

Identifying Vulnerabilities - Insights from the IMPACT-R project assessing access to basic services of microfinance customers



HEDERA

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Klaus Töpfer Sustainability Fellow – Institute for Advanced Sustainability Studies
CEO - HEDERA

Part of the webinar series by the Green Inclusive and Climate Smart Finance Action Group (AG-GICSF)

The GICSF- Action Group

The Green Inclusive and Climate Smart Finance Action Group (GICSF-AG) is a **Unique** multi-stakeholder think-tank for **environmentally responsible inclusive finance**

OBJECTIVES

- Discuss **current challenges and strategies** in green inclusive finance
- **Improve knowledge and action** of inclusive finance actors in environmental issues
- **Enhance cooperation** among green inclusive finance actors
- **Increase international attention** for green inclusive finance
- **Develop dedicated tools**, recognized as “standard” by the inclusive finance sector, to support green inclusive finance
- **Publicise and disseminate its findings**
- **Enhance the interest and concrete commitment** of all actors (MFIs, investors and others) in green inclusive finance



EUROPEAN
MICROFINANCE
PLATFORM

NETWORKING WITH THE SOUTH



e-MFP
Green Inclusive &
Climate Smart Finance
ACTION GROUP

...since 2013...a long-term commitment!



Members

Launched in Feb. 2013 in Berlin and hosted by the European Microfinance Platform (e-MFP) it has **135+ members** with different level of engagement, affiliated to **75+** institutions and organized into activity sub-group, among which:

ADA, Advision Finance, Agora, Alterfin, Antwerp University- IOB, Babyloan, BBVAMF, BFC, BIO, BNP Paribas, Cerise, Clarmondial, COFIDES, Envest Microfinance, ESAF, European Microfinance Network, KIVA, FDL, GAWA Capital, Global Environment Facility, Grameen Crédit Agricole MF Foundation, HEDERA, IFAD, IFU, ILO, Inpulse, LMDF, MAIN, MFC, MFR, MicroEnergy International, Microfinanza Srl, M-CRIL, myclimate, Sparkassenstiftung, Nitlapan, Palladium Europe, CIDR PAMIGA, SIDI, SOS Faim Belgium, Triple Jump, Univ. Bergamo, Univ. Genève, Univ. Lux, Rabo Foundation, RFR, REDCAMIF, ULB-CERMi, UNCDF, SPTF, World Bank, YAPU Solutions

Coordinated by the GICSF-AG Heads:

- Natalia Realpe Carrillo, HEDERA & IASS Potsdam
- Davide Forcella, YAPU Solutions & CERMi



The GICSF- Action Group Achievements

2013-2019

- **Green Index:** standards for environmental performance assessment
- **Catalogue** green energy products
- **7 Events**, 2 scientific committees,
- **10+ trainings & 40+** presentations
- **Publications & e-learning**

2020-21 (selection of)

- **Green Index Study:**
 - Mapping International Standards vs. GI;
 - analysis of 1000 + env. assessments;
 - Assessment of needs for environmental performance from 250+ stakeholders
- **Launching GICSF AG Webinar Series**
- **Launching the Development of Green Index 3.0**
- **Launching of Green Inclusive Finance Online library**
- **Establishment of newsletter and AG Map**
- **Launching the Development of Universal standards for environmental performance: joint work with SPTF & CERISE**

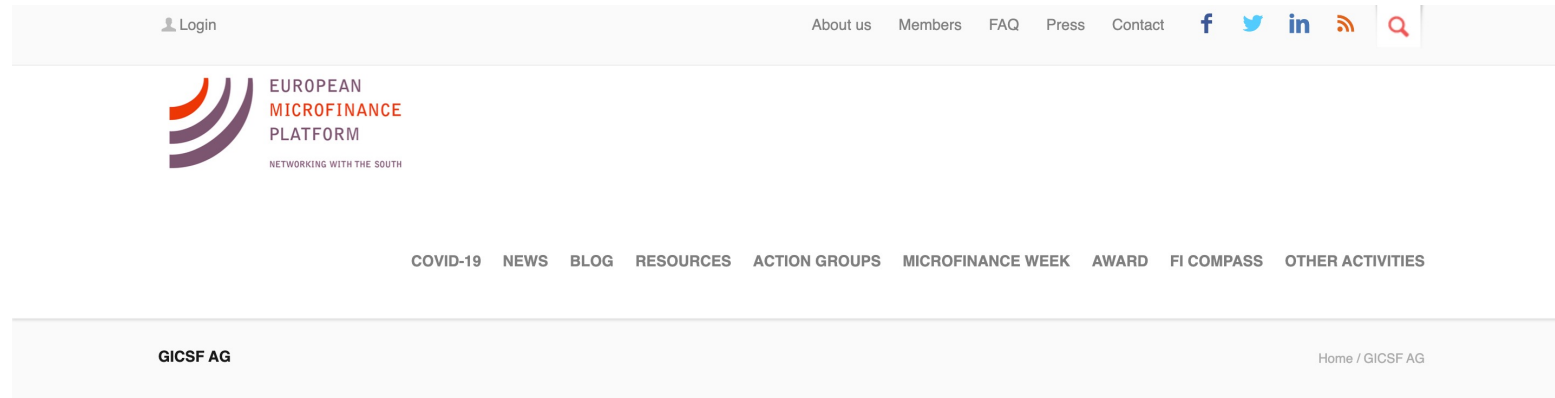
Ongoing activities 2021

- Finalisation of Green Index 3.0
- Finalisation of Universal standards for environmental performance: joint work with SPTF & CERISE
- Training Preparation on Green Index 3.0
- Preparation of the “State of the Art of Green Inclusive Finance”
- Regulation & Green Inclusive Finance, Digital & Green Inclusive Finance, Green Inclusive Finance in Europe (in collaboration with EMN)
- Guidelines for green products development/disbursement, “working with green heroes” FSPs
- Webinars, newsletters, preparation of 2 pagers and discussion papers
- Launching of Green Inclusive Finance Online Library
- Digital tool Green Index 3.0

We are working to increase the sector understanding and action in green inclusive finance

- New website!

<https://e-mfp/gicsf-ag>



"Green is the most resilient"
Pedro Marchetti, FDL Nicaragua

ABOUT THE ACTION GROUP

The e-MFP Green Inclusive & Climate Smart Finance Action Group (GICSF AG) is a **unique multi-stakeholders think tank** that brings together inclusive finance practitioners to discuss, exchange experiences and **find common path in dealing with environmental issues, grab green opportunities and create new practical tools** to advance green inclusive and climate smart finance.

The GICSF AG disseminates its results among e-MFP members and the inclusive finance sector at large, with the aim of increasing stakeholders' awareness of and commitment to act. It is meant as both an internal knowledge-sharing and external awareness-raising platform that serves as a reference in the inclusive finance sector.

We are working to increase the sector understanding and action in green inclusive finance

- Online library dedicated to green inclusive finance only, publicly available, containing + 500 documents and growing!

<https://gicsf-ag.hedera.online>

Green Inclusive and Smart
Climate Finance
e-MFP AG

🏠 AG Homepage


ONLINE LIBRARY

🔍 Search

📄 Overview

PAGES

🔑 Login

Powered by 

Search the database

The Green Inclusive and Climate Smart Finance Action Group is happy to provide the first online database dedicated to Green Inclusive Finance. The objective is to be both comprehensive and focused, and to be a useful repository for different types of actors with different levels of expertise and who are looking to answer a broad range of questions. Therefore, the publications collected include academic as well as policy- or practitioner-oriented publications, which can deal with concrete case studies or more abstract concepts. The search options are there to help the interested reader refine its quest.

The online library aims to support exchanges of experiences, results, and lesson learnt.

Start typing to search papers by title or author name

More filters

Found 857 other similar queries

Id	Author	Title	Category	Topics	Region	Language	Document
750	(2011)	Using Microfinance to Ensure Sustainable Rural Livelihoods and Food Security While Mitigating Climate Change - PART II: CLIMATE CHANGE.	Report	Microfinance, Climate change adaptation, Energy poverty	World	English	View PDF

Green Index evolution

2014

Green Index 1.0

- The most accepted tool to assess MFIs' environmental performance
- Publication available online on e-MFP AG webpage
- Green Index available in SPI4 (optional Dim 7)

2016

Green Index 2.0

- Incorporates lessons learnt from MFI's use, ability, and willingness to track environmental management
- Quantitative components for green products
- Integrated into SPI4 (only qualitative)

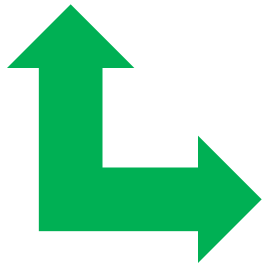
2021

Green Index 3.0

- Inclusion of (climate) vulnerability
- lessons learnt from 1000+ assessments & 6 years of use, 300+ stakeholders inputs
- Alignment to international initiatives
- Aligned with Universal Standards Env. Performance "Dim 7" developed with SPTF & CERISE, new mandatory dimension of US

Closing Last Feedback Rounds

GREEN INDEX 3.0



DIM 7 of USSPM



→ Upcoming trainings for FSPs and Investors & data collection starting from October 2021

Webinar Series

- Series of webinars on topics related to green inclusive finance
- Brief presentations by practitioners & academics
- Opportunity for discussion and networking
- Material and video available online

1 webinar every 2 weeks

60 mins

**Everyone working on green inclusive finance is invited to present,
contact us if you are interested!**



Identifying vulnerabilities

Insights from the **IMPACT-R** project
assessing access to basic services of
microfinance customers



IMPACT-R Impact-Driven &
Action-Based Research

Background

- Research Project
 - Hosted by IASS
 - Klaus Töpfer Sustainability Fellowship
 - Technical support of HEDERA



