



**World Bank Biomass Energy Initiative for Africa
Quarterly Performance Report**

Winrock International

Revised July 28, 2011

Background

The Biomass Energy Initiative for Africa (BEIA) is administered by the World Bank Africa Energy Unit (AFTEG), and will co-finance 9 promising and innovative pilot biomass energy projects throughout the Sub-Saharan Africa region to help modernize the biomass energy sector. This support recognizes that biomass plays an important and pervasive role in the region’s domestic cooking, lighting and heating as well as commercial and industrial applications and is likely to continue to be a predominant local source of energy for decades to come.

Winrock International (WI), a US-based nonprofit organization that works to help the poor and disadvantaged increase long-term productivity, equity, and responsible resource management, including through access to energy services, has been appointed the Pilots Administrator. Under this contract, Winrock International will administer, coordinate and support the implementation of the selected BEIA pilots with a goal of achieving a sustainable supply, efficient usage and newer and cleaner applications of biomass energy.

Winrock’s contract became effective on January 25, 2009. During the first few months, WI provided general support to the BEIA Task Team on finalizing the contractual arrangements with the Grantees, and developing templates for effective implementation and monitoring of different pilots. Winrock undertook the first field mission during September 2010-January 2011 (see details below) to accomplish the following objectives:

- a) Discuss and understand project goal, objectives, activities and methodology;
- b) Discuss WB expectations on administration of the project, procurement and financial management system; and
- c) Discuss and revise monitoring and implementation plans and agree on reporting schedules.

Winrock also assisted in the organization of the BEIA Kick-off Workshop in December 2010 in Nairobi, Kenya to launch all the pilot projects.

Organization visited/Date	Name of the Pilot Project	Activities Performed / Key Findings
GERES January 19-23, 2011	Promotion of Social Biofuels in Benin	<ul style="list-style-type: none"> - Visited office and met staff - Discussed BEIA project - Met project partners - Visited the field plantations - Discussed implementation schedule - Discussed financial system - Discussed procurement and hiring of consultant guidelines



		<ul style="list-style-type: none"> - Agreed on reporting schedule and template - Revised monitoring and work plans
Concern Universal October 28-29, 2010	Promotion of Improved Biomass Vesto Stoves in Gambia	<ul style="list-style-type: none"> - Visited office and project met staff - Discussed BEIA project - Visited the project partners - Discussed implementation schedule - Discussed financial system - Discussed procurement and hiring of consultant guidelines - Agreed on reporting schedule and template - Revised monitoring plans
Restio October 4-5, 2010	Promotion of Improved Biomass Rocket Stoves in South Africa	<ul style="list-style-type: none"> - Met and visited the RESTIO staff in Somerset West - Reviewed the project objectives, goal and activities - Discussed the project outcome indicators and revised - Discussed the existing promotional materials for stove - Discussed the logistics for the stove distribution - Discussed the Procurement and hiring of consultants guidelines - Discussed co financing and relationship with partners - Discussed budget and revised it - Reviewed financial system
CREEC September 15-16, 2010	Promotion of Charcoal Briquettes in Tanzania	<ul style="list-style-type: none"> - Visited the CREEC offices at Makerere University Kampala - Went through project overview - Discussed relationship between CREEC and project partners - Discussed implementation schedule - Reviewed accounting and financial systems - Discussed guidelines for hiring consultants and procuring - Discussed reporting schedule - Went through and reviewed Monitoring plans - Discussed the grant agreement document
Appropriate Rural Technology Institute – Tanzania September 8-9, 2010	Promotion of Charcoal Briquettes in Tanzania	<ul style="list-style-type: none"> - Visited office premises in Dar es Salaam - Went through project overview - Discussed implementation schedule - Reviewed accounting system - Reviewed financial manual - Discussed procurement and hiring guidelines - Discussed report - Revised budget



		<ul style="list-style-type: none"> - Discussed grant agreement – change of project name - Visited the field
ADENYA September 20-21, 2010	Promotion of Charcoal Producers' Organization in Rwanda	<ul style="list-style-type: none"> - Visited office which is in Nyaruguru County southern Province Rwanda - Went through the project overview - Visited offices of project partner – CARE Rwanda and discussed relationship - Discussed implementation schedule with both project partner and ADENYA - Reviewed accounting system - Discussed and agreed on the procurement and hiring of consultants guidelines - Discussed and agreed on the reporting schedule - Discussed and revised the monitoring plans
Help Self Help Centre September 10-11, 2011	Scaling up Biodiesel Production in Kenya	<ul style="list-style-type: none"> - Visited both offices in Nairobi and Central province of Kenya - Met project staff - Went through project overview - Discussed implementation schedule - Reviewed accounting system - Tour of the project site in Central Province – buying centre and processing plant - Discussed procurement and hiring guidelines - Discussed reporting guidelines and schedules - Discussed Grant agreement - Revised budget
Gaia Association September 13-14, 2010	Promotion of Ethanol Micro-Distilleries in Ethiopia	<ul style="list-style-type: none"> - Visited the office premises in Addis Ababa and met with project staff - Held meeting to understand project objective - Reviewed accounting and financial documents - Met with household benefitting from ethanol stoves - Met project partners and understood role - Went through procurement and hiring guidelines
African Energy for Enterprise November 8-10, 2010	Increasing Power Capacity with Bioelectricity Project	<ul style="list-style-type: none"> - Met with project implementers and discussed project objectives, goals - Discussed project implementation - Visited the host organization and met with project staff. - Discussed the WB expectations - Went through pending issues required for the grant agreement to be completed - Agreed on timeframe to accomplish pending issues - Met with potential partners



ASDI September 13-14, 2010	Promotion of Bioelectricity in Uganda	<ul style="list-style-type: none"> - Visited office premises in North of Uganda - Met with project partners and understood relationship - Revised budget - Discussed procurement and hiring of consultant guidelines - Discussed workplan and monitoring plans - Discussed implementation plans - Visited proposed project site
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The nine¹ selected BEIA pilots fall within four themes of biomass sector modernization:

A. Enabling market conditions for high quality and high performance modern cooking stoves:

1. CREEC/Uganda, P120030, Promotion of Improved Biomass TLUD Stoves in Uganda
2. Restio Energy/South Africa, P120029, Promotion of Improved Biomass Rocket Stoves in South Africa
3. Concern Universal/Gambia, P120024, Promotion of Improved Biomass Vesto Stoves in Gambia

B. Modernizing the charcoal industry:

4. ARTI-TZ/Tanzania, P120035 Promotion of Charcoal Briquettes in Tanzania
5. ADENYA/Rwanda, P120037, Promotion of Charcoal Producers' Organization in Rwanda

C. Demonstrating the feasibility of social (small-scale locally produced and consumed) biofuels

6. Help Self Help Centre (HSHC)/Kenya, P120038, Scaling up Biodiesel Production in Kenya
7. GERES/Benin, P119962, Promotion of Social Biofuels in Benin
8. Gaia/Ethiopia, P120040, Promotion of Ethanol Micro-Distilleries in Ethiopia

D. Increasing power capacity with bioelectricity

9. ASDI/Uganda, P120042, Promotion of Bioelectricity in Uganda

Winrock's work comprises four main categories:

- 1) Administrative guidance to grantees;
- 2) Technical guidance to grantees;
- 3) Monitoring of pilot projects; and
- 4) Reporting to AFTEG.

This performance report covers the period January 2011 –June 2011, as the activities have just been initiated. Future progress reports will be on a quarterly basis.

