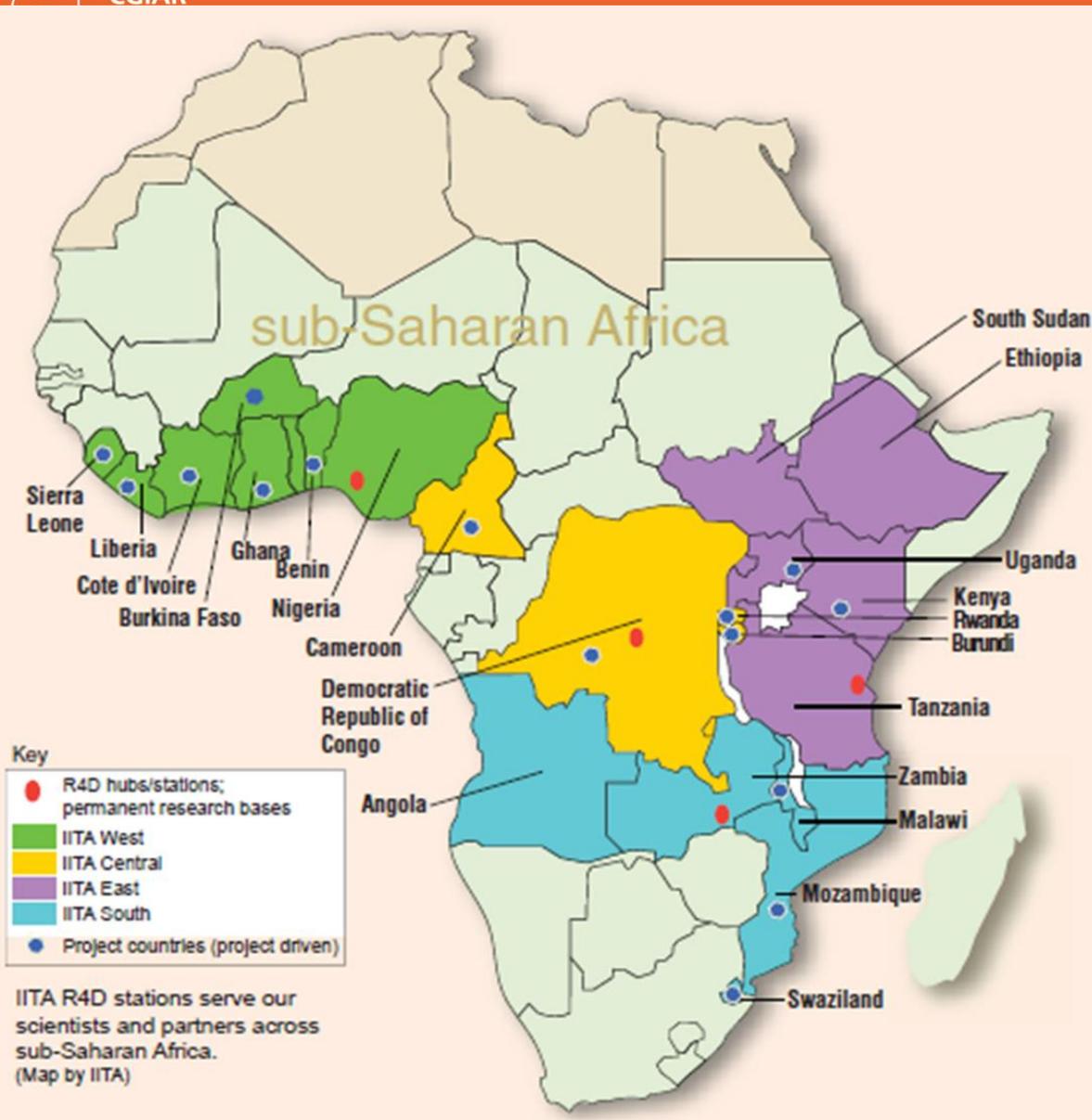


International Institute of Tropical Agriculture

R. Swennen

- A continental baseline: \$35 B/year food import
- Do nothing or status quo: \$110 B/year by 2025