Objectives

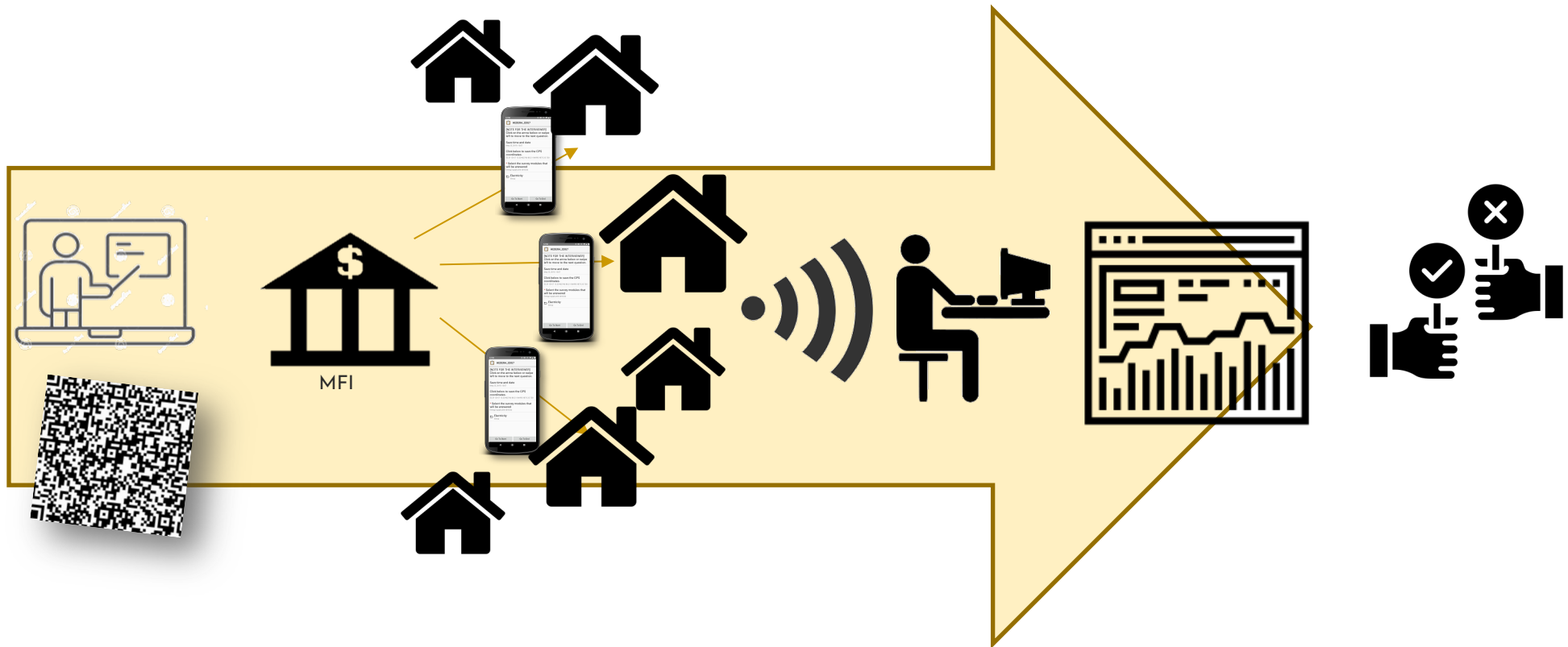
- Understanding vulnerabilities and measuring standard indicators (bottom-up)
- Data-driven products & services
- Recommendations for policy makers

Objectives

- Understanding vulnerabilities and measuring standard indicators (bottom-up)
- Data-driven products & services
- Recommendations for policy makers



Approach



Participants

Haiti:
PALMIS

Senegal:
FANSOTO

Uganda:
Platinum Capital Limited



Rogenette Georges



Eugénie Constancias



Ismaila SENE



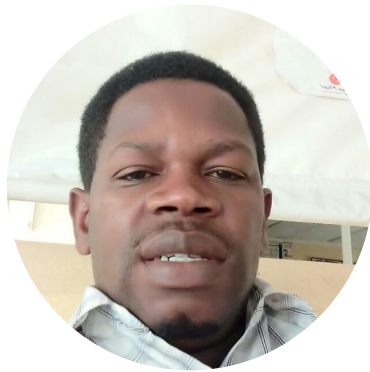
Andrew Muhwezi





Participants

Zambia:
VOWAZA



Ackson Banda



Nepal:
Muktinath Bikas Bank



Govinda Raut



Rwanda
Sustainable Villages Foundation



Joachim Hauschopp



Frameworks



Electricity supply
(households and
productive uses) &
Cooking solutions



Drinking water,
sanitation &
hygiene at
household level



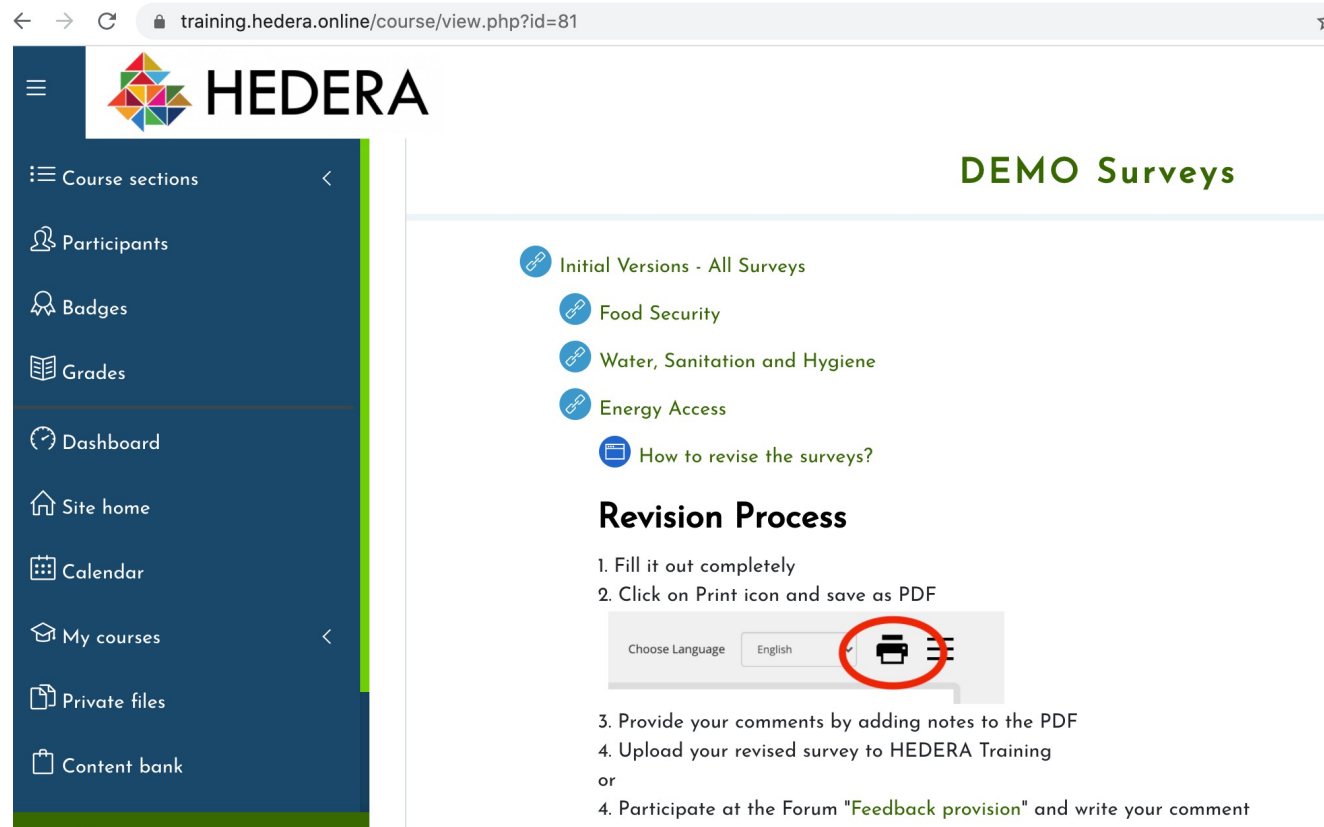
Food Insecurity
Experience Scale
at household level

Methodologies & Tools

- E-learning platform
- Tutorial app
- Digital communication channels
- Data dashboard
- Digital automated report

Methodologies & Tools

■ E-learning platform



The screenshot shows a web browser window with the URL `training.hedera.online/course/view.php?id=81`. The page header features the HEDERA logo and the title "DEMO Surveys". A dark blue sidebar on the left contains navigation options: Course sections, Participants, Badges, Grades, Dashboard, Site home, Calendar, My courses, Private files, and Content bank. The main content area lists survey topics: Initial Versions - All Surveys, Food Security, Water, Sanitation and Hygiene, Energy Access, and How to revise the surveys?. Below this is a "Revision Process" section with four numbered steps. A red circle highlights a "Print" icon in a language selection dropdown menu.

training.hedera.online/course/view.php?id=81

HEDERA

DEMO Surveys

- Initial Versions - All Surveys
 - Food Security
 - Water, Sanitation and Hygiene
 - Energy Access
 - How to revise the surveys?