¹ Three additional projects were originally awarded. VillageReach (Mozambique/stove) had to drop out of the program in March 2010 when their MFI partner backed out and they also were not having success developing a viable dual biomass/LPG prototype. Ajuda de Desenvolvimento de Povo para Povo na Guiné Bissau (Guinea Bissau/biofuel) was dropped in October, 2010 due to problems, including price competition with fossil fuels, and low jatropha yield, that made the commercial biofuel aspect of the project unviable. Hende Wayela Empreendimentos (aka African Energy for Enterprise, Mozambique/bioelectricity) was dropped in June 2011 due to concerns regarding financial management and cofinancing.



Winrock activities during this reporting period

Activities during this performance period focused on two primary activities:

- 1) Support to the World Bank and grantees for completion of grant agreement requirements, signing and initial funding disbursement.
- 2) Administrative and technical guidance to grantees. Provision of technical and pilot-project management advice to initiate the execution process, as described in this report. Future quarterly reports will have much more emphasis on project implementation monitoring. To date, five grantees have received their initial funding disbursements and are moving forward with implementation.

Over this reporting period, Winrock has been in close communications with all 9 grantees. While the grant agreements require quarterly reports, Winrock has been receiving summary monthly reports from each grantee to keep close track of progress. Winrock has used these monthly reports to closely monitor the projects as well as to improve the format, content and accuracy of reporting, and has been reporting regularly to the World Bank Task Team Leader (TTL) on progress and performance of each project.

Winrock's activities and a brief status report of each project are included below. More details on each project's progress are included as an Annex.

1. CREEC/Uganda, P120030, Promotion of Improved Biomass TLUD Stoves in Uganda

Winrock has been communicating with the grantee on a regular basis, working with them to get co-financiers commitment letters so that the grant agreement could be issued, along with initial funding disbursement. Before December 3, 2010, this grantee did not have a legal entity in the sense that CREEC was not officially registered; as such, funding would have to be disbursed to Makerere University, which would have made the procedure quite complicated. Winrock therefore worked with the grantee to get the legal status and change the name of official recipient from Makerere University to CREEC. In addition, Winrock worked with the grantee on revising the workplan and monitoring plans to be more realistic and objective.

Winrock worked with the grantee to ensure the application for withdrawal was submitted correctly; the grantee received their initial disbursement of \$74,993 at the end of May 2011. Prior to receiving the funding, Winrock worked with the grantee to begin planning to ensure as little time as possible would be lost in start-up. On receiving the funding Winrock has kept close communication with the grantee to ensure that right procurement procedures and reporting is carried out; Winrock consults by telephone on a weekly basis on project update and progress. The grantee also sends all minutes and notes from any meeting or workshop held.

During the period under review, CREEC developed selection criteria for project location, including location of districts, population density, education level, employment, wealth, biomass



availability, and project fatigue. Based on their initial baseline survey, CREEC identified 25 districts in which the project activities will take place. CREEC has also undertaken further research and development on TLUD-stoves, and took steps toward identifying final prototype candidates.

Assessment: Based on the progress above, CREEC is expected to pilot test the TLUD in June and July 2011 and eventually roll out the improved TLUD stoves in 25 districts in Uganda, distribute and monitor stove performance during last quarter of 2011 into 2012, and complete the activities under the project by end of September 2012. Winrock believes they will be successful in doing so.

CREEC has revised its workplan and it is working hard to ensure it achieves the project outcomes by end of September 2012; Winrock believes that it can do so.

During the month of October 2010, Winrock undertook its first supervision trip to CREEC. Winrock met and got acquainted with the project implementers and got a better understanding of the project objectives and goals. Winrock was able to critically review the implementation schedule as well as the monitoring plan and together with the grantee made some revisions while ensuring the plans were realistic and achievable. As the administrators of the BEIA project Winrock conveyed the expectations of the World Bank. More details are available in the CREEC trip report.

2. Restio Energy/South Africa, P120029, Promotion of Improved Biomass Rocket Stoves in South Africa

Winrock has been working closely with the grantee to help them meet their requirements for grant agreement finalization and then once issued to monitor their progress. Before finalizing the grant agreement, the World Bank's legal team in Nairobi raised several issues; Winrock worked with the grantee to respond to these and provide clarifications satisfactory to the legal team, who was therefore able to finalize the grant agreement. Winrock worked with the grantee on the co-financing letters of commitment, including more clearly identifying cash, in kind contributions, and cash co-financing. Winrock also worked on revising the budget and updating the project indicators as well as revising the workplan. Winrock has been in regular communication with the grantee, including working with the grantee on an opportunity the project was offered of partnering with an organization Central Energy Fund to promote stoves in South Africa, which the World Bank agreed to, as long as the project's objectives were not altered. Winrock received and reviewed the monthly narrative and financial reports for March, April, May and June 2010. Winrock also received and edited their feature-story on cooking stoves to be published on the World Bank web site. Winrock checked Restio's financial reports and helped them correct the format as well as the figures.

The grantee received \$ 67,155 (50% of their funds) in March 2011. They have ordered and received 1,232 stoves and placed an order for a second container. The stoves were purchased using direct sourcing based on a previous relationship they have had with StoveTec (now



EcoZoom); this procurement method was approved by the World Bank. Restio has commissioned the development of a custom sales and stock management software package, and conducted interviews for sales agents. Restio has also compiled training plans and finalized their sales and networking plan for the first month, and developed posters, which can be viewed at <http://www.flickr.com/photos/restioenergy>. In total, 360 stoves have been sold, and a TV advertisement has been developed to market the stoves: http://www.youtube.com/watch?v=n-99H9R5ovk&feature=player_embedded.

Assessment: Based on the progress above, Restio is expected to roll out the improved stoves in 3 provinces: Kwa Zulu Natal, Eastern Cape and Limpopo Provinces, distribute and monitor stove performance throughout the project duration, and complete the activities under the project by September 2012 while achieving its projects outcome. Winrock believes that this is achievable.

Winrock made its first supervision visit to Restio in South Africa during the month of October 2010. Winrock met with the project staff and visited the offices. Winrock spent time discussing with the grantee the project objectives, goals and activities. Winrock and Restio discussed the project co financiers who at that point were not confirmed, and revised the monitoring plans. More details are available in the Restio trip report.

3. Concern Universal/Gambia, P120024, Promotion of Improved Biomass Vesto Stoves in Gambia

Winrock has been working closely with the grantee prior to receiving funds to respond to legal concerns raised during the preparation of the grant agreement, including: proof of legal status, role of partners and form of engagement, formal agreement with partners, proof of co-financing, details of composition, functions and responsibilities of committees, and procurement methods. Winrock also worked with the grantee to revise the workplan and indicators as the earlier workplan was for only 6 months.

The grantee received \$74,981 in April 2011. However there were delays in commencement of activities as the grantee had planned to spend 84% of the project budget during the first period, while what they received was 50% of the WB funds. Winrock worked with the grantee to revise their planned activities and spending plan to fit the available funds, and has been in regular communication with them in initial project activities. Winrock received, reviewed and commented on their May and June 2011 financial and narrative reports.

The grantee has prepared and discussed TORs for technical consultants for the work that they will undertake, and has sought a ‘no objection’ from the World Bank on their appointment. Partner contracts and work plans have been finalized. The TORs for the selection of Technical Assistants and field extension workers have been finalized. A full partner briefing was held at Concern Universal offices on June 2, 2011 to provide a ‘refresher’ on the project concept, methodology and workplan. Initial action points were agreed, including project intervention areas, roles and responsibilities, project and reporting structures, and reporting deadlines.



Attendees included the Technical Consultant, Technical Assistants, representatives from the three partner organizations (MMAP, PRSP and TARUD), and marketing partner Studio 361.

