



CSOS PERSPECTIVES ON THE INTEGRATION OF RENEWABLE ENERGY IN PLANNING AND BUDGETING PROCESSES IN THE AGRICULTURAL VALUE CHAINS

Presentation at a Dialogue Organised by ACODE and Heifer International on Integrating Productive Use of Solar Energy (PUSE) in Government Programmes

> By Kimbowa Richard Chairman - Renewable CSO (RECSO) Network* (c/o Environmental Alert) Email: <u>kimbowa.richard@gmail.com</u>





Productive Use of Solar Energy (PUSE):

- Use of solar energy to increase income or productivity. It is the application of this energy to generate income, increase revenue by creating new activities or business opportunities, extending working hours, and lowering production costs.
 - There is a **wide range of applications of PUSE** in the agricultural, industrial, and commercial sectors, such as lighting, cooling, heating, drying, and cooking.





Agricultural value chain:

- For a range of crops (food crops like maize, cassava, beans and other cereals, horticultural produce, coffee, etc.
- Animal products (milk, meat)
- Through irrigation, drying, cold storage









Government programmes:

Uganda is agrarian working toward achieving middleincome (Vision 2040) → increasing agric. output productivity. Agricultural sector in Uganda employs the majority and provides the highest potential for impact



Agricultural sector employs over **70% of Uganda 's work force** and has the significant potential for value addition across the country¹



Productive use equipment in agriculture could potentially increase individual monthly incomes by 30%²



Sources: OCA analysis & interviews supplemented by

 1. CIA World Fact Book: https://www.cia.gov/library/publications/the-world-factbook/fields/2048.html

 2. National Survey and Segmentation of Smallholder Households in Uganda

Activate Window





At stake...

- Improving agricultural productivity requires mechanization, which in turn necessitates reliable, affordable access to energy.
- But farmers are not familiar with PUE (PUSE) appliances
- And... Commercial lenders are unfamiliar with Decentralized Renewable Energy (DRE) and PUE (*PUSE*) appliances and how to finance them.

'A solar-powered pump and sprinklers, for example, cost \$725 on average yet over 77 percent of Ugandan farmers earn \$61 per month'

Source: Power For All (2023) Powering Agriculture: Uganda Action Plan





CSOs experience in promoting the Productive Use of Solar Energy (PUSE) in the Agricultural Value Chain?

 Assessment based on the Renewable Energy Civil Society Organizations Sector Performance Report for FY 2017/2018: 28 CSOs including International NGOs, national NGOs, CBOs and membership based networks implementing activities in the renewable energy sector. 50% of the contributing CSOs were local or national CSOs.





- RECSO Network members implemented projects that promote energy saving cook stoves, solar systems and briquettes, awareness raising campaigns through media engagements and development and dissemination of IEC materials, and capacity building projects respectively.
- Other activities: advocacy and lobbying through development of advocacy strategies and position papers on key policy issues, media engagements through talk shows .
- Much as the activities were covering the whole country, most of the activities were implemented in the eastern, central, mid-western, south western and very few operate country wide.





Region	Districts mentioned	Number
		S
Country wide	CSOs working in all the districts.	3
West Nile	Arua, Nebbi, Maracha, Koboko, Moyo, Adjumani, and Pakwach.	7
South Western	Rubirizi, Bushenyi, Buhweju, Sheema, Mitooma and Ntungamo,	10
HHHH	Rukungiri, Kisoro, Mbarara, and Isingiro.	
Mid-Western	Masindi, Kiryandongo, Buliisa and Hoima, Kibaale, Kyenjojo,	13
///////////////////////////////////////	Kagadi, Kyenjojo and Ntoroko Bundibugyo, Masindi, Kabarole,	
	and Kyegegwa	
Eastern	Bukwo, Kweni, Kapchorwa, Bulambuli, Sironko, and	20
1111111	Mbale.Manafwa, Namisindwa and Bududa (Elgon), Jinja, Kaliro,	
///////////////////////////////////////	, Bugiri, Mayuge,Iganga Mayuge, Namutumba, Kaliro, Buyende,	
////////	Luuka, and Kamuli.	
Central	Buikwe Kampala, Wakiso, Mpigi, Masaka Mityana Rakai,	16
///////////////////////////////////////	Kalungu, Bukomansimbi, Gomba, Mubende Rakai, Kyotera,	
	Mityana, Wakiso, and Nakasongola.	
Northern	Amuru, Lamwo, Pader, Kitgum, and Agago.	5







Source: Renewable Energy Civil Society Organizations Sector Performance Report for FY 2017/2018





Table 2: Items produced/distributed to enhance development of the renewable energy sector for FY 2017/2018.