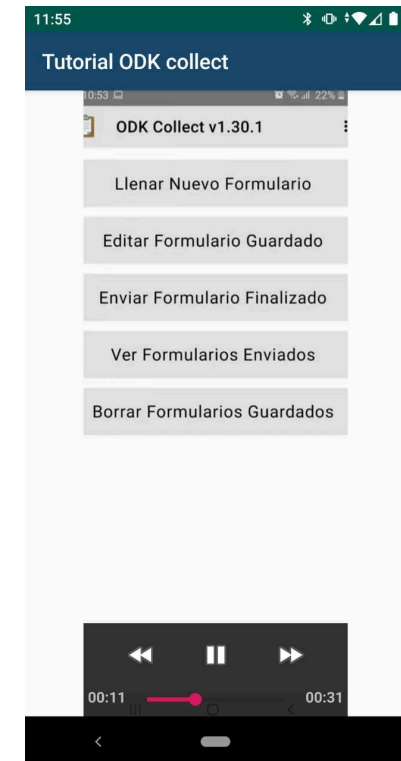
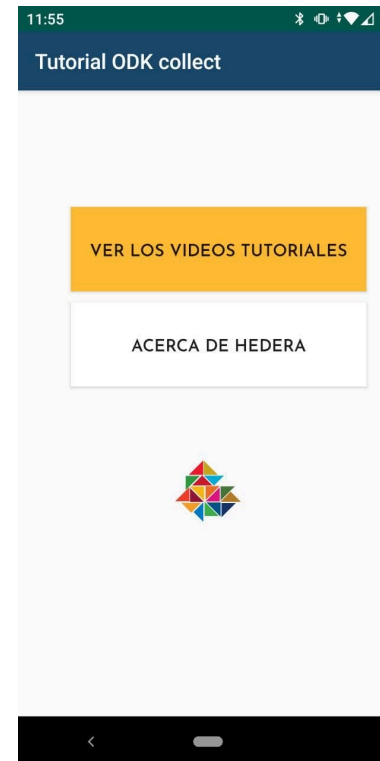
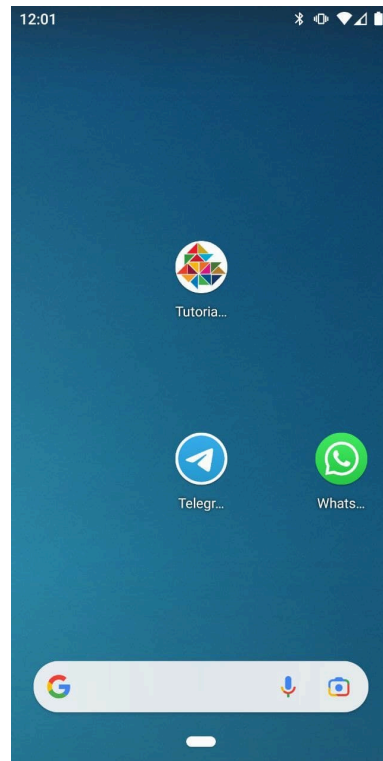
Revision Process

1. Fill it out completely
2. Click on Print icon and save as PDF
3. Provide your comments by adding notes to the PDF
4. Upload your revised survey to HEDERA Training or
4. Participate at the Forum "Feedback provision" and write your comment

Methodologies & Tools

■ Tutorial app

English
Spanish
French



Methodologies & Tools

■ Digital communication channels



WhatsApp – FANSOTO Field Team



Telegram – Technical Support to VOWAZA

Methodologies & Tools

Automated report

POWERED BY

2

SVF STUDY - APRIL 2021

2 Electricity Supply

What is the main source of electricity used in the household?

Variable name: `electricity_source`

required

Type: single choice

Total number of answers: 245 (100.0%)

Choice code	Label	Answers
none	None	111 (45.3%)
shs	Solar System	134 (54.7%)
other	Other	0 (0.0%)

Please specify the source of electricity:

Variable name: `electricity_source_other`

required

Type: text

`conditional` selected(`electricity_source`, 'other')

What do you mainly use for lighting?

Variable name: `electricity_illumination_source`

required

Type: multiple choice

Total number of answers: 245 (100.0%)

Choice code	Label	Answers
none	None	2 (0.8%)
kerosene	Kerosene lamp	0 (0.0%)
candles	Candles	24 (9.8%)
solar_torch	Solar torch / Solar lantern / Solar desktop lamp	21 (8.6%)
solar_lamp	Solar lamp / Solar area floodlight	123 (50.2%)
torch_battery	Torch / Battery torch / Rechargeable battery flash-	127 (51.8%)



IMPACT-R Dashboard

Search this book...

IMPACT-R Project Dashboard

INSTITUTIONS

Sustainable Villages Foundation
(Rwanda)

Entrepreneurs du Monde - FANSOTO
(Senegal)

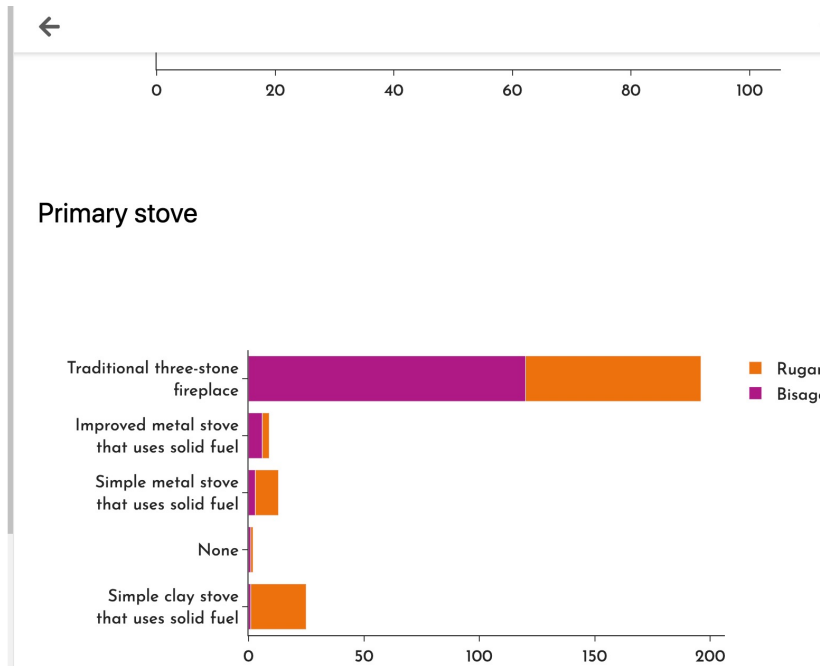
Entrepreneurs du Monde - Palmis
Mikwofinans Sosyal (Haiti)

Muktinath Bikas Bank (Nepal)

HEALTH VULNERABILITY

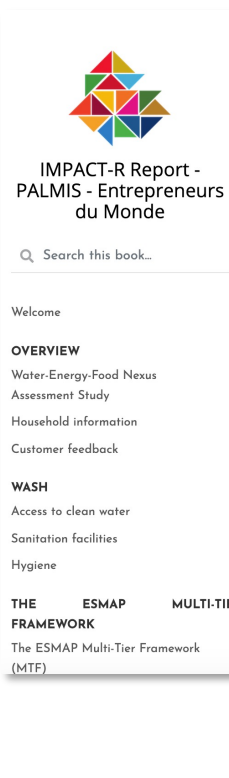
A Health Vulnerability Index

ABOUT



Methodology & Tools

Dashboard – Theory & Results



IMPACT-R Report - PALMIS - Entrepreneurs du Monde

Q Search this book...

Welcome

OVERVIEW

Water-Energy-Food Nexus Assessment Study

Household information

Customer feedback

WASH

Access to clean water

Sanitation facilities

Hygiene

THE ESMAP MULTI-TIER FRAMEWORK

The ESMAP Multi-Tier Framework (MTF)

Ranking matrix to evaluate access to cooking solutions

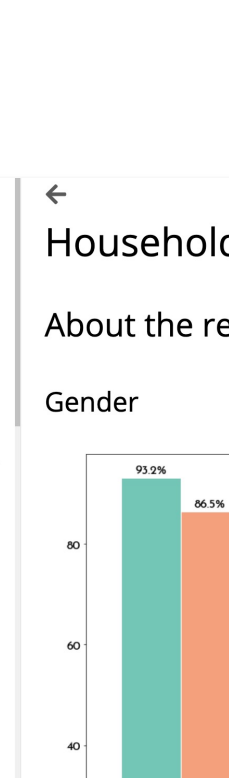
- **EXPOSURE (stove design):** Which type of cookstove is primarily used in the household?
- **EXPOSURE (fuel):** Does the household use primarily a clean fuel for cooking?
- **EXPOSURE (Ventilation):** Where do members of your household normally cook with the cookstove?
- **AVAILABILITY:** In which months is the fuel for cooking available?
- **AFFORDABILITY:** How much does the household spend in fuel for the main cookstove in the last month/in a typical month when you use the stove? (Amount in Local Currency)
- **SAFETY:** In the last 12 months, did you or anyone in your households experience any injury or accidents while cooking?
- **CONVENIENCE (week):** In the last 7 days, how many times in total have household members gone out for **gathering, collecting or purchasing the main fuel** for the main cookstove?
- **CONVENIENCE (day):** In the last 7 days, how many minutes per day (on average) did household members spend on **gathering, collecting or purchasing the main fuel** for the main cookstove, including travel time?

ATTRIBUTES	TIER 0	TIER 1	TIER 2	TIER 3	TIER 4	TIER 5
Emission: Fuel	Firewood, dung, twigs, leaves, rice husks, processed biomass pellets or briquettes, charcoal, kerosene					Biogas, ethanol, high quality processed biomass pellets or briquettes
Emission: Stove Design	Three-stone fire, tripod, flat mud ring, traditional charcoal stove	Conventional or old generation ICS	ICS+ chimney, rocket stove or ICS + insulation	Rocket stove with high insulation or with chimney, advanced insulation charcoal stoves	Rocket stove with chimney (well sealed), Rocket Stove gasifier, Advanced secondary air charcoal stove, forced air	Electricity, solar, LPG
Cooking Exposure *						
Ventilation: Volume of Kitchen ²	Less than 5 m ²	More than 5 m ²	More than 10 m ²	More than 20 m ²	More than 40 m ²	Open air
Ventilation: No opening ³	No opening ³	1 opening	More than 1	Significant openings (large openings below)	Veranda or a hood is used	Open air

WASH

Access to clean water

Sanitation facilities



IMPACT-R Report - Entrepreneurs du Monde

Q Search this book...

