

FUSE project in India and Jordan

Food-water-energy for

Urban

Sustainable

Environments

Water



Food

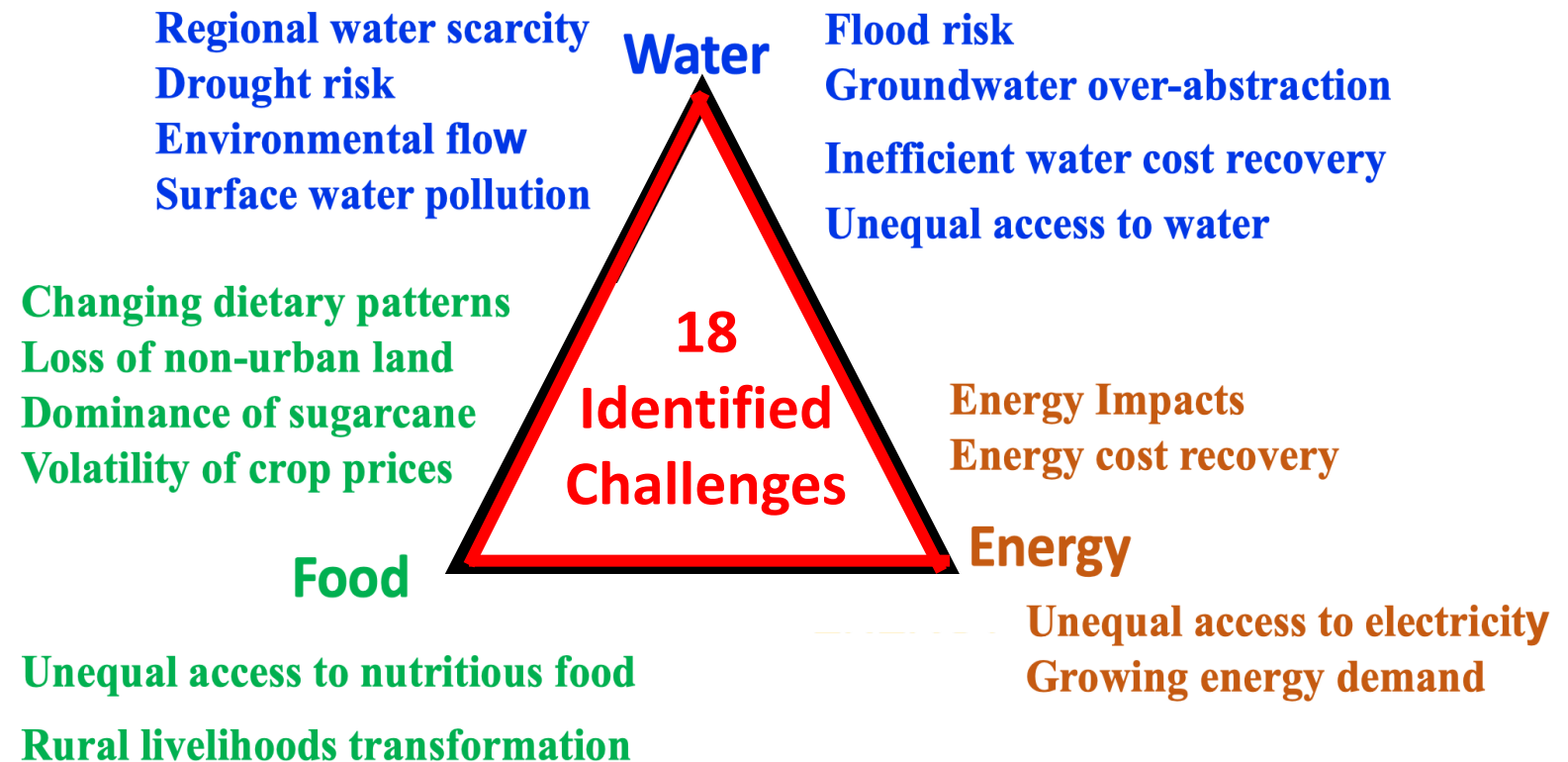
1) Results - so far

Science: Development of new technology

Coupled F-W-E systems models to analyze policy interventions under climate and demographic change scenarios.

Buy in: Active participation of stakeholders

from policy, public administration, civil society, farmers, citizens organizations, NGOs.



2) Impacts (achieved and expected)

Identified challenges and potential solutions to urban-Food-Water-Energy challenges via workshops and **participatory model building**



Amman, Jordan (achieved)

Jordan Water Model (JWM) – identified policies for long-term planning of freshwater sustainability

Project endorsed by government - Ministry of Water and Irrigation and **JWM** used for long-term planning



Pune, India (expected)

Explore future impacts of policy measures

Get buy-in of policy-makers in Pune region

Aid long-term need adoption of FWE perspective

Transfer model to regional planners



3) Approaches to realize these impacts

1

Engagement: Obtained ~200 stakeholders' ideas and local experts' solution to F-W-E challenges through a set of 6 workshops in Pune and Amman

2

Develop quantitative process understanding – for Water-Food-Energy systems

3

Determine resource access, use, and preferences based on survey of ~2000 urban households in Pune

4

Construct a coupled human-natural-engineered system model for policy-evaluation based on ideas obtained through participatory model building

4) Networking and Capacity Building

Accomplishments:

- **JordanCap** – capacity building training of Jordanian water planners and managers with German government agency support
- **NexusFootprints collaboration of FUSE and InSource** - aims to map urban food-water-energy footprint indicators (food consumed, water used, GHG emissions) to quantify and visualize urban nexus patterns and facilitate their objective comparison

What support is needed?

Extend project end-dates through 2022. Provide support for workshops and stakeholder engagement delayed due to the pandemic.

