ETHOS 2022

BUILDING FIELD RESEARCH AND IMPLEMENTATION CAPACITY DURING COVID AND BEYOND: A DISCUSSION WITH FOUR PROJECT MANAGERS

Today's Presenters

- Sonam Tashi Lama (Red Panda Network)
- Wubshet Tadele Tsehayu (Project Gaia)
- Timket Biresaw (International Lifeline Fund)
- Yamikani Liyenda (CQuest Capital)

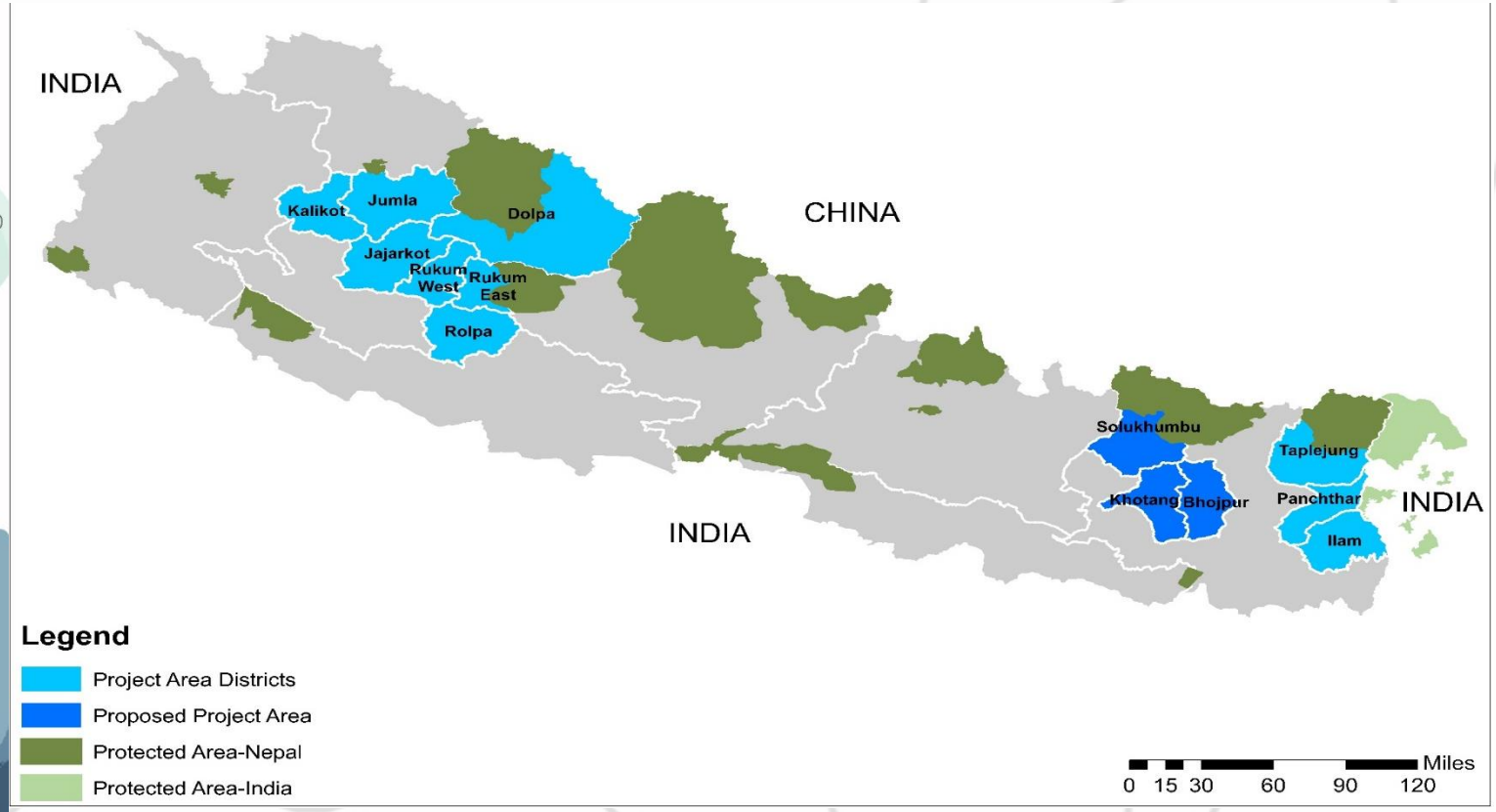
ICS Field Research During COVID-19 in eastern Nepal

Sonam Tashi Lama & Janam Shrestha, Red Panda Network

CONTENTS

- Introduction of RPN
- Thematic area
- Improved Cook Stove (ICS)
- Project Objectives
- Walk through
- Result
- Challenges