Welcome

OVERVIEW

Water-Energy-Food Nexus Assessment Study

Household information

Customer feedback

WASH

Access to clean water

Sanitation facilities

Hygiene

THE ESMAP MULTI-TIER FRAMEWORK

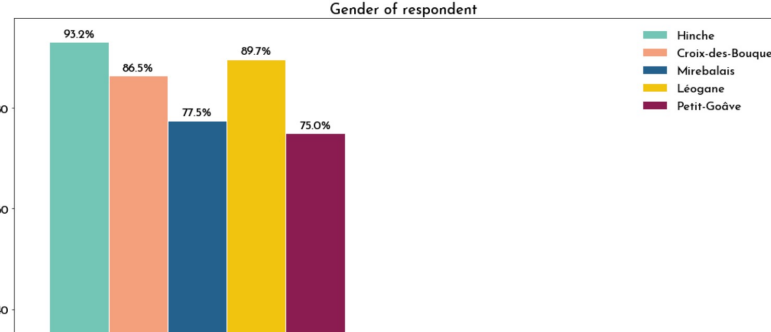
The ESMAP Multi-Tier Framework (MTF)

Household information

About the respondent

Gender

Gender of respondent



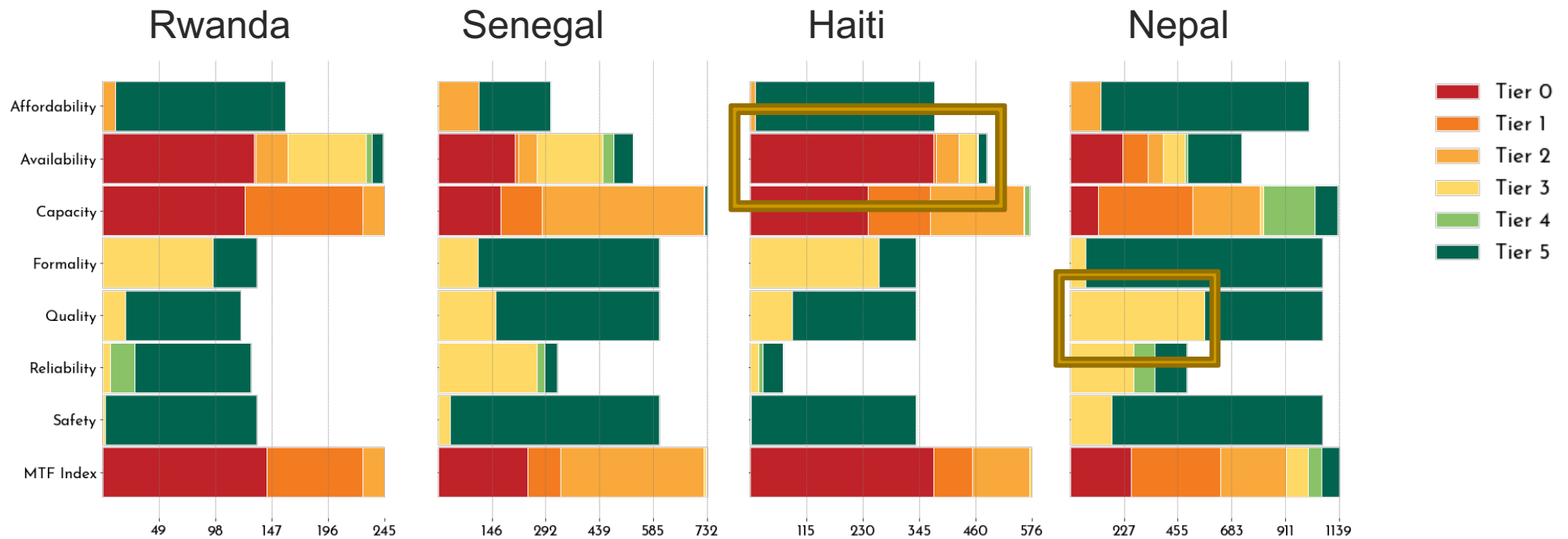
Location	Percentage
Hinche	93.2%
Croix-des-Bouquets	86.5%
Mirebalais	77.5%
Léogane	89.7%
Petit-Goâve	75.0%



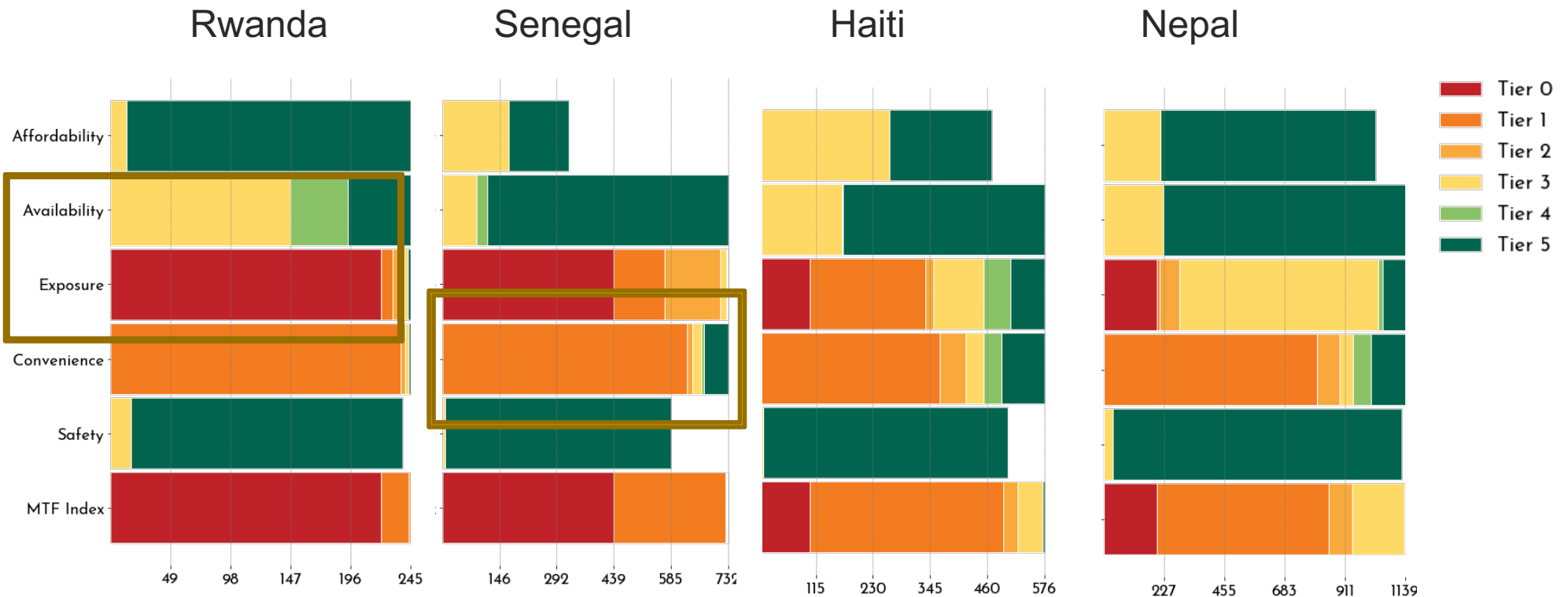
Outreach

- As of Sept 2021 - 6 countries
- +4000 households interviewed
- Over 100 enumerators trained
- Planned: DRC, Nicaragua & India