Item	Description	Units
Installation of PV systems (1000W)	<mark>Schools</mark>	<mark>12</mark>
	<mark>Health centres</mark>	<mark>10</mark>
Reach to awareness programs (People reached in millions)	Radio talk shows	6
	TV talk shows	9
Training in effective sales and marketing of renewable energy	Female CBOs	12
technologies	Male CBOs	24
Training in credit handling	Female CBOs	10
	Male CBOs	35
Training in technical skills in solar PV technology	Female Technicians	<mark>2</mark>
	<mark>Male Technicians</mark>	<mark>53</mark>
Training artisans for Lorena stove		4300
Establish VSLAs for solar home systems		<mark>46</mark>
Households accessing clean energy technologies		2631
Households accessing solar home systems		921
Households with improved cook-stoves		4232
IEC materials developed	Various types	12,000
Market Awareness Campaigns		9
Tree seedlings planted	Biomass woodlots	1,500,000







How do CSOs engage the various actors in the planning and budgeting for renewable energy in government programmes?

- Report notes that **RECSO members get most of the funds they utilize from development partners (74%).** This is followed by funds that are registered as contracts between CSOs themselves and their clients (private sector, development agencies). Limited funds from the central government (4%) and no funds streaming in to CSOs from the District Local Governments.
- RECSO Network members actively participates in the Renewable Energy Conference (RECs) organized by the Ministry of Energy and Mineral Development (where CSO viewpoints and experiences are shared with diverse actors)
- RECSO Network is now represented at the Board of Trustees of the National Renewable Energy Platform (NREP) c/o MEMD (inform, influence, inclusion, etc)





From the CSOs perspective: what needs to be done to integrate PUSE in the national and subnational plans and budgets?

- Awareness: Farmers, subnational authorities and others in the agricultural value chains are familiar with PUE (PUSE) appliances / opportunities as technology advances
 - Awareness & advocacy for stronger oversight: Commercial lenders are more familiar with Decentralized Renewable Energy (DRE) and PUE (PUSE) appliances / opportunities and (how to) finance them with in line with existing PUE / PUSE financial opportunities.





- Advocacy for favorable business environment through NREP and bilaterally (engaging donors and investors:
 - **Quality standards** to protect consumers from unscrupulous traders / inferior products while ensuring that manufacturers produce quality PUSE solutions
 - Facilitate access to more, accessible, predictable PUSE finance
 - **Training (retooling)** members, technicians in PUSE technology(s), business development and entrepreneurship and organizing networking events and connections with diverse stakeholders and experts within the sector in addition to / building on the RECs
- Addressing affordability challenges for (poor) small holder farmers: Village Savings and Loan Associations (VSLAs) at community level as a financial inclusion model where individuals and businesses have access to useful and affordable PUSE financial products and services
- Integrating PUSE / renewable energy investment opportunities and options in Government's agriculture, youth and women empowerment programmes
 - **Sustainability of PUSE in agriculture:** financing, operation & maintenance schedules, training / extension services





Conclusion

- Promotion of PUSE is needed in many parts of Uganda as part of wealth creation and other programmes – not a stand alone
 - Sustainability of these initiatives need to be taken into account for success (ESG, financing models to secure roll out + supportive extension services at subnational levels, ewaste)





References cited

- 1. Environmental Alert (2028). Renewable Energy Civil Society Organizations Sector Performance Report for FY 2017/2018
- 2. Powering Agriculture: Uganda Action Plan https://www.powerforall.org/campaigns/agriculture/poweringagriculture-uganda-action-plan