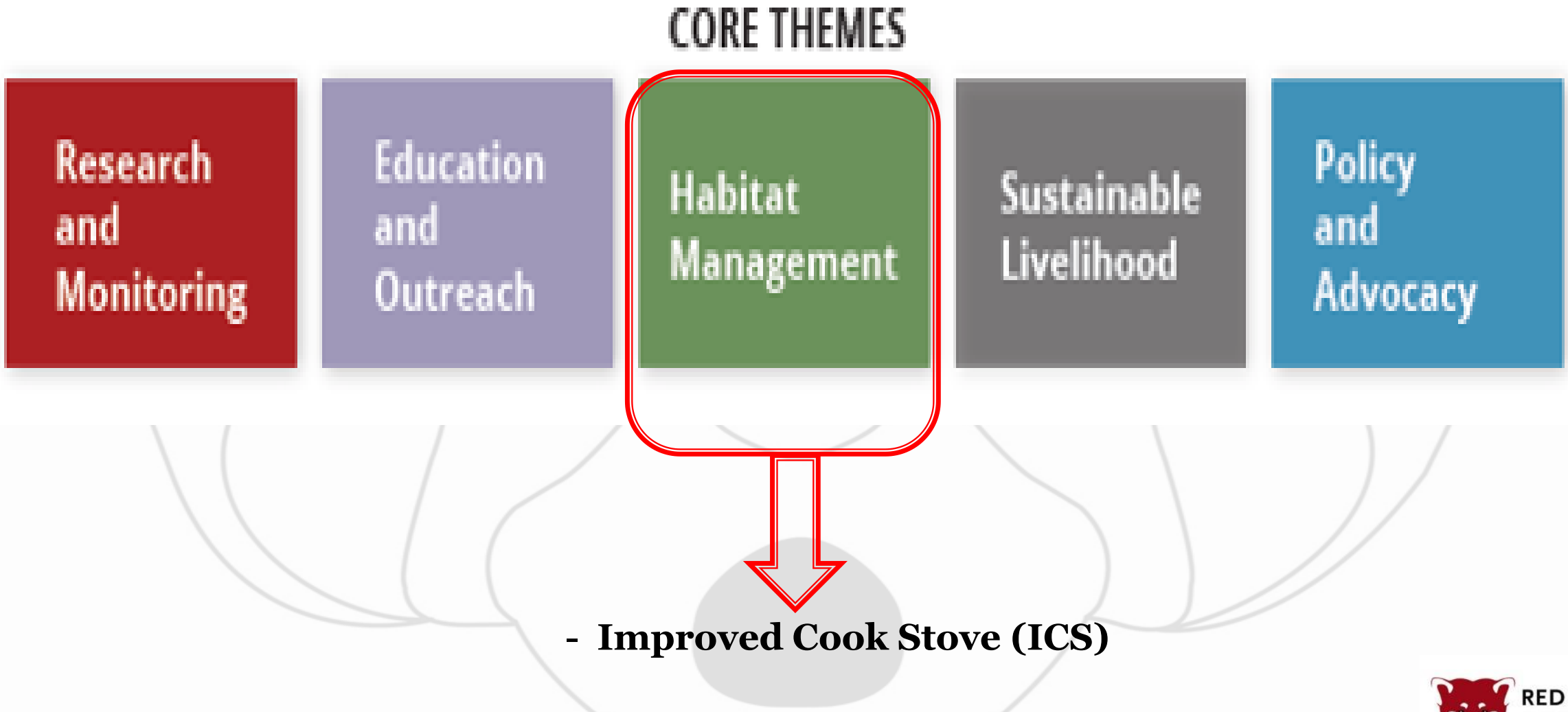
RED PANDA NETWORK



Committed to the conservation of wild red pandas and their habitat through the education and empowerment of local communities.