Assessment: Based on the progress above, Concern is expected to roll out 30 stoves as part of its research to 30 families in 3 target areas and based on the outcome of the research, roll out and distribute a further 500 stoves to commercial customers during the last two quarters of the project, and complete the activities under the project by September 2012 while ensuring its project outcomes are achieved. Winrock believes Concern will achieve these goals, but will nonetheless work closely with Concern to keep the project on schedule, as any slippage in the timeline could be detrimental to achieving project goals.

In October 2010, Winrock made a first supervision trip to Concern Universal in Gambia. Winrock met with project staff as well as the project partners and understood the relationship between the two. Winrock and Concern discussed the project goal, objectives and activities and revised the monitoring and implementation plans, as well as the budget. Winrock discussed the WB expectations in terms of procurement, hiring of consultants and reporting. More details are available in the Concern trip report.

4. ARTI-TZ/Tanzania, P120035 Promotion of Charcoal Briquettes in Tanzania

Winrock has been in close contact with the grantee and ensured that the requirements of the grant agreement were met. Winrock assisted the grantee in preparation of the financial agreement and revising the budget, and in understanding required procurement procedures. Winrock also helped the grantee to revise their monitoring indicators to ensure that they are objective, specific and time-bound.

The grantee received \$67,403 in February 2011. Winrock received and reviewed their monthly narrative and financial reports for March and April as well as their May 2011 financial report. Winrock checked their financial reports and assisted them to correct the format as well as the figures. ARTI have made a revised work plan to adjust for the reduced time frame and increased cost of the kilns. During the period under review, the grantee initiated contact with stakeholders, namely the Ministry of Natural Resources and Tourism, Ministry of Energy and Minerals, Rural Energy Agency and Bagamoyo District Officials.

During the progress period, the grantee selected the villages where the households would be trained, and made visits to the selected villages to sensitize the leaders on the benefits of the proposed training. 176 persons in six villages identified have now received training in making charcoal briquettes. The grantee has purchased kilns, briquette extruders, tools and safety equipment for the training as well as a new generator. The welding machine and angle grinder, and safety equipment generator were purchased through the shopping process. The kilns and briquette extruders were purchased from a local supplier through a single source procurement process.



Assessment: Based on the above report Winrock expects that ARTI will train 1140 persons from 4 districts with each district consisting of 12 villages. This will take place throughout the project period and will achieve the project's outcome.

Winrock made its first supervision trip to ARTI in September 2010. Winrock visited the offices and met with project staff. Winrock and ARTI discussed in length the project's objectives, goals and implementation schedule. The monitoring plans were discussed and revised. Winrock explained to ARTI the World Bank's expectations, and discussed with them the Grant Agreement. More details are available in the ARTI trip report.

5. ADENYA/Rwanda, P120037, Promotion of Charcoal Producers' Organization in Rwanda

Winrock has been communicating with the grantee on a regular basis to keep the grantee on track to fulfill the conditions of the grant agreement. ADENYA's original partner, CARE Rwanda, terminated their MOU with ADENYA in December 2010 due to concerns about internal financial management issues and possible fraud. During the progress period, the World Bank's Financial Management Specialist and others performed an investigation into ADENYA's situation, and approved the project moving forward with a replacement implementing partner. Winrock received and commented on the draft MOU that ADENYA prepared with CECI, their new partner, as well as the revised project budget, monitoring indicators and work plan.

The World Bank TTL requested that ADENYA:

- a. Finalize the MOU, incorporating his suggested changes
- b. Amend the budget to show CECI charges as consultancy, and not salaries. This has been done and reviewed by Winrock and is found sufficient
- c. Submit a confirmation of co-financing, stating how much money ADENYA will deposit in the bank account as cash co-financing. ADENYA's co-financing will be done in kind hence no funds will be submitted

The grantee is working on providing the MOU by close of business 22nd July 2010.

Assessment: ADENYA is committed to achieving its project's objectives by end of September 2012, which Winrock believes is possible if work starts immediately.

During the month of September 2010, Winrock visited ADENYA in Southern Province of Rwanda. Winrock met with ADENYA's main partner (at that time) CARE International Rwanda and discussed the project's objectives, goals as well as implementation schedule. Winrock further reviewed the implementation schedule against the monitoring plans and revised them to be realistic and objective. Winrock discussed World Bank's expectations from ADENYA. More details are available in the ADENYA trip report.



6. Help Self Help Centre/Kenya, P120038, Scaling up Biodiesel Production in Kenya

During the reporting period, Winrock communicated with the grantee on a regular basis to monitor their progress. The grantee received their initial disbursement of \$67,862 in March 2011. Winrock received and reviewed their monthly narrative and financial reports for March, April, May and June 2011, and assisted them to correct their financial reports both in terms of format and figures. Winrock staff visited the Nairobi office of HSHC to discuss their project activities, purchasing plan, and to assist their accountant to revise the format of their financial report. The workplan and monitoring indicators were discussed and revised during the visit. Since HSHC is based in Kenya, it has been easy to monitor this grantee through frequent telephone conversation, or visit to their Nairobi office for project update and consultation.

During the period under review, HSHC recruited two technical assistant staff. They developed TORs and recruited a consultant to conduct a survey of raw materials availability and seasonality, who then conducted the survey. HSHC has now submitted a report detailing the current resource base of oil seeds. The grantee also prepared an architectural plan and started the construction of a storage facility with a capacity of 400 tones of feedstock, and has continued to establish tree nurseries and green houses for vegetative propagation of trees. HSHC organized training of farmers on tree planting procedures, group organizational management and simple accounting. The project has supported the establishment of one collection centre for seed. The project continued to create awareness at different forums including environmental days, workshops, and farmer's forums. Hundreds of brochures were distributed. The project continues to test and improve the design and improvement of the bio-stove. It also continued to research uses of the by-products, for example using the seed cake for as feedstock or husks as charcoal briquettes.

Assessment: Help Self Help Centre has revised its workplan but not altered its project objectives; Winrock believes the grantee will meet its project outcomes by end of September 2012.

During the month of September 2011, Winrock visited HSHC offices in both Nairobi and Naro Moru. In Naro Moru Winrock met the project staff and visited the processing and buying center. Winrock and HSHC discussed the entire process of biodiesel production, and the project objectives and goals as well as its activities. Winrock discussed the grant agreement and expectations of the World Bank especially the issue of co-financing. More details are available in the HSHC trip report.

7. GERES/Benin, P119962, Promotion of Social Biofuels in Benin

Winrock has been communicating with the grantee on a regular basis to support their efforts to fulfill the conditions of the grant agreement. Winrock visited the grantee in Bohacon in Benin and was able to better understand the project, meet the project staff, partners and visit the project proposed sites. Winrock worked with the grantee on the financial manual as well as ensuring that the grantee understood the financial procedures as well as reporting procedures. Winrock has



worked with the grantee to revise the workplan and monitoring indicators and to ensure that the co financing was banked as required and documentation sent to World Bank. Winrock also worked with the grantee to clarify the legal issues raised by the legal team at World Bank.

The grantee has filled and submitted a Withdrawal Application form for FCFA 39,000,000. The application has been approved and revised to FCFA 20,000,000, which is 50% of the total amount of the grant. The funding has been received and activities have now begun.

Assessment: Winrock believes that GERES will achieve the project objectives by September 2012. That said, many project outcomes will be achieved in 2013-14 as they require additional time.

Winrock visited the GERES project in January 2011, and met with the project coordinator and other project staff. Winrock and GERES discussed the project overview and reviewed at length the implementation schedule, which was then revised. Winrock discussed with GERES co financing of the project, and the requirements of the World Bank which are similar to those of their current donor, European Union. More details are available in the GERES trip report.

