

UPSCALE

Upscaling the Benefits of Push-Pull Technology for Sustainable Agricultural Intensification in East Africa



Shem Kuyah, Adewole Olagoke, Emily Poppenborg Martin

The UPSCALE Project <https://upscale-h2020.eu/>



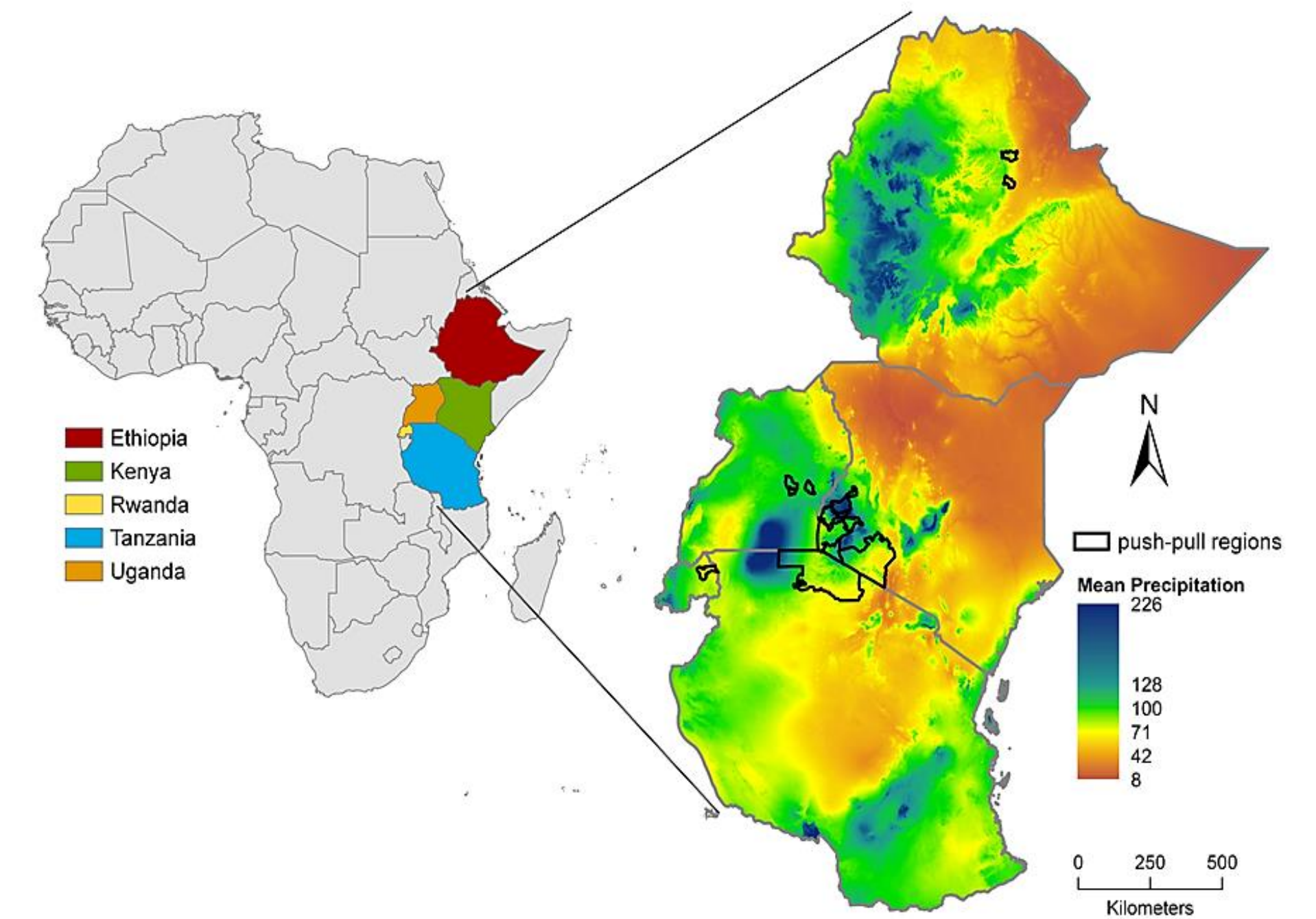
Aims to support smallholder farmers in sub-Saharan Africa improve food security, livelihoods and climate change resilience by fostering nature-based solutions inspired by push-pull technology.

