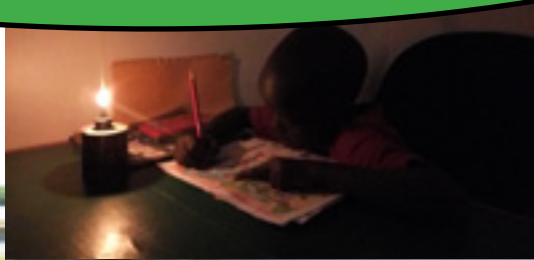




***CLEAN ENERGY PROJECT HANDBOOK
FOR YEAR 2017
BY
RURAL INITIATIVE FOR COMMUNITY EMPOWERMENT
WEST NILE***

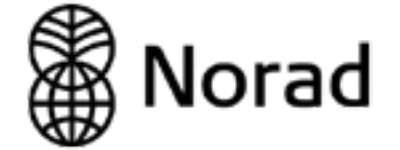


*Website: www.riceuganda.org
Email: info@riceuganda.org/ ricearua@yahoo.com
FB: Rural Initiative for Community Empowerment West Nile
Twitter: @RICEWESTNILE
Office line: +256372280576 / +256372275161
Mobile: +256772261176*

TABLE OF CONTENT

DONORS AND PARTNERS.....	3-5
BACKGROUND.....	6
GOAL AND OUTCOMES.....	7
PROJECT STAKEHOLDERS AND THEIR ROLES.....	8
THE JOURNEY SO FAR.....	9-10
SUCCESS STORIES.....	11-15
FINANCE AT GLANCE.....	16-17
CHALLENGES.....	18

DONORS FUNDING THE PROJECT



European Union

PARTNERS



PARTNERS

ADJUMANI DISTRICT

Former Seminarians Initiatives for Development (FOSID)

Global Aim Uganda Program (GAUP)

ARUA DISTRICT

Hear International (HI)

Community Organization for Rural Enterprise Activity Management (CREAM)

Approaches to Rural Community Development (ARCOD)

Nile Community Empowerment NETWORK (NICEN)

Nile Pro Trust Limited (NPTL)

KOBOKO DISTRICT

Community Empowerment and Rehabilitation Initiatives for Development (CERID)

Partners in Community Transformation (PICOT)

MARACHA DISTRICT

Maracha District Farmers' Association (MADIFA)

Community Empowerment Network Uganda (CENU)

MOYO DISTRICT

Moyo District Farmers' Association (MDFA)

PALM Corps

NEBBI DISTRICT

Nebbi District NGO Forum (NDNGOF)

Community Uplift and Welfare Development (CUWEDE)

Agricultural Productivity Enhancement Forum (APEF)

BACKGROUND

The Albertine Graben is advantaged with major natural resources such as lakes, rivers, forests, rift valleys, wetlands, hills and fertile soils which are of great importance for national and international biodiversity conservation and contributes numerous benefits (e.g. tourism revenue, water catchment functions and provision of energy, food, employment and income) for local communities living adjacent to the protected areas in the region.

Despite numerous roles of the natural resources along the Albertine area, the estimated loss of high conservation value forests in the Albertine Graben is 100,000 hectares each year (National Forestry Agency (NFA), 2009), which constitutes 60% of the high conservation value forest loss in all of Uganda. The total loss in Uganda of high conservation value forests is estimated at 168,000 hectares each year (National Forestry Agency (NFA), 2009). The production of charcoal for heat energy accounts for 60% of this loss (100,000 hectares each year), while rampant felling of trees for firewood accounts for 5% (8,000 hectares each year), NFA, 2009).

This project is designed to increase access to sustainable and renewable energy alternatives in the 20 District of Southern, Mid and Northern

Albertine Graben. RICE-WN coordinates the project in the Northern Albertine Graben covering six districts including Arua, Nebbi, Moyo, Adjumani, Maracha and Koboko Districts that have high levels of destruction to the forests due to overdependence on biomass for energy for cooking and livelihood.

Charcoal production and firewood is a source of livelihood for many households in West Nile region. Most rural communities in West Nile also use kerosene lamps that generate lots of smoke that accounts for some cases of respiratory tract infections experienced by members from such households.

This project shall focus on addressing the dangers associated with deforestation for charcoal production and firewood to protect the forest cover in the region.

Capacity of Civil Society Organizations (CSOs)/ Community Based Organizations (CBOs) to trigger communities to adopt use of renewable energy products and advocate with the district local governments and local private sector to increase sustainable and renewable energy solutions for the rural communities.

