing to lend in this unfamiliar territory.

The study has highlighted various models that GVEP-I (or similar support Organisations) can explore in working with Financial Institutions, Energy SMEs and Technology Suppliers. However GVEP-I will be required to develop policy documents clearly specifying how to implement the different types of models, describing the role of each of the key players. In addition, it is extremely important that capacity building through trainings and awareness programmes on energy technologies are important for senior management and loan officers of FIs. In addition, the MSMEs and suppliers need training in the areas of marketing, branding, financial management, borrowing and savings. Creation of value chains between MSMEs and Suppliers and FIs are also important.

For the consumer the main problem faced is they lack the high lump sum upfront costs involved in buying a system. Other problems are the lack of technicians to rely on for maintenance for the installed kit and also a general lack of knowledge about the equipment.

Country specific, here are a few conclusions and potentials to move forward:

6.1 Kenya

Kenya's FIs are most advanced in the range and types of energy portfolio created but sustenance of the portfolio have been weak. Most of them are linked to larger donor funded or investment programmes. Of the 6 Financial Institutions interviewed, all expressed interest in participating in a capacity building programme to expand/diversify/start-up an energy lending portfolio. Provision of consumer credit for energy products, notably solar lanterns or home systems, was a major topic of discussion. A number of the FIs were interested in training for loan officers on the range and benefits of energy products available in the Kenyan marketplace.

There are many potential FIs to work with in Kenya but below are a few that were met during the course of this survey:

- ❖ **Oikocredit** is a microfinance wholesale credit provider whose main focus is to provide credit to trade cooperative, fair trade organizations and small to medium enterprises (SMEs). The lending model is a wholesale model that provides credit to Microfinance Institutions and SMEs and Non Governmental organizations. Credit is offered using two currencies as follows:

- Local currency loan- attracts duration of maximum 6 years
- Foreign currency loan – attracts a duration of maximum 10 years

SME Loans attract a grace period of 3-6 months while Microfinance Institutions are given a grace period of one year. Interest rates are negotiable but are pegged to the 182-day Treasury bill with a risk score of 3.5%. Oikocredit has an interest in creating an energy portfolio but more discussions need to be held with the senior management. The lending model could be wholesaler model where Oikocredit provides wholesale credit to a financial institution or a large energy enterprise.

- ❖ **Muramati SACCO Society Limited** in Kenya with a total membership of 56,000 as of November 2009 and a total of eleven branches. The SACCO draws its membership mainly from tea farmers of Central Province and has its headquarters at Muranga town in Muranga District of Central Province. Its region of operation is divided into two zones. After the failed PVMTI project the SACCO is very careful in energy funding and proposed the micro leasing model as a workable model which they are currently piloting with other products. The micro leasing model does not require members of the SACCO to mobilize deposits (leverage shares) but to demonstrate ability to possess a skill that can be used to generate income or start an enterprise. Under micro leasing the member applies for a loan from the SACCO, the SACCO approves the loan and pays the equipment supplier and co-owns the equipment purchased with the member, once the member completes payments the SACCO then transfers ownership to the member. The maximum amount a member can apply for is 100,000 shillings; loan duration is one year, while security is the equipment bought.
- ❖ **Kenya Commercial Bank (KCB)** The history of KCB dates back to 1896 when its predecessor, the National Bank of India opened an outlet in Mombasa. Eight years later in 1904, the Bank extended its operations to Nairobi, which had become the Headquarters of the expanding railway line to Uganda. The next major change in the Bank's history came in 1958 when Grindlays Bank merged with the National Bank of India to form the National and Grindlays Bank. Upon independence the Government of Kenya acquired 60% shareholding in National & Grindlays Bank in an effort to bring banking closer to the majority of Kenyans. In 1970, the Government acquired 100% of the shares to take full control of the largest commercial bank in Kenya. National and Grindlays Bank was renamed Kenya Commercial Bank. Currently, KCB has a total of 151 branches in Kenya, 1 in Sudan, 1 in Rwanda, and 1 in Uganda. KCB offers loans to under the following 4 categories; Retail Banking, Corporate Banking, Personal Banking and Micro Banking Services. KCB's micro banking services are tailor made to suit the needs of the micro and small entrepreneurs. The micro banking

services offers loan and savings facilities of micro business, small business and those in the Jua Kali sector.

