Standardising Cooking Sector Planning Processes

World Bank, ESMAP Webinar
Series on Clean Cooking

6th November 2025

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Introduction to EED

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About EED Advisory

EED Advisory is a pan-African consulting firm offering technical, analytical, and advisory services in **energy, climate change,** and **WASH**.

Founded in 2013 in Nairobi, EED has a team of 31 operating in **Nairobi (Kenya), Dakar (Senegal) and Johannesburg (South Africa).**

Our footprint spans across 32 sub-Saharan African countries and the sub-continent of India.

We've carried out **over 170 assignments** including **the development of various clean cooking planning tools and processes across 7 countries.**

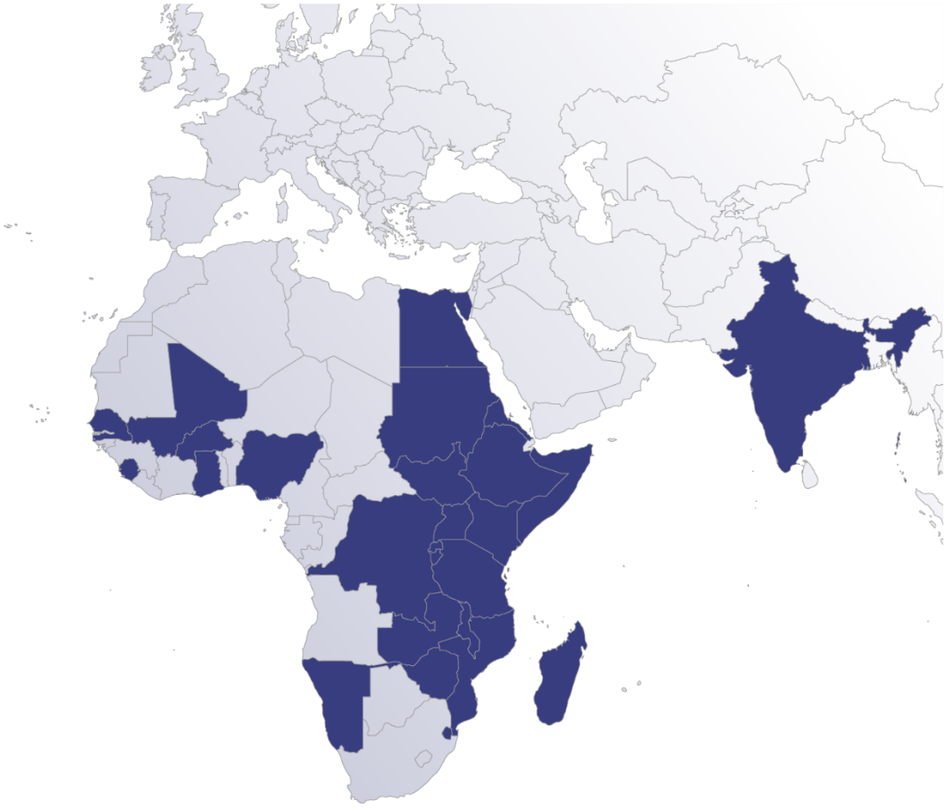
Some of our partners and clients include:

170+
Assignments

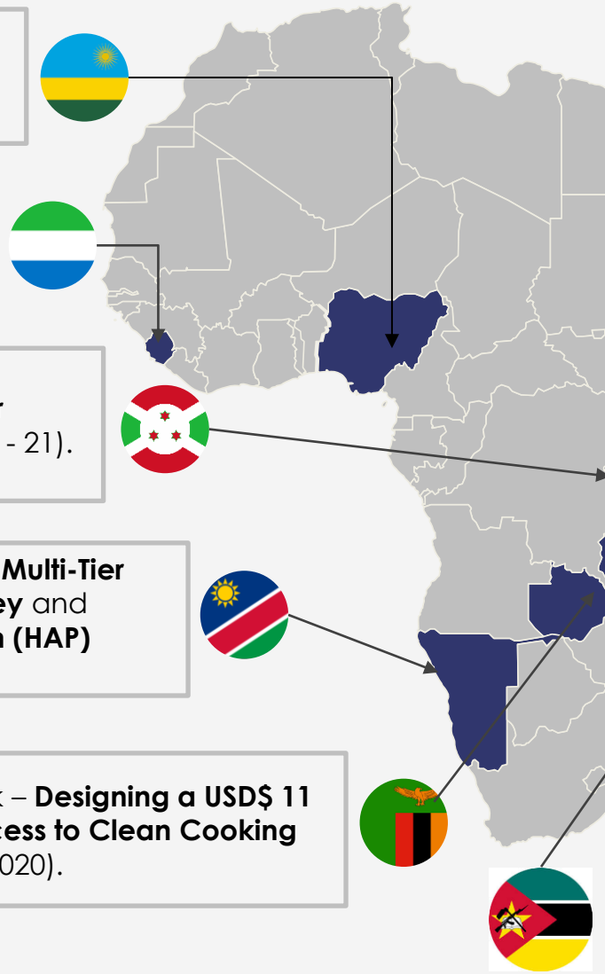
Assignments Across Countries
33

3
Regional Offices

Founded
2013



Clean Cooking Planning: EED Sample Projects



World Bank – **Nigeria Multi-Tier Framework (MTF) Survey** (2025 - 26).

MoE, Sierra Leone – **Developing a National Clean Cooking Strategy** (2024-25).

World Bank – **Burundi Multi-Tier Framework (MTF) Survey** (2020 - 21).

World Bank – **Namibia Multi-Tier Framework (MTF) Survey** and **Household Air Pollution (HAP) Assessment** (2024-25).

World Bank – **Designing a USD$ 11 million Access to Clean Cooking Program** (2020).

World Bank - **Ethiopia Multi-Tier Framework (MTF) Survey** and **Household Air Pollution (HAP) Assessment** (2024-25).

World Bank - **Somalia Multi-Tier Framework (MTF) Survey** and **Household Air Pollution (HAP) Assessment** (2024-25).

MECS – **Kenya National Clean Cooking Transition Strategy** (2022-23).

AECF- **Designing a US$ 5 million Clean Cooking Market Activation Program** (2021).

African Development Bank- **Developing a Clean Cooking Strategy** (2025).

FUNAE- **Developing an LPG Masterplan** (2025-26).

2
Core Components

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2.1 Localising the Definition of Clean Cooking

Technology & Fuels

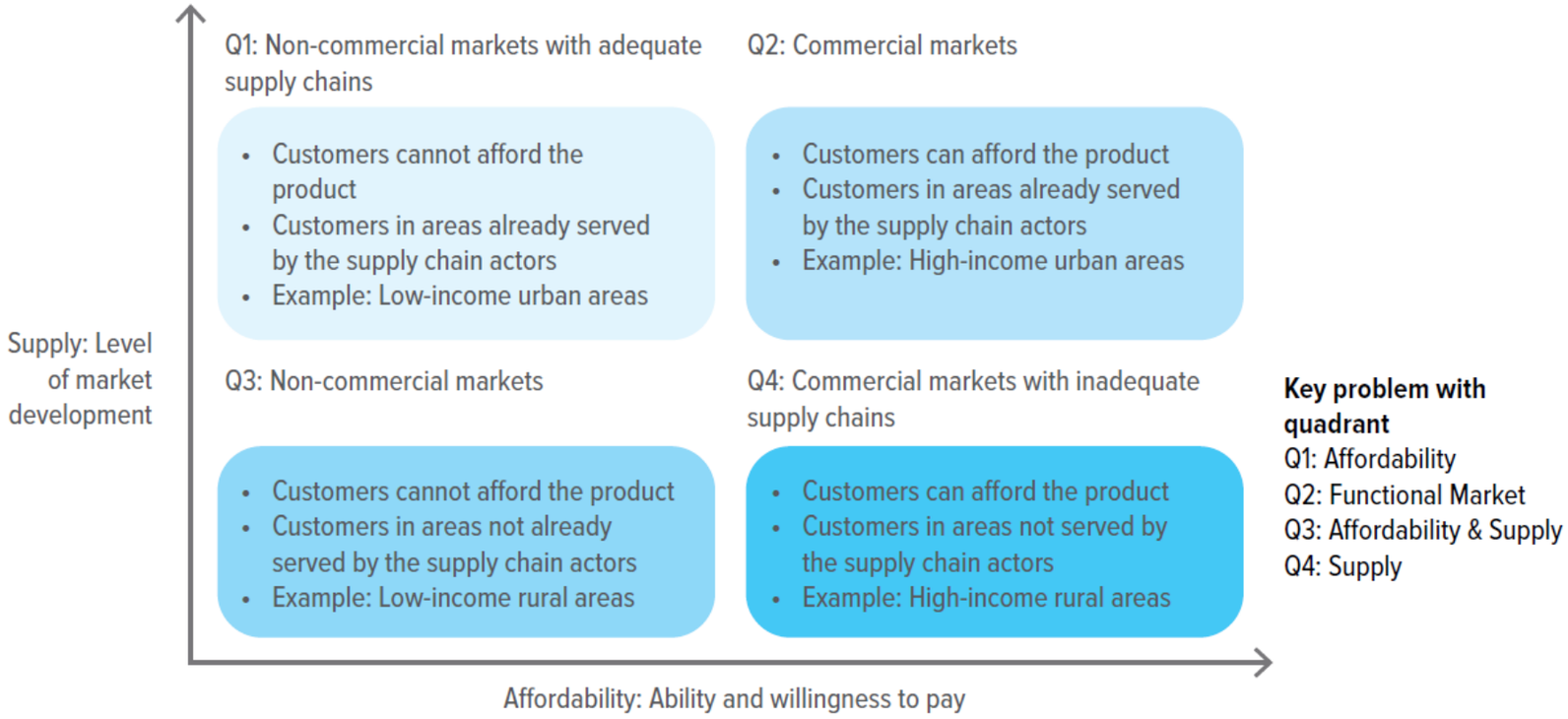
- **The most common categories and classes include** traditional, improved, clean, cleaner, and modern.
- **Cooking solutions consist of at least two components - the technology and the fuel -** making the application of these definitions somewhat fluid.
- **The ISO IWA Framework** uses a multi-category (thermal efficiency, CO emissions, PM 2.5, safety, and durability) six-tier classification matrix making it hard to interpret and apply in practice.
- **Energy transitions** may occur as a change in the energy carrier, conversion processes, or patterns of end use. **This requires a process of localising the definition.**