8. Gaia/Ethiopia, P120040, Promotion of Ethanol Micro-Distilleries in Ethiopia

Winrock has been communicating with the grantee on a regular basis to support their efforts to fulfill the conditions of the grant agreement, including the requirement of opening a US dollar account and providing proof of co-financing to the World Bank.

The grantee has not been allowed by local authorities to open a USD account and has had to open a local currency account. All parties are concerned that the money could devalue significantly over time, in which case they would not be able to purchase the micro distillery. The grantee is researching other options, including making two withdrawal applications, one for their local currency account and the other to be paid direct to the supplier.

Gaia's next step will be to submit the application for withdrawal on July 21st 2011. To expedite project activities and while waiting for funding to be wired, Gaia Association will undertake the following:

- Hold a meeting with all partners to finalize the MOU and Terms of Reference of the consultant – 26th July 2011
- Make a public announcement for consultancy services – 27th July
- Have all funds from co financiers deposited by end of July/1st week of August
- Interview for consultant to carry out feasibility study – 15th August
- Offer letter to consultant – 18th August 2011
- Feasibility study completed by end of first week of September
- Begin procurement of micro distillery – 2nd week of September

Assessment: Based on this movement ahead, Winrock believes that Gaia will achieve its project objectives by September 2012 if the funds are received quickly.



In September 2010, Winrock visited Gaia Association in Addis Ababa Ethiopia. Winrock met the project staff and discussed the ethanol micro distillery project. Winrock and Gaia reviewed the project overview and discussed in length the project partners and the relationship and the need to have a MOU. Winrock and Gaia discussed the role of Gaia Association in the partnership, and the grant agreement and expectations of World Bank in delivery of the project. Winrock visited some households already using ethanol stoves for cooking. A more detailed report is attached. More details are available in the Gaia trip report.

9. ASDI/Uganda, P120042, Promotion of Bioelectricity in Uganda

Winrock has been communicating with the grantee on a regular basis to support their efforts to fulfill the conditions of the grant agreement. The grantee has been requested by the World Bank to obtain proof that their co-financing has been received (as the disbursement condition) before funds from the World Bank can be transferred. The grantee has not been able to obtain funding from the original sponsors, but is exploring other options of co-financing from either an Energy Capitalization Grant or the Electricity Regulatory Authority. The grantee has expressed difficulty in securing commitment from the above mentioned, hence is seeking other options.

Winrock has worked with the grantee to provide justification for single sourcing as requested by the World Bank. It is working to ensure that the grantee responds to the issues raised by the Bank as comprehensively as possible. Winrock has worked with the grantee to revise the workplan and monitoring indicators. Winrock has also reviewed and commented on the budget which the grantee has revised.

ASDI has submitted the signed Grant Agreement and the Disbursement Letter to the WB legal department in Nairobi who have forwarded it to South Africa for disbursement of funding. The grantee is working on getting co financing from the Prime Minister's office of US\$ 44,000; while bureaucracy is causing delays in accessing the funding, the grantee is now confident that the funding will come through since the directive from the Prime Minister's office is final. A copy of the directive will be availed to Winrock on July 26th 2011. In the meantime, the grantee has sent a justification letter for no objection to the World Bank team. The grantee is working on revising the workplan which will be submitted by July 27th 2011 and will work on specification for the materials to be used for clearing the land as the shelter. Personnel have been identified and will be issued with terms as soon as the funding is ready. On 5th of August, ADSI will hold a partners meeting to endorse the workplan and plan on project delivery.

Assessment: The project is confident it will achieve all its project objectives by end of September 2012 as well as most of the outcomes. Some outcomes will be achieved by 2013 as they require more than one year. Despite the fact that the grantee has made recent improvements in communications Winrock continues to have serious concerns about this project's viability. Winrock does not believe that the ASDI team has the technical expertise, financing or time to achieve the distribution grid component of the original project plans. If the World Bank decides to move ahead with this project, Winrock would suggest that the distribution grid component be



stricken, administrative concerns raised by Winrock reviewed closely by the Bank, and that the Bank undertake at least one supervision trip in addition to the three trips that Winrock plans to take. Further details documenting Winrock's concerns have been submitted to the World Bank separately.

In September 2010 Winrock visited the ASDI project in Northern Uganda. Winrock met with the project coordinator and discussed the project overview. Winrock also met with the board members, visited the proposed project site and got to better understand how the project will work. Winrock reviewed financial document and pointed out budgetary concerns which were addressed in the revised budget. More details are available in the ASDI trip report.

Winrock activities planned for the next reporting period

During the next quarter (July-September 2011), Winrock plans to continue to work closely with the four projects that are ongoing, and provide detailed reporting on their progress. Winrock will also perform site visits with World Bank staff, wherever feasible. Finally, Winrock will assist the four grantees who have not yet received their funds to fulfill all the conditions of the grant agreement and withdrawal application submission, with regular reporting to the BEIA team on progress in ensuring all projects kick off.

Winrock contract amendment

Because of the unanticipated delay in the issuance of the World Bank grant agreements, Winrock has provided more than 12 months of unbudgeted labor costs, with expenditures totaling over \$170,000 to date (as of June 30, 2011). As a result, when Winrock's contract is amended to extend the end date through October 2012, we anticipate a need for an incremental cost allocation of an approximate range of \$85,000 in additional funding. Unfortunately, the reduction in number of pilots from 12 to 9 is not expected to result in significant savings for Winrock. The original budget for site visits was for 3 trips per site, which may be amended to 4 trips, resulting in equal total cost. Given only 14 months left before the closing date, 2 more supervision trips for each project would be practical. Original IAP monitoring plans for 4 pilots assumed the pilots could be measured on the same timeline to reduce travel costs, which may now not be possible. The added travel costs will absorb the savings from reducing the number of pilots monitored from 4 to 3. Other fixed price costs, like the wrap-up workshop remain essentially the same. Winrock does not anticipate significant time savings in gathering and compiling reporting from 9 pilots vs. 12. Winrock does not recommend using the budgeted \$70k contingency for extension purposes, as that was intended for unexpected contingencies that may still arise during actual implementation of the pilots, which is just now beginning. Winrock would be happy to provide the World Bank with a budget projection for the additional funding needed for the extension period. The matter of Winrock contract amendment is being discussed with the BEIA Task Team.



ANNEX: Pilot Projects Progress Details

1. CREEC/Uganda, P120030, Promotion of Improved Biomass TLUD Stoves in Uganda

Expected Outcomes:

This project will produce and promote 10,000 air controlled top lit updraft (TLUD) stoves produced by local tinsmiths and small business entrepreneurs in Uganda. These stoves have extremely low emissions, high fuel efficiency and a great variety of fuels can be burned in it, including various types of agro-waste. The three project components include (1) a preparation stage that involves the promotion, assessment of quality stove, and the adaption of the stove to local conditions through monitoring; (2) training of local skilled tinsmith to produce the stove and the development of resellers and entrepreneurs as part of the market chain; and (3) the actual production and marketing of the 10,000 TLUD stoves. It is anticipated that the project will be able to obtain support through carbon finance and microfinance institutions, and outcomes include indoor air pollution reduction and alleviating deforestation in the local areas of the project.

Achievements this reporting period:

The grantee received \$74,993 at the end of May 2011. The grantee has held four planning meetings between CREEC and JEEP; for minutes please see *CREEC attachment 1 (available upon request)*. The meeting covered:

- Work-plan (but the activity-plan is still a work in progress)
- Project thematic objectives
- Team coordination
- Roles and responsibilities
- Budget
- Identification of 25 districts
- Research and development of the TLUD stoves and choice of the final prototypes
- Awareness and promotion in the districts
- Monitoring & Evaluation and reporting

Goods and services have been procured using the “Shopping Method”.