IITA

Research to Nourish Africa



CGIAR



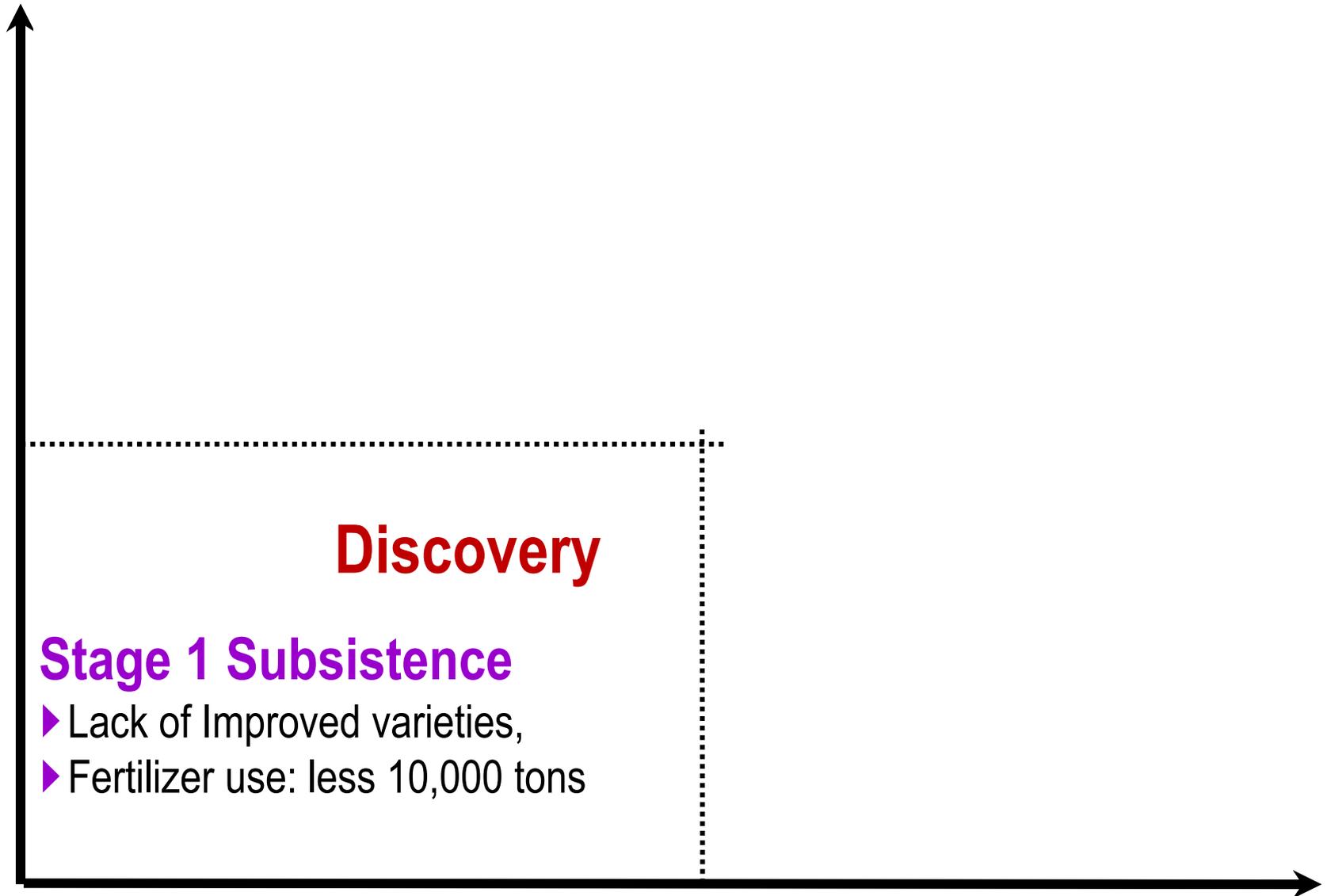
IITA

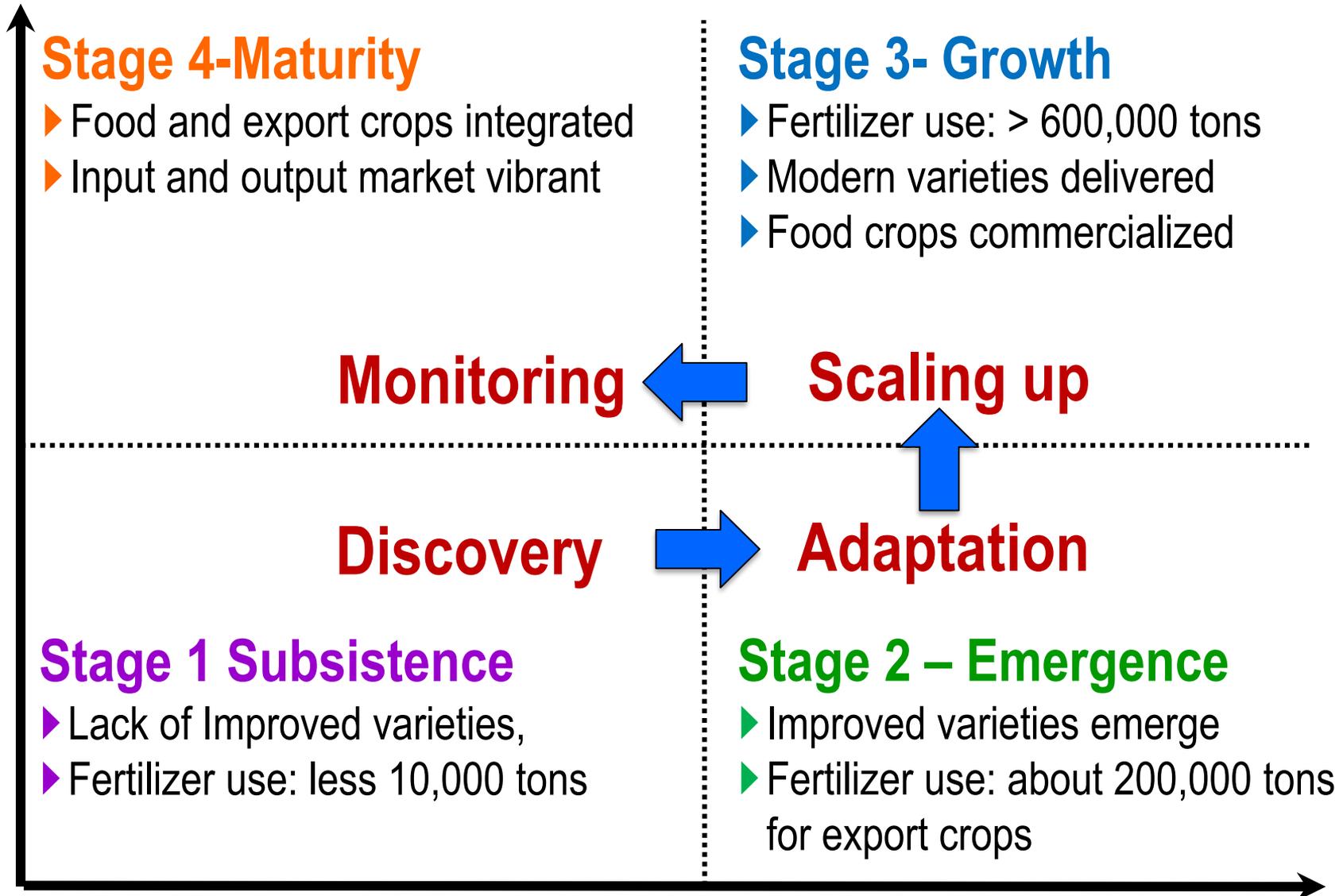
Transforming African Agriculture



1967 - 2017

- Increase food security
- Reduce rural poverty
- Reduce the prevalence of undernutrition
- Introduce sustainable natural resource management





IITA
Research to Nourish Africa

2012–2020
Refreshed Strategy

*The lead research partner
facilitating agricultural solutions for
hunger and poverty in the tropics*



www.iita.org

‘To lift over 11.6 million Africans out of poverty and turn 7.5 million ha of land into sustainable use’

Research themes



1. Biotechnology and Genetic Improvement
2. Natural Resource Management
3. Plant Production and Health Management
4. Social Science and Agribusiness