KCB does not have an energy portfolio, it gives its clients personal loans which some invest in energy. The regional manager of Western Kenya would be interested to train staff on renewable energy as well as starting a portfolio.

- ❖ **Faulu Kenya Advisory** offers business services by providing training solutions as well as management consulting services to Faulu Microfinance Institution and other institutions. Faulu Kenya has a mandate to provide services to Faulu Kenya Microfinance Institution at a fee to earn income; the CEO has developed a proposal in the form of a solar lantern product that he wants to pilot with Faulu Kenya Microfinance clients. Faulu Advisory is willing to create an energy division to start an energy portfolio and replicate the same with other institutions since its mandate also allows it to work with other financial institutions.
- ❖ **Women Enterprise Development Institute (WEDI)** is an umbrella company that manages funds of Accumulation of Savings and Credit Associations (ASCAs). Currently WEDI manages a total of 800 ASCAs. The main intentions of the groups are to mobilize their own funds to lend amongst its members mainly to gain independence from donor funding and create their own funds for socio economic development. In addition the managed ASCAs would like to start group savings and lending amongst members mainly to gain independence from donor funding and create their own funds for socio economic development. Currently, the Fund Manager noted that some groups have savings in Banks that they could invest. The group also has a 'Project' component whereby groups are introduced to various products that can be bought by members through their savings.

It is intended that a Supplier linkage (lighting and/or cookstove products) will be established with some of the groups. The Fund Manager has suggested some progressive groups in central Kenya to start off such a 'project portfolio'. This will involve a first step training for WEDI sector field officers working in the area as well as a cluster of some Group Chairpersons to enable buy in. The training would need to introduce the groups and officers to energy products, and an introduction to key suppliers. Once the model functions well it will be scaled outward to other groups. A supplier guarantee arrangement may be required for this model.

6.2 Uganda

In Uganda, it was concluded that developing a market first is more important and once demand is generated, financing will be successful. In addition to the formal institutions, members of SACCOs, VSLAs and other such like member-owned groups provide a huge potential for marketing energy products. It is by strengthening these existing networks of organizations and FIs through awareness, training and linkages that will provide an impact of scale contributing to the positive effect on reducing poverty in Uganda. Some potential partnerships suggested were:

❖ **Stromme Microfinance East Africa Ltd.** has as its vision 'A World free of Poverty' through financial services for the poor. The MFI operates in Uganda, Kenya, Tanzania and Sudan. Some of their key products and services include:

- wholesale lending in terms of loans to established and upcoming MFIs, SACCOs and CBOs at competitive terms,
- Provision of Guarantees to large Microfinance Institutions which can be leveraged by commercial banks
- Equity investments on a selective basis
- Business development Services to partners, especially self-help Groups and community managed Microfinance
- Technical Assistance to partner organizations is provided during onsite visits depending on institutional gaps identified

Besides the services listed above, Stromme Microfinance EA is one of the few experienced providers of loan guarantees in Uganda.

❖ **BRAC** began its operations in Uganda in 2006 and has expanded serving close to half a million people in Uganda and is a key civil society partner helping the government pursue its ambitious goal of 'prosperity for all'. In 2008, BRAC's microfinance program in Uganda continued its impressive growth and now operates in 33 of the 83 districts nationally - across all four geographical regions of the country. The program doubled in size with an expansion of operational infrastructure, staffing and microfinance groups. In total, BRAC had already established 3,410 microfinance groups. Membership has been steadily increasing all year with nearly 50,000 women joining their local microfinance groups. At the core of the program are micro loans, which are exclusively for the women participating in the group process.