Members of staff from CREEC and JEEP have been oriented and allocated duties to assist with the different project activities.

The 25 Districts in which the project activities are to take place have been identified. The procurement method used was agreed upon in the Project Planning meeting held on the 17th and 18 May, 2011. Both procedures used and districts selected are included in *CREEC attachment 2 (available upon request)*.

Stove Manufacturability, Marketing and Use Research and Development progress:



Biomass Energy Foundation Camp/Workshop: The first part of research and development was for all the involved parties to understand the concept and logic of the micro-gasifiers especially the TLUDs. At the end of this camp everybody was familiar with the concept, logic and operation of the TLUD and was ready to start on the implementation. Camp/Workshop information is provided in ***CREEC attachment 3 (available upon request)***.

After much consultation and testing the grantee settled for the TLUD technology based on the “Champion ’08” model. Even the Champion ’08 however was still a heat source and it pyrolysed for shorter than desired time. In order to convert it into a socially acceptable cookstove, the grantee has modified the Champion ’08. The modifications include: added handles for safety; added legs for stability; modified the fuel chamber (it’s now removable for more convenient reload); an air control system important for fire power control; and a pot rest on which to place the pot while cooking. To increase the Champion ’08’s fire power its dimensions were investigated, adding 20% to the diameter and 20% to the height and then testing the subsequent designs. Two major fuels were compared and the stove performance improved remarkably. In order to come up with the best size three additional sizes of stoves were built, as in 20 % wider (T2), 20% higher (T3) and 20% wider and higher (T4) in relation the original TLUD Champion ’08 (T1) design. The four stoves were tested by cooks and by the grantees staff members.

Stove Testing: The modified stoves (T2, T3 and T4) performed better than the original (T1). The T2, performed best among all the four (4) stoves and was selected to serve as the base stove prototype namely: the “BEIA Stove”. Results of this modification test and fuel variation test are included in ***CREEC attachment 4 (available upon request)***. Alongside results of this modification test and fuel variation test, observations made when the stove was running on Eucalyptus chops (firewood) are included in ***CREEC attachment 5 (available upon request)***.

Next steps:

- Twenty pieces of the base stove are going to be piloted in Nakawa Division and Wakiso District as agreed in the Planning meeting of 6 July, 2011. The pilot will start mid July 2011.
- Pilot study: the grantee report on results of the pilot study which has started.
- Developed Systematics Transfer that is; how all the earlier systematics developed are doing.
- Stove Manufacturability, Marketing and Use of the Research and Development phase have been taught to the Tinsmiths and the End-users in the selected districts.
- Stove Production and Sale.
- Quality Assurance, further refinement and Certification of the stove.

Challenges:

The project is working on overcoming challenges of the project location, including rampant strikes and riots in the city, rampant load shedding, rapidly fluctuating inflation, which has made quotations hard to make and execute, and drastically raising transport costs.



2. Restio Energy/South Africa, P120029, Promotion of Improved Biomass Rocket Stoves in South Africa

Expected Outcomes:

The aim of this project is to create a market for efficient biomass stoves of the StoveTec design in the South Africa rural off-grid market by developing and implementing 5 Market Enabling Pillars:

1. Awareness-raising/marketing, which includes:
 - a. Environmental education etc.
 - b. Product testing/integrity
2. Securing Policy/Government Endorsement
3. Establishing Distribution Infrastructure
4. Ensuring Commercial Supply Security
5. Ensuring Access for All Potential Customers
 - a. Transactions, credit, lay-buys, etc.

Achievements this reporting period:

The grantee ordered 1,232 stoves in March, the arrival of which did not come until June. The stoves arrived in Durban harbor and were transported to Consolidated & Wholesale Cargo's Warehouse in DubeTradezone, Durban. Units have been unpacked, sorted, palletized and stored. The grantee has placed an order for a second container expected in August 2011.

Restio has also commissioned the development of a custom Sales and Stock Management software package for effectively capturing sales, stock levels, stock movements, queries and monitoring market penetration.

Phone interviews were conducted with 15 shortlisted candidates for the position of stove product agent for Durban. The selection process involved the use of a Multi-Criteria Decision-making tool (*see **RESTIO attachment 1 -available upon request***). The evaluation was based on a number of criteria:

- Sales Experience
- Experience in rural and peri-urban areas
- Experience working with community organizations, municipalities, general retail stores etc.
- Ability to travel frequently
- Knowledge of the energy and renewable energy sectors
- Enthusiasm for the product and eagerness to fill the position
- Proposed marketing and sales approach for selling efficient biomass stoves

Using the abovementioned criteria and based on the phone interviews, two candidates were selected for final in-person interviews, which have been scheduled. Contract specifications for the proposed sales agent(s) have also been finalized, and an induction and training plan compiled. A sales and networking plan for the sales agents' first month has also been finalized.



With regards to resources needed: demonstration packages including product samples, marketing documents and presentations have also been finalized.

Some 280 stoves were (pre)sold to Siyanceda Africa Relief who are distributing the stoves amongst poor rural households in South Africa. While the intention is to develop a commercial market for the stoves, working with organizations like Siyanceda does increase the profile of the product and ensure greater presence in the market. Please see the TV advert developed by the organization to market the stove: http://www.youtube.com/watch?v=n-99H9R5ovk&feature=player_embedded. Posters developed may be viewed at <http://www.flickr.com/photos/restioenergy>.

Some 80 additional stoves were also (pre)sold to Kobus Venter, who has established a small distribution initiative in KwaZulu-Natal utilising local sales agents who are trained and supported to on-sell into their (rural) communities.

Next steps:

1. Appointing a Product agent in Durban. Signing of employment contract – (as above). Introduction to project, processes, aims, products, his/her responsibilities, etc. Commencement of the first month's sales plan (June&July).
2. Managing and monitoring Sales Agents, introducing them to the respective managers of the NuRa and KES concessionaires, corresponding on their sales contacts and results. Providing marketing support and assisting them in penetrating the various markets and areas (on-going).
3. Finalization of the next order of StoveTec stoves (June) and receiving the next shipment at our Durban warehouse (August).
4. Development of marketing materials and presentations (on-going).
5. First visit to the NuRa concession (KwaZulu-Natal) on the proceedings of the project (June), first visit to KES and Solar Vision concessionaires (August).
6. Sales and stock programme finalised (July).
7. Receiving feedback from Siyanceda Arica Relief's Winter 2011 Project on the stoves (on-going).

Challenges:

While there were delays with regard to the arrival of the stoves, the grantee was able to pre sell 360 of the stoves. The delays have not had a huge impact on overall sales, but rather on marketing into the concession programme. The grantee has done all the necessary ground work to ensure that the programme – as far as creating rural markets is concerned – will overcome the delays. A strong relationship with the stove manufacturers as well as the freight and forwarding companies allows the grantee some degree of control (and, at worst, transparent communication) with those involved in this part of the supply chain.

3. Concern Universal/Gambia, P120024, Promotion of Improved Biomass Vesto Stoves in Gambia



Expected Outcomes:

Concern Universal is carrying out a project to create commercial community enterprises through the promotion of fuel efficient stoves and biomass briquettes from waste materials. This project targets 3 urban/peri urban communities who primarily use firewood as fuel in the greater Serrekunda area in the Gambia. In the immediate, the project will import the Vesto stove from Southern Africa and test 10 stoves in each of the three target areas for a period of one month; then sell 500 stoves in the target areas during the project timeline.

Achievements this reporting period:

With Winrock's help, this grantee has now revised their planned activities and spending plan to fit the available funds (they had intended to spend 84% of their budget in the initial disbursement period, rather than the 50% available).