Biotechnology and genetic improvement

About IITA's Revised Strategy

Obj 1. Increase yields of staple crops

Obj 2. Increase resilience of staple crops to biotic and abiotic stresses

Obj 3. Increase nutrient density of staple crops and suitability to new utilization

Obj 4. Raise efficiency of breeding staple crops

Crop	Economic benefits (US\$ million per year)	Benefit-Cost ratio
Maize	274	21:1
Cassava	324	13:1
Cowpea	81	6:1

Just Out: Promising High-Yielding Tetraploid Plantain-Bred Hybrids in West Africa



Published On - 29 April 2019

■ Banana and Plantain, Benin, Burkina Faso, Cote d'Ivoire, Highlights, News, Success Stories
Cote d'Ivoire, Togo



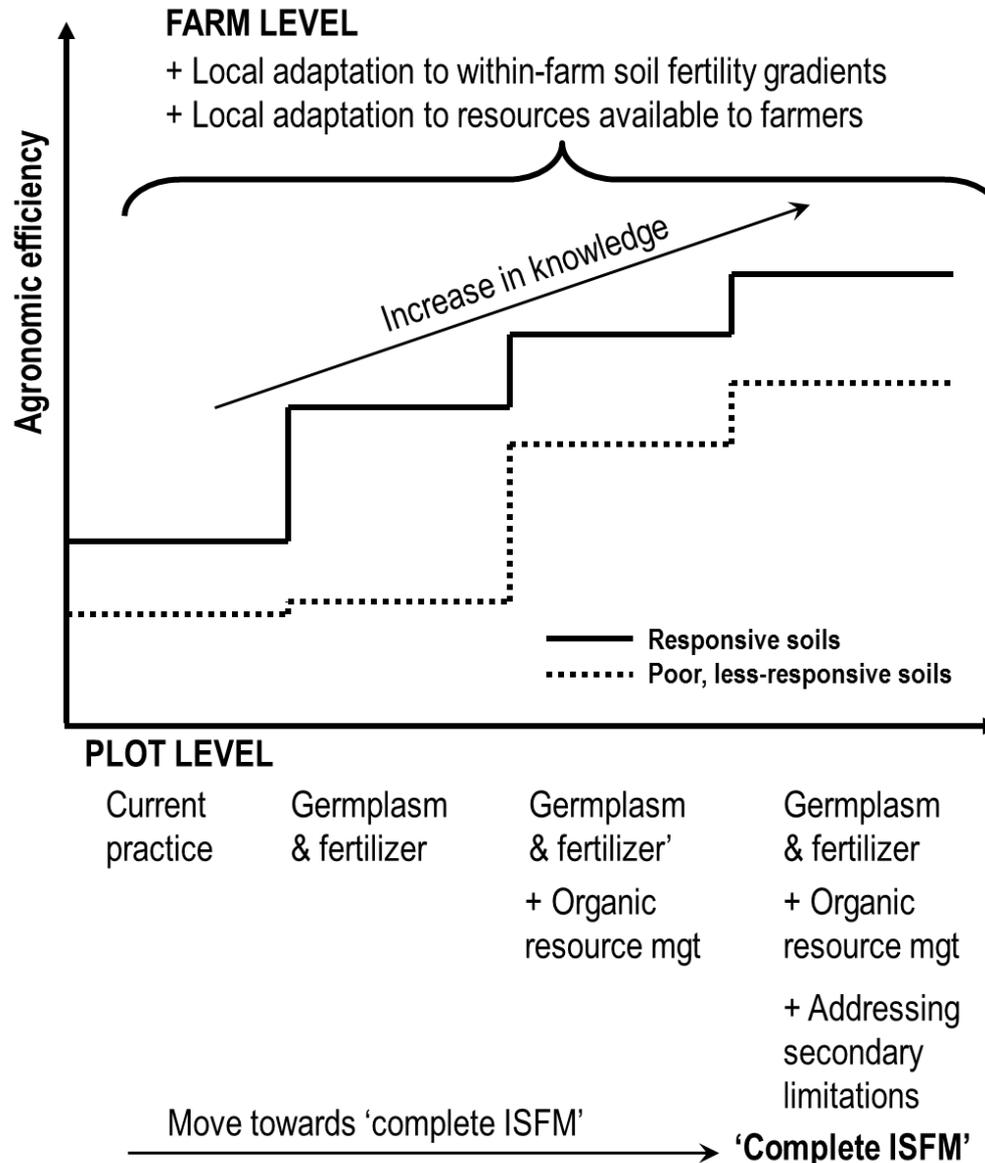
Scaling up cassava seed systems through Semi-Autotrophic Hydroponics (SAH)