The first small enterprise loans were disbursed with an average loan size of USD 1,327. Currently the program has more than 385 borrowers - of which 75% are women. Nearly USD 500,000 has been distributed so far. Some members of the micro loan scheme become eligible for this scheme as their businesses grow and expand and their investment needs change. BRAC promotes Village Organizations (VOs), which have similar features as the VSLAs and SILCs. It will be good to learn from each other and to create synergies wherever possible.

❖ **Capital Micro Credit (CMC)** is the lending section of The Foundation for Entrepreneurship Development (FED), which is a private non profit organization with a broad vision of driving and promoting entrepreneurship in Uganda using a practical approach. CMC has set itself as a partner for small and micro Ugandan entrepreneurs as they strive to start and grow their businesses. After only 10 months in operations, CMC had extended credit facilities to over 900 micro and small enterprises.

As part of **CMC**, **MYC4** is an online marketplace that connects people from all over the world with African entrepreneurs, who lack capital to develop their businesses. With the Internet as

infrastructure, MYC4 bridges the gap between people with needs and people with means. Instead of donations and other forms of redistribution of wealth, MYC4 wants to give everyone a fair chance to lift themselves out of poverty. MYC4 removes barriers, like excessive interest rates and wants to end poverty through business on fair conditions. So far 16,850 investors from 101 countries have invested € 10,678,060 in 5,372 businesses in 7 African countries.

While banks and such FIs limit themselves to extend credit in a 'safe manner', the approach of CMC and MYC4 is more of making venture capital available to realize viable business opportunities. GVEP-I could work closely together with CMC and MYC4 as this is one of the few realistic opportunities to actually access risk capital in small amounts for energy enterprises

- ❖ **Gatsby Micro Finance Limited (GMFL):** The broad objective of GMFL is to enable SMEs access credit and acquire technology for their growth. GMFL targets those that are in need of either working capital or machinery to assist them in the development of their technological base and enable them to grow. SME's have prospects to grow into medium or large scale enterprises but lack business development skills and access to financial support for investment. Uganda Gatsby Trust provides these SMEs with both business development services and credit services by directly lending to the enterprises. This scheme, which was reviewed by a consultant and thus transformed into Gatsby Micro Finance Limited, has grown rapidly to cover 20 districts.
- ❖ **The Savings and Credit Co-operatives Sector:** The SACCOs and other small groups like VSLAs, SILCs and VOs could be effective financial service providers who have the potential to proceed with specialized lending to grassroots-focused energy enterprises and their clients alike. While the international benchmark on interest rates is 15% -25% p.a., SACCOs in Uganda charge typically between 2.5% and 3% monthly on the principal. A few of the larger SACCOs, have adjusted their rates of interest to be 2.5% monthly on declining principal. An additional advantage of SACCOs – as compared with MFIs – is the cooperative ownership of the SACCO. This translates into dividends, if a SACCO is operating professionally and is cost conscious.
- ❖ **The VSLA / SILC / VO model:** Village Savings and Lending Associations, Saving and Internal Lending Cooperatives and Village Organizations have been very successful in addressing the 'bottom of the bottom of the pyramid' and providing assistance to poverty reduction. Delivery models can be adopted to suit these groups, of which large numbers exist in Uganda. One of these regions is West-Nile, where WENIPS with assistance of CARE have set up more than 2,300 such VSLAs and have been involved with the set up of some 80 SACCOs. In total these combined have 80,000 members, which constitute a sizable market for Clean Energy Technology and Services that can be delivered through such enterprises that have access to credit facilities through SACCOs (or other arrangements).

