



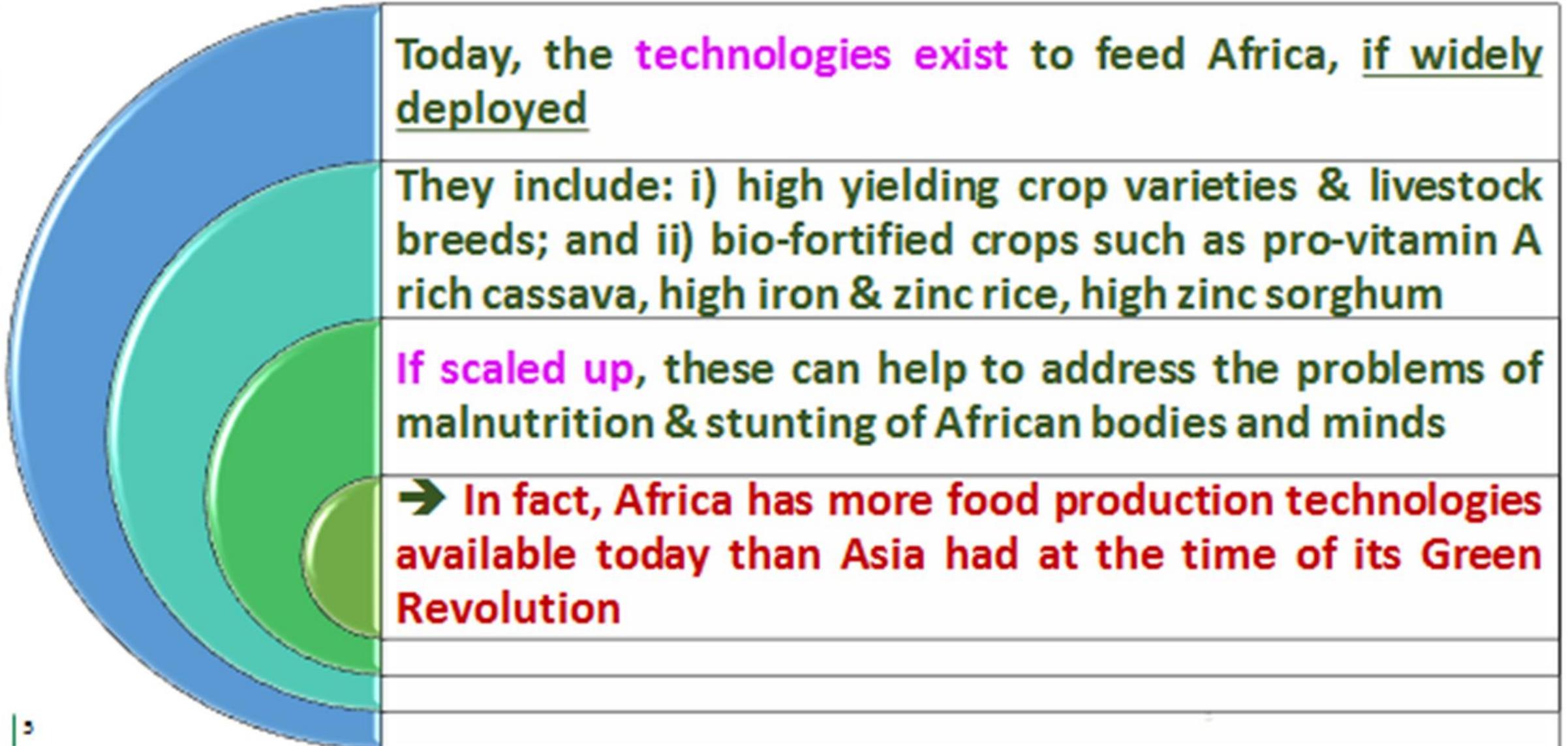
# **TAAT Phase II: Deploying agricultural technologies and innovations at scale**

**Solomon GIZAW**  
*Head of TAAT Clearinghouse*  
*16 April 2024*

# Presentation Outline

- 01 The Context & rationale**
- 02 TAAT Program & Clearinghouse**
- 03 TAAT technology vetting and profiling**
- 04 TAAT country engagement, scaling approach & partnership,**
- 05 Examples of transformative success stories**