RED PANDA NETWORK

THEMATIC AREAS



- **Improved Cook Stove (ICS)**

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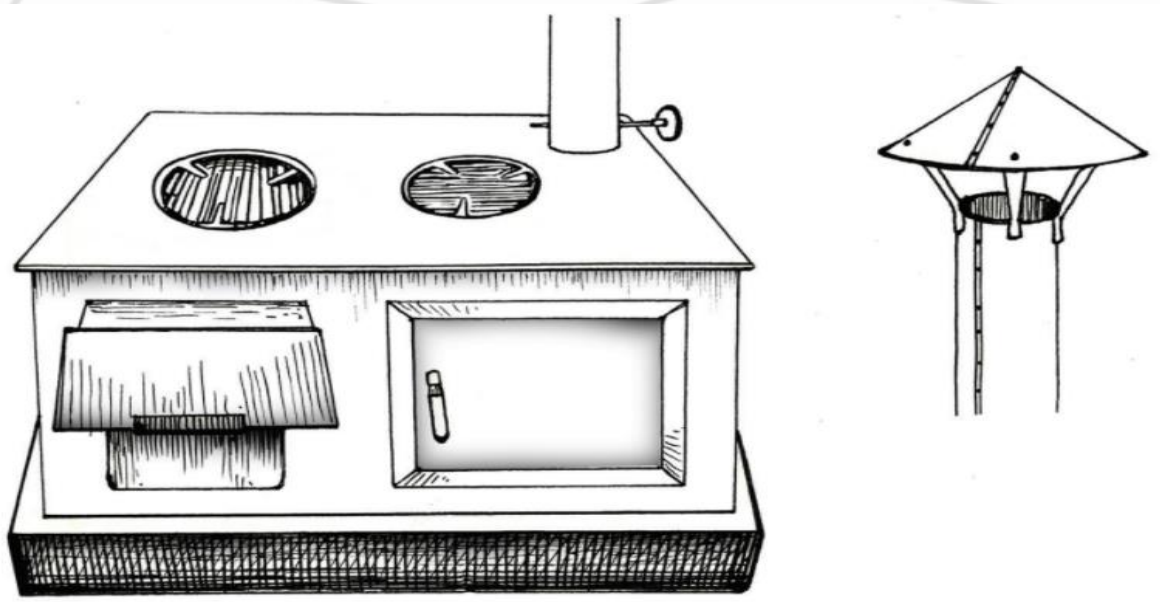
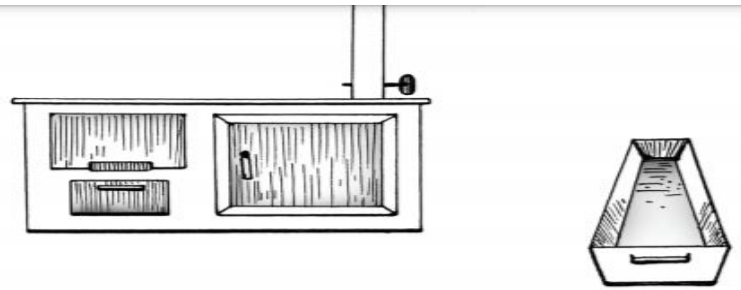
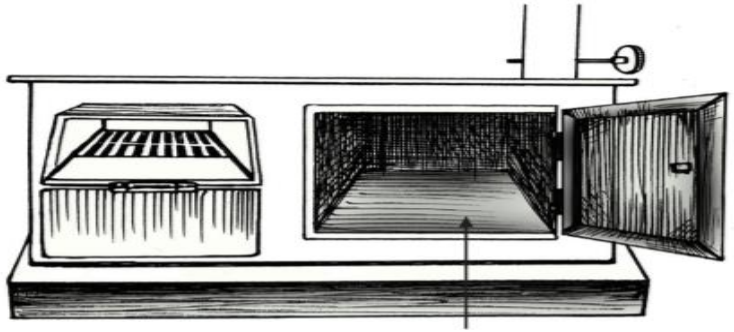




चित्र ७: खरानी जम्मा हुने किस्ती (Ashtray) ।

खरानी भरिएपछि यसलाई खाली गर्नुपर्छ । आगो बाल्न शुरु भएपछि यसलाई हल्का बाहिर तानेर हावा पस्न दिनुपर्छ । जसले गर्दा आगो राम्रोसँग बल्दछ ।



चित्र ८: दाउरा सुकाउने ठाउँ ।

RPN designed Improved Cook Stove

RED PANDA NETWORK

RPN's project objective

- To quantify the impacts of transitioning from traditional stoves to RPN's improved cook stove with a chimney on both ***fuel consumption and indoor air quality*** in two of its working villages in Nepal.

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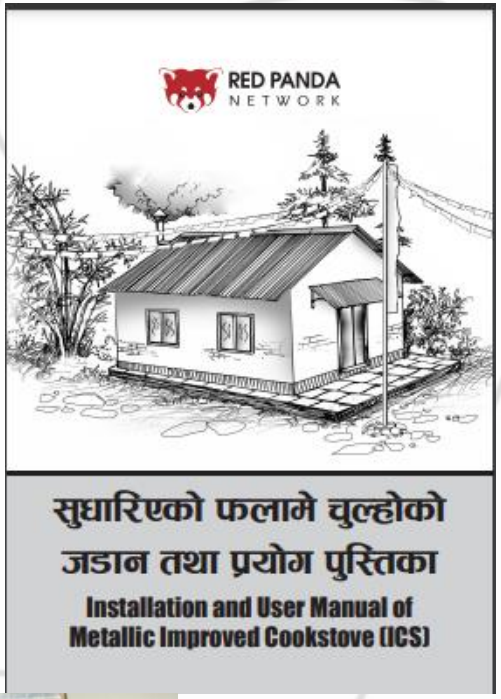
Walk through the project activities and the collaboration with OSU

- Study timeline and objectives was accomplished using through **Zoom meetings**
- **Written material** and **video content** as a guide for sensor use
- Sensor received from Climate Solutions Consulting.
- All the sensor were tested in the main office before deploying in the field



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The village where the study was conducted

TAPLEJUNG

PANCHTHAR

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District	# HH	HAPEx Data	FUEL Data	Fuel & Feeding Data
Taplejung	22	19	15	15
Panchthar	26	19	24	23