The grantee has completed designs of the completion and fit-out of the production, training and research centre and has put them out to tender. Duty waivers for the import of stoves are being negotiated and finalized with the relevant government line ministry. Meetings have been held with the Ministry of NGO Affairs and the National Environment Agency to introduce them to the project and to facilitate the duty waiver process. Briefings and trainings for field extension workers have been scheduled and planned; one has already taken place (agenda and presentations attached as **CU attachments 1a, 1b (available upon request)**). A project logo has been designed and agreed for inclusion on branding of all project-related materials, to increase visibility and brand recognition (**CU attachment 2 - available upon request**).

Contracts with international technical consultants are currently being finalized in order to complete the initial research into stove use and briquetting manufacture. There may be an opportunity for one of the international technical consultants to visit The Gambia to carry out research in the field. This was not part of the original work plan but is excellent news for the project as we will have the benefit of his research expertise first hand. It is not expected to affect the timings of implementation as laid out in the workplan. Partner contracts and workplans have been finalized. The contract for The Gambia Technical Consultant was finalized and a letter for single-source procurement was submitted to the World Bank for approval; the contract was approved without objections.

TORs for and selection of Technical Assistants have been finalised; TORs for field extension workers have also been finalized and circulated (**CU attachment 3 - available upon request**).

A full partner briefing was held at Concern Universal offices on June 2, 2011 to provide a 'refresher' on the project concept, methodology and workplan. Initial action points were agreed, including project intervention areas, roles and responsibilities, project and reporting structures, and reporting deadlines. Attendees included the Technical Consultant, Technical Assistants, representatives from the three partner organizations (MMAP, PRSP and TARUD), and marketing partner Studio 361. (Agenda and presentation attached to this report.)

Next steps:

The next activities will be focused on:



- Carrying out the research into stove use and potential for briquetting production
- Designing basic training Materials
- Finalizing CO₂ testing parameters to meet WB standards
- Putting out to tender completion and fit-out of production, training and research center
- Design, approve and put out to tender briquetting production equipment

Challenges:

This project's main challenge is timeline; because of the extended research phase of the project, stove promotion activities will not take place until the last six months of the grant agreement, leaving little room for delays. Winrock will work closely with the grantee to keep them on schedule.

4. ARTI-TZ/Tanzania, P120035 Promotion of Charcoal Briquettes in Tanzania

Expected Outcomes:

The project aims to empower rural inhabitants, especially existing charcoal producers with knowledge, through hands-on practical training on how charcoal can be made from agricultural waste and any other dry biomass which is around them, without cutting trees. Each month ARTI-TZ will train 3 villages, each village receiving a 4 day training program. The trainings will be done in 4 districts – Bagamoyo, Kibaha, Kisarawe and Mkuranga – which are the major sources of the wood charcoal being used in Dar Es Salaam. Each training program will provide in-depth skills to 30 participants in the fabrication of charcoal kilns, the process of pyrolysing agricultural waste for the production of char powder, and the manufacture of charcoal briquettes. The 2 charring kilns fabricated by the participants will remain in the village continuing to convert Waste to Wealth.

Achievements this reporting period:

ARTI received their initial grant disbursement in February, and has made a revised work plan to adjust for the reduced time frame and increased cost of the kilns. During this quarter the grantee initiated contact with stakeholders, namely the Ministry of Natural Resources and Tourism, Ministry of Energy and Minerals, Rural Energy Agency and Bagamoyo District Officials.

During this quarter the villages to be trained were selected by the District Forest Officer who based the selection on villages that are affected by deforestation. The grantee made visits to the selected villages to sensitize the leaders on the benefits of the proposed training. The participants themselves were selected by the village government council based on those that are making charcoal by felling trees as well as those aged between 25 – 35 year as a way of creating jobs which is a major social problem in Tanzania.

The first six villages identified for training have now received training in making charcoal briquettes (see **ARTI attachment 1** for training manual - *available upon request*). All the trainings were standard taking 4 days and involved the following components:

- How to make kilns using empty drums
- Converting dry biomass to make char powder using the kilns
- Converting char powder to make briquettes using briquette extruders that were supplied by ARTI



- Governance structure by electing and appointing a management committee in each village

The grantee has purchased kilns, briquette extruders, tools and safety equipment for the training as well as a new generator. The welding machine and angle grinder, and safety equipment generator were purchased through the shopping process. The kilns and briquette extruders were purchased from a local supplier through a single source process.

Details of the trainings by village:

May 3rd, 2011 to May 6th, 2011 – Makurunge Village

ARTI-TZ trained 27 participants in the Makurunge village located in the Bagamoyo district from May 3-6, 2011. Amongst the participants there were seven females and twenty males. The median age for the participants was 30.5 years. The occupation of all participants was farmers.

May 10th, 2011 to May 13th, 2011 – Kerege Village

ARTI-TZ trained 30 participants in the Kerege village located in the Bagamoyo district from May 10-13, 2011. Amongst the participants there were twelve females and eighteen males. The median age for the participants was 36.5 years. The occupation of the participants was predominantly farmers, others include house girl, stay at home mother, carpenter, and entrepreneur.

May 31st, 2011 to June 3rd, 2011- Mbwewe Village

ARTI-TZ trained 29 participants in the Mbwewe village located in the Bagamoyo district from May 31 - June 3, 2011. Amongst the participants there were fifth-teen females and fourteen males. The median age for the participants was 35 years. The occupation of the participants was predominantly farmers.

June 7th, 2011 to June 10th, 2011 – Kikaro Village

ARTI-TZ trained 30 participants in the Kikaro village located in the Bagamoyo district from August 7-10, 2011. Amongst the participants there were ten females and twenty males. The median age for the participants was 37 years. The occupations of the participants are predominantly farmers.

June 14th 2011 to June 17th, 2011 – Msata Village

ARTI-TZ trained 30 participants in the Msata village located in the Bagamoyo district from June 14-17, 2011. Amongst the participants there were sixteen females and fourteen males. The median age for the participants was 30 years. The participants were predominantly farmers.

June 22nd, 2011 to June 25th, 2011 – Lugoba Village

ARTI-TZ trained 30 participants in the Lugoba village located in the Bagamoyo district from June 22-25, 2011. Amongst the participants there were eleven females and nineteen males. The median age for the participants was 48years. The occupations of the participants were predominantly local government and farmers.

Next steps:



- Complete training in 3 villages remaining in Bagamoyo District
- Obtain Introduction Letter from the Ministry of Natural Resources to Kibaha District officials.
- Contact Kibaha District Forest Officer and indentify 12 villages
- Visit the 12 identified villages and agree on the training schedule.
- Commence training in Kibaha district
- Visit all the trained villages to monitor their progress and activities

Challenges:

The grantee's overall preparation has enabled them to begin the project on a very positive and progressive note. Preparing stakeholders in advance has won us their support and confidence. The grantee was able to meet the above mentioned stakeholders and get the support required to organize at the District and Village levels. The main challenges are with the cost of the equipment which has increased from the original budget and will be very difficult to meet. The cost of equipment has risen sharply over the past two years and now is 25-30% more than when the proposal was submitted. The grantee budgeted for \$280 and now the best price they can negotiate is \$350. Furthermore, with the sharp increase (45%) in petrol cost the cost of transport of equipment and personnel to the villages has increased, along with almost all other costs.

To help address these budget issues, the grantee has agreed with the local supplier of kilns and extruders to maintain a fixed price on the equipment under the condition that they pay for the equipment one year in advance. Because they do not have a storage site at their office, the supplier has agreed to deliver the required equipment to ARTI office just prior to each village training. In addition, the number of villages has been reduced from 15 in each District to 12 in each district.