# The Context–Current Technological Situation in Africa



# TAAT vision and rationale

- ✓ **TAAT (Technologies for African Agricultural Transformation)** is a flagship program of the Feed Africa Strategy of the African Development Bank.
- ✓ TAAT seeks to **increase agricultural productivity** across Africa by deploying proven agricultural technologies integrating social inclusion dimensions to farmers
- ✓ **Technologies exist today** to feed Africa; we need to get them into the hands of millions of farmers to raise productivity.
- ✓ TAAT is a partnership that brings together all the key players in a unique delivery system
- ✓ **Overall goal - Double** crop, livestock, and fish productivity by expanding access to **productivity-increasing technologies** to more than **40 million smallholder farmers** across Africa.



# The key organizing principles of TAAT for Africa Feeding Africa

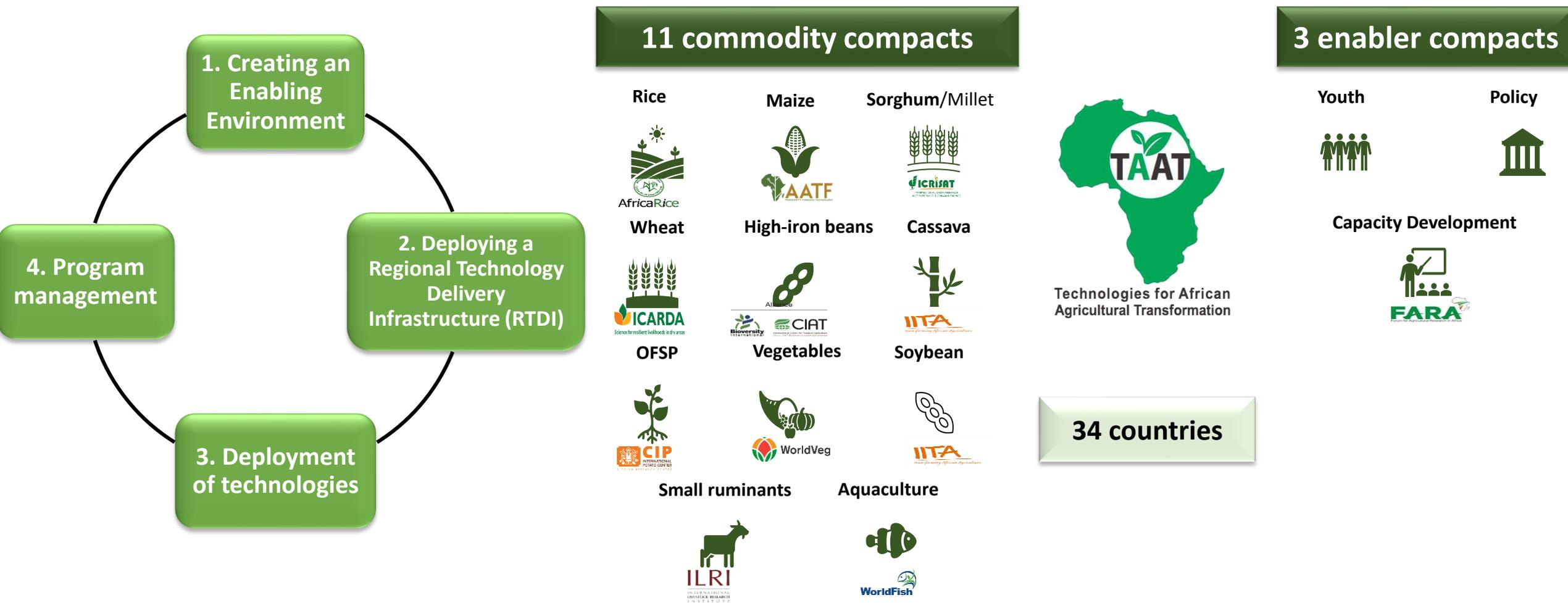
The key organizing principles for achieving a transformative impact at scale in RMCs:

- Technology Matters
- Scale Matters
- Policy Matters
- Partnership Matters



# TAAT Program Components Driving Delivery of Innovative Solutions

TAAT works with 11 commodity compacts and 3 enabler compacts in SSA countries



Technologies for African Agricultural Transformation (TAAT)

