

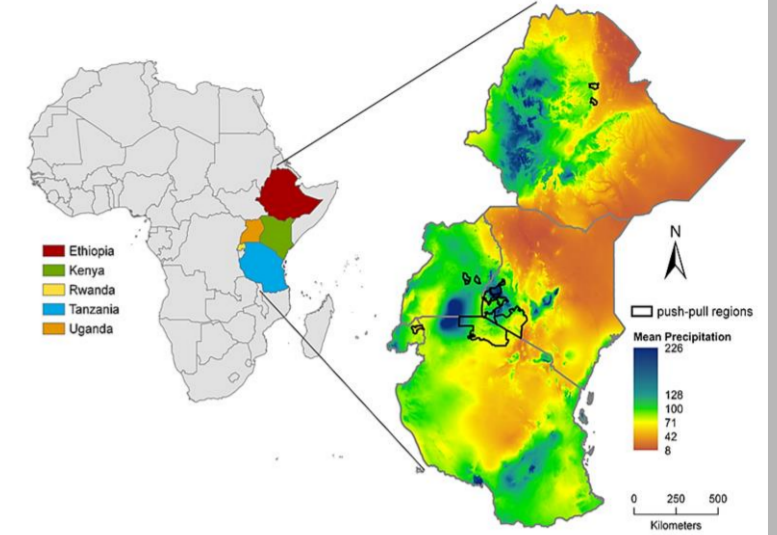
Shem Kuyah<sup>1</sup>, Adewole Olagoke<sup>2</sup>, Emily Poppenborg Martin<sup>2</sup>

<sup>1</sup>Jomo Kenyatta University of Agriculture and Technology (JKUAT), Nairobi, Kenya  
<sup>2</sup>Justus Liebig University of Giessen, Giessen, Germany

### Purpose

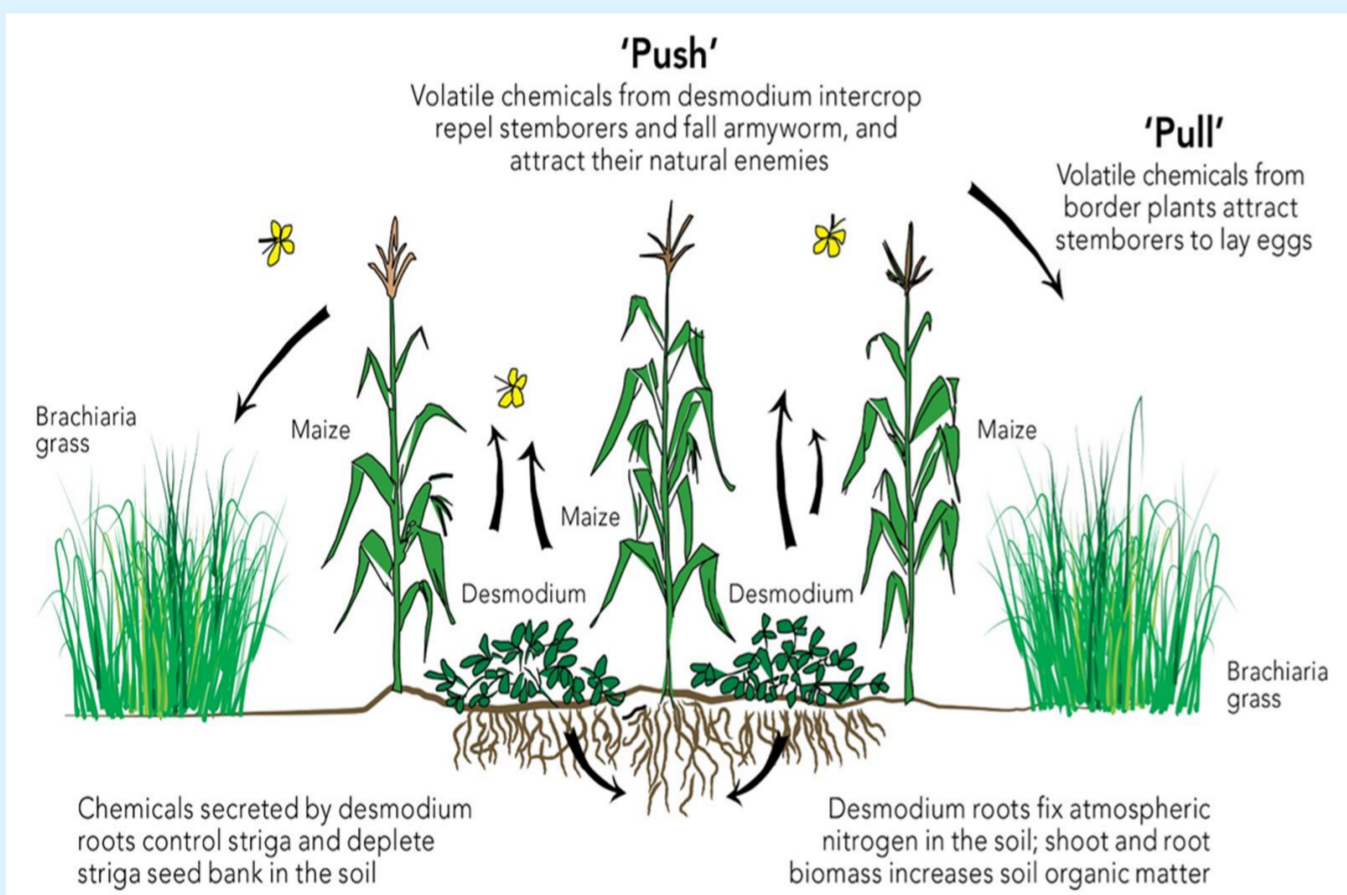
UPSCALE aims to support smallholder farmers in sub-Saharan Africa improve food security, livelihoods and climate change resilience by fostering nature-based solutions inspired by push-pull technology.