5. ADENYA/Rwanda, P120037, Promotion of Charcoal Producers' Organization in Rwanda

Expected Outcomes:

The objective of this project is to modernize charcoal industry through organizing and transforming the charcoal production sector into profitable and sustainable businesses. The project will support skills training in using improved carbonization techniques and marketing approaches. The project will also provide support in organizational development and institutional capacity building that will make charcoal sector more profitable for the target communities.

Expected results are:

- The charcoal sector is legally organised, profitable in stainable way to 120 charcoal producers in the project targeted area;
- Some 120 charcoal producers save 30% of wood by using improved carbonization techniques;
- Six charcoal producers' cooperatives and their umbrella are created, organized, operational and play key role in the "Forest Management Plans"(FMP) implementation

Achievements this reporting period:



Winrock has been communicating with the grantee on a regular basis to keep the grantee on track to fulfill the conditions of the grant agreement. ADENYA's original partner, CARE Rwanda, terminated their MOU with ADENYA in December 2010 due to concerns about internal financial management and possible fraud. This quarter the World Bank's Financial Management Specialist and others performed an investigation into ADENYA's situation, and approved the project moving forward with a replacement implementing partner. Winrock received and commented on the draft MOU that ADENYA prepared with CECI, their new partner, as well as the revised project budget, monitoring indicators and work plan.

The World Bank TTL requested that ADENYA:

1. Finalize the MOU, incorporating his suggested changes
2. Amend the budget to show CECI charges as consultancy, and not salaries
3. Submit a confirmation of co-financing, stating how much money ADENYA will deposit in the bank account as cash co-financing, if any. ADENYA's contribution is in kind

All the above have been accomplished and the grantee expects official communication from the World Bank.

Next steps:

1. Complete application for withdrawal and submit request
2. Revise work plan and indicators
3. Mobilizing charcoal producers in the two districts
4. Sensitize the stakeholders on issues relating to charcoal production and distribution
5. Capacity building to local institutions

Challenges:

This project will have just about 1 year to complete and achieve its objectives. In order to achieve its projects objective it will need constant monitoring and guidance. Winrock proposes to work with the grantee in achieving the project's objective.

6. Help Self Help Centre/Kenya, P120038, Scaling up Biodiesel Production in Kenya

Expected Outcomes:

The project aims to upscale the biodiesel output at an existing local production facility from the current 300 litres to 800 litres per day. It will also facilitate the fabrication of stoves for cooking with bio-kerosene already under trial. It will mount a vigorous campaign to promote the use of biodiesel in vehicles and generators, bio-kerosene in lamps and stoves and the by-products such as seed husks for use in heating boilers (industrial) and seed cake as livestock feed. Biodiesel will be produced using oils extracted from trees (seeds) found naturally in the forest and on-farm. The trees that produce the oil-containing seeds are abundant and the seeds and nuts are freely available in the proposed project area.

Achievements this reporting period:

This quarter the grantee recruited two technical assistant staff: Peter Njenga and Zachary Gitonga. Peter's duties involve technical assistance and training in tree propagation, nurseries



and green houses management. Zachary's focus is in the factory, specifically involved in quality control aspects (biodiesel and feedstock). Both have undertaken refresher courses in respective areas of propagation and quality control. The grantee also developed a TOR and recruited a consultant who then conducted a survey of raw materials availability and season ability, including the current resource base status of croton, cape chestnut and castor (see *HSHC attachment 1*). The report is already providing the grantee with the basis of determining raw material ownership and supply forecasting, and sites for establishment of collection centres. The findings of the survey gave the project an indication of the season, volume and distribution feedstock for biodiesel production. This data is not only necessary for production planning but is critical in making decisions on future up-scaling and in securing interests from investors. It has also identified a capacity to produce 3000 liters of biodiesel per day. There is room for expansion on-farm and in forest, estimated to double the existing population of trees on-farm and in public forests.

The grantee also constructed a storage facility with a capacity of 400 tones of seeds, which involved developing an architectural plan, conducting a bid process, and selecting a constructor based on the cost and the experience of the individual/company. The first phase of the storage facility with a capacity of 280 tones has been completed and is already being used to store seeds. The completion of the storage facility will allow the grantee to capitalize on the collection of croton and cape chestnut seed season expected in June to August this year.

The grantee further established greenhouse vegetative propagation of croton and cape chestnut; the establishment of nurseries and green houses has gone on very well despite the water shortage. There are currently 3 fully supported nurseries and 3 green houses that are facilitating tree propagation. In addition there are 4 other nurseries which have been partially supported by the grantee through request by concerned community group. This has been provided with technical and material assistance. The success of this project component is based on the enthusiasm created by the prospect of alternative income stream created through sales of both seedlings and seeds. Only two green houses and two nurseries remain to be supported to achieve the projected five.

To date, a total of 197 farmers have been trained in nursery and green house management. The trainings were conducted on site and involved practical demonstration, covering the following topics:

- Seed and propagate selection
- Seed and propagate treatment
- Development of a growing medium
- Green house management
- Tree nurseries general practices and management
- Transplanting

The training also involved areas related to group's organizational management and simple accounting as the nurseries and green houses in question are run by community groups on a semi-commercial basis. Some 300 targeted individuals total will eventually be trained; all of



these groups are actively involved in the production of seedlings and have the capacity to manage these facilities.

During this quarter the grantee supported the establishment of one collection centre (the sixth in the region), which serves as a seed collection point and performs important functions of grading, weighing, packaging and storage. They handle all kinds of seeds including croton, sunflower, and castor, canola and cape chestnut. The centres have been an effective tool not only in mobilization seeds collections but in predicting the expected volume necessary for production planning. In addition these centres handle a significant amount of seeds 45% of all the seeds brought to the processing unit. They also act as platform for learning and interaction for the women who manage them.

During the reporting period, the grantee continued to create awareness at different forums/events organized by Government, community, local institutions and individual farmers. The awareness included project attributes, bio-fuel, commercial tree crops, on-farm tree planting, nature based enterprises and benefits accrued to participants in the project. It is estimated that 323 individuals were reached during the reporting period. The foras included environmental days, Forest Management Plan (FMP) workshops, and FMP launch and farmers forums organized by HSHC. A workshop was organized for the local planning team which included local institutions to formulate strategies for awareness creation especially for the economic opportunities offered by the grantee in seed collection and the linkage to the overall natural resource management. The participants who attended the workshop numbered 46. Hundreds of brochures were distributed.

The grantee also continued to test and improve the design and improvement of the bio-stove. Although one design looks promising, further development, testing and improvement are required. The criteria that have been set for the stove to qualify for market include efficiency, cost effectiveness (affordability) and convenience to handle. These are the qualities designers have in mind when developing the stove and a combination of them all is a must.

Research and development of value added products undertaken this quarter involves testing the chemical content of the oils for different purposes including biodiesel, straight vegetable oil and applications as bio kerosene. Analysis has been conducted to determine the content of both the seed cake for as feedstock and croton husks as charcoal briquettes. The test for husks for conversion to briquettes is complete and successful but that of seedcake to animal feed is inconclusive. Further research in this area especially testing the nutritional content (and undesirable elements) and compare with the national recommended standards.

Next steps:

1. Construct an additional storage facility
2. Develop 2 network of raw materials suppliers
3. Awareness and dissemination campaign
4. Establish 2 green houses for vegetative propagation of croton and castor
5. Establish 2 tree nurseries to nurture seeds and propages
6. Train 113 farmers on green houses and nursery management
7. Promote on farm tree planting



8. Liaise with the Kenya Forest Services and community forest associations to promote a forestation
9. Ongoing market linkage of products

Challenges:

The grantee had problems completing the Application for Withdrawal Form, so experienced a delay in accessing funds. The project also experienced shortage of space for construction of the new storage facility. The original design of the project was one structure with capacity of 400tons of feedstock at any one time. However this was not possible as there was a limited space. The old timber store which occupied the alternative additional space could not be demolished as it acted as the main feedstock store. As such, the project revised the construction plans to take place in two phases.