6.3 Tanzania

Tanzania has been the weakest amongst the three countries in the financing of energy products by the FIs. Although, FINCA and CRDB Bank tried to do so through pilot tests that lasted two years each, both faced the problem of requiring collateral from the users or businesses which the borrowers did not have. Buy in from staffs faced a lot of challenge. The only successful reference in Tanzania implemented at some scale was through the PRET project in 2007/8 but was very short lived and so continuity by market forces also quite limited. The lessons learned should be incorporated in the products/models going forward.

The task at hand to facilitate the local players in the market deepen and grow outreach improving access to renewable energy in rural and semi-rural areas. This is no easy task and for sustainable implementation involves at least three key interventions-financing, capacity building for staff and technicians and awareness creation. In order to leave behind a sustainable model that will be able to replicate itself, intervention supporting the three key players identified needs to be for at least three to five years.

The potential is enormous and some key FIs to work with are:

- **CRDB Bank:** CRDB staff did not seem very enthusiastic about solar lending portfolio since the volumes were low that they served. However further explorations on developing relationship to promote lending whereby a guarantee for a revolving fund to CRDB lending to FIs may be more attractive as the volumes would be bigger.
- **National Microfinance Bank (NMB)** is Tanzania's largest bank, both when measured by number of borrowers and branch network. With over 120 branches, the bank is located in 80% of the districts NMB cited the huge demand and potential for profitability as the main reason for its interest in lending to energy businesses/entrepreneurs. They currently do not have a portfolio for renewable energy loans and lack the expertise to set up product. The four main concerns with NMB were the challenges of technology (Mostly solar energy), pricing, distribution, and the financing. Reasons cited included; lack of awareness at all levels from management to loan officers, lack of standardized parts, no profitable or scalable lending model, and no expertise with energy in finance or technicians. It is recommended that NMB Bank would lend to MFIs and SACCOS who would then lend to the end user so as to reach out to many in big volumes. However, this needs to be hand in hand with training on renewable energy products to the management and implementing staff and also provide a guarantee for the energy loans made to FIs.
- **Access Bank:** Access Bank Tanzania is a commercial bank with a special focus on microfinance. The bank has four branches in Dar-Es-Salaam with strong growth in the past two years. Bank staff sees a potential business opportunity even though currently only working in Dar es Salaam where most are connected to the national grid. Main focus is for lending to all technologies that will be considered viable that the FIs they lend to will want to finance. The main challenge for them would be to finding out ways to make the energy product profitable so as to add to the bottom line of the bank. In addition, staff capacity and awareness in setting up a renewable energy component is limited. A loan guarantee can be

placed whereby Access Bank would provide loans to FIs like MFIs and SACCOS lending in the rural areas.

- **Growth2Africa** is a private microfinance institution that is based in Dar es Salaam and is about three years old. The company works as intermediary in raising funds for identified needs. The company targets individuals with productive businesses and uses a model that involves posting a loan on the MYC4 web for international individual investors to finance. It has a big potential if well explored. The idea is to come up with financing packages and technologies, market them to the user's then link them with web sourced financing. Growth2Africa is already raising loan finance this way for its business loans. The main challenge is to get dealers educated in setting up financing packages suitable for rural consumption, capacity building of staff and access to adequate capital.
- **PRIDE Tanzania** has operated in Tanzania since 1994. The company has a loan portfolio of over 27 million USD, and over 100,000 borrowers. The company uses a 'modified Grameen' method as its main methodology which involves giving loans to members in groups. PRIDE has split its operations into PRIDE microfinance that does the traditional business lending and PRIDE NGO that does the softer lending like renewable energy loans development. PRIDE is still setting up the energy lending product under PRIDE NGO. The company has shown interest in working with Micro Energy International in developing solar energy product, though was not able to get in touch with the spokesperson in the study period.
- Annex 1 (Tanzania) has a table showing the lending profiles of the nine FIs for their non energy portfolios and energy portfolio in more detail.