UPSCALE is an EU-Funded H2020 Sustainable Agricultural Intensification research project that aims to achieve the transformative potential of the push-pull cropping system from field, to landscape and regional scales, and from cereal to other crops and cropping systems.

Implemented across 15 study regions with different biophysical and farming systems characteristics in 5 East African countries.

Brings together 18 cooperating partners from 4 European countries and 6 African countries, ensuring interdisciplinary and multi-actor approach.

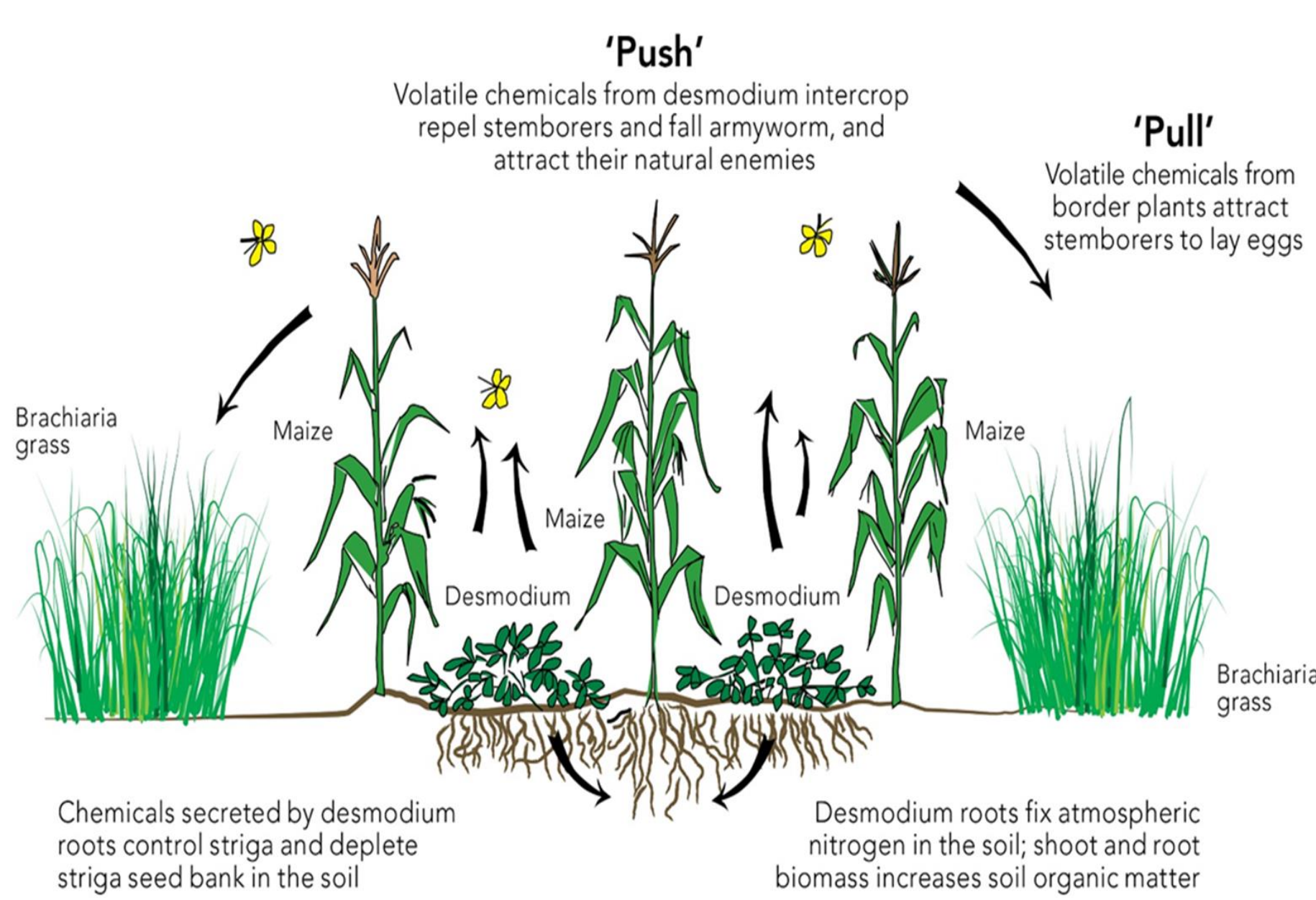
Employs a knowledge exchange hub and multi-actor communities as key pillars for stakeholder engagement.