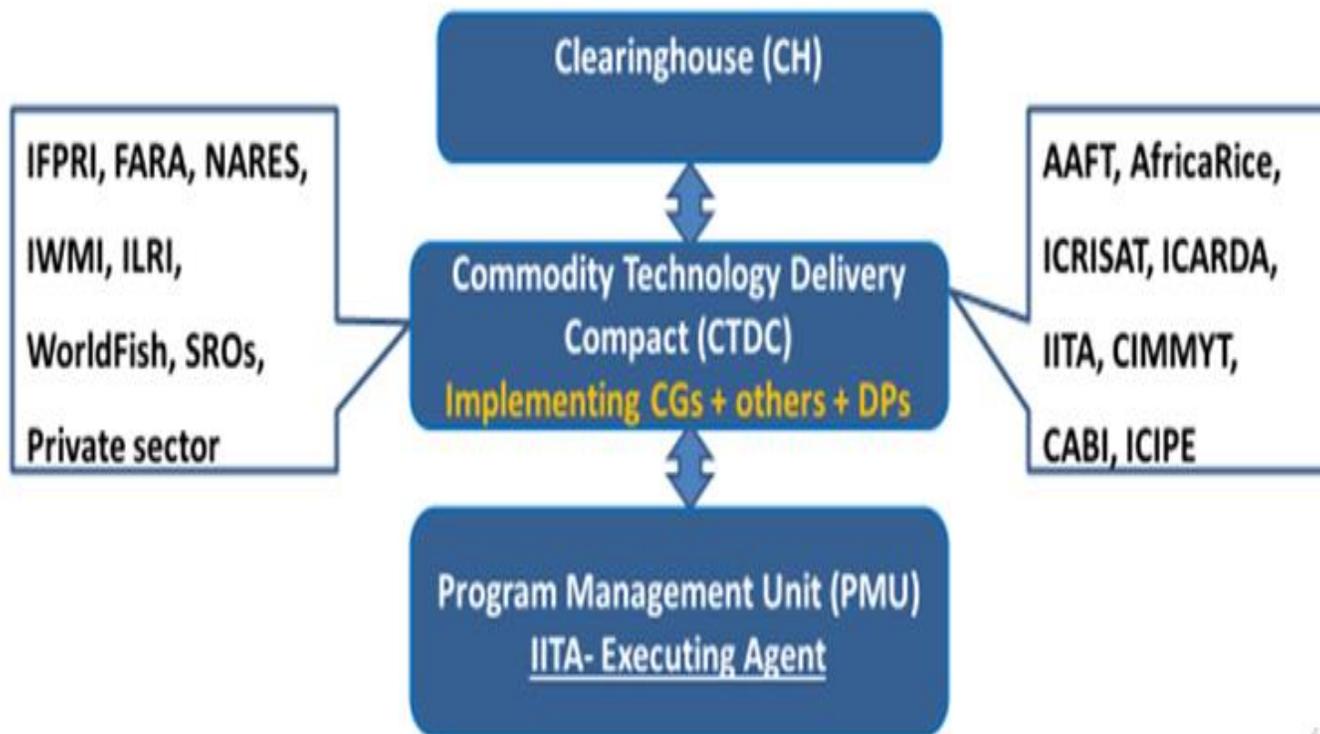


# TAAT Program Implementing Structure

## THE REGIONAL TECHNOLOGY DELIVERY INFRASTRUCTURE (RTDI)

With IITA as the Executing Agency

### Structure of TAAT's Regional Technology Delivery Infrastructure



I  
M  
P  
L  
E  
M  
E  
N  
T  
A  
T  
I  
O  
N

The Program Management Unit promotes a sustainable TAAT implementation structure adhering to compliance of the donor

The Clearinghouse promotes work of the Compacts at scale and through country investments for sustainable transformation

S  
U  
S  
T  
A  
I  
N  
A  
B  
I  
L  
I  
T  
Y

Scaling of TAAT Technologies - The Critical & Unique Linkages



Technologies for African  
Agricultural Transformation

# The Role and Functions of the TAAT Clearinghouse

**The TAAT-Clearinghouse is the lynchpin of TAAT, vetting & selecting agricultural technology and marketing them to the public & private sectors and development partners**