7 Reference

- a. Financial Sector Deepening and Central Bank of Kenya, June 2009, FinAccess National Survey; Dynamics of Kenya's changing financial landscape.
- b. Central Bank of Kenya, 2009, Revised Annual Report, 2009
- c. Government of Kenya, 2005, Sessional Paper No.2 of 2005 on Development of Micro and Small Enterprises for Wealth Creation, Employment Generation and Poverty Reduction
- d. Central Bank of Kenya, December 2008, Survey on Bank Charges and Lending Rates
- e. FINANCIAL SECTOR DEEPENING TRUST, 2007, FinScope E-book, Dar es Salaam, Tanzania
- f. Steadman Group, 2007, Financial Access Survey for Financial Sector Deepening, Uganda

ANNEX 1 – List of financial institutions with energy portfolio (or those with potential)

Kenya

MICROFINANCE INSTITUTIONS	Profile of institution	Description of lending model	Conditions for lending	Loan application fee*	Appraisal fee and other charges*	Max amount for 1 st time borrower*	Repayment period and interest rates
KREP	<ul style="list-style-type: none"> 1st MFI bank in Kenya started as an NGO in 1984 to promote microenterprise By 2009 - 31 countrywide branch network 	<ul style="list-style-type: none"> Offers savings, lending & money transfer services Group based lending Individual lending 	<ul style="list-style-type: none"> cash collateral of 10% See conditions for group and individual lending below 	2%	Inclusive in loan application	Average KES 20,000 to 5 million for SME's	6 months – 3 years 21% p.a. reducing balance
Faulu Kenya	<ul style="list-style-type: none"> 1st licensed deposit taking microfinance institution in Kenya serving over 250,000 clients 22 branches and 54 offices countrywide 	<ul style="list-style-type: none"> Offers savings and lending products 	<ul style="list-style-type: none"> Be a member for 1 month cash collateral 10% See conditions for group and individual lending below 	1.5% loan insurance	2% KES 100 for passbook & KES 400 for training	Average KES 20,000 to 10 times of savings	1 year 20% reducing balance
Kenya Women Finance Trust - KWFT	<ul style="list-style-type: none"> Largest and only microfinance institution exclusive for women Large network serving in all 9 provinces with 111 offices. Recently won the CCA Award for Best Financing. 	<ul style="list-style-type: none"> Group Lending and individual lending 	<ul style="list-style-type: none"> Be a member for 3 months cash collateral 10-20% See below for other conditions 	Insurance inclusive in appraisal	2.75% KES 500 membership KES 1,500 chattel mortgage	Average amounts of KES 10,000 to KES 3 million.	Repayment period 1-3 years - Rate 18% reducing balance
KADET	<ul style="list-style-type: none"> Limited Liability Company established by World Vision in 2000 to empower Communities with limited access to financial services. Over 11 offices countrywide 	<ul style="list-style-type: none"> Group lending and Individual lending 	<ul style="list-style-type: none"> See below on conditions for lending 		- must have 20% of what one wants to borrow	~ 5 times savings amount - Amount ranges from KES 10,000 to KES 3 million	Interest rate is 19.5% reducing balance

