

Embracing modernity while preserving tradition final presentation.

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Embracing Modernity While Preserving Tradition

The Role of Innovative
Cooking Technologies in Sustaining African
Culinary Heritage

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Presentation Outline



Brief Context



Challenges of African Cooking Methods



State of access to clean cooking



Achieving Universal Access and Fuel mixes



Challenges with cooking with electricity



Achieving a just transition



Conclusions

Context: Food and Heritage

Food is a key element in the preservation and representation of cultural heritage(Di Giovine and Brulotte, 2016)

UNESCO recognizes certain food practices as intangible cultural heritage.

Example, Ceebu Jen from Senegal (Inscribed in 2021). Recipe and techniques are traditionally passed down from mother to daughter



Challenges of African Cooking Methods



Health Concerns



Environmental Concerns





Gender inequality

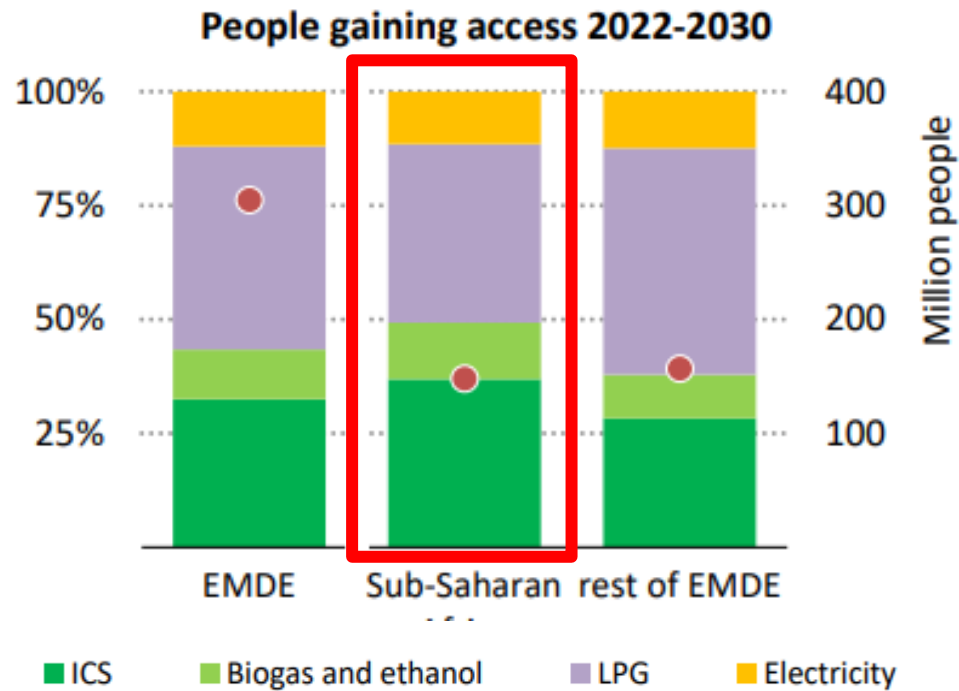


Image credit: Hivos






What is the state of access to clean cooking?

	INDICATOR	2010	LATEST YEAR	SSA (2021)
	7.1.1 Proportion of population with access to electricity	1.1 billion people without access to electricity	675 million people without access to electricity (2021)	~ 500 million people without access
	7.1.2 Proportion of population with primary reliance on clean fuels and technology for cooking	2.9 billion people without access to clean cooking	2.3 billion people without access to clean cooking (2021)	940 million people without access

Outlook to 2030 (Access for all Scenario)



Source: IEA(2023)