→ Facility (20 sq. m) holds up to 25,000 plants (or 2.5 ha of land)



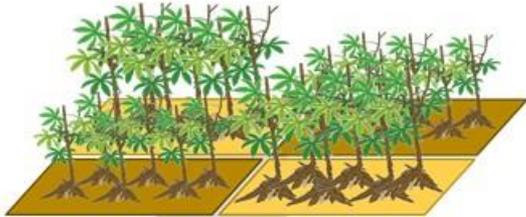
Natural Resource Management

About IITA's Revised Strategy

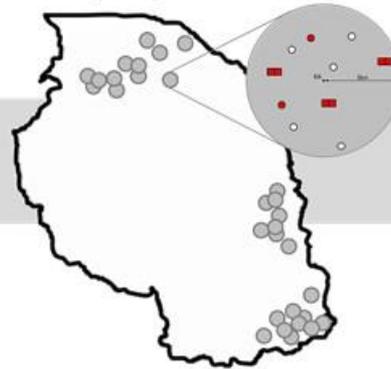


+ costings

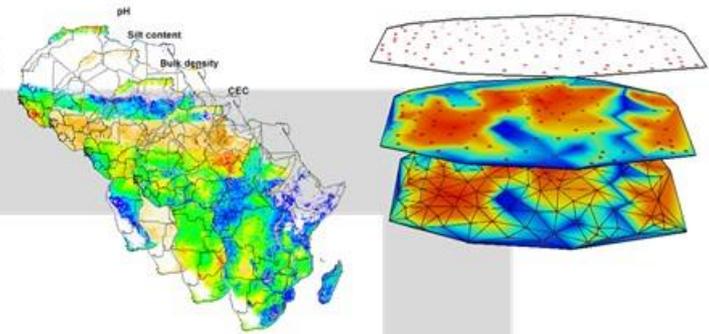
Field trials to test and develop best agronomic interventions



