

Learning from Frugal Innovation in Water and Agro-food

Centre for
Frugal
Innovation
in Africa

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Athens



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Outline

What is Frugal?

How is it linked to Water & Agro-Food?

Navigating under scarcity, while climate & technology are changing rapidly

How to strengthen local innovation practices & resilience?

Conclusion: include a frugality lens in PRIMA calls and in Horizon Europe?

Frugal: what does it mean?

Literal meaning:

- Sparing, thrifty
- Careful and diligent in the use of resources

Frugal Innovation in economic development:

- Low cost & high functionality
- Re-thinking the innovation process, reduce over-engineering & focus on relatively poorer customers/ users
- By firms, NGOs, communities, individuals
- Frugality, like inclusiveness or sustainability, not 0 or 1

Frugality in Water & Agro-Food

Navigating under conditions of scarcity

Farmers and SMEs in Agro-Food value chains:

- climate change: relevance of existing practices and knowledges decreases but continues to be important
- new technologies offer opportunities but also bring risks of new dependencies

How to innovate through using both existing practices & new opportunities? Mindset of simplicity & functionality

Frugal products, machines, services, systems

Robust, simple local weather stations

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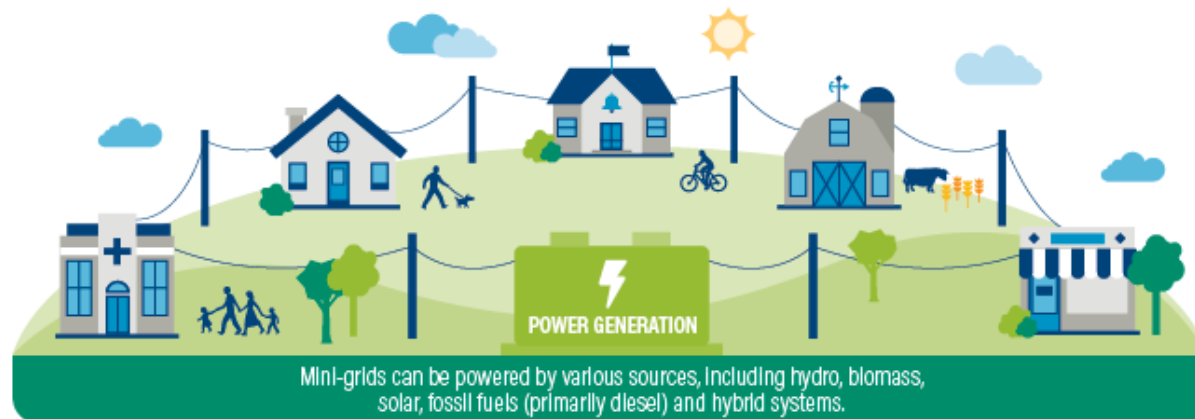
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Example of mini-grid solar energy provision

Delivering Electricity Through Mini-grids

Mini-grids are electrical generation and distribution systems of less than 10 megawatts (MW) that serve customers through local distribution networks.

HEALTH CLINICS	HOUSEHOLDS	SCHOOLS	AGRICULTURE	SMALL BUSINESSES
Village health centers use refrigerators to store medical supplies	Electricity for meeting household needs	Children have longer hours for study and more computer lessons	Farmers process fruits and vegetables and press sunflower seeds into oil	Barbers, butchers and restaurant operators extend business hours




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#energyaccess
wri.org/tanzania-mini-grids

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Local innovation practices & resilience

Two-way interaction processes and mutual learning between:

- local farmers and SMEs in agro-food value chains &
- R&D, researchers, extension workers

With a focus on adaptation, simplicity, functionality & thus frugality:

‘good enough instead of optimal’ practices,
‘taking advantage of Mediterranean values, knowledge and heritage’

Conclusion: a frugality lens in PRIMA & Horizon Europe?

Many of you are doing this already, without using the label

Our pitch with DG Research & Innovation:

‘frugality, next to sustainability and inclusion in Horizon Europe can help to ensure a focus on locally relevant innovation processes that enhance resilience of marginalised producers and consumers’

This will help to reduce over-engineering in R&I & enhance relevance of EU innovation strategies for poorer producers and consumers

We engage in an empirical research agenda to see under what conditions a frugality lens can actually provide this value added

Thank you for your attention

more info on our Centre at:
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