Cooking Solutions	Traditional Biomass Stoves		Improved Biomass Stoves			Modern[10] - Liquid, Gas & Electric Stoves			Renewable Fuel Stoves		
Stove Category	Open fire	Legacy stoves	Basic ICS	Intermediate ICS	Advanced ICS[11]	Kerosene stoves	LPG stoves	Electric[12]	Biogas	Biofuel stoves	Solar & Retained heat
Emissions (PM 2.5)	Tier 0	Tier 0 -1	Tier 1	Tier 1 -2	Tier 3	Tier 3 -4	Tier 4	Tier 4-5	Tier 4 - 5	Tier 4 - 5	Tier 5
Cookstoves & their description	1. Three stone	2. Metallic, biomass (+wood), stoves, no chimney	4. Built in or portable biomass (+wood) stoves, insulated, with chimney,	6. Built in, biomass (+wood), stoves incl. rocket[13] stoves	9. Natural draft, TLUD[14], gasifier stoves	12. Kerosene wick stoves	14. Single burner stoves incl. LPG *mekos*	16. Electric coil stoves, 17. EPCs, 18. Mixed LPG-Electric stoves 19. Electric induction stove	21. Biogas stoves	22. Liquid biofuel stoves	25. Solar cookers
		3. Metallic charcoal stoves, no insulation	5. Charcoal, ceramic stoves, basic & artisanal	7. Portable, biomass (+wood), stoves incl. rocket stoves	10. Natural draft, TCHAR[15], gasifier stoves	13. Kerosene pressurized stoves	15. Multiple burner stoves incl. tabletops & cookers	20. Other task specific eCooking appliances (Microwave ovens, Air fryer, electric oven, rice cookers, halogen oven)		23. Gel biofuel stoves	26. Retained heat cookers
				8. Improved charcoal stoves incl. rocket stoves	11. Forced/ Fan draft gasifier stoves					24. Solid biofuel stoves[16]	
	Traditional		Improved			Clean					