		Before RPN Stove			After RPN Stove		
District	Households	Sensor Deployment	Mid Check-In	Data Collection	Sensor Deployment	Mid Check-In	Data Collection
Taplejung	22	Feb. 20th	Feb. 28th	March 5th	March 25th	April 2nd	April 6th
Panchthar	26	March 8th	March 15th	March 22nd	April 9th	April 15th	April 21st

FIREWOOD STACKING CULTURE

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TYPES OF COOK STOVES SEEN IN THE STUDY AREA

LPG WITH SMALL BURNER

LPG WITH BIG BURNER

COAL STOVE

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METAL MUD STOVE

IMPROVED MUD STOVE

CEMENT STOVE

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TRADITIONAL OPEN STOVE

KITCHEN SETTING

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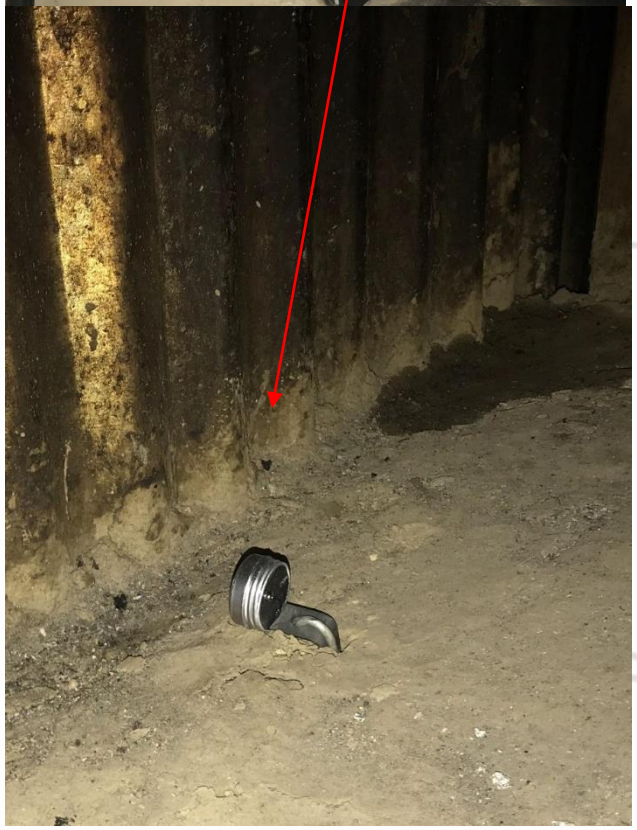
These type of stoves are usually seen outside of the house to cook animal feed

