

Adoption potential for sustainable small-scale irrigation with solar pumps in Burkina Faso

Hycenth Tim Ndah, Pingwinde Marc Ouedraogo, Johannes Schuler, Edmond Rouamba, Stéphan Abric, Jean-Louis Fusillier, Bruno Barbier

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Background

- Farmer led irrigation (FLI), is expanding rapidly in Africa, particularly in Burkina Faso,
- Farmers mobilize water from close-by water sources in the dry season or during dry spells of the rainy season.
- Further expansion of irrigation is limited by often painful, inefficient, or unsustainable practices.



Irrigation by hand, solar panels for electric pumps. Photo: H.T. Ndah

Results

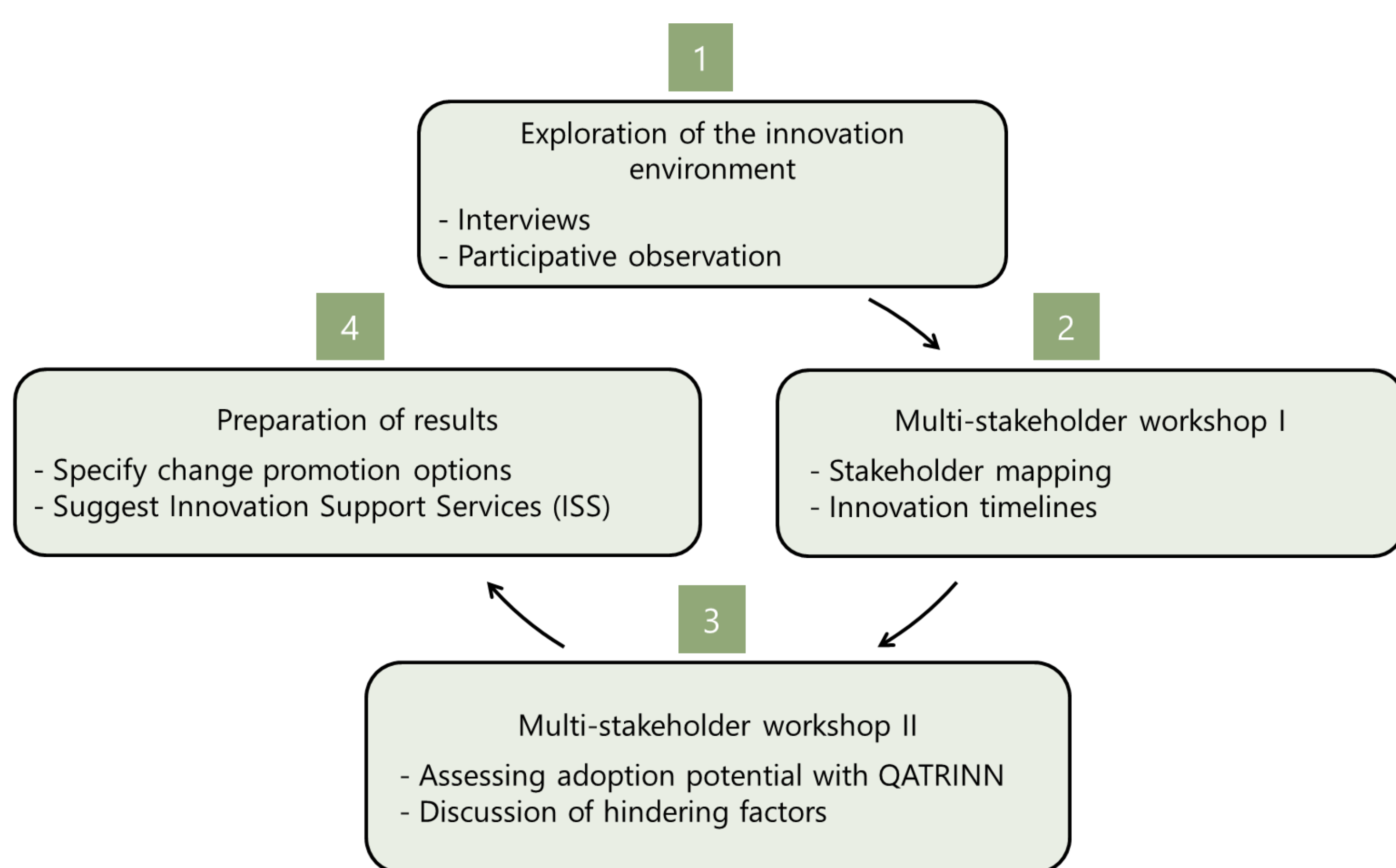
- Limited familiarity: lack of awareness about the innovation and exposure to any similar indigenous knowledge.
- Financial constraints: insufficient financial means to cover the expenses.
- Input accessibility: the non-availability of the equipment and the essential technical inputs.
- Limited promoter presence: the organization responsible for promoting the technology is yet to establish.



Solar and fuel driven pumps. Photo: J. Schuler

Recommendations

- Innovation platforms can serve as effective means to educate farmers and improve the acquisition of equipment
- subsidized loans to farmers or create opportunities for leasing irrigation equipment,
- Create opportunities to test new equipment



Adapted methodological steps of Transformativ Learning approach (Probst et al. 2019)

Project aim and approach

- Project IRRINN has focused on promoting small scale irrigation,
- Aim:** determining the adoption likelihood of solar pumps
- Method:** Applying the Transformativ Learning Approach (TLA) by:
 - ✓ Exploration of the innovation environment
 - ✓ Identifying and analysing drivers and constraints to adoption based on stakeholder workshops and interviews
 - ✓ Proposing actions for further promotion.