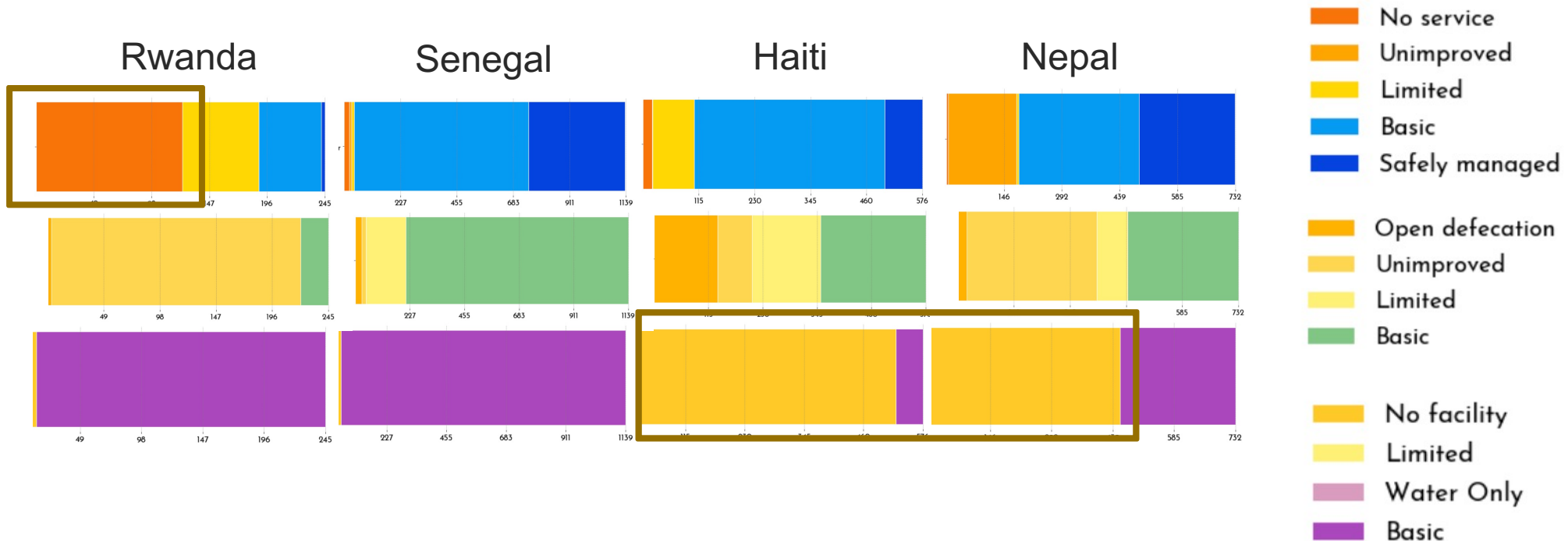
Key Findings: Electricity Supply



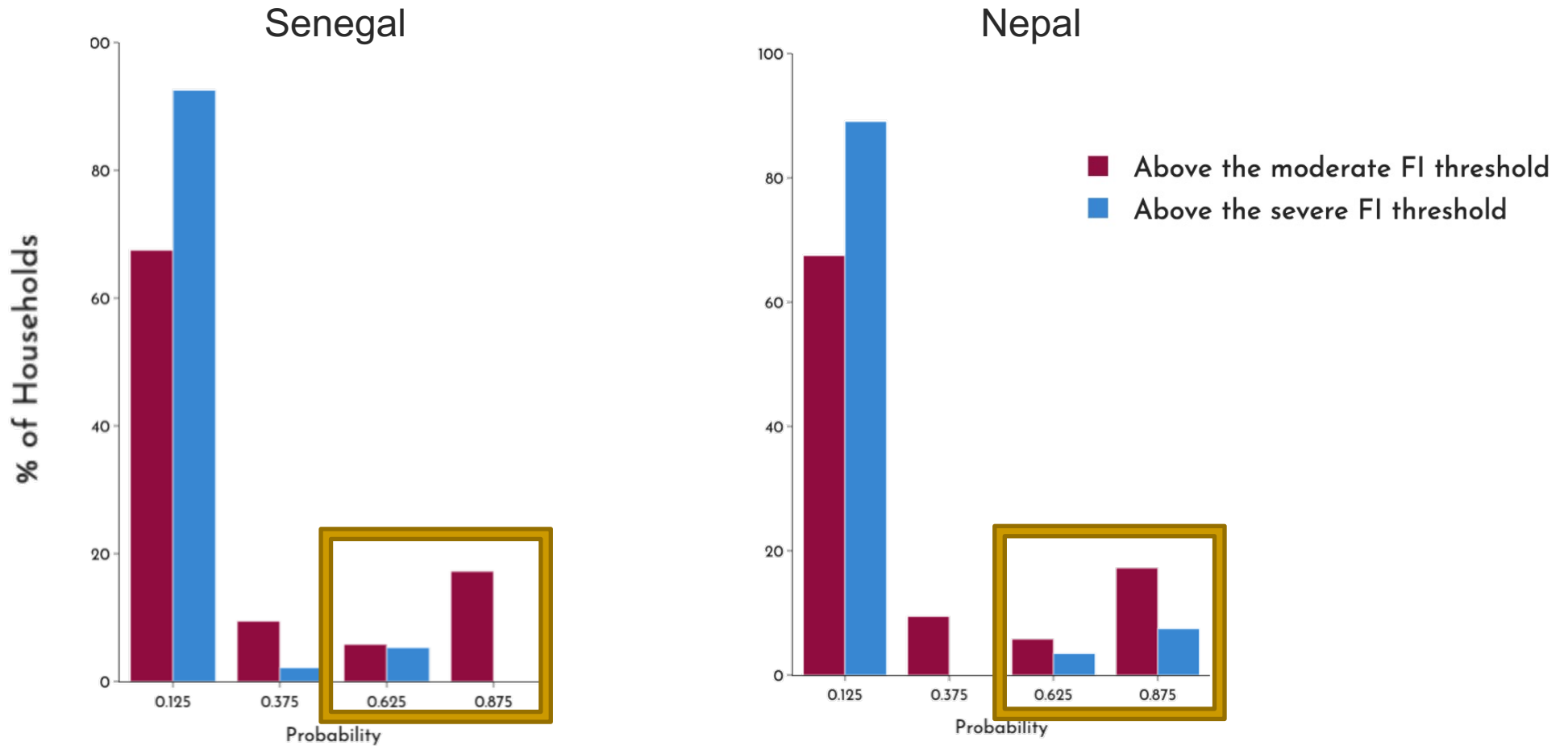
Key Findings: Clean Cooking Solutions



Key Findings: WASH



Key Findings: Food Insecurity Scale



Nexus

- Cross-topic among frameworks:
 - HEALTH – practices may affect health
 - CLIMATE VULNERABILITY – lives affected easily by climate



Nexus

■ Cross-topic among frameworks:

○ HEALTH – practices may affect health

○ CLIMATE VULNERABILITY – lives affected easily by climate

HEALTH VULNERABILITY

■ Energy Access & Access to WASH

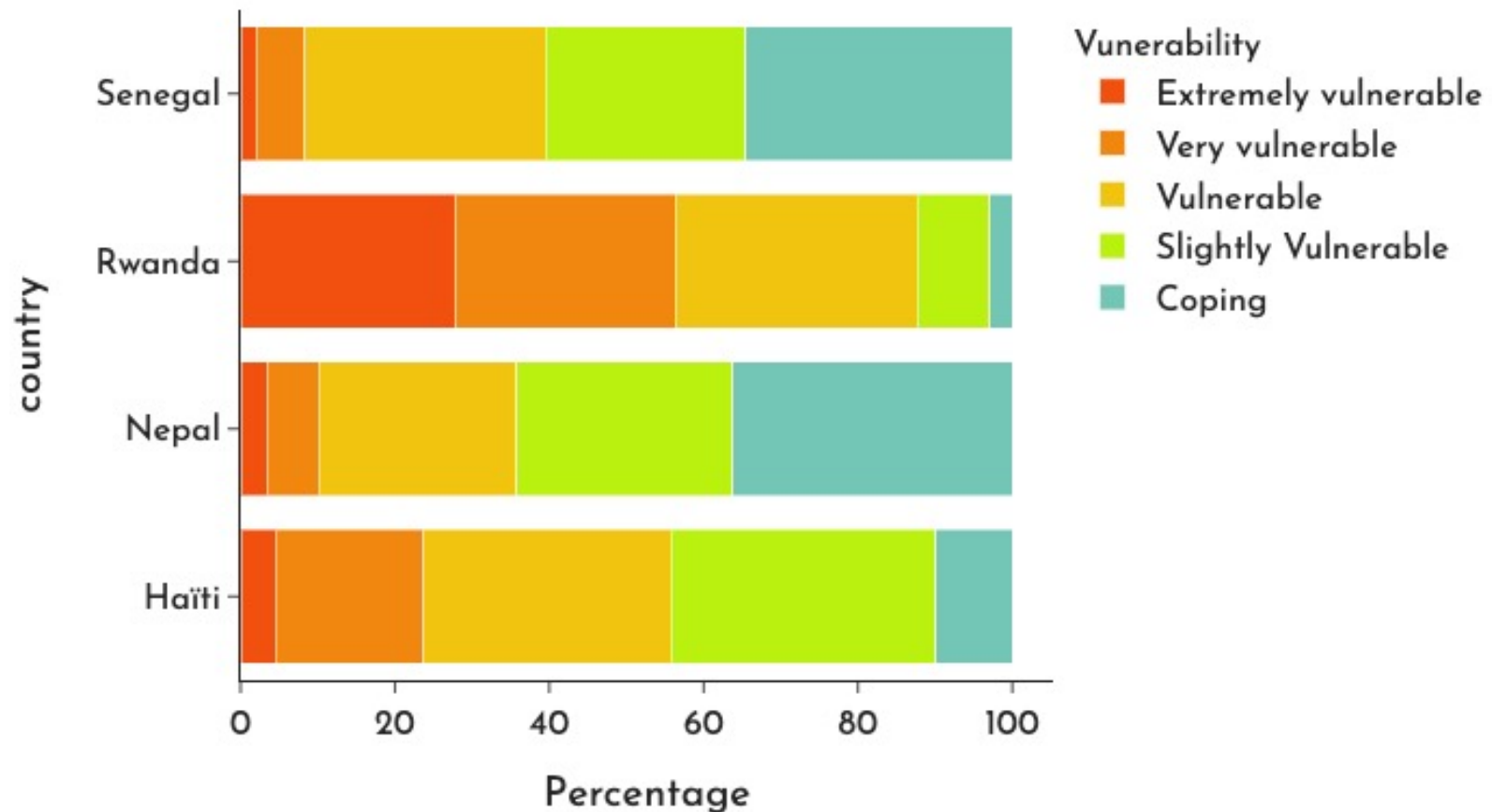
- Injuries caused from the cooking solution
- Injuries due to the electricity source
- Cooking fuel/stove

- Source of water
- Quality of drinking water
- Quality of drinking water
- Availability of clean water

- Shared/Own facilities
- Risks when using the toilet
- Emptying of septic tank
- Hygiene practices