BANKS (KENYA)	Profile of institution	Description of lending model	Conditions for lending	Loan application fee*	Appraisal fee and other charges*	Max amount for 1 st time borrower*	Repayment period and interest rates
Equity Bank	<ul style="list-style-type: none"> Commenced business in 1984 as Building Society Now the largest bank in the country in terms of customer base with 4.1 million accounts Rated in 2009 as emerging markets most sustainable bank 	<ul style="list-style-type: none"> Banking products and services for Personal and Business Banking Individual and group based banking for SME's 	<ul style="list-style-type: none"> Sheba loan- 15- 30 members & Fedha loan- 7-10 members other conditions similar to those below 	Loan insurance 1.5%	<ul style="list-style-type: none"> Free account opening KES 300 for ATM card 3.5% 	Sheba Loan- 300,000sh & Fedha loan- 1,000,000sh	<ul style="list-style-type: none"> 1.25% per month fixed rate 6-12 months repayment
Cooperative Bank	<ul style="list-style-type: none"> The bank opened for business in 1968. It was founded to provide banking services for the cooperative movement. Cooperatives own majority shares in the bank. 	<ul style="list-style-type: none"> Individual lending and lately group based lending 	<ul style="list-style-type: none"> Account holder for 6 months Business must have been running for 1 year chattel mortgage KES 2,000 Similar to below 	Loan insurance 2%	<ul style="list-style-type: none"> 2-2.5% 2.5% 	Min KES 15,000	<ul style="list-style-type: none"> 6 months repayment on 1st loan Micro loan Rate 1.5% flat rate SME loan – 15.75% reducing Up to KES 2 million
Family Bank	<ul style="list-style-type: none"> Began in 1984 as a building society and later transformed into a bank One of the first banks in the country to offer paperless banking Has over 600,000 clients with 45 branches nationwide 	<ul style="list-style-type: none"> Banking services Individual and group lending to SMEs 	<ul style="list-style-type: none"> - Account holder for 6 months and business operated for 1 year 	5% of loan principal	- KES 400 insurance	From KES 5,000 to 500,000	<ul style="list-style-type: none"> Interest rate is 8% pa. Payment up to 2 years
Fina Bank	<ul style="list-style-type: none"> Started operations as a commercial bank in 1996 It is medium sized bank but rapidly growing its SME segment Known as the Regional SME bank Has 13 branches countrywide 	<ul style="list-style-type: none"> Banking services with particular emphasis on SME's 	<ul style="list-style-type: none"> - See below on bank conditions 	2.5% of required amount	1-2%	Min KES 300,000 for the business loan to KES 5 million	<ul style="list-style-type: none"> payment 5 years 17-22% p.a reducing balance

Ecobank	<ul style="list-style-type: none"> Began operations in Togo in 1988. A leading Pan African bank it has expanded in the Africa region with 600 branches in the west, central, east and southern African countries. Acquired EABS Bank in Kenya 	<ul style="list-style-type: none"> Individual lending conditions similar to those below. For groups they provide collateral and open a fixed deposit account 	<ul style="list-style-type: none"> account holder for 6 months Business in operation for 1 year Audited accounts 	Application 2% Insurance 1%	Included in application fee	Lon range KES 50,000 to 3 million
----------------	--	--	---	--------------------------------	-----------------------------	-----------------------------------

CREDIT UNIONS (KENYA)	Profile of institution	Description of lending model	Conditions for lending	Loan application fee*	Appraisal fee and other charges*	Max amount for 1st time borrower*	Repayment period and interest rates
Jamil Sacco	<ul style="list-style-type: none"> Was incepted as a Cooperative Society in 1972 with membership drawn from the civil service Today has 6,000 members countrywide Lends to the business community through the FOSA 	<ul style="list-style-type: none"> individual and group lending 	<ul style="list-style-type: none"> account with the SACCO for 6 months Business should have been running for six months See conditions for lending under SACCO's 	2.5% of loan	Inclusive in application	Max KES 30,000 - KES 1 million	<ul style="list-style-type: none"> 18% p.a. reducing balance Repayment in 1 year
Kingdom Sacco	<ul style="list-style-type: none"> Community based organization serving the business community in the Nairobi Eastern region of Githurai 	<ul style="list-style-type: none"> Group based lending – members join the SACCO through small groups 	<ul style="list-style-type: none"> Have 1/3 rd of amount borrowed as savings Must be a member - Get guarantee by other members 	- 1% for loans below KES 3,000 and KES 5,000 for loans above.	KES 100	3 times savings	<ul style="list-style-type: none"> Interest rate is 12% per month reducing balance maximum period 1 year
Muramati SACCO	<ul style="list-style-type: none"> The Sacco was formed in 1993 as an initiative of tea farmers drawn from the former Muranga, Maragua and Thika districts. It has grown to be one of the larger rural SACCO's with assets exceed KES 1 billion. Currently has 10 branches in the central province. 	<ul style="list-style-type: none"> Individual or group lending 	<ul style="list-style-type: none"> For individuals one should hold a business or personal account. For group lending one should be a group member 	Inclusive in the appraisal fee	3%	Max KES 50,000 for 1 st time	<ul style="list-style-type: none"> Individual 17% p.a. reducing balance Period 6-18 months Group is 10% flat p.a. 6-18 months