UPSCALE focal study regions supported by national infrastructure

The Push-Pull Technology

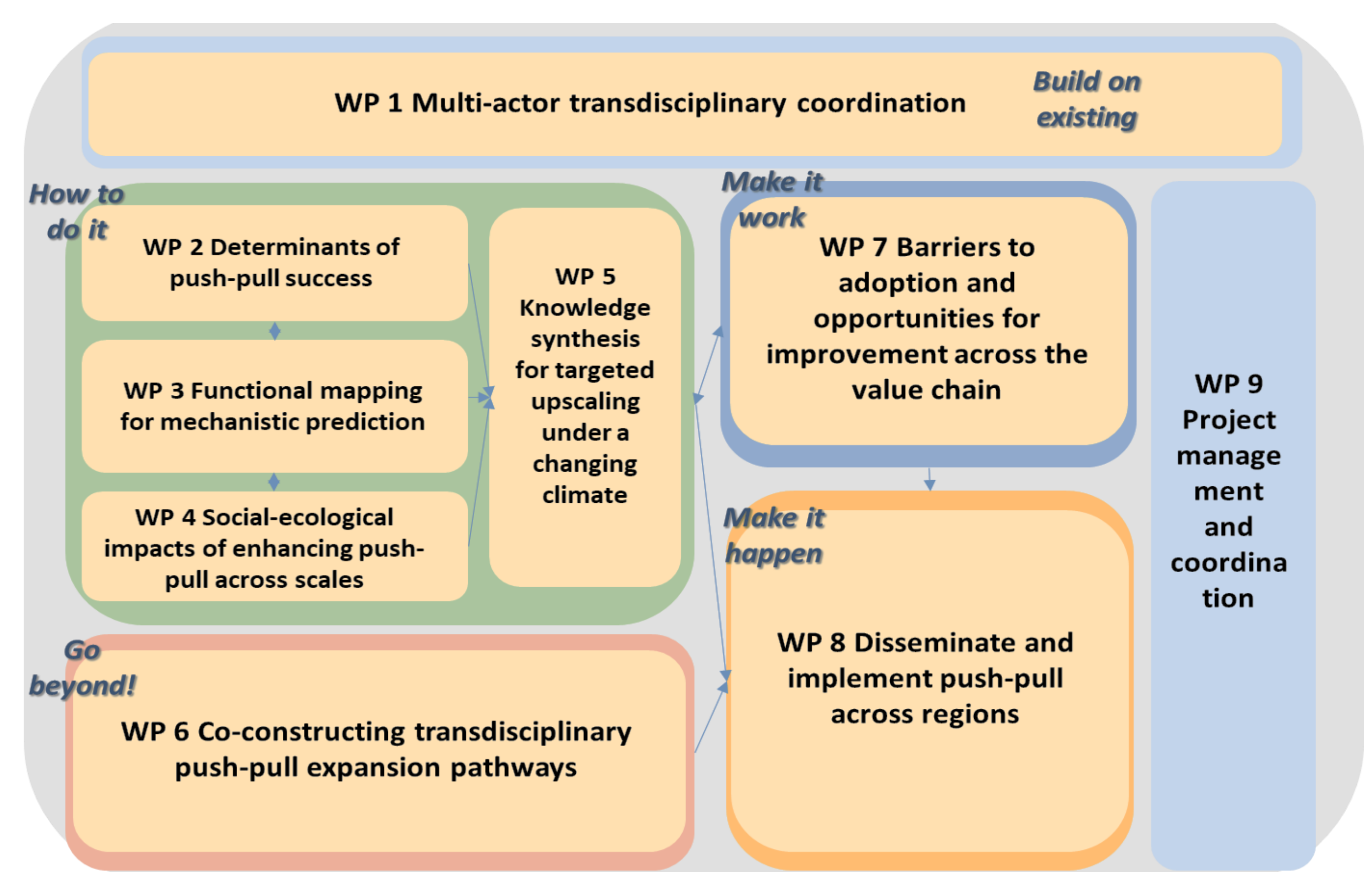
Push-pull is an integrated cropping system that involves driving pests away from the main crop using volatile chemicals from a repellent intercrop (*the push*) while attracting them out of the crop with border trap plants (*the pull*) <http://www.push-pull.net/>.