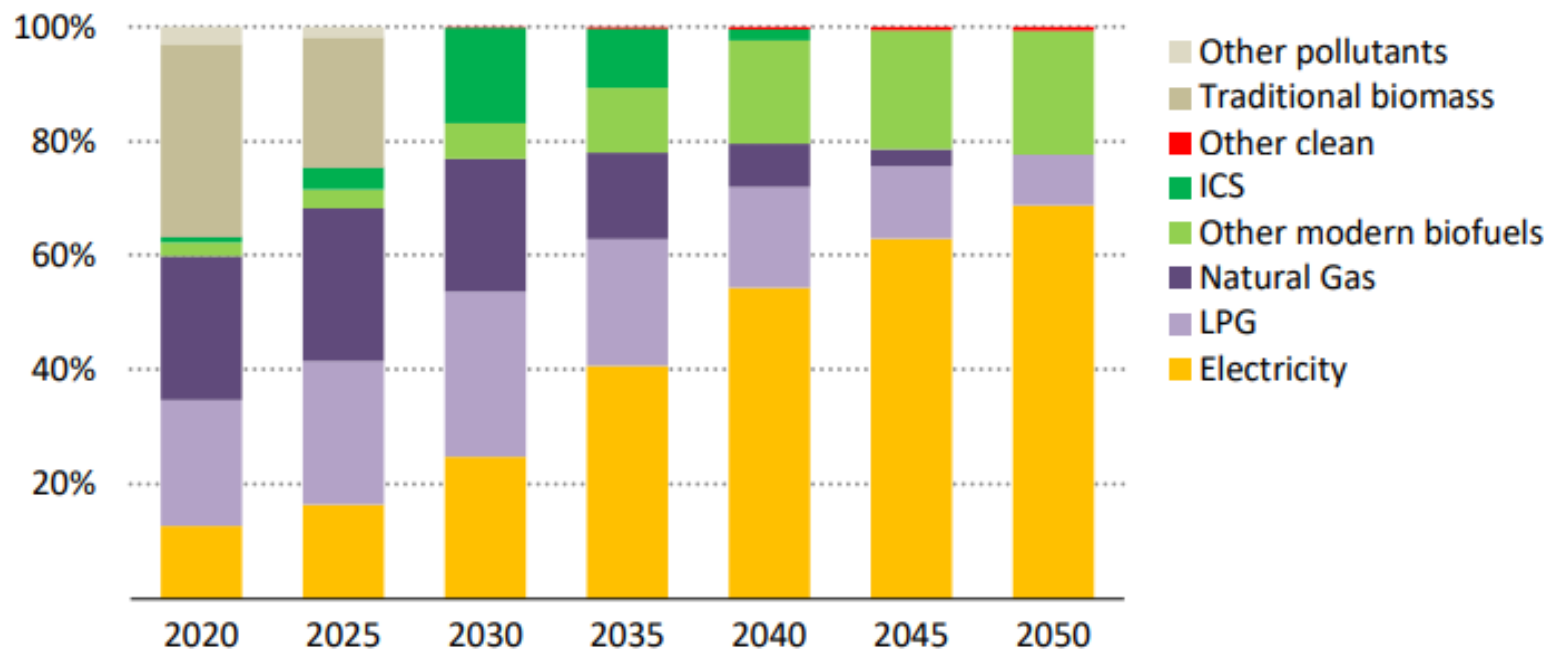
Improved biomass stoves	E-cooking or electric stoves/cooking	LPG stoves
<p>An enclosed stove that burns solid fuel, but keeps heat from escaping and improves combustion, thereby reducing smoke. There are many types of ICS, each with different performance standards.</p> 	<p>Primarily hot plates, induction stovetops, rice cookers or electric pressure cookers for those gaining clean cooking access, but technically includes all electric cooking appliances.</p> 	<p>A burner that uses a stable mixture of propane and butane distributed in large pressurised cylinders.</p> 
Biodigesters	Ethanol	
<p>A large vessel where organic matter (animal manure, agriculture residues, food waste) is decomposed into biogas. This biogas is then used in a burner-type stove.</p> 	<p>A simple burner that attaches to a small canister containing alcohol fuel made from crops, such as corn or sugar, that has been fermented and distilled.</p> 	

Type of stove		Health	Gender	Environment	Upfront cost	Fuel cost	Disruption risk	Scalability	Efficiency & cooking time
Basic	Gathered biomass	Low performance	Low performance	Low performance	High performance	High performance	Medium performance	Not applicable	Low performance
	Charcoal and fuelwood	Low performance	Low performance	Low performance	High performance	Medium performance	High performance	Not applicable	Low performance
	Coal	Low performance	Low performance	Low performance	Medium performance	Medium performance	Medium performance	Not applicable	Low performance
	Kerosene	Low performance	Low performance	Low performance	High performance	Medium performance	High performance	Not applicable	High performance
Traditional	Improved biomass cookstoves	High performance	High performance	High performance	High performance	Medium performance	Medium performance	High performance	High performance
Modern	LPG	High performance	High performance	Medium performance	Medium performance	Medium performance	High performance	High performance	High performance
	Natural gas	High performance	High performance	Medium performance	Medium performance	Medium performance	High performance	Low performance	High performance
	Electric cooking	High performance	High performance	Medium performance	Medium performance	Medium performance	High performance	Medium performance	High performance
	Biogas	High performance	High performance	High performance	Low performance	High performance	Medium performance	Low performance	High performance

Source: IEA(2023)

High performance
Medium performance
Low performance
Not applicable

Outlook toward 2050 in emerging market and developing economies



IEA. CC BY 4.0.

Every household has access to modern cookstoves by 2040. Electric cooking becomes the norm, but gas and liquid cooking fuels persist, albeit increasingly lower emissions



Evidence from Consumer trials and pilots

The Modern Energy Cooking Services programme has demonstrated through its pilots and trials that cooking with electricity is hindered by (often false) perceptions around

1. Cost
2. **Taste and safety**
3. Lack of awareness or availability of aftersales service
4. **Access to reliable electricity**
5. Reluctance of male decisionmakers to authorise appliance purchase

(Leary et al.,2021)



How can Africans Become Part of the Change?

- Climate change is influencing the way things are done
- Modern Cookstove design and manufacturing needs to involve Africans and way for innovating on our biomass type stoves.
- Some manufacturing facilities like Burn in Kenya
- How can we upskill the stove developers and people who work in the wood and charcoal informal sector?
- These are all considerations to ensure the preservation of African food heritage.

Summary and Conclusions



References

IEA (2023), *A Vision for Clean Cooking Access for All*, IEA, Paris

<https://www.iea.org/reports/a-vision-for-clean-cooking-access-for-all>, Licence: CC BY 4.0

Di Giovine, M. A., & Brulotte, R. L. (2016). Introduction food and foodways as cultural heritage. In *Edible identities: Food as cultural heritage* (pp. 1-27). Routledge.

Leary, J., Menyeh, B., Chapungu, V., & Troncoso, K. (2021). ECooking: Challenges and opportunities from a consumer behaviour perspective. *Energies*, 14(14), 4345.



Thank you for your attention