Uganda

BANKS (UGANDA)	Main Product	Profile of the Company	Distribution Network	Terms/ Range of Interest	Comments
Equity Bank	Savings / loans MFI loans	Commercial, subsidiary of EB Kenya. In Uganda since 2008	Rapidly growing branch network (40+) throughout Uganda	Standard banking terms apply 18% prime rate 30% effective	Former UML failed on Solar Loans Equity is willing to try again
Centenary Bank	Savings / loans MFI loans	Commercial bank Since 1983	33 branches throughout Uganda	Standard banking terms apply 1.83% p.m. 46% effective	85% of portfolio to micro enterprises. Interest expressed to boost energy portfolio
Stanbic Bank		Commercial Bank with HQ in South Africa	Well developed branch network in UG (70+)	Standard Banking terms apply	Stanbic Bank has possibly the best developed ATM network in Uganda
Ecobank (Uganda)	Commercial loans	Commercial Bank in Uganda since 2009	6 branches (thereof 4 in Kampala)		Ecobank seeks to enter the EA-market with an aggressive approach
FINA Bank	Tailor-made solutions for SMEs	Commercial Bank, in Uganda since 2007	7 branches (thereof 5 in Kampala)		Small, but focused bank, could be interesting to work with in Wakiso District and Kampala

CREDIT UNIONS (UGANDA)	Main Product	Profile of the Company	Distribution Network	Terms / Range of Interest/ Challenges	Comments
MAMIDECOT	Savings / Credit to members	SACCO with more than 8.000 members,	Masaka Region		Largest SACCO in Masaka Region
Nyakyeera Farmers SACCO	Savings / Credit to members	Since 2002	Ntungamo District	<ul style="list-style-type: none"> ▪ 3% p.m. declining, 12 months ▪ Max UGX 10 M (group) ▪ Max UGX 5 M (individual) 	Recipient of MSC loans 1.500 + members
RUSCA, Rubare Modern Rural SACCO Development Association Ltd	Savings / Credit to members			<ul style="list-style-type: none"> ▪ Active Saver, good record, ▪ 1.5% p.m. declining ▪ 12-24 months ▪ Max UGX 3 M 	Supplier of Solar loans
Bwogyera SACCO	Savings / Credit to members	Since 2002	Ntungamo District	<ul style="list-style-type: none"> ▪ Active Saver ▪ Loan max 5x of members share ▪ 2.5% p.m. declining ▪ 12 months 	1500 + members Solar loans available
Pakwach-Nam SACCO	Savings / Credit to members	Since 2001	Pakwach	<ul style="list-style-type: none"> ▪ Active Saver, 3% ▪ Loan max 5x of members share ▪ 10% deposit ▪ Max UGX 4.5M ▪ 2% p.m. flat ▪ 12 months 	Supplier of Solar Loans is within West-Nile Region
Rushere SACCO	Savings / Credit to members	Since 2001	Kiruhura District	<ul style="list-style-type: none"> ▪ Active Saver ▪ Members must hold at least 5 shares of 10' ▪ Max UGX 15M ▪ 3% p.m. flat ▪ 12 months 	3.000+ members Supplier of Solar Loans
SACCOs in West Nile	Savings & Micro-loans to Members	Cooperative	80 SACCOs in West-Nile Region (34.000 Members)	<ul style="list-style-type: none"> ▪ 2% - 3% p.m. flat ▪ Cost of roll out 	Concentrating operations in one region where a competent implementing partner may create impact of scale
VSLAs in West Nile	Pico-loans to group members	Groups of 10-30 members	2300 groups of 30 in West-Nile Region (50.000 members)	<ul style="list-style-type: none"> ▪ 5% - 10% p.m. flat, Must be a member Loans on group consensus, subject to cash availability	