Key benefits

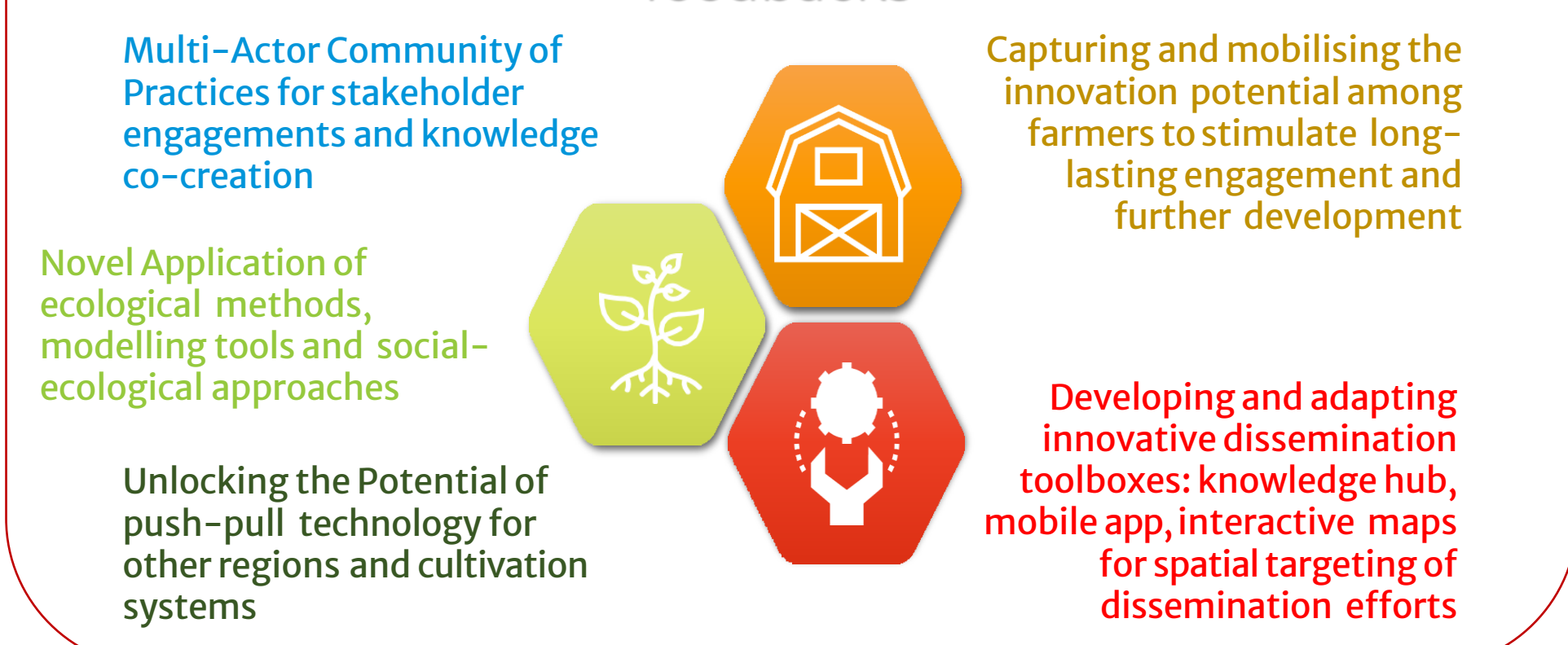
- Increase crop yield
- Fodder for livestock
- Natural pest control
- Improved soil health
- Higher income
- Gender empowerment
- Biodiversity conservation
- Reduce GHG emission
- Averts land degradation