Goal and Outcomes

Project Goal

The goal of the project is to ensure communities living in the Albertine Graben have adopted sustainable and renewable energy alternatives to reduce dependency on biomass for their energy needs.

Project Outcomes

Outcome 1: Civil society in partnership with other agents of change is transforming government and private sector decisions and practices towards sustainable and renewable energy development to the benefit of women, men and youth.

Outcome 2: Government, private sector, civil society actors and local communities have adopted effective strategies and practices that support sustainable and renewable energy access in Albertine Graben.

Outcome 3: Government and private sector have put in place an enabling framework that supports increased financing/ investment for sustainable and renewable development.

Project stakeholders and their roles

Stakeholders	Roles
District local governments	Supporting the project activities at all levels including; selection of CSO partners when the project started, providing technical backstopping implementation for the different CSOs, monitoring and evaluating project activities among others.
Sub-counties in districts of intervention	Supported in selection of strong community groups including women and youth groups the project shall work with.
CSOs	The main implementing partners that RICE-WN is directly working with to create awareness in communities and distribute the sustainable and renewable energy alternatives in West Nile.
Women and Youth groups	Used to drive awareness creation and distribution of the sustainable and renewable energy alternatives in West Nile region among peers and the bigger communities targeted by the project.
Local communities	The direct project beneficiaries targeted for awareness creation and adoption of sustainable and renewable energy alternatives that should be seen reducing overdependence on biomass for their energy needs.

THE JOURNEY SO FAR

Expected results Area	Achieved	Variance	Comment
18 District partner CSOs	16	02	Expectations could not be met by the project
Sales 1500 Solar Home systems, 1666 Cook stoves	97 229	1403 1427	Inconsistency in marketing drives, personnel limitations, inadequate sales strategies employed
630 (60% WOMEN) Target population reached with awareness messages	2,387 (1,053 F, 1334 M)	1757 (675 F, 1082M)	Additional 1757 (675 F, 1082M) reached during road shows and market exhibition Different strategies used by different partners Underreporting
01 (cook stove construction with 60%F) for 30 ppts Capacity building trainings	01 (reaching 36 ppts – 22F, 14M) – 36% F	00	Additional trainings were given in Credit management, Mentorship on business development, Solar installation, operation and maintenance, Human Rights Based Approach)

THE JOURNEY SO FAR

Expected results Area	Achieved	Variance	Comment
03 Position papers	03	00	Drafts are currently being reviewed
06 Private sector actors reached	111	105	Priority was given to the community level private sector actors including VSLAs and SACCOs.
01 Reflection meeting with key stakeholders	01	00	

SUCCESS STORY

One of beneficiaries of the project, Mr. Opoya Charles, a Local Council Chairperson of Ocelo Village in Kucwiny Sub-county in Nebbi District Uganda, is a businessman who owns a small shop at Ocelo trading center. He got to know about the project through his involvement in a community awareness campaign done in Nebbi District on 4th November, 2017 by Agricultural Productivity Enhancement Forum (APEF), one of the partner organizations that RICE-WN is working with to promote the project in Nebbi District. During the activity, the solar home system was demonstrated and its benefits to the communities elaborately described to all participants. This compelled Mr. Opoya Charles to acquire one of the solar products for his shop located at Ocelo Trading Centre with the hope of boosting sales at his shop.



(In grey) Mr. Ongebo Samson and Mr. Opoya Charles at the shop during the monitoring visit.

On 20th November, 2017; the RICE-WN Monitoring and Evaluation Officer, Mr. Samson Ongebo paid him a visit to capture his story of how the project transformed his life as highlighted below:

Before purchasing the solar home system

In the past, Mr. Opoya Charles used to light his shop at night using a small torch. According to him, this mode of lighting was not very effective since he would close his shop quite early by 9.00 pm every evening and incur costs of up to UGX 15,000 per month on purchases of dry cells for his torch.

“I would close the shop by 9:00pm since the sales were low. The dim and

inadequate light of the torch would not attract many clients. This brought me very low sales of only 4 to 5 bottles of soda per day.” – Mr. Opoya Charles, November 2017.

After purchasing the solar home system

Today, Mr. Opoya Charles uses the solar home system to light his shop at night. The bright and adequate light ensures that his shop is well lit and attracts many clients who convene in large numbers every evening at his shop to interact with their friends and relatives on issues that concern them. This has greatly boosted his sales and increased returns in his business.

“Today I close my shop at 11.00pm since there are always clients at the shop till that time. I now sell over 20 bottles of soda per day. I used to sell only five bottles per day and take about 1 week to refill a crate.” – Mr. Opoya Charles, November 2017.