## TAAT Clearinghouse

**Review, vet & select proven technologies**

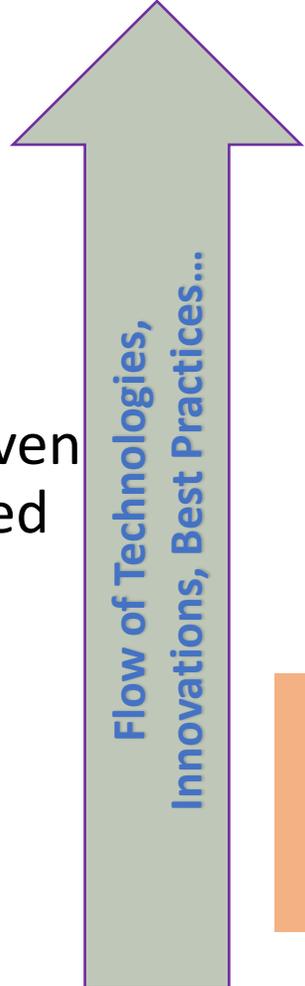
**Promote technologies to public sector**

**Promote technologies to private sector**

**Mobilize resources to catalyze scaling**

**Review & align Compact plans**

TAAT brokers proven & evidence-based technologies



Governments

Private Sector

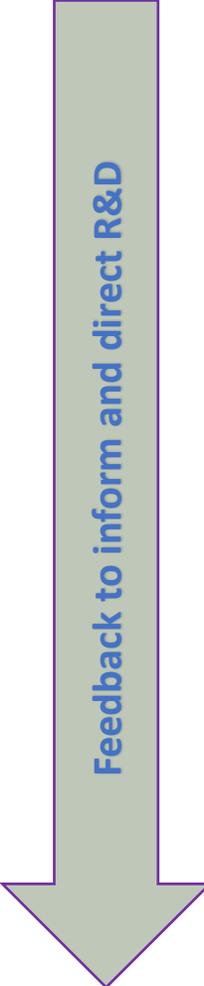
TAAT Clearinghouse

Technology brokering

TAAT Compacts

Technology repositories

