# Durable Solutions Congo

Sustainable Solutions for Health and the Environment



## Areas of Emphasis

- Improved Cook Stoves
- Syntropic Agroforestry
- Sustainable Solar Water Systems
- Solar installations for health facilities
- Provide financial and technical support for church health programs

### Sala Makala Cookstove

Development of an improved cookstove for DR Congo





## Why Clean Cookstoves

- Respiratory illness is the greatest cause of death in Congo, mostly due to excessive exposure to smoke.
- 56 million tons of wood is used for cooking in Congo each year.
- Most of the burden and risk of gathering wood falls on women and children.



#### **Adoption of Stove**

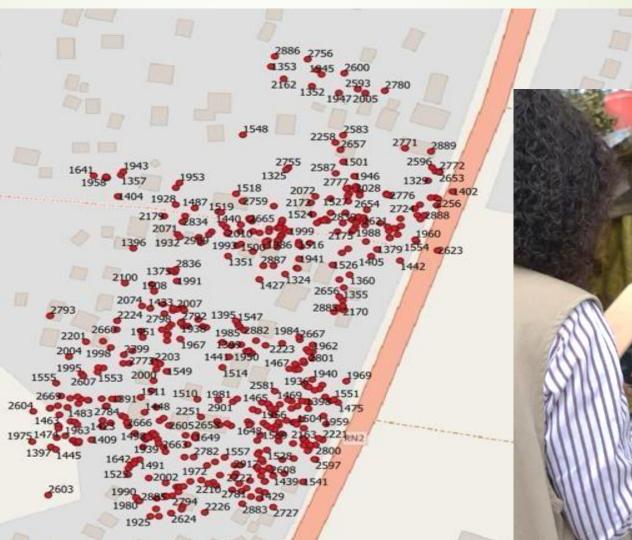


- In Mpoko village there was a 100% adoption of the stove
- In peri-urban area: 72% used the stove every day
- 5 years after distribution, people are still using their stoves





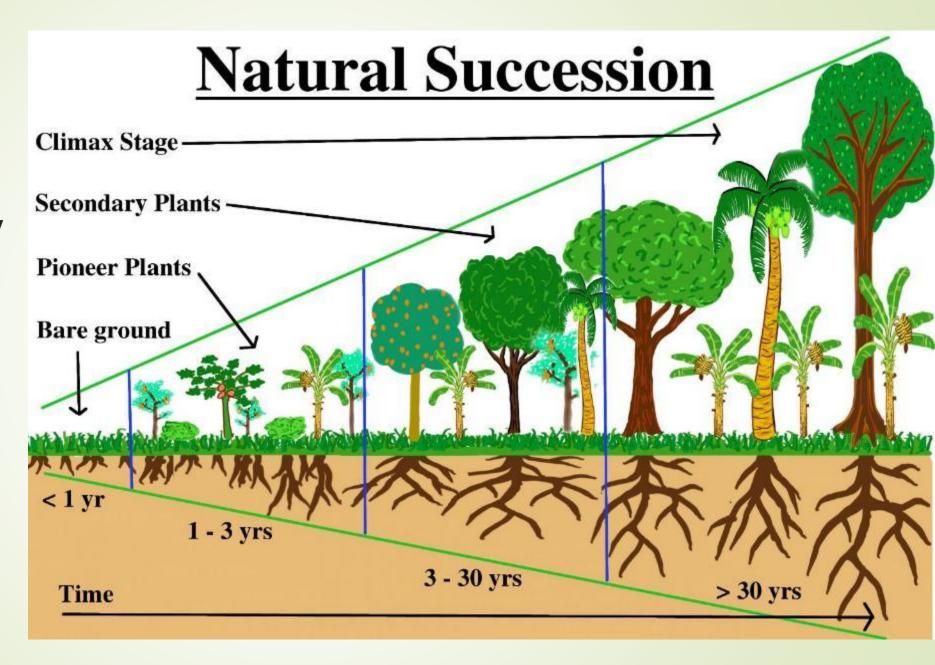
# Tracking the location and use of all cookstoves with Open Data Kit





#### **Becoming Carbon Neutral**

A 32m-by-32m plot of a fastgrowing trees such as Acacia angustissima will produce enough wood to cook two meals every day for an average family that uses a Sala Makala stove Syntropic Agroforestry







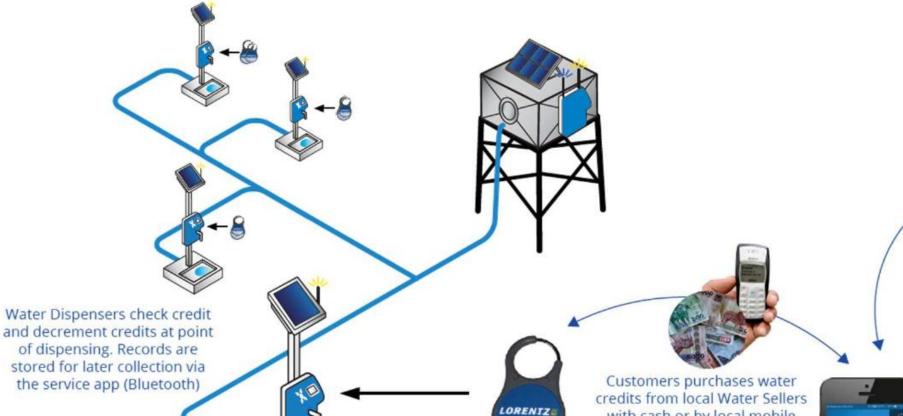


#### **Water ATM**

- 24/7 access to clean water
- Guaranteed maintenance by professionals
- Ongoing financing of community priorities







Tag holds credit infromation and essential Customer details

Water Dispenser with integrated battery, charger and LoRa radio

Water Seller requests water credits for sale locally. Water Operators are notified of requests and can either authorize or decline. Sales records and new Customer registrations are uploaded

LORENTZ

with cash or by local mobile

money transaction

LORENTZ smartTAP App for customer registration and local crediting of tags

Sun. Water. Life.



#### How it works

- 5 liters of water free every day for tag owners
- 9¢ for 25 liters of water
- 25% of income given back to communities



# Solar power and vaccine refrigeration for health facilities

The Durable Solutions team has installed over 1,000 solar system and vaccine refrigerators for health facilities.





## CPK Health Program







#### **MPH**

Averaging 500 guests and 12 conferences per year



# Durable Solutions and MPH seek to facilitate mission work in Congo

- Provide technical assistance for health, environment and food security programs
- Create an efficient transparent means of supporting programs financially with regular reports and audited finances
- Use carbon credits to leverage funds for church programs
- Facilitating interns and short-term specialists