Mr. Opoya’s experience has inspired fellow community members in Ocelo Village who grow cotton as a predominant cash crop. Many of them now plan to sell their cotton and purchase the solar home systems for their homes and businesses. He has applauded the project and hopes to save money to purchase a larger solar product of 4 lights for his home as well.

Household cooking using traditional technologies such as three stone open fire, low energy saving metal charcoal stoves, locally built indoor stoves etc, encourage wastage of energy in a household. Such cooking technologies consume high levels of wood and charcoal which pose great risks to the environment since a large amount of trees are consumed in the production of charcoal and firewood for households using such technologies. Economically, this translates into high levels of household expenditure in the purchase of the cooking fuels i.e: charcoal and firewood. Health implications are also associated with use of traditional cooking technologies since huge quantities of carbon are emitted in the resulting smoke from such technologies. A recent study¹ conducted in Uganda’s West Nile District of Arua indicated that 72% of households use traditional three stone open fire cooking technology. This encourages high levels of deforestation from harvesting firewood for cooking. No wonder, reports by National Forestry Agency (NFA) indicate that the highest levels of forest cover loss in Uganda are experienced in the Albertine Graben. These are areas along the Rift Valley basin of which West Nile Districts lie.

To avert some of the above risks, Rural Initiative for Community Empowerment West Nile (RICE-WN) is implementing a Renewable Energy Project in the West Nile region of Uganda with support from World Wide Fund for Nature Uganda Country Office (WWF-UCO) and local Civil Society Organizations based in West Nile. This project is aimed at increasing access to renewable energy alternatives i.e: improved cook stoves and solar home systems in the region.

Hon. Raleo Rose, a Youth Councillor with Adjumani District Local Government, is one of the beneficiaries of the project. Her story reveals the great benefits of the improved cook stoves that become of communities that adopt them.



A kind of inbuilt household cook stove that Hon. Raleo used in the past

¹ Dr. Samuel Baker Kucel et. al: A Socio-economic Study and Energy Access Baseline for Arua and Masindi Districts; 2017

Improved cook stoves: A step further towards saving our trees

She attended the project inception meeting that was held in September 2017 in Koboko District during which various stakeholders were invited to launch the project in the region. During the meeting, the RICE-WN project team elaborated the benefits of the



Hon. Raleo cooking with the project supplied improved cookstove

improved cook stoves to the communities. Rose was compelled to buy one of the stoves due to its cited ability to use 30% less fuel i.e; charcoal and firewood to cook. In her mind, she anticipated high savings on costs of charcoal to feed her fairly large family of 12. Rose purchased the cook stove on September 20th 2017 and 2 months later in November 2017, she was overwhelmed by the great performance of the stove.

Today, Hon. Raleo is saving at least 50% monthly on costs of charcoal in her home with an improved cook stove. Previously, Rose used to cook with a locally built indoor cook stove. She used to purchase 2 bags of charcoal a month in her home to feed her family. Now, she only uses 1 bag of charcoal per month.

“I have a family of 12 people. I used to buy 1 bag of charcoal every 2 weeks to cook for my family. Ever since I bought the improved cook stove, I now buy only 1 bag of charcoal in a month.” – Hon. Raleo Rose

1 bag of charcoal costs UGX 25,000 in Adjumani. Rose used to spend UGX 50,000 per month on 2 bags of charcoal to feed her family. Today, with only 1 bag of charcoal per month, she saves UGX 25,000 every month in her household. The improved cook stove is expected to last at least 5 years of

cooking. In 5 years, Rose would be saving UGX 1,400,000 in her household which can be used to promote socio-economic development in her home. Such benefits can translate into environmental conservation within the communities. The improved cook stoves in this project are manufactured with funding from World Bank which estimates each unit to save at least 33 trees annually since they use less fuel to cook. Hon. Rose believes that if households in Adjumani District would purchase the cook stoves, the future generations may still have some trees left in their environment.

“There is a high level of deforestation in Adjumani District. If my family alone used to consume 2 bags of charcoal in a month, how many bags are consumed by larger families? We should buy the cook stoves to conserve out trees for future generations.” – Hon. Raleo Rose

Safety! Safety! Safety!
Smoke from cooking is harmful to your health

Resort to clean cooking with Improved cook stoves for Healthier Families

Smoke inhaled from "fadooba" and kerosene lamps is a

- Silent killer
- Makes it hard for children to study at night
- Can cause fire outbreaks