Technology scouting, vetting & characterising



NARS

CG Centers & ARIs

Private sector

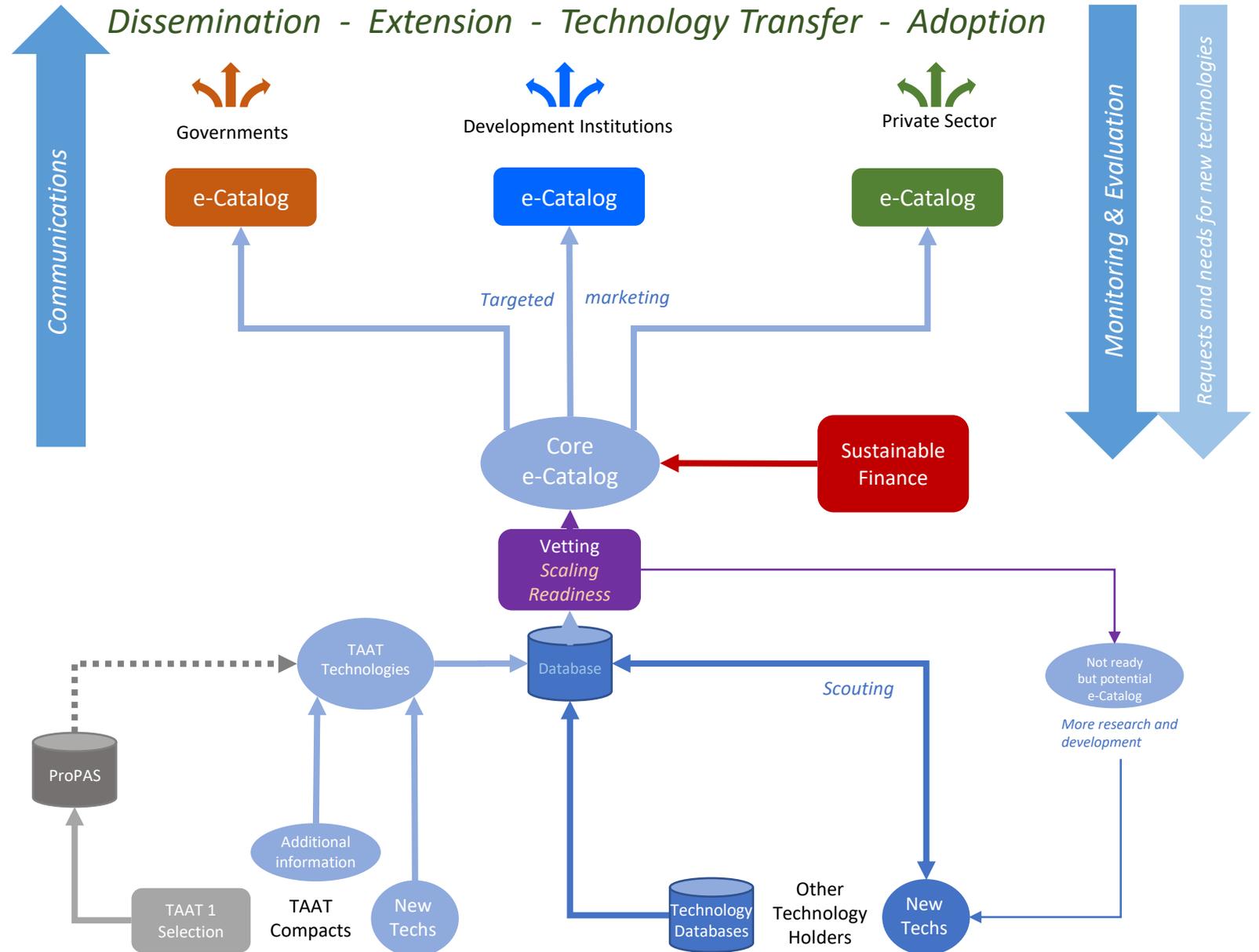
# TAAT technology vetting and profiling

## Technology providers:

- TAAT Compacts (CGIAR, ARI)
- Other providers
  - NARS, SROs
  - Private sector
  - Other repositories (USAID..)

## Transparent vetting process

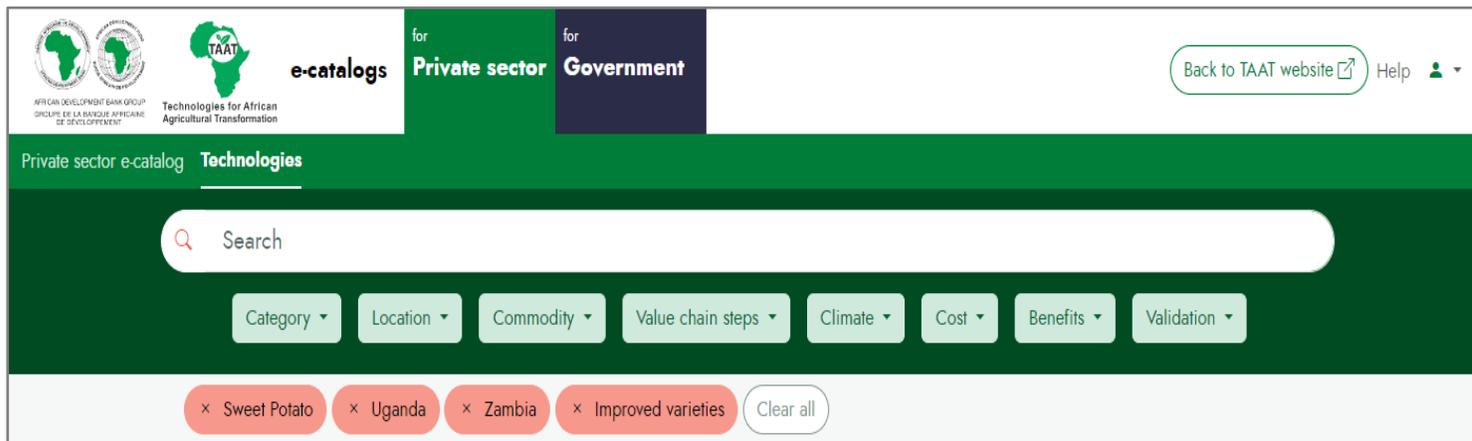
- Pre-vetting using scaling readiness
- Vetting committee of wise people
- Ensures technologies are fit for purpose and ready to scale