2.2 Characterising Market Segments

Affordability & Access Challenges

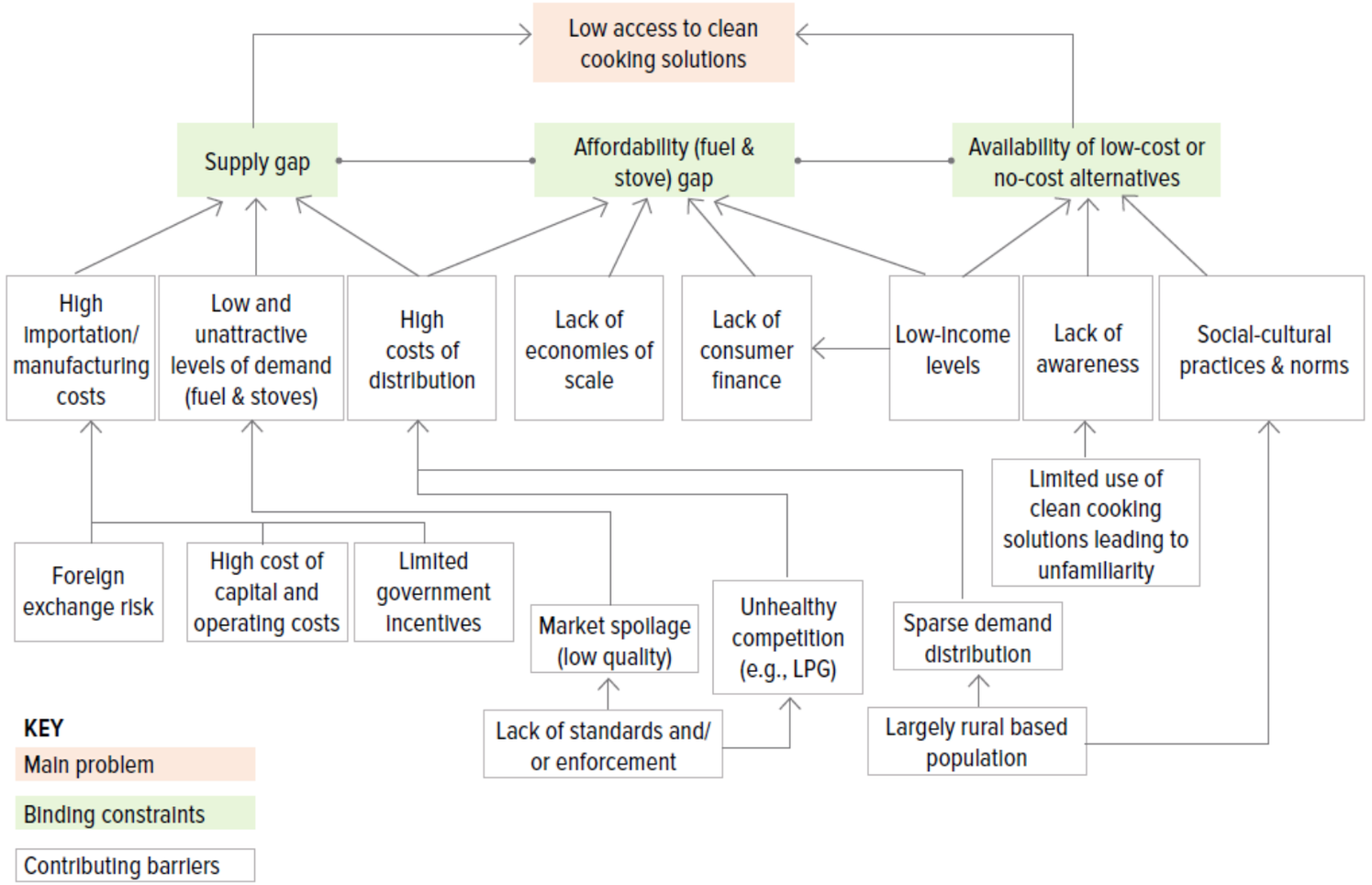
- **The total addressable market** is not equal to the total market size.
- **The total serviceable market** may be constrained by either affordability or access challenges, or both.
- Designing appropriate interventions should be **guided by the type of market failures and characteristics**.
- Strategy design and planning should **synchronize with national level household surveys and other data collection initiatives** such as national censuses and ESMAP Multi Tier Frameworks surveys.