RED PANDA NETWORK

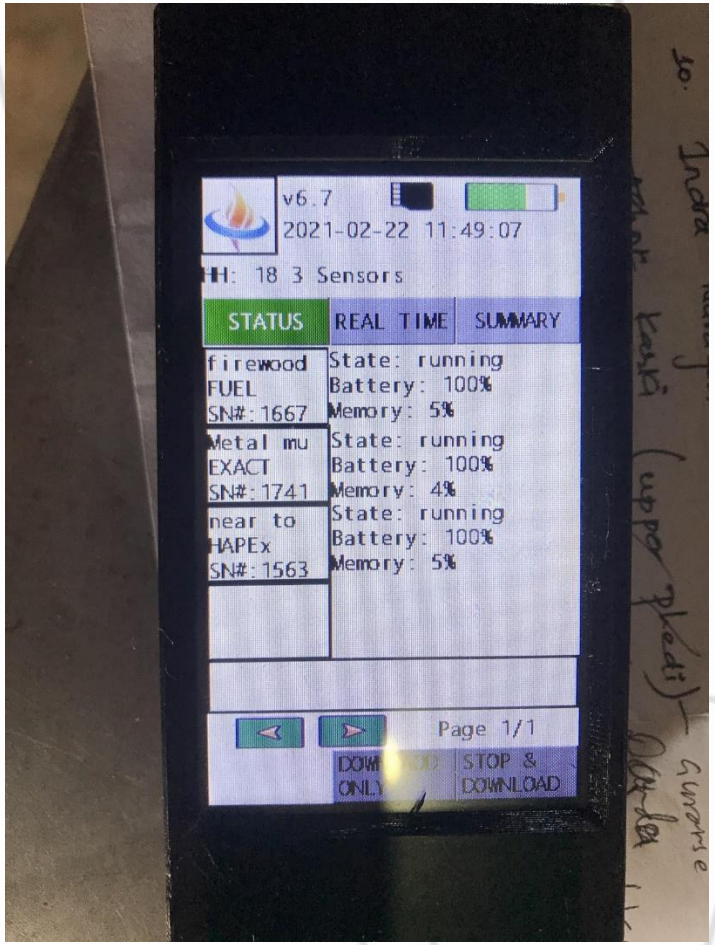
FUEL Sensor

RED PANDA NETWORK



EXACT SENSOR

RED PANDA NETWORK



LAUNCHER

MOISTURE MEASURMENET

DATA COLLECTION

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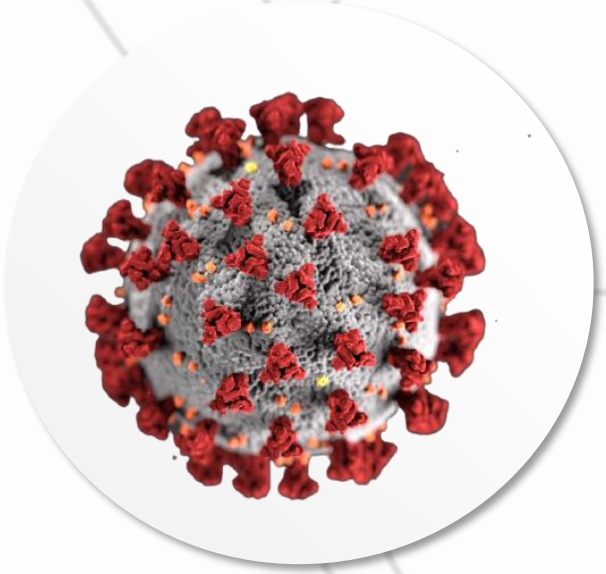
CHALLENGES



01 MONITORING ON VILLAGE 3 WAS HAMPERED

02 DELAY IN CUSTOM

03 TRAVE RESTRICTION / STAFF CONTRACTING COVID-19

Others !!

- Data Loss
- Stove stacking

What went well !!

- Despite the COVID-19 pandemic, international collaboration was possible
- Technical capacity of the team enhanced
- Efficiency of RPN distributed ICS known
- Satisfactory relation with the community people build

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ACKNOWLEDGMENT

- Local partner- Himali Conservation Forum, Taplejung and Deep Jyoti Youth Club, Pachthar
- Oregon State University
- Climate Solutions Consulting
- Sensor Deployment Team

RED PANDA NETWORK

THANK

YOU

RED PANDA NETWORK

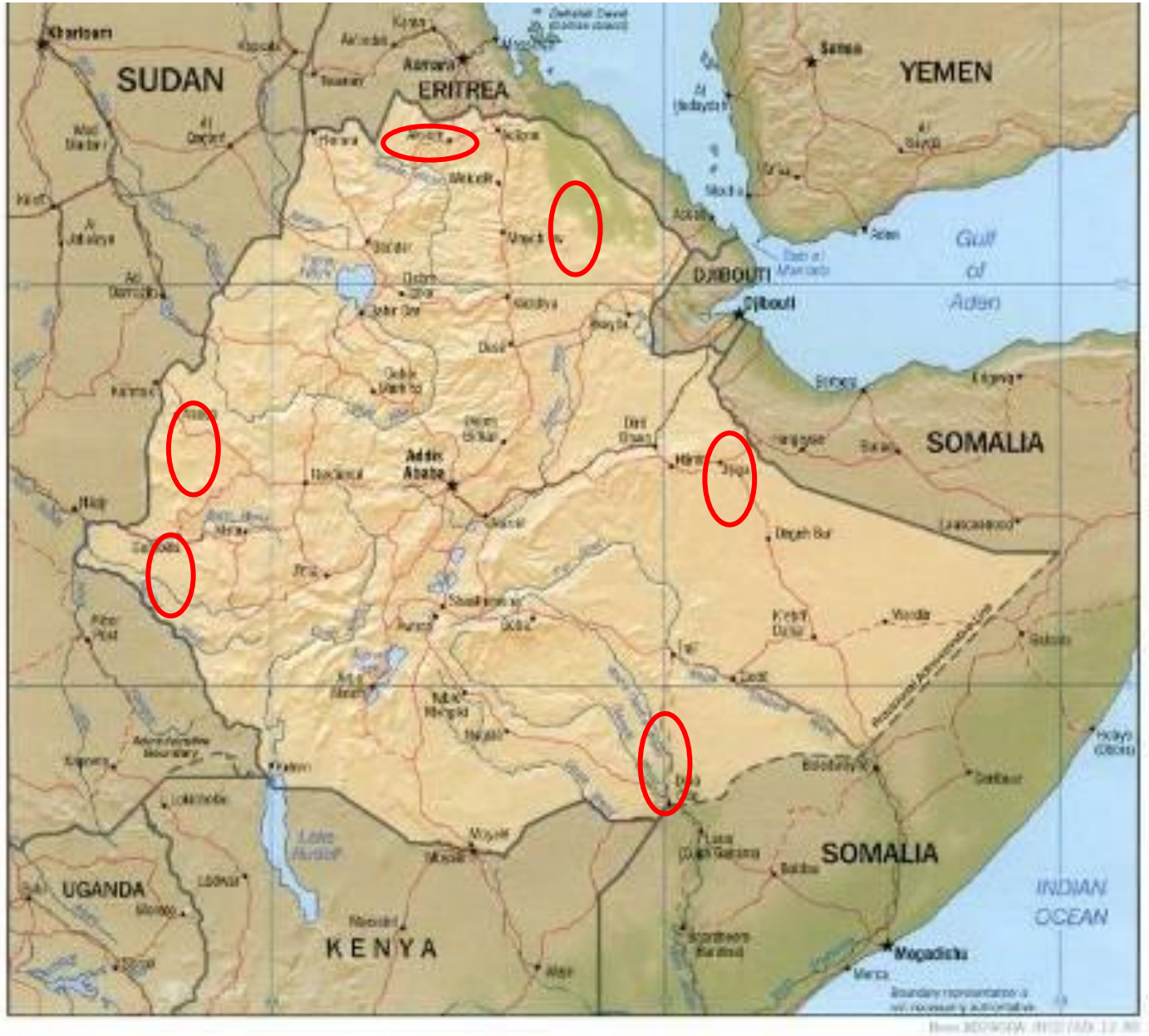
Controlled Cooking Tests Experience in the Refugee Camps of Ethiopia (Gambela and Dolo)