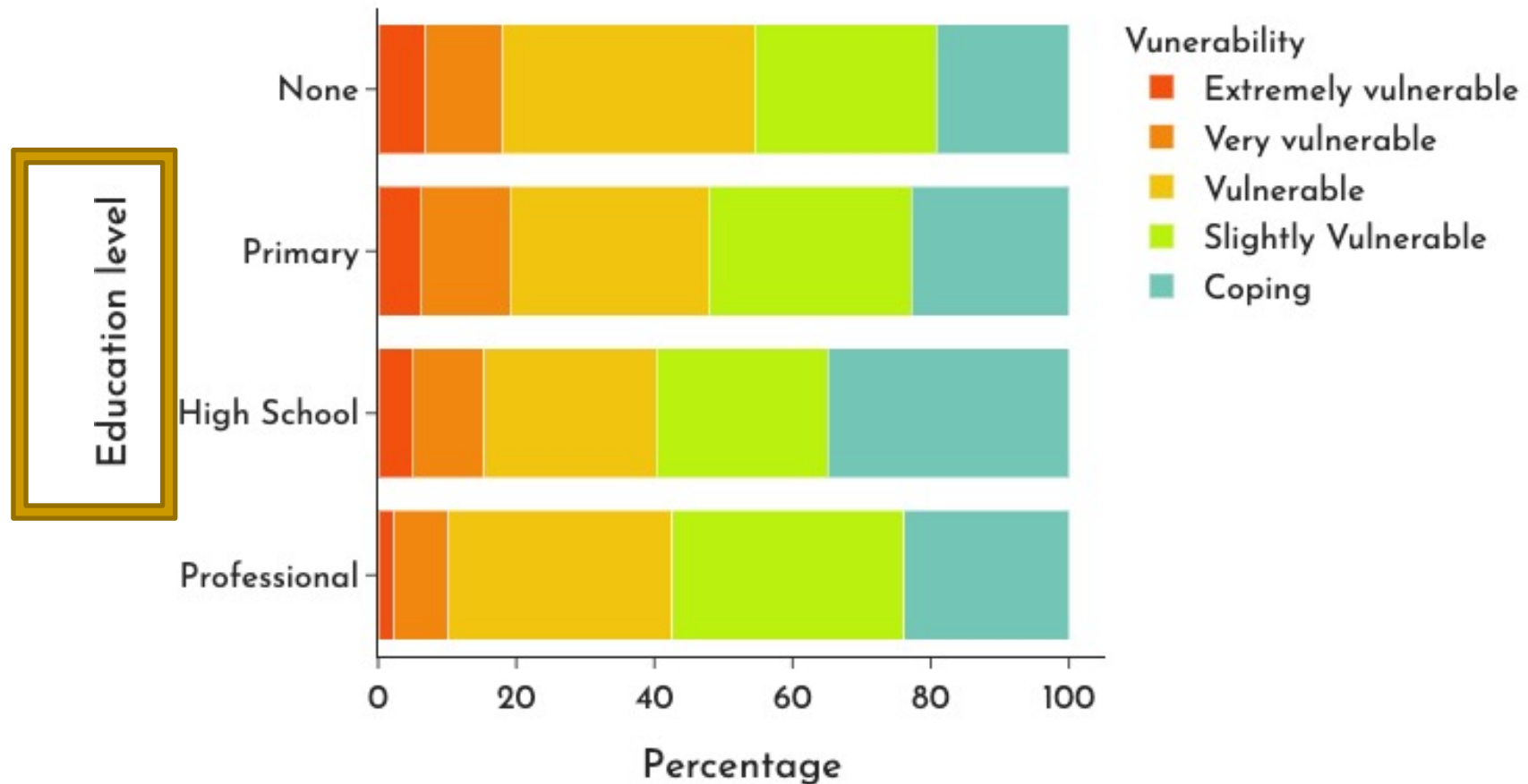


HEALTH VULNERABILITY





HEALTH VULNERABILITY





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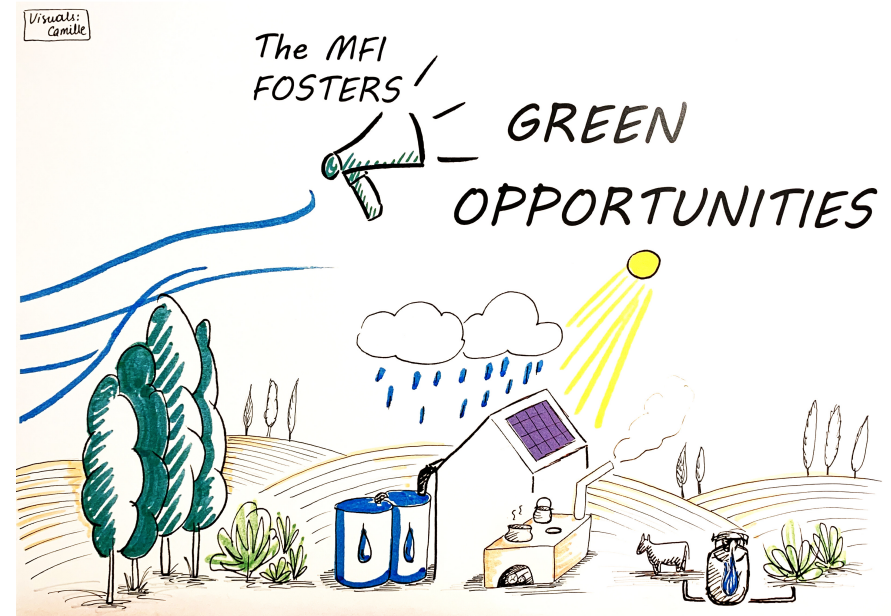
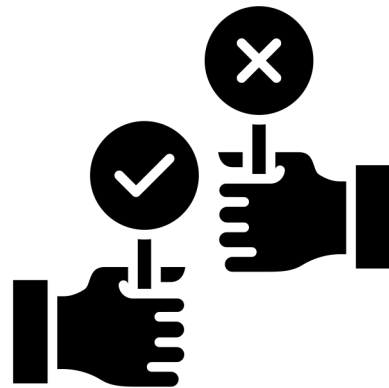
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Climate Smart Finance
ACTION GROUP

What's next?

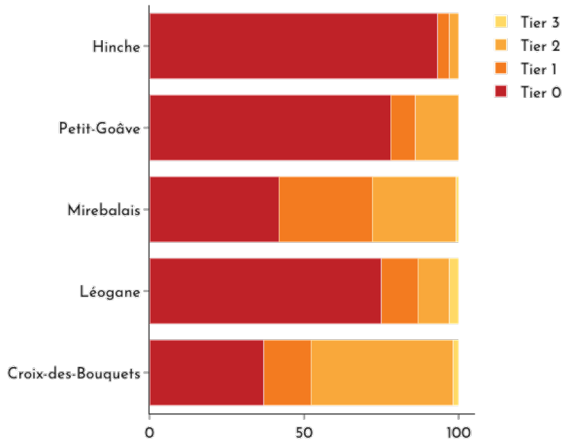
Fostering GREEN INCLUSIVE FINANCE

■ Data-driven decision-making at MFIs

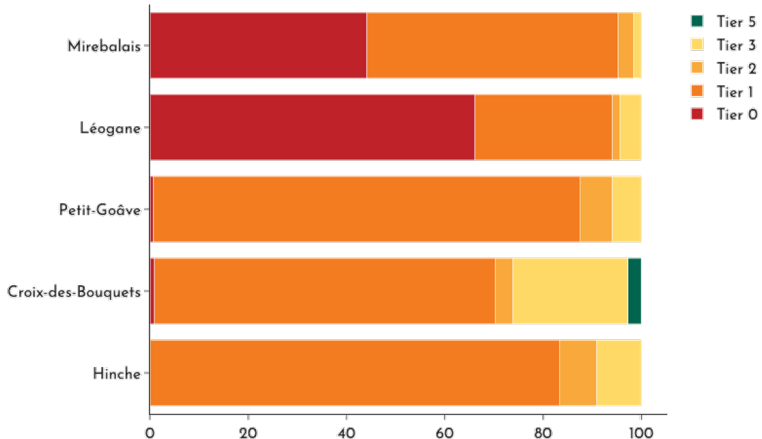
Vulnerabilities
identification



MTF Index (Access to Electricity)