- 15 study regions
- 5 East African countries
- 18 partners
- Multi-actor approach



### Background

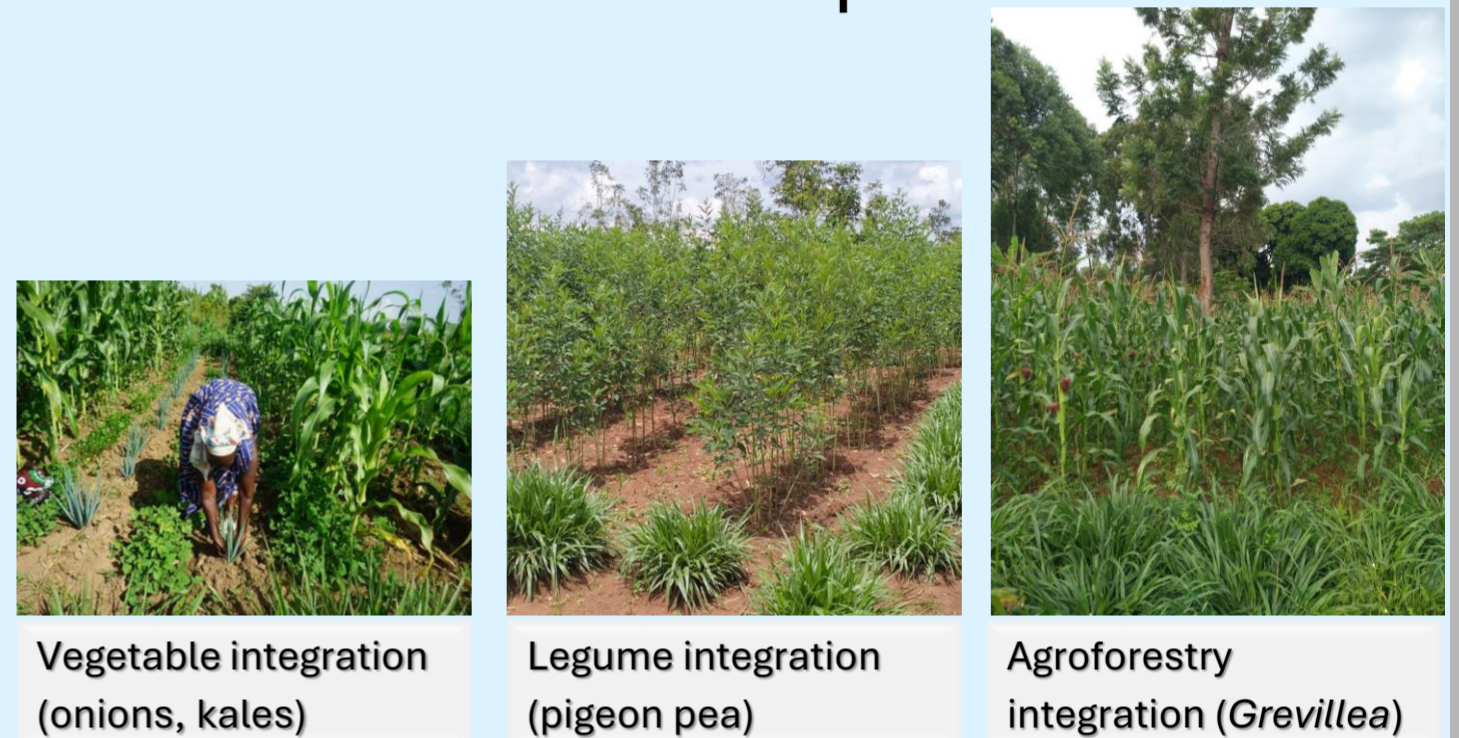
UPSCALE is about achieving the transformative potential of the push-pull cropping system from field, to landscape and regional scales, and from cereal to other crops and cropping systems.



Push-pull cropping system (<http://www.push-pull.net/>)

### Results

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



### Benefits recorded from these integrations

- Increase crop yield
- Fodder for livestock
- Natural pest control
- Improved soil health
- Higher income

### Method

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



Participatory needs assessment

- Setting up test-fields.
- Evaluation of yield,
- Pest and disease,
- Chemical ecology,
- Soil health,
- Farmer knowledge, perception.

Field experimentations for targeted upscaling

### UPSCALE impacts

- Providing farmers with viable nature-based solutions for agro-ecological management and sustained delivery of essential ecosystem services
- Boosting crop yields and resilience of local and regional food systems to exogenous shocks
- Enhancing household livelihood and social wellbeing
- Reducing inequalities by supporting women, youths and farmers with special needs
- Reinforcing EU-Africa multi-lateral joint research initiatives.