Externally the project was affected by persistent and prolonged drought (early project phase), lack of Forest Management Plans in some forests and insufficient policy direction from the government. Internally the project was challenged by limited markets for the husks, limited storage capacity and delay in the delivery of the oil extraction machine. All these factors affected the project in a number of ways: production planning, production efficiency and inability to purchase all seeds collected by farmers. The most critical challenge to the project is that the expected rainfall did not materialize in this region. There was only an intermittent rainfall and in some areas non-existent. This has challenged the development of nursery and green houses (GH) and will interfere with on-farm tree planting.

To address these challenges the grantee has encouraged farmers to water the trees with the little available water and practice other water conservation practices including large holes and mulching. In the absence of these practices and the rain, the survival rate of seedlings is reduced by 50 percent in some instances. The grantee thus intends to train farmers and build awareness on water conservation practices linked to tree planting.

7. GERES/Benin, P119962, Promotion of Social Biofuels in Benin

Expected Outcomes:

The project aims to start a pilot crude Jatropha oil (CJO) production social enterprise. Four main project components are:

- A) Start a CJO production social enterprise through a participative decision making process
- B) Initiate CJO production suitable for local energy-based services use
- C) Develop the local CJO market
- D) Follow-up and monitor for replicability conditions identification

Achievements this reporting period:

Winrock has been communicating with the grantee on a regular basis to support their efforts to fulfill the conditions of the grant agreement and to ensure that the co-financing was banked as required and documentation sent to World Bank. Winrock also worked with the grantee to clarify the legal issues raised by the legal team at World Bank.



The grantee has filled and submitted a Withdrawal Application form for FCFA 39,000,000. The application has been approved and revised to FCFA 20,000,000, which is 50% of the total amount of the grant. The grantee has received the funding.

The following activities have been carried out to date:

1. The grantee has held discussions with ETD and his role has been clarified. A contract on his engagement has been drafted and is undergoing administrative procedures before signing.
2. Capacity building that took 3 days was conducted by the entrepreneur on simple business skills, networking, and marketing. A skills assessment of the entrepreneur is included as **GERES attachment 1 (available upon request)**.
3. Training on business plan development – this activity is ongoing. The training guide has already been developed.
4. Plans have been held on how the Jatropha oil production plant will be fabricated: training will be carried out by a manufacturer from Belgium and will take place October 2 to 12th 2011. This expeller, installed in GERES's experimental centre, will be tested in order to produce or confirm the knowledge necessary to work out the TOR for the extraction plant construction, and to accompany the manufacturer that will be selected to make the social business enterprise plant

Next steps:

1. Training of the entrepreneur through the elaboration of the business plan (continuation, if contract problem solved)
2. Experimental expeller test with manufacturers
3. Workshop with local manufacturers on the fabrication of an expeller and on CJO adaptation of Lister engines
4. Elaboration of TOR for the CJO extraction plant

Challenges:

The construction of the extraction unit within a 7 months period is a challenge. It does not give much leeway in case of unexpected problem, all the more so that this will be the first Jatropha expeller ever made in Benin (which is reason an expeller made in Belgium will be used as a model). The approach in order to reduce the risk is to work with and train the potential manufacturer before launching the call for proposal (using the experimental expeller to be installed early August) and then have a well-trained technical staff able to closely follow-up the work of the manufacturer that will be selected.

No Objection requirement for ETD's performance on social engineering of the enterprise is required by EU who is the co-financier. The process will take 1 month however some activities have begun and others planned to follow immediately as the grantee awaits the No Objection from EU.



8. Gaia/Ethiopia, P120040, Promotion of Ethanol Micro-Distilleries in Ethiopia

Expected Outcomes:

The project will demonstrate that ethanol is suitable, safe, efficient and affordable cooking fuel in Ethiopia in comparison to fuel wood, charcoal and kerosene, by expanding and running a pilot ethanol micro distilleries plant. The ethanol produced will be used for domestic cooking in ethanol stoves already disseminated in Ethiopia along with other appliances that are being introduced. The project will also provide technical support for the planting of multiple potential feedstocks. If successful the project will result in increased investment by small and medium enterprises in ethanol micro distilleries, and potentially increased policy support for ethanol micro distilleries.

Achievements this reporting period:

During this quarter Winrock communicated with the grantee on a regular basis to support their efforts to fulfill the conditions of the grant agreement, including the requirement of opening a US dollar account and providing co-financing proof to World Bank.

The grantee has not been allowed by local authorities to open a USD account and has had to open a local currency account. All parties are concerned that the money could devalue significantly over time, in which case they would not be able to purchase the micro distillery. The grantee is researching other options, including making two withdrawal applications, one for their local currency account and the other to be paid direct to the supplier. In the meantime, the grantee has sent the application for withdrawal to World Bank

Next steps:

- Hold a meeting with all partners to finalize the MOU and Terms of Reference of the consultant
- Make a public announcement for consultancy services
- Have all funds from co financiers deposited by end of July/1st week of August
- Interview for consultant to carry out feasibility study
- Offer letter to consultant
- Feasibility study completed by end of first week of September
- Begin procurement of micro distillery

Challenges:

Not having a dollar account in Addis is a big setback for the grantee as the exchange rate will greatly affect the budget. The grantee will however work on adjusting the budget to resolve the situation as best as possible.



9. ASDI/Uganda, P120042, Promotion of Bioelectricity in Uganda

Expected Outcomes:

This project aims to install high performance temperature controlled biogas plants fueled by abundant local fish waste to produce electricity for refrigeration, to support fish preservation through drying and cooling. The project also endeavors to provide power to an electricity distribution network serving 100 households, substituting biogas for kerosene in household and petrol used by generators in the village.

The project outcomes include:

- A new Energy Service Company is in place and 70,000 kWh electricity sold
- 100 families/homes supplied with electricity
- 200 t of organic manure procured from 100 local farmers
- 100 fishermen improved their income by using storage facilities and selling fish waste

Achievements this reporting period:

During this quarter Winrock communicated with the grantee on a regular basis to support their efforts to fulfill the conditions of the grant agreement. The grantee has been requested by the World Bank to obtain proof that their co-financing has been received before funds can be transferred. The grantee has not been able to obtain funding from their original sponsors, but is exploring other options of co-financing from either an Energy Capitalization Grant or the Electricity Regulatory Authority. The grantee has expressed difficulty in securing commitment from the above mentioned hence is seeking other options.

Winrock has worked with the grantee to provide justification for single sourcing which received feedback from World Bank, and is working to ensure that the grantee responds to the issues raised as comprehensively as possible. Winrock has worked with the grantee to revise the workplans and monitoring indicators. Winrock has reviewed and commented on the budget which the grantee has revised. ASDI has submitted the signed grant agreement and the Disbursement Letter to the WB legal department in Nairobi who forwarded it to South Africa.

Next steps:

1. Provide evidence of co financing
2. Finalize procurement plans
3. Once again revise workplan to indicate September 2012 as closing date
4. Prepare specifications for shelter
5. Meet with project partners

Challenges:

Winrock does not believe that the ASDI team has the technical expertise, financing or time to achieve the distribution grid component of the original project plans. If the World Bank decides to move ahead with this project, Winrock would suggest that the distribution grid component be stricken, administrative concerns raised by Winrock reviewed closely by the Bank, and that the Bank undertake at least one supervision trip in addition to the three trips that Winrock plans to take.