UPSCALE Structure and Workflow

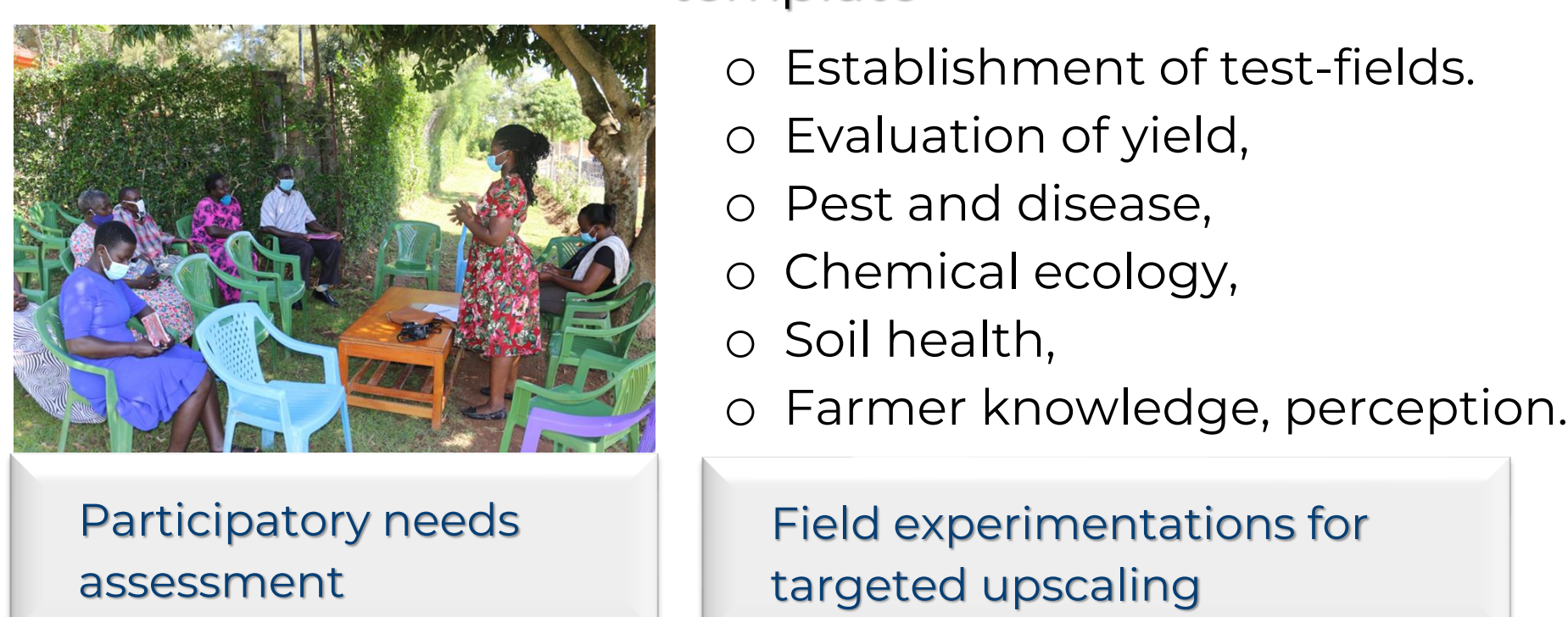


UPSCALE Concepts and Methodologies

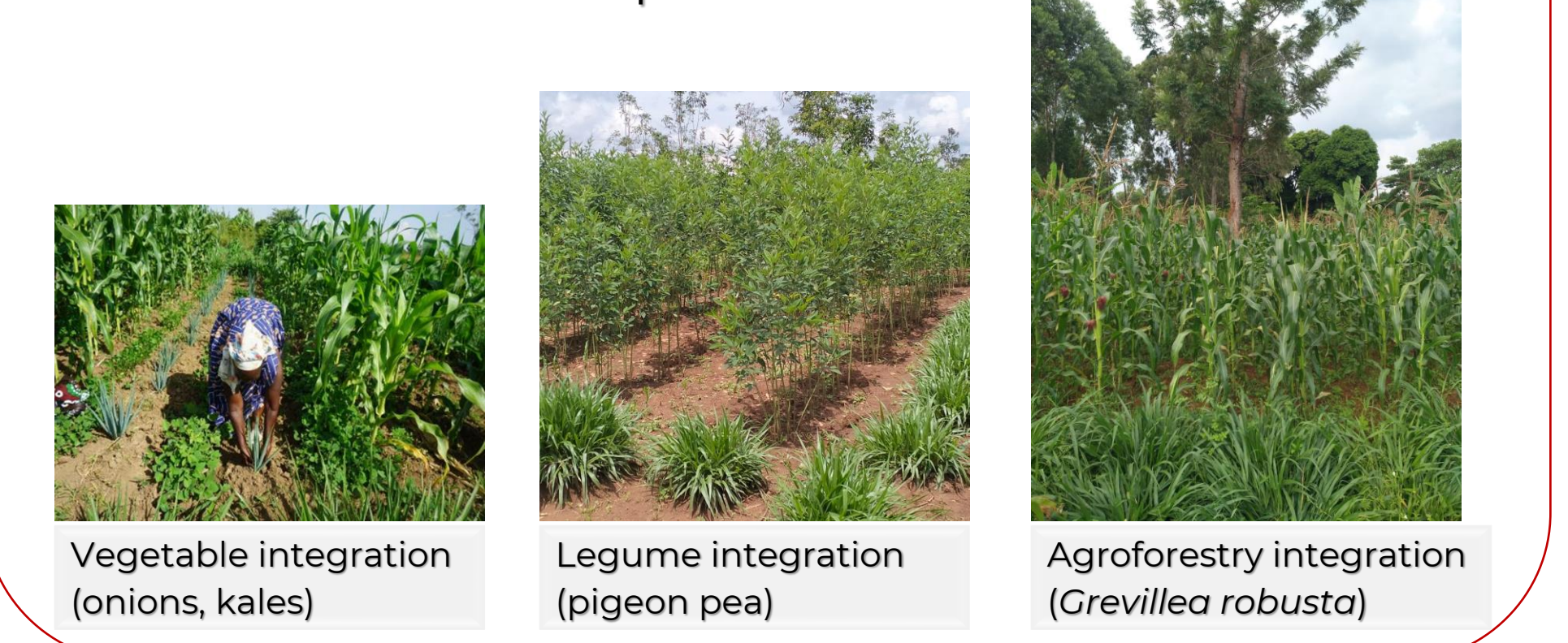
Co-constructing push-pull expansion pathways and participatory analysis of socioeconomic impacts and feedbacks



Sustainable intensification of smallholder agriculture using push-pull cropping system as a template



Co-developing innovation in existing push-pull and co-designing synergies with other sustainable intensification practices



UPSCALE impacts

- Provides farmers with viable nature-based solutions for agroecological management and sustained delivery of essential ecosystem services.
- Boosts crop yields and resilience of local and regional food systems to exogenous shocks.
- Enhances household livelihood and social wellbeing.
- Reduces inequalities by supporting women, youths and farmers with special needs.
- Reinforces EU-Africa multi-lateral joint research initiatives.

Contact: Dr. Shem Kuyah
kshem@jkuat.ac.ke



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Institute of Animal Ecology