

# PUBLIC LECTURE ON: EAST AFRICA CATALOGUE OF SUSTAINABLE ENERGY & LOCAL CLIMATE SOLUTIONS MASENO UNIVERSITY

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Supported by



# Why sustainable energy and climate solutions?

- **Energy is sustainable** if it meets the needs of the present without compromising the ability of future generations to meet their own needs.
- Sustainable energy include considerations of environmental aspects such as greenhouse gas emissions , social and economic aspects such as energy poverty.
- One main solution to climate change is **Changing our main energy sources to clean and renewable energy** so as to stop using fossil fuels. These include use of technologies like solar, wind, power, switch to sustainable transport among others.
- Sustainable energy and different climate solutions are key contributors to the **mitigation** of climate change
- Solutions help to contribute to **SDG7**(affordable and clean energy) **SDG13** (climate action), **SDG5**(Gender), **SDG2**(Hunger, food),**SDG1**(Poverty) and implementation of Nationally Determined Contributions (NDC) and long term low emission development strategies (LEDS) under the Paris Agreement.



# Mitigation priority, Updated Kenya's NDC on SE

- Abate GHG emissions by 32% by 2030 relative to the BAU scenario of 143 MtCO<sub>2</sub>eq; in line with our sustainable development agenda and national circumstances.
- Clean, efficient and sustainable energy technologies to reduce overreliance on fossil and non-sustainable biomass fuels.

# CATALOGUE Local Sustainable Solutions-East Africa

Collection of Successful Cases of Sustainable Energy and Climate Solutions in Kenya, Uganda and Tanzania



With support from  CISU CIVIL SOCIETY IN DEVELOPMENT

- Catalogue comprises of 80+ local sustainable solutions in East Africa.
- Collected and made by Partners of East Africa Civil Society for Sustainable Energy and Climate Actions (EASE-CA) Project.
- INFORSE-East Africa:  
Tanzania: **TaTEDO** Uganda: **JEEP, UCSD SusWatch Kenya** members of International Network for Sustainable Energy (INFORSE) with support from **CISU, Denmark.**
- Partners have good track-records on development and promotion of practical climate local solutions that solve energy, water, food insecurity for local communities.



# CATALOGUE: East Africa Catalogue for Local Climate & Sustainable Energy Solutions



## CATALOGUE: LOCAL SUSTAINABLE SOLUTIONS IN EAST AFRICA



[WWW.LOCALSOLUTIONS.INFORSE.ORG](http://WWW.LOCALSOLUTIONS.INFORSE.ORG)

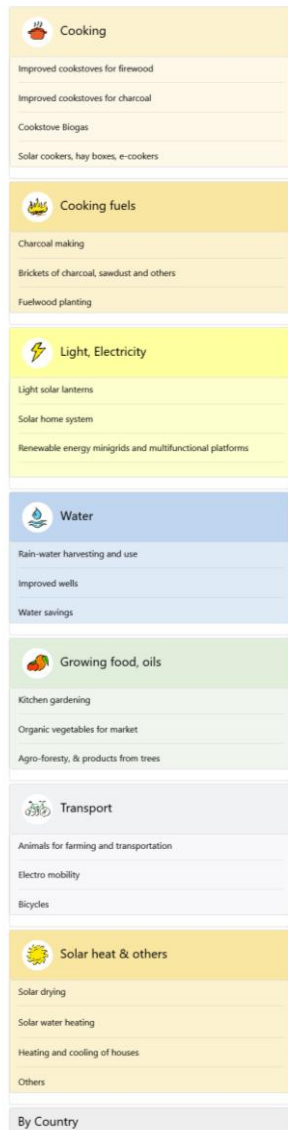
- The catalogue is made for people that need cleaner and better energy and other needs for their life and for development.
- Local solutions are more accessible and site specific.
- Solutions, which are popular in East Africa used by at least more than 1000 people

## In a nutshell, Catalogue provides details on

- Pictures of the solution
- Why to choose the solution
- Benefits
- Costs
- Lifetime
- Maintenance needs
- Barriers, Limitations
- Why is it successful
- Contribution to climate effect
- Financing & business models
- Skills of production, installation, maintenance and use
- Link to short video on construction/making, maintenance and use,
- Country where the case is available in
- Source for more information



# CATALOGUE: East Africa Catalogue for Local Climate & Sustainable Energy Solutions



## Local Sustainable Solutions – East Africa

Find here local solutions for better energy use, water, tree planting, and others.