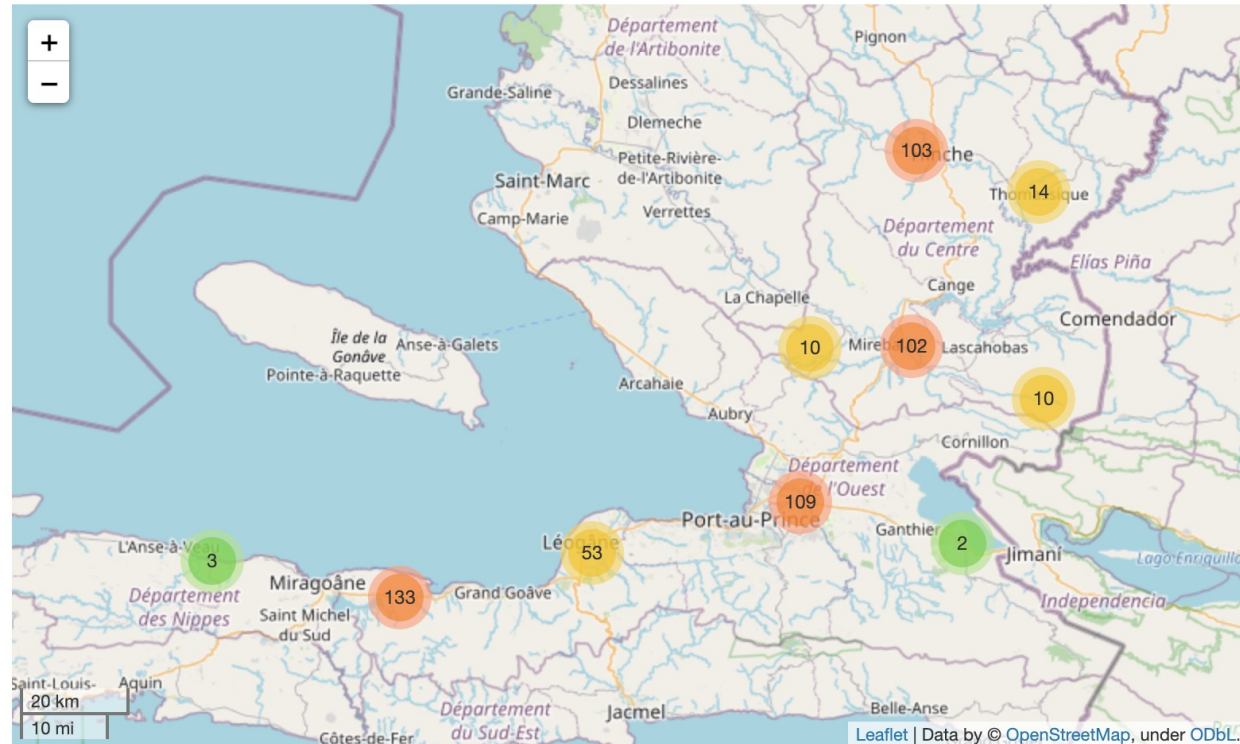


MTF Index - Cooking solutions



IMPACT MANAGEMENT SYSTEMS

BASELINE
2021



Feedback from the Field

- Reaction of respondents
- Feedback of enumerators
- Perceptions of community needs
- Learnability and usability of digital tools
- Field testimonials (comments, audio, pictures)



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Stay Tuned

- Findings from employees and enumerators feedback
- Detailed publication & analysis
- Global dashboard
- Next round of Call for proposals for MFIs & NGOs: December 2021/January 2022
- Research opportunities



Thanks for your attention!

Dr.-Ing. Natalia Realpe Carrillo

Institute for Advanced Sustainability Studies
Natalia.realpecarrillo@iass-potsdam.de

HEDERA
natalia@hedera.online
<https://hedera.online>

An event organized by the Green Inclusive and Climate Smart Finance Action Group (AG-GICSF)
Do you want to speak at the webinar series? Please contact us:

Heads of the AG-GICSF

Natalia Realpe Carrillo: natalia@hedera.online

Davide Forcella: davide.forcella@yahoo.it

e-MFP contact

Joana Afonso: jafonso@e-mfp.eu



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ANNEXES



Electricity Supply

ATTRIBUTES		TIER 0	TIER 1	TIER 2	TIER 3 ^a	TIER 4	TIER 5
Capacity	Power capacity ratings (W or daily Wh)	Less than 3 W	At least 3 W	At least 50 W	At least 200 W	At least 800 W	At least 2 kW
	Services	Less than 12 Wh	At least 12 Wh	At least 200 Wh	At least 1 kWh	At least 3.4 kWh	At least 8.2 kWh
Availability ^a	Daily Availability	Less than 4 hours	At least 4 hours		At least 8 hours	At least 16 hours	At least 23 hours
	Evening Availability	Less than 1 hour	At least 1 hour	At least 2 hours	At least 3 hours	At least 4 hours	
Reliability		More than 14 disruptions per week			At most 14 disruptions per week or At most 3 disruptions per week with total duration of more than 2 hours ^b	(> 3 to 14 disruptions / week) or ≤ 3 disruptions / week with > 2 hours of outage	At most 3 disruptions per week with total duration of less than 2 hours
Quality		Household experiences voltage problems that damage appliances				Voltage problems do not affect the use of desired appliances	
Affordability		Cost of a standard consumption package of 365 kWh per year is more than 5% of household income			Cost of a standard consumption package of 365 kWh per year is less than 5% of household income		
Formality		No bill payments made for the use of electricity				Bill is paid to the utility, prepaid card seller, or authorized representative	
Health and Safety		Serious or fatal accidents due to electricity connection				Absence of past accidents	

Cooking Solutions

ATTRIBUTES		TIER 0	TIER 1	TIER 2	TIER 3	TIER 4	TIER 5
Cooking Exposure ^a	Emission: Fuel	Firewood, dung, twigs, leaves, rice husks, processed biomass pellets or briquette, charcoal, kerosene				Biogas, ethanol, high quality processed biomass pellets or briquettes	
	Emission: Stove Design	Three-stone fire, tripod, flat mud ring, traditional charcoal stove	Conventional or old generation ICS	ICS+ chimney, rocket stove or ICS + insulation	Rocket stove with high insulation or with chimney, advanced insulation charcoal stoves	Rocket stove with chimney (well sealed), Rocket Stove gasifier, Advanced secondary air charcoal stove, forced air	Electricity, solar, LPG
	Ventilation: Volume of Kitchen ^b	Less than 5 m ³	More than 5 m ³	More than 10 m ³	More than 20 m ³	More than 40 m ³	Open air
	Ventilation: Structure	No opening except for the door	1 window	More than 1 window	Significant openings (large openings below or above height of the door)	Veranda or a hood is used to extract the smoke	Open air
	Ventilation Level	Bad			Average	Good	
	Contact Time ^c	More than 7.5 hours	Less than 7.5 hours	Less than 6 hours	Less than 4.5 hours	Less than 3 hours	Less than 1.5 hours
Cookstove Efficiency	ISO's Voluntary Performance Targets (TBC)	Less than 10%	More than 10%	More than 20%	More than 30%	More than 40%	More than 50%
	Fuel acquisition (through collection or purchase) and preparation time (hours per week)	More than 7 hours		Less than 7 hours	Less than 3 hours	Less than 1.5 hours	Less than 0.5 hour
Convenience	Stove preparation time (minutes per meal)	More than 15 minutes		Less than 15 minutes	Less than 10 minutes	Less than 5 minutes	Less than 2 minutes
	Safety of Primary Cookstove	Serious accidents over the past 12 months				No serious accidents over the past year	
Affordability ^d		Levelized cost of cooking solution (fuel) more than 5% of household income				Levelized cost of cooking solution (fuel) less than 5% of household income	
Fuel Availability		Primary fuel available less than 80% of the year				Primary fuel is readily available 80% of the year.	Primary fuel is readily available throughout the year

Drinking Water

Service level	Definition
Safely managed	Drinking water from an improved water source which is located on premises, available when needed and free of faecal and priority chemical contamination
Basic	Drinking water from an improved source provided collection time is not more than 30 minutes for a roundtrip including queuing
Limited	Drinking water from an improved source where collection time exceeds over 30 minutes for a roundtrip to collect water, including queuing
Unimproved	Drinking water from an unprotected dug well or unprotected spring
No service	Drinking water collected directly from a river, dam, lake, pond, stream, canal or irrigation channel



Sanitation

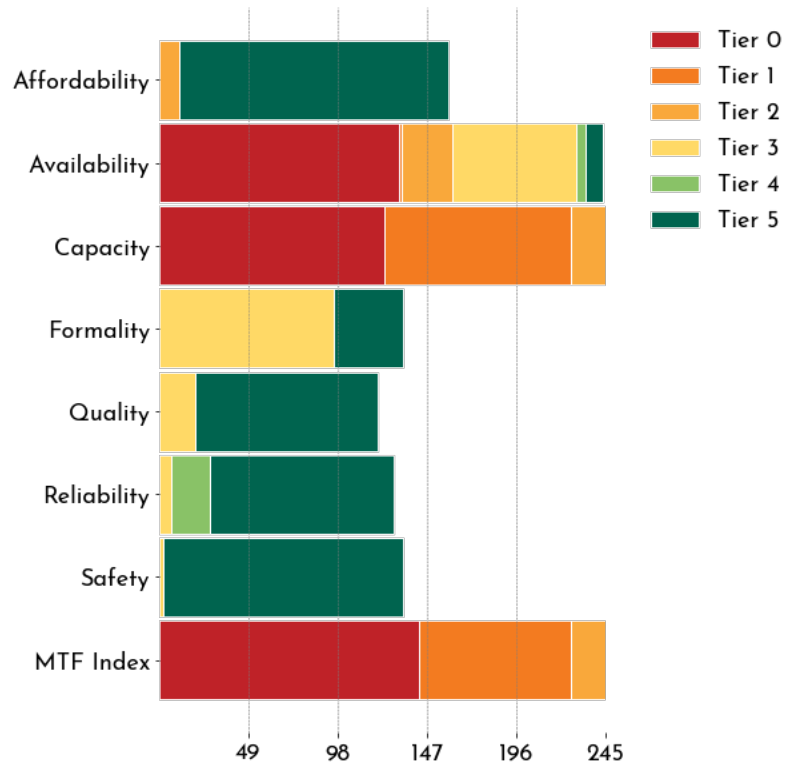
	<p>SAFELY MANAGED</p> <p>Use of improved facilities which are not shared with other households and where excreta are safely disposed in situ or transported and treated off-site</p>
	<p>BASIC</p> <p>Use of improved facilities which are not shared with other households</p>
	<p>LIMITED</p> <p>Use of improved facilities shared between two or more households</p>
	<p>UNIMPROVED</p> <p>Use of pit latrines without a slab or platform, hanging latrines or bucket latrines</p>
	<p>OPEN DEFECACTION</p> <p>Disposal of human faeces in fields, forests, bushes, open bodies of water, beaches and other open spaces or with solid waste</p>