Tanzania

FINANCE INSTITUTION	Lending Portfolio			Energy Loan Portfolio			Repayment	Ease of follow up	Challenges	Lessons learnt
	Size	Scope	Lending model used	Type of energy funded	Size of portfolio	Model used				
NMB	1,073,465 clients	80% of districts, 120 branches	Wholesale lending to SMEs	N/A	N/A	N/A	N/A	Easy	Awareness, Pricing, Technology Distribution	Want to see success at MFI level.
CRDB	700,00 clients 60 branches	109 districts	Individual and wholesale to SACCOs	Solar dealers	Went up to ~ 40 million loans outstanding	Lending to individuals with UNDP guarantee	4 out of 5 paid well	Not so easy-scattered in rural areas	Dealers lack collateral	Better adopt to internal systems rather than setting new systems for small portfolio
Growth 2Africa	60,000	Dar es Salaam	To individuals raising finance from web based investors	N/A	N/A	N/A	N/A	N/A	Lack of awareness & internal loan finance	
TMF	3,000	Four branches, three rural	Group and individual loans to end users		7,000,000	Individual Loans Asset lending	Very high	Easy	Awareness by users and Lack of technical expertise	Important for all players to play their roles
PRIDE	106,082	38 branches	Mostly group loans with some individual loans	N/A	N/A	N/A	N/A	N/A		
FINCA	37,006 borrowers	14 branches	Mostly group loans with some individual loans	N/A	N/A	N/A	N/A	N/A		
SACCOS	Approx. 3000 in total	18 different rural locations	Individual loans to end user					Fairly easy	Lack of capital to meet need for members	Awareness, local support and financing important
TTZ	10,500	Dar es salaam	Mostly group loans with some individual loans	N/A	N/A	N/A	N/A	N/A	Lack of staff capacity to develop product	

Annex 2: Conditions for lending for Microfinance institutions

Most microfinance institutions use group lending methodology and individual lending. In most cases individual lending is given to clients who have excelled in group lending and the microfinance institution has established the credit history of the clients.

Features of Group lending

- Own a business
- Operation of a group account
- Group savings
- Pledged household or business assets by individuals
- Periodic loan repayments
- Group membership from 5-30
- Group guarantee

Features individual lending

- Own a business
- Personal loans
- Must have saved before borrowing
- No group backing
- Operation of an account
- Dependent on business cash flow

Collateral required for group lending includes the following:

- Household or business assets
- Log books
- Shares in the stock market

Annex 3: Conditions for lending in Banks

Clients should have the following:

- Account holder
- Cash flow analysis
- Review of business records
- Collateral which could be :
 - Household or business assets
 - Log books
 - Title deeds

Annex 4: Conditions for lending for SACCO

- Account holder at the Front Office Services (FOSA)
- Cash flow analysis
- Review of business records
- Collateral which could be :
 - Household or business assets
 - Log books
 - Title deeds
- Leveraging of shares (loans are a multiple of shares held)
- Members guarantee loans

CONTACTS

GVEP International

73 Wicklow Street

London WC1X 9JY

United Kingdom

Telephone: 0207 713 8246

Fax: 0207 713 8706

East Africa Regional Office

Kiganjo House

Rose Avenue, Off Lenana Road

P.O. Box 76580 – 00508

Yaya Towers

Nairobi, Kenya

Tel: + 254 20 2714164/5

Email: kavita.rai@gvepinternational.org / phyllis.kariuki@gvepinternational.org