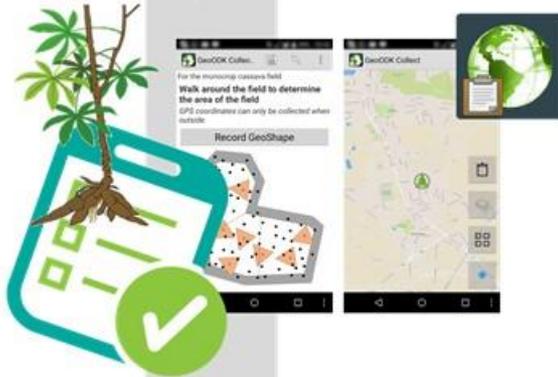
Sampling frames



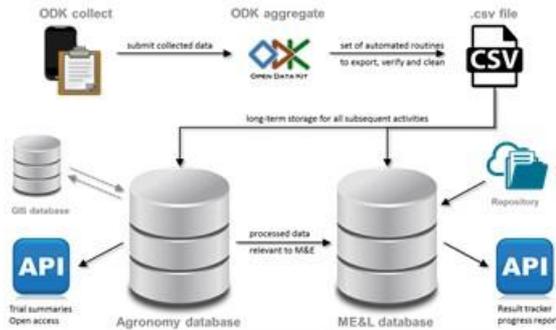
GIS and geospatial modelling



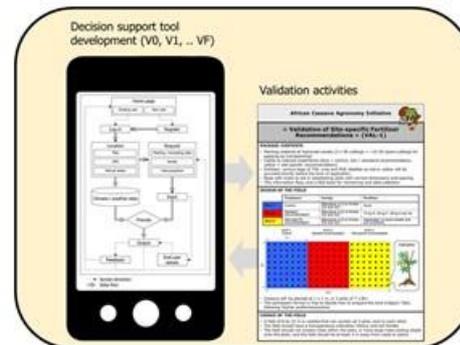
Field surveys and characterisation



Data management infrastructure



Recommendation domains and yield gap maps



Plant protection and health

About IITA's Revised Strategy

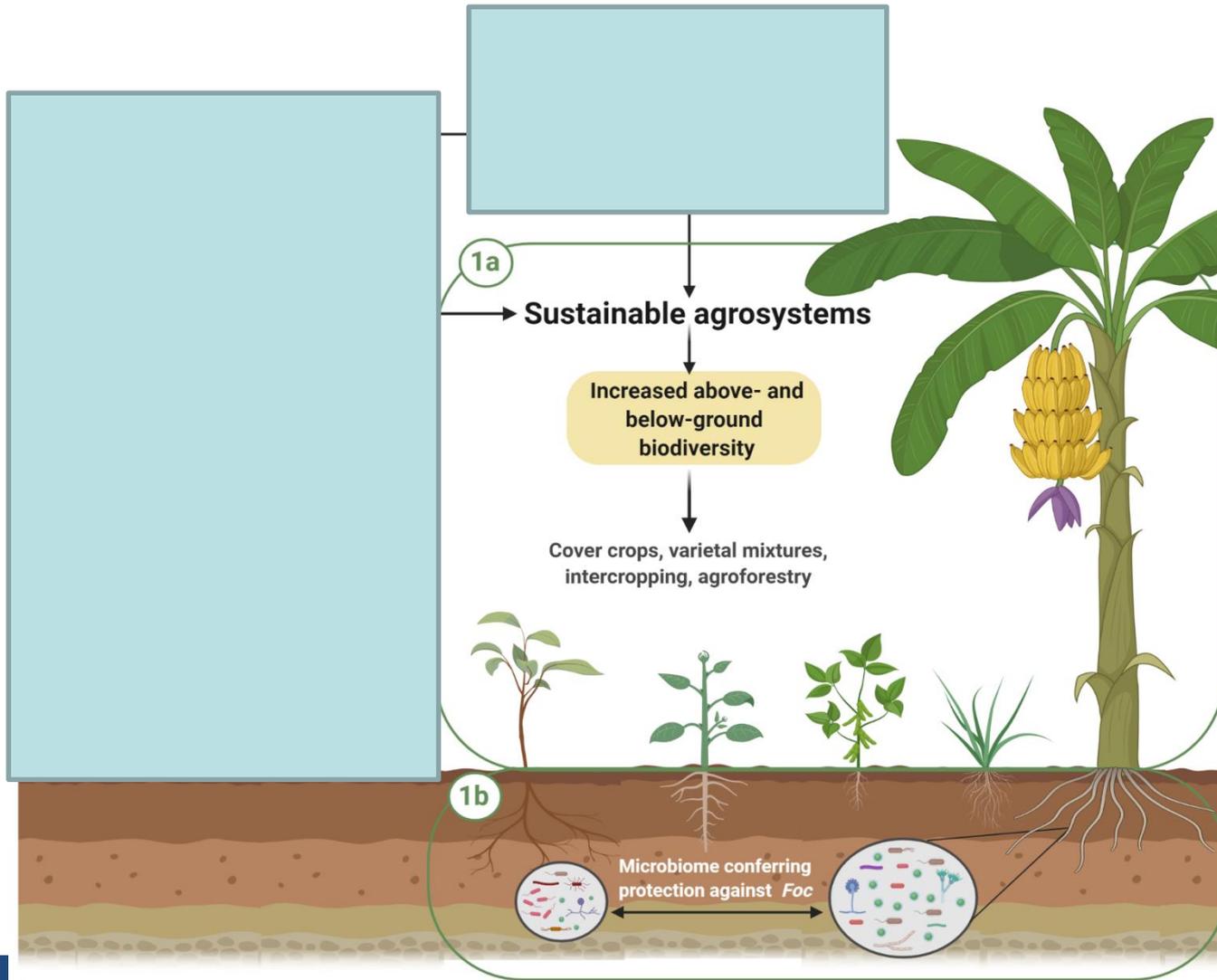
Objective 1: Develop **cropping systems and technologies** that are resilient to climatic variation and use agricultural resources efficiently

Objective 2: Develop environmentally friendly and **sustainable pest management** options

Objective 3: Appropriate mechanisms for **technology, knowledge and information delivery** to end-users

Objective 4: Innovative **partnerships and capacity development** in agronomy and plant health management

Towards an integrated approach

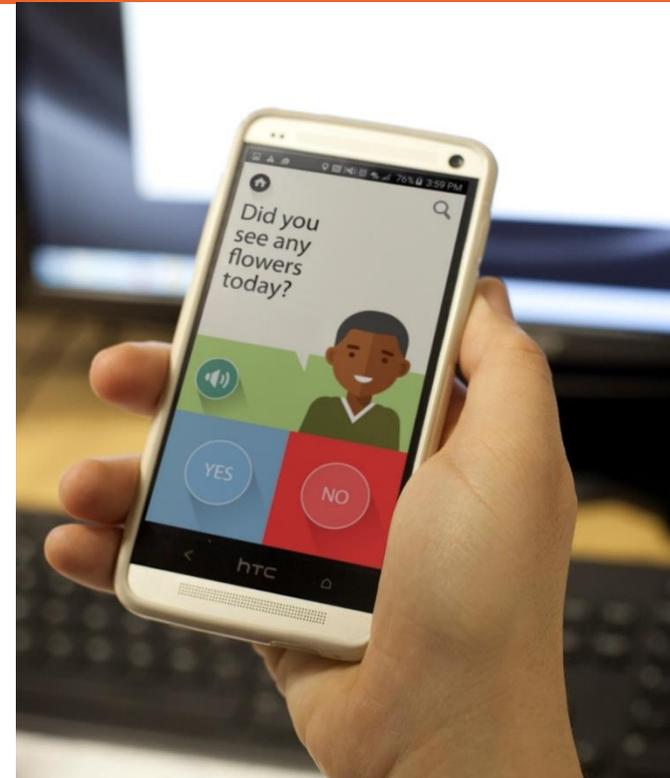
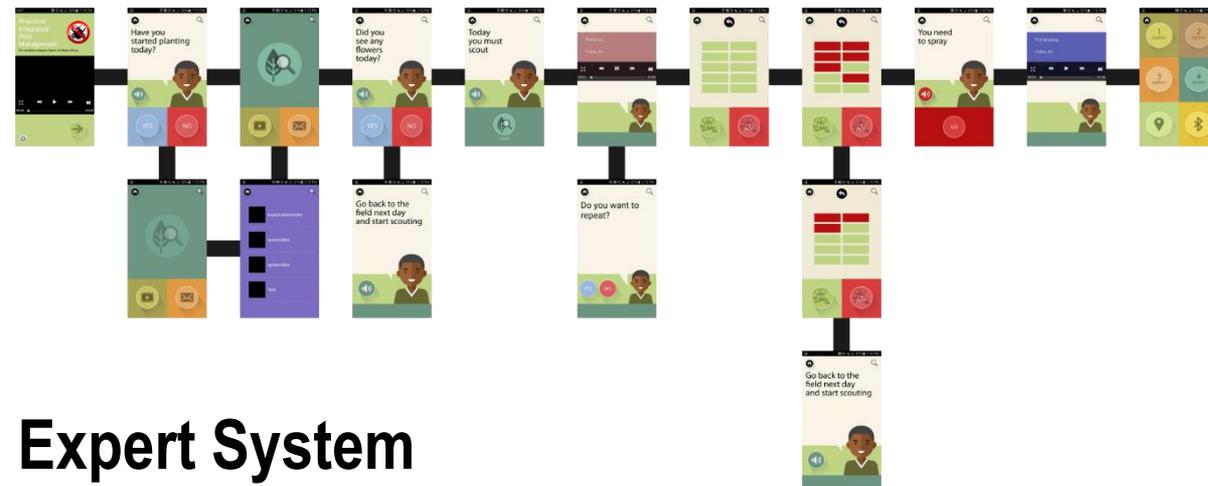