Hygiene

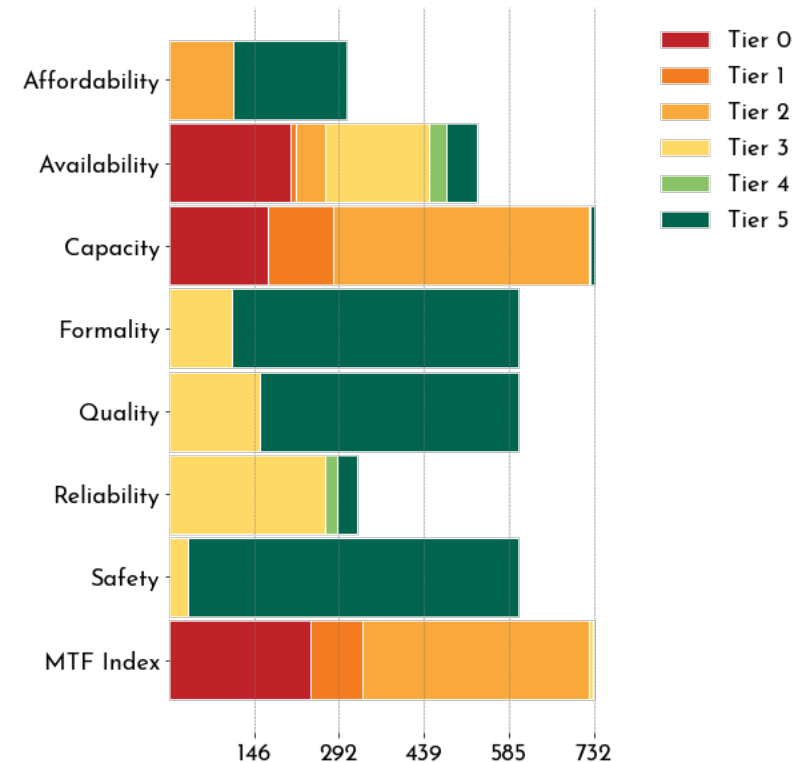
	<p>BASIC</p> <p>Availability of a handwashing facility on premises with soap and water</p>
	<p>LIMITED</p> <p>Availability of a handwashing facility on premises without soap and water</p>
	<p>NO FACILITY</p> <p>No handwashing facility on premises</p>

Electricity Supply

Rwanda

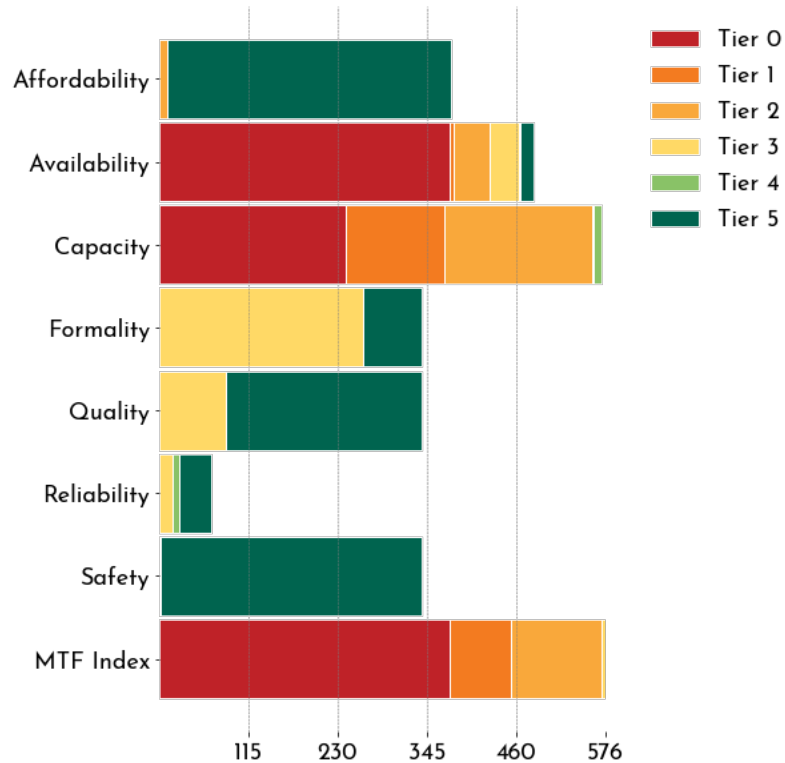


Senegal

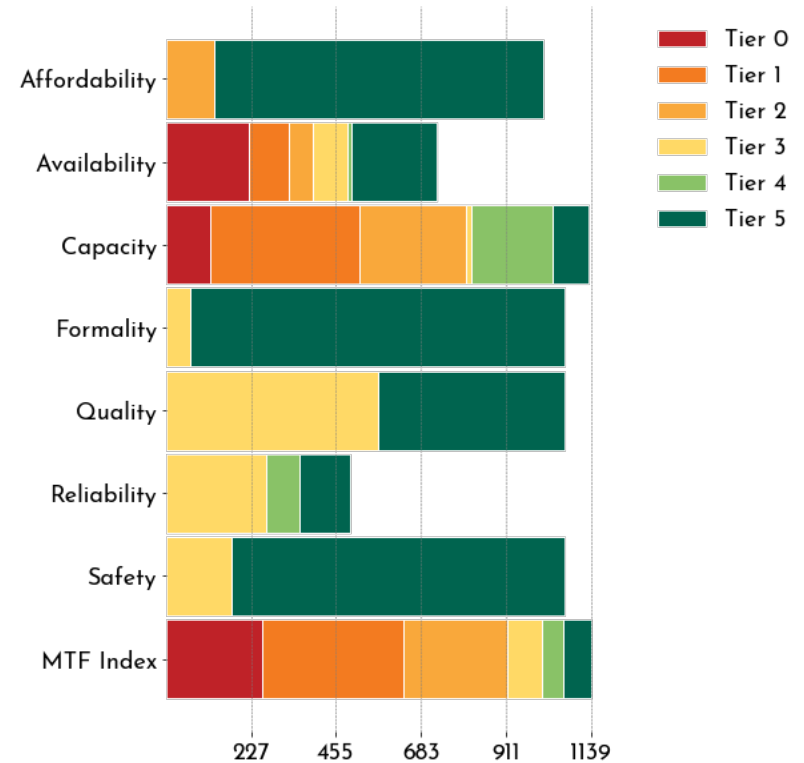


Electricity Supply

Haiti



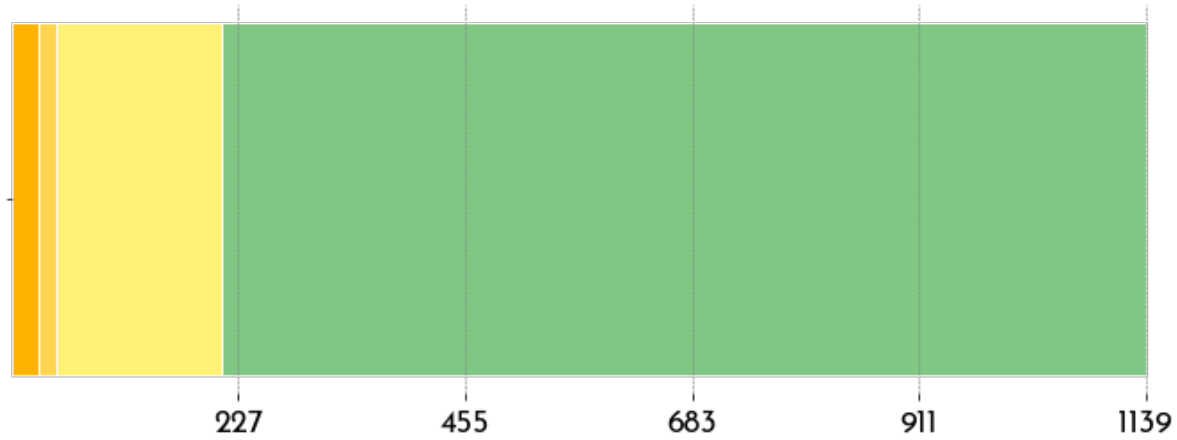
Nepal



WASH

Nepal

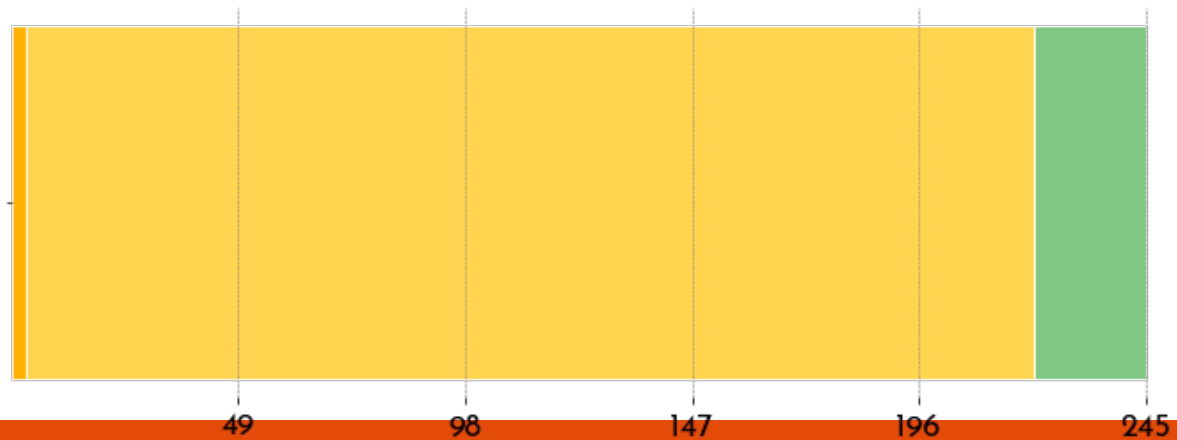
Sanitation Service Ladder



- Open defecation
- Unimproved
- Limited
- Basic

Rwanda

Sanitation Service Ladder



- Open defecation
- Unimproved
- Limited
- Basic

FOOD SECURITY