Use smoke-free Solar Home Systems for healthy home lighting

FINANCE AT GLANCE

<i>Income</i>	<i>Actual</i>	<i>Budget</i>
B/F	498,194	
Funds disbursed by WWF for 1st quarter: Aug - Oct 17	161,935,200	161,935,200
Funds disbursed by WWF for Market Exhibition Dec 17	33,388,000	33,388,000
Funds disbursed by WWF for 2nd quarter Nov - Dec 17	40,483,800	40,483,800
Total Income	236,305,194	235,807,000

Expenditures

	ACTUAL BUDGET	EXPENDITURE %
Conduct Community dialogue with Women, Men, Youth Local government & CSOs to document issues & develop position paper	19,336,000	100%
Undertake targeted awareness campaign (Radio & Community outreaches to promote sustainable & renewable solution)	24,760,000	100%
Undertake capacity building of CSOs and local community representatives on cook stove construction and maintenance(Regional)	17,500,000	100%

FINANCE AT GLANCE

Expenditures

	ACTUAL BUDGET	EXPENDITURE %
Facilitate CBOs to distribute sustainable and renewable energy solutions in the Northern Albertine Graben	17,240,000	100%
Facilitate stakeholder engagements for delivery of sustainable and renewable energy solutions in the Northern Albertine districts (Regional)	15,811,000	100%
Conduct dialogue with local private sector on innovative financing mechanisms for delivery of renewable energy products (District based)	29,462,000	100%
Monthly monitoring and reporting on project implementation	6,817,000	100%
Conduct CSOs review meeting to share experiences & lessons learnt	19,923,000	100%
Project Cost	10,050,000	100%
Contributions to Staff Cost	10,000,000	100%
Administrative Expenses	31,338,450	100%
Conduct Market Exhibition	33,388,000	100%
TOTAL EXPENDITURE	235,625,450	100%

CHALLENGES

High influx of counterfeits in the local open market. This was observed as a major challenge expressed during the dialogues with the local private sector meetings. Because of this, the communities seem to have lost faith in the quality of the solar products.

Low household income levels limit abilities of the households to acquire the products. Baseline data indicated that most households (58%) in West Nile (Case study of Arua) earn less than 300,000/= per month and are willing to spend only 120,000/= and 10,000/= on solar home systems and improved cook stoves respectively. Additionally, the prices of the renewable energy alternatives are relatively high which limits affordability by the rural households. Baseline data indicates improved charcoal stoves in the West Nile range between 12,000/= to 32,000/=. This is lower than the project price at 35,000/=. The high prices have been cited as one of the main factors leading to low sales of the renewable energy product whereby only 34 solar home systems have so far been sold out of a target 1,500 for distribution. There is need for more sensitization on the benefits of the products vis-à-vis the prices of the products such that the communities appreciate the differences in the prices.

Unfavorable competition from some clean energy products on the market. For example, solar home systems that come with Television sets, small radios and cook stoves with added advantages such as capability to charge phones. Some community members have expressed interest in such cook stoves due to the added advantages that they possess and have thus demanded that the project cook stoves should adopt the same technology. Implementing partners need to continuously assess levels of demand for such products in the communities to inform tailored production for more efficient usage of resources. WWF through World Bank and other project donors could consider engaging suppliers such as Battery Masters and Ugastove (cook stove manufacturer) to design various product models that meet various demands of the community members in order to promote increased adoption of the clean energy alternatives within the communities.

Excessive use of charcoal and firewood kills our forest

Save our environment

Three stone open fire system kills our trees!!

Use solar system for cleaner home lighting and energy saving stoves for cleaner home cooking

DANIDA, European Union, Norad, SIDA, THE WORLD BANK



Dual Energy saving cook stove (can use both charcoal and fire wood)



High quality German made solar home systems in different sizes:

1. One bulb (1.5W).
2. Four bulbs (5W)
3. Four bulbs (20W) Can light upto six bulbs.

Get all the clean lighting and cooking products at RICE-WN office
Plot 3B Mvara-Oluko Road
P.O. BOX 481, Arua
Mobile: +256 787 467694, +256 772 261176, +256 774 501470
Email: info@riceuganda.org, ricearua@yahoo.com
Website: www.riceuganda.org

VISION: A MODEL COMMUNITY-BASED
SERVICES PROVIDER FOR HOLISTIC
TRANSFORMATION

MISSION: TO ADVANCE AND PROMOTE
HEALTHY COMMUNITY DEVELOPMENT

CORE VALUE: STRENGTH

SIMPLICITY

TEAMWORK

RESPECT

EXCELLENCE

NOVELTY

GUARDIANSHIP

TIME CONSCIOUSNESS

HONESTY



©

RICE-WN

*Organization Development
Communications and documentation
Veronica Wairimu Gikonyo*