- Catalogue is available online, off-line version (used on computer or mobile phone without internet access) and in print.

- 7 Main Categories, 23 sub categories  
3 countries (Kenya, Uganda, Tanzania)

- Catalogue link:

[www.localsolutions.inforse.org](http://www.localsolutions.inforse.org)



Cooking



Cooking fuels



Light, Electricity



Water



Growing food, oils



Transport



Solar heat & others

By Country



Cooking

Improved cookstoves for firewood

Improved cookstoves for charcoal

Cookstove Biogas

Solar cookers, hay boxes, e-cookers



Cooking fuels

Charcoal making

Brickets of charcoal, sawdust and other

Fuelwood planting



Light, Electricity

Light solar lanterns

Solar home system

Renewable energy minigrids and m



Water

Rain-water harvesting and use

Improved wells

Water savings



Growing food, oils

Kitchen gardening

Organic vegetables for market

Agro-forestry, & products from trees



Transport

Bicycles



Solar heat & others

Solar drying

Solar water heating







## Category: Cooking

### Sub category: improved cookstoves for firewood

Home

[About this catalogue](#) [Partners](#) [EASE & CA Project](#)

Picture	Title	Country
	<a href="#">GloW Stove yaGesi / GloW yaMbao</a>	Uganda
	<a href="#">KIDT Briquettes Energy Saving Stove</a>	Tanzania
	<a href="#">Shielded Firewood Cookstove</a>	Uganda
	<a href="#">Aniga Energy Efficient Cookstoves</a>	Kenya

## When you click a solution...



[Home](#) / [View case](#)

[Download \(PDF\)](#)

### **Country:**

Uganda

### **Why to choose this solution?**

The improved cookstoves is very energy efficient and therefore a great green solution. Furthermore it facilitates charcoal as side product

**Downloadable in pdf**

*Improved cookstoves for charcoal, Improved cookstoves for firewood  
Uganda*

## **GloW Stove yaGesi / GloW yaMbao**



### **Why to choose this solution?**

The improved cookstoves is very energy efficient and therefore a great green solution. Furthermore it facilitates charcoal as side product

### **Savings per day or production:**

It provides 60% savings in both fuel, money, and CO2

### **Cost in money and in own time to construct:**

40 Euros (160.000 UGX)

### **Lifetime:**

# Improved Firewood Stoves



Movable institutional firewood stove



Fixed Institutional firewood stove



Improved fish frying firewood stove



Upesi stove



Household firewood stove



Household firewood stove

# Improved Charcoal Stoves & Briquettes



# Improved charcoal Production Kilns



**Improved Basic Earthmound Kiln**



**Portable metal kiln**

**Solar cookers, hay boxes  
EPCs**



Hay Baskets – fireless cooker



Solar cooker



Electric Pressure cookers (EPC)



# Solar technology & Services



**Solar PV roof**



**Direct Solar Water Heater**



**Solar mini-grid**



**Solar powered water pump**



**Little sun solar lamp**



**Solar Refrigerator**



# Biogas



**Blue flame biogas digester**



**Fixed dome biogas digester**



**Flexi biogas**



**Takamoto Baloon biogas**

# Kitchen Garden & Solar Drier



# Sustainable Transport



bicycles



Animal for farming and transportation



Electric 3 wheeler

**THANK YOU!!**

**More information:**



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