2.3 Identifying the Most Binding Constraints

Systems Analysis & Action

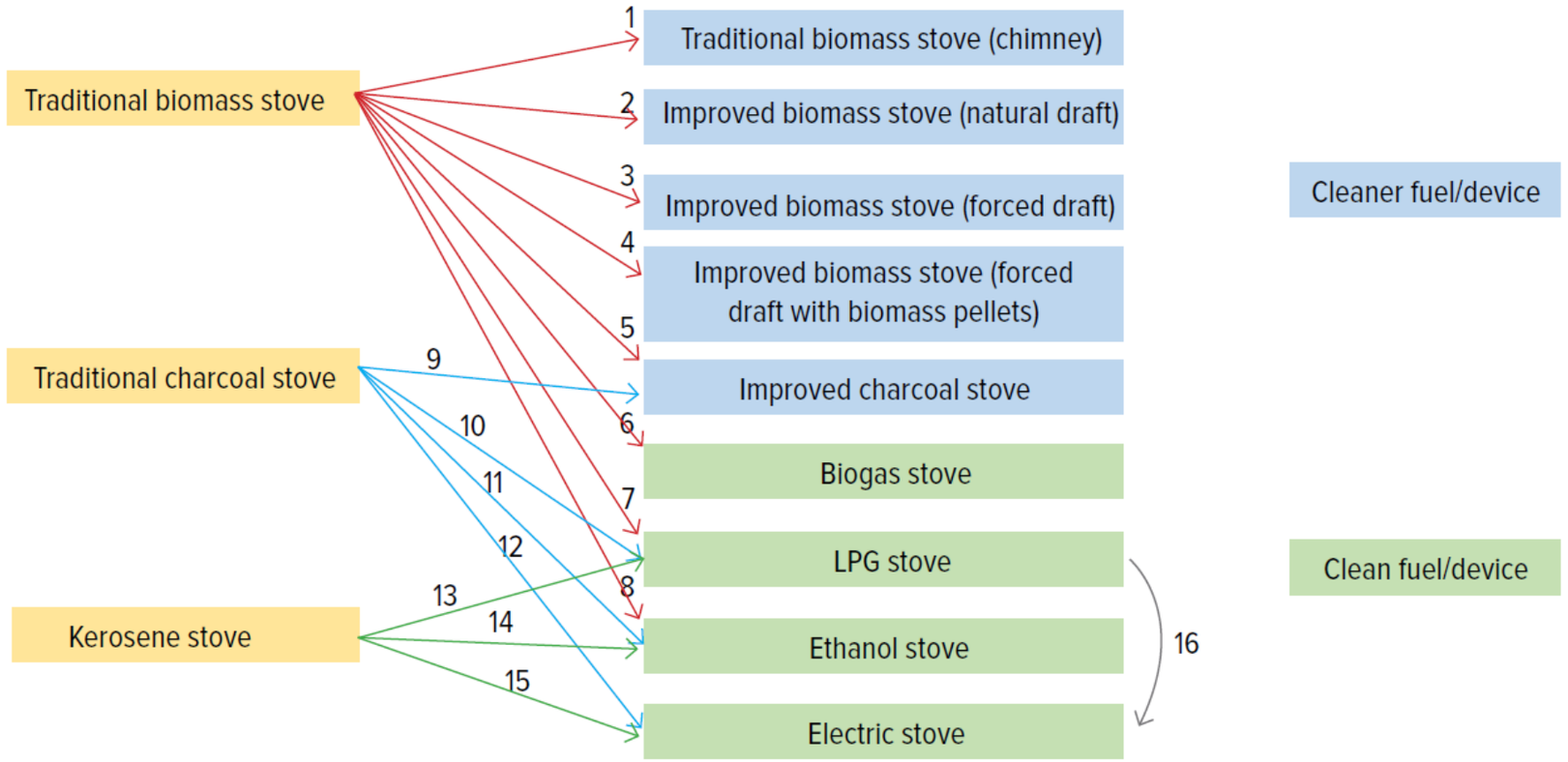
- Barriers and gaps are not only related or interconnected but also **manifest on a hierarch**y.
- Analyses should go beyond dependent and independent variable and include mediating and moderating variable, **assessed on a conceptual structure**.
- Strategies should **adopt a systems-approach** when developing solutions rather than unidimensional approaches.
- Problem-solving approaches may need to be implemented either **simultaneously or sequentially**, depending on the relationships of the barriers and gaps.



2.4 Modelling for Target Setting

Applied Modelling

- The three main types of models—**normative (prescriptive), descriptive, and simulation** —play distinct roles in research and decision-making
- There are various cooking sector modelling tools including **OSeMOSYS, OnStove, BAR-HAP (WHO), Clean Cooking Planning Tool (WB/ ESMAP), TIMES (IEA)**, among others.
- Unless the public sector planners understand the options, **selection of the modelling tool is often determined by the consultant or development agency involved.**
- Modelling should be **guided by national aspirations and designed to address specific planning needs**, rather than being implemented as an academic exercise.



Thank You

EED Advisory is a multidisciplinary Pan-African consulting firm offering technical, analytical and advisory services in energy, water and climate change.

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