Nature Food

In press

Farmer App interfaces with an Expert System

- Guides farmers to scout for pests
- Delivers appropriate solutions in real time (own languages)
- An interlinked community where researcher and farmer data are collected



Expert System

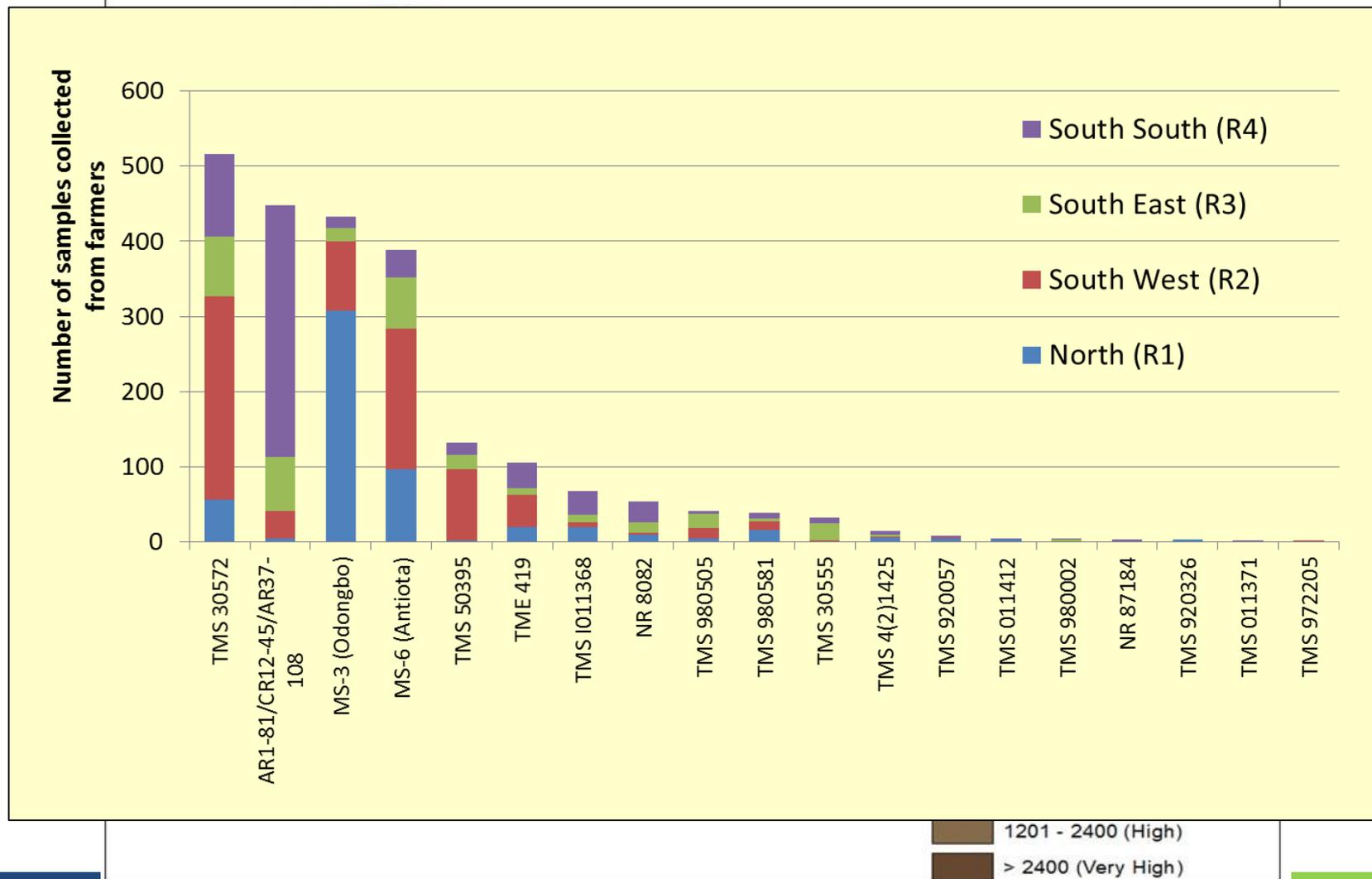
12+ data parameters that are collected and used:

- “Recipes” can be created for localized recommendations (type, timing)
- Pushed to the Farmer App
- Farmer verifies validity of recommendation
- System learns to refine recommendation

Social sciences and Agri- business

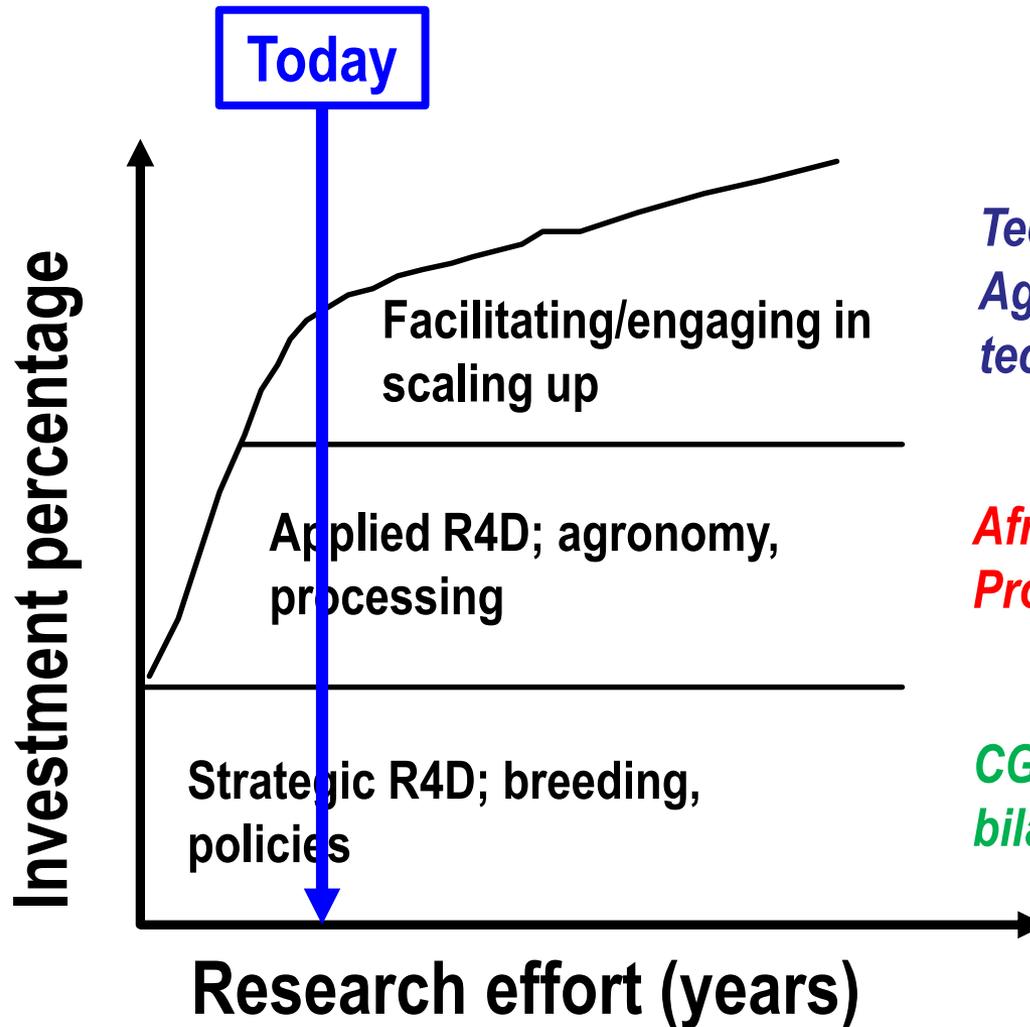
About IITA's Revised Strategy

Cassava impact study in Nigeria: use of DNA techniques



Partnerships for delivery

About IITA's Revised Strategy

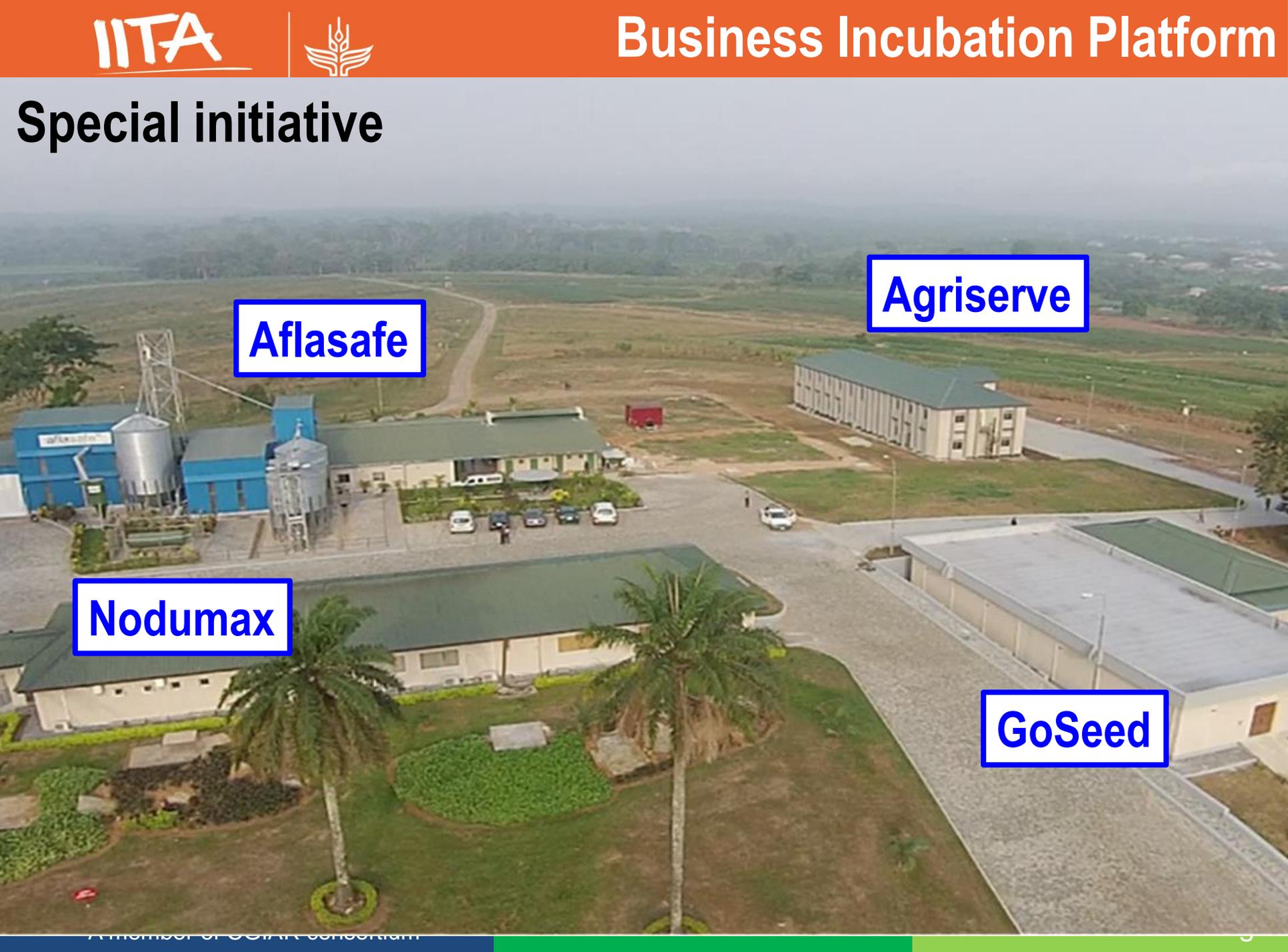


Technologies for African Agricultural Transformation (TAAT); technical assistance to WB projects

African Agricultural Research Program (AARP)

CGIAR Research Programs (CRPs); bilateral research projects

Special initiative



Aflasafe

Agriserve

Nodumax

GoSeed

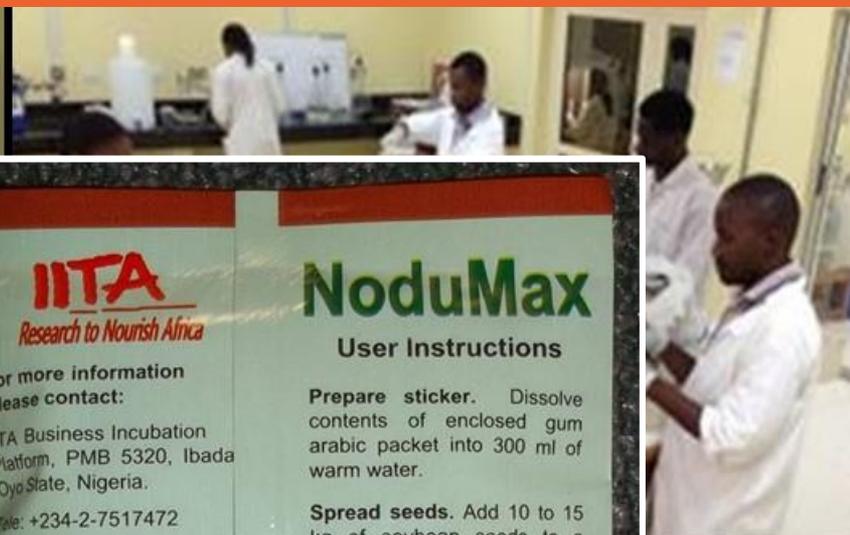


NoduMax

legume inoculant

IITA Manufactured and distributed by the IITA Business Incubation Platform

*contains 100 g for application to soybean
store in cool, dry, shaded conditions
avoid direct sunlight, do not freeze*



Nodu



IITA

Research to Nourish Africa

For more information please contact:
IITA Business Incubation Platform, PMB 5320, Ibadan, Oyo State, Nigeria.
Tel: +234-2-7517472
Email: iita@cgiar.com

Manufacture date: 2017
Expiry date: 2018
Batch number: 1000

Guaranteed to contain at least 1 billion live soybean rhizobia per gram



NoduMax

User Instructions

Prepare sticker. Dissolve contents of enclosed gum arabic packet into 300 ml of warm water.

Spread seeds. Add 10 to 15 kg of soybean seeds to a large basin.

Apply sticker. Add sticker to seeds and mix until uniformly coated.

Apply inoculant. Add 100 g of Nodumax to seeds and mix until seeds are uniformly covered with the inoculant.

Allow to set. Cover the inoculated seeds with a cloth and allow the sticker to set for 10 minutes. Avoid direct sunlight.

Plant seeds. Plant the inoculated soybean seeds as soon as possible into a moist seed bed.



Special initiative



IITA
Youth Agripreneurs
Agriculture is the future