ETHOS 2022

Wubshet Tadele
Project Gaia

January 28, 2022

UNHCR Refugee Camps in Ethiopia



The Problem

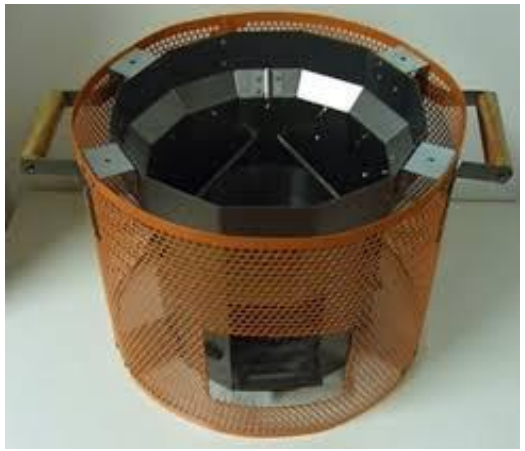





Project Gaia & Gaia Clean Energy Undertakings

…Project Gaia & Gaia Clean Energy Undertakings

CCTs in Gambela and Dolo



CCTs in Gambela







CCTs in Dolo

Thank you.

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Building Implementation Capacity During COVID-19 & Beyond

About International Lifeline Fund, Lifeline

- **Vision**
  - A world in which no one suffers for lack of access to clean water and energy.

- **In Uganda**
  - Humanitarian and development work since 2006.

Two main thematic areas:

1. Environment

- Fuel Efficient Cookstoves and Solar technology


This kiln was constructed with support from the
GIZ Energising Development Programme (EnDev)

2.Water, Sanitation & Hygiene (WASH)

- Sanitation training & drilling & maintenance

CVID19 Response:

- **Early days of the pandemic:**
  - when covid hits and the first lockdown was declared in Uganda, the senior management made an emergency meeting and set short, mid and long term response plan. Based on that :
    - some product lines were discontinued
    - project activities were rationalised
    - detailed contingency plan rolled out

Strategies followed:

Human Resources:

- drafted SOP's inline with the guidelines from the MOH & GOU lockdown policy.
- training to the team on SOP's.
- deployed PPE, (face masks, sanitizers, gloves, aprons, goggles, safety shoes, handwashing facility).
- non essential staff were sent on leave, introduced working from home during lockdown, (teleworking).
- camped factory staff at the production site, allocated food ration to the workers.

Projects:

- reducing number of training participants by increasing clusters,
- consulted the donors and shifted some of our activities to COVID emergency response
- volunteered as member of the COVID response task force, (provided technical & logistics support to government).
- engaged our partners; GIZ EnDev supported PPE, Charity Water WASH emergency response grant & PSFU provided COVID economic relief fund.

Impact of Covid:

On Human resources:

- we have lost a staff
- a number of our project team were exposed to the virus (despite all the care).
- forced to close office a couple of times, (affected team morale due to uncertainty)
- high personnel cost

Impact, contd.

On Programs:

- affected production of Fuel Efficient Stoves as inputs were limited, disruption in distribution as non food markets were closed in Uganda.
- implication on funding as donors tend to reprogram their finances to curb the pandemic, a grant was cancelled.
- support visits from global office & partners were affected. e.g. planned visits from BDL team & Stanford were delayed until flights resume.
- halted a research project (with Stanford university) as over 20

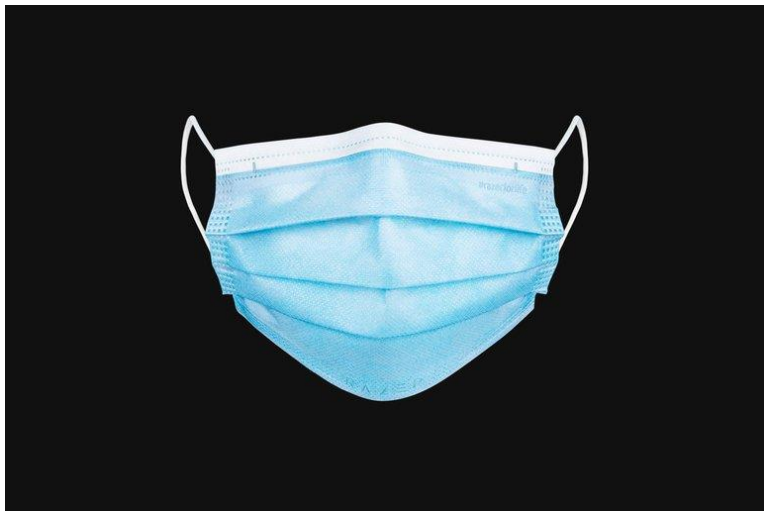
Conclusion:

- Despite all the precautionary measures, COVID19 still poses a challenge to our programs, it’s a high risk to our staff, project beneficiaries & partners.
- After over 2 – years, COVID -19 remains a global pandemic that needs a global solution.

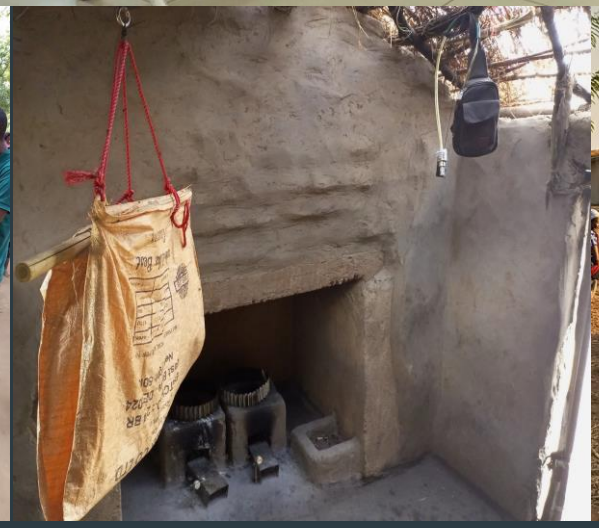
Lifeline, Uganda Office - front view

Lifeline Uganda Team

Thank you & Stay Safe !



CQC MALAWI SENSORS STUDY



BY: YAMIKANI Liyenda

CQC MALAWI AUDIT MANAGER

C-QUEST CAPITAL MALAWI BACKGROUND

- C-Quest Capital is a social impact project developer whose purpose is transform the lives of poor families in poor communities around the world.
- Generally, CQC meets its objective by providing access to sustainable energy services and clean energy cooking technologies that reduce humanity's carbon footprints, mitigate global climate change and improve the health of those in greatest need.
- In Malawi CQC has two major mainstream interventions:
    1. Provision of Improved Cook Stoves called Rocket Stoves
    2. Provision of Bamboo Seedlings in afforestation component

- Our stoves reduce carbon emission which reduces women exposure to harmful gasses. They also reduce fire accidents and improves kitchen hygiene and in general help to improve good health amongst women.
- Our Bamboos helps to replenish soil cover and sequestrate carbon with increased carbon sink.
- Currently, CQC Malawi is implementing its project in 25 direct sites, not including the partners sites.

COVID SITUATION AND PERCEPTION IN MALAWI

- The Coronavirus disease or COVID-19 has upended the lives of children and their families around the world
- In Malawi, as of 11 January 2022, there are now 80,867 confirmed cases and 2,427 deaths
- Malawians from both urban and rural areas are conscious of covid 19.
- However, rural Malawians perceive the virus as posing more threat in urban areas than rural areas.
- With Government restrictions, the gatherings were limited to only few people and most NGOs had to change their approaches to communities and less visits than normal.
- The Government of Malawi supported communities with hand washing backets and a few other PPTs.
- At first people were more scared in the villages and over time they have learnt to live with Covid 19, but on meetings they try to mount up a hand washing backet and encourage use of masks.

SENSORS STUDY OVERVIEW

OSU CQC SENSORS STUDY

The study done in conjunction with OSU with Grant as a representative, aimed at comparing the efficiency of different types of stoves with specific focus on:

1. Fuel Consumption
2. Emissions and exposure to women
3. Stover users feedback
4. The impact of other cooking technologies like Chimneys and Jet flames on both Traditional stoves and Improved cookstoves.

The study used different sensors to measure the above variables.

The sensors included: Fuel sensor, Hapex Sensor, uPump with is

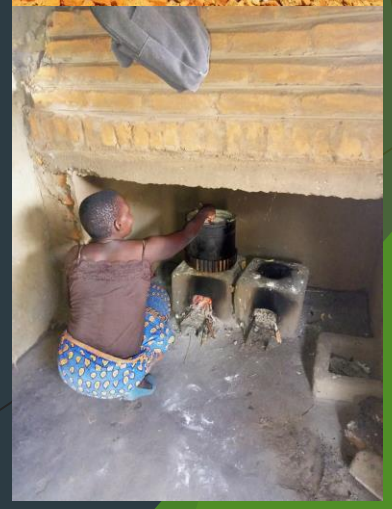
accessories and Exact sensor.

