Why Europe Needs Frugal Innovation

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#FrugalInnovation
Frugal innovation increasingly ‘on the radar’

Study on frugal innovation and reengineering of traditional techniques

Call for Tenders PP-02381-2015

Policy debate

Academic Debate
Outline

What is Frugal Innovation and who are Frugal Innovators?

Commercial Frugal Innovations

NGO/ Social enterprise Frugal innovations

Community Frugal Innovations

How to anchor Frugal Innovation in the EU agenda?
FRUGAL

SPARING, THRIFTY

CAREFUL USE OF RESOURCES AND INCREASE USE OF RENEWABLE

SIMPLE AND SMART

4TH INDUSTRIAL REVOLUTION TECHNOLOGIES
FRUGAL INNOVATION

LOW COST AND HIGH FUNCTIONALITY

REDUCE OVER-ENGINEERING

FOCUS ON LOW INCOME HOUSEHOLDS
Three types of Frugal innovators

- **Firms** that develop frugal innovations to make profits and penetrate new markets

- **NGOs** and **social enterprises**, with donor funding, develop frugal innovations to address societal challenges

- **Individuals** and **communities** who develop their own frugal innovations to address their own bottlenecks
Commercial Frugal Innovations

Market segmentation: Middle of the Pyramid

- China via the Bottom
- OECD via the Top

- Fight for the Middle:
  - Basic standards
  - No frills
  - Good quality
  - Local ‘flavor’
Examples of Frugal Innovations
Example from the Health sector

General Electric, Portable electrocardiogram (ECG)

• Portable ECG for rural areas in India
• Sold at 10% of price for ECG’s developed for the US market
EU Policy Example: INNOWIDE

Viability assessment of collaborative and INNOvative business solutions in WorldWIDE markets

Bringing innovative European SMEs to the forefront of international markets

2nd VAP call is OPEN

FIND OUT MORE  APPLY NOW
Missions approach

Key criteria:

1. Bold, inspirational with wide societal relevance
2. A clear direction
3. Ambitious but realistic
4. Cross-disciplinary, cross-sectoral and cross-actor innovation
5. Multiple, bottom-up solutions
NGO/Social enterprise Frugal Innovation:

**AFFORDABLE HIGH-TECH FOR HUMANITARIAN AID**

**SOLVE THE CHALLENGE**

€ 5 million in prizes

**MAIN REQUIREMENTS**

- **advanced technologies** for a frugal innovation approach
- developed for **people in collaboration with people**
Community Frugal Innovations:
Frugal innovation ‘by the people’

Broadening the meaning of ‘frugal’ in frugal innovation

Where frugal means judicious, industrious, intuitive, adaptive, experiential knowledge based actions
Community Frugal Innovations: Frugal innovation ‘by the people’

Motivations behind frugal innovations by ‘the people’
• Context specificity
• Social relations

The conventional focus of innovation policies:
• ‘Exchange value’
• ‘Large scale commercialisation’
Community Frugal Innovations: The evolving policy canvas

UNCTAD:

Appeals to have new innovation approaches to implement the SDGs.
Community Frugal Innovations: The evolving policy canvas

EU’s emphasis on: ‘inclusive society’ and ‘science with and for society’
Community Frugal Innovations: The evolving policy canvas

The need and scope for rethinking on the depth and breadth of innovation policy!

• How to introduce non-economic motivations?
• How to include local actors and knowledge systems?
• How to strengthen the linages between innovation policies and ‘other policies’?
Way forward:
How to anchor frugal innovation in the EU agenda?

To what extent can we successfully address grand challenges through integrating more *frugal* solutions into existing policy instruments?

To what extent is re-thinking of desired innovation trajectories needed?
- reduce over-engineering
- involve low-income innovators & citizens

To weave frugality into high-end advanced scientific innovations.
Thank you for your attention

more info on our centre
www.cfia.nl