With the help of 4 enumerators, the study involved orienting

the villagers on sensors, installing the sensors, making visits to download data and rotate the launch of uPumps, responding to emerging sensor issues and collecting sensors after a phase.

SENSORS STUDY DESIGN

- The Sensors study had a total sample of 55 households from a population of 90 Households and these households were in two categories:
    1. No Hood Households (Had 40 Households)
    2. Hood Households (Had 15 Households)



- The No Hood category had 4 phases of an Average of 10 days each.
- The Hood has on the other hand had 3 Phases of 10 days each.

The sample was spread over 3 Villages, in 2 Districts

- The No hood category had a Traditional Three stone fire, then a single CQC Rocket stove, followed by a Single CQC stove with one JFK And had a double CQC Rocket stove with two JFK in the final phase.
- Hood category on the other hand started with Traditional three stone fires without a hood, then a tradition three stone fire under a chimney/hood and finished with CQC Double Rocket stoves under hood.

STUDY LOGISTICS ARRANGEMENT

- To properly manage the study within the set timeframe, each of the 4 Research Assistants was assigned households both from Hood and no Hood categories, and was simply supposed to be following in those households from the start to the end of the study.
- Before the start of every phase, we started with a briefing and orientation meeting with the study participating households.
- Apart from launching common sensors at the start of a phase, we were also supposed to manage a rotation of uPump sensors which were on 8. We were also supposed to be replacing batteries every 24 hours in Ambient Air Pump.
- For all this work to be done, we allocated 2 vehicles for a full time engagement in study.
- A daily logistical plan was being drawn considering study master schedule, set households to be visited in a particular day, their location and convenience at large.
- Our logistics arrangement was very flexible to accommodate all emerging issues which included study equipment failures.

STUDY ACTIVITY AND PROGRESS

- The Study involved the orientation of the households before launching sensors at each phase.
- It also involved training households on use of introduced technologies.
- There was also a need to do parallel complementary work to the study which included Construction of CQC Rocket Stoves and Chimneys/ Hoods, according to the demands at each phase.
- To allows the main stream team concentrate on the study, a supporting team from CQC office was set up to manage the construction of Chimneys which was very involving on its own.
- The Phases of the study were arranged to be done successively (finishing a phase today, and starting another phase next day)

STUDY SUCCESSES

- We managed to complete the study with the set period
- The Re-designing of the study to match our local culture helped to easily manage and enumerators easily got familiar with the study.
- Continued Briefing meetings helped to clear the households on study misconceptions, where over time they could fully understand the concept of the study.
- The allocation of same households to an enumerator, helped to establish good relationship with participating Households and made the study data collection easy.
- The company of Study supervisor through out the visits, helped in systematic study data consolidation and sharing as per study requirement.
- We had an effective team (enumerators, Drivers and other supporting staff) which made coordination very easy, and the team was flexible even working to old hours.
- The availability of Olivier, Grant, Onyx and Alena assisted as we could always consult and get timely guidance.

CHALLENGES

- Time taken to allow stoves improve efficiency was not considered and this affected expected results in terms fuel consumption.
- Participating households were first time users of CQC stoves, who normally doubt the technology and take time to completely stop feeding more fuel. This also affected fuel use to be more than the expected.
- The faulty yellow solar batteries and Jetflames that kept on burning out and clogging respectively, brought hiccups in the study.
- Chimneys needed well thatched kitchens with a plastic paper sheets, which most households could not afford and it affected smoke flow.
- Lack of consultations with local team during the study designing brought in some gaps during the study training as some factors were not considered
- We experienced a reasonable number of sensors failures during the study.
- The sampling from the submitted names of households, led to indifferences in some villages and also the selection of uncommitted households who gave less support to the study.
- Some old aged women who were sampled for the study, could not quickly keep up with introduced technologies of JFK and solar sets.

LESSONS LEARNT

- There must be wider consultations with all relevant stakeholders when designing a study, to give room for a consideration of variance factors and scenarios.
- The Study needed to factor time taken for the stove to completely dry and adopt to usage and improve efficiency. The 10 days break for stove construction, drying up and familiarization was very short.
- Studies which involve introduction of technologies must involve experts who may provide accurate specifications and purchasing must follow recommended specifications. There must also be enough time for households training on both technologies and correct stove use.
- The research design information must be clearly shared prior to commencemt
- Where possible, extra financial support must be provided to help in standardizing variable like kitchens.

PROPOSED FUTURE IMPROVEMENTS AND FUTURE SUPPORT

- Technical studies like Sensors study must have a provision for reference certificates to the team in acknowledgement of knowledge gain in those specific studies.
- Study supervisors must always be included in the study designs as they play vital role and they should be well motivated
- Provision of incentives to study participating households should be upheld, but we should continue to provide them in form of relevant materials and not money. For instance, pots in sensors study were very relevant.
- To avoid misconceptions in studies which involve storage gadgets like in sensors study, projecting videos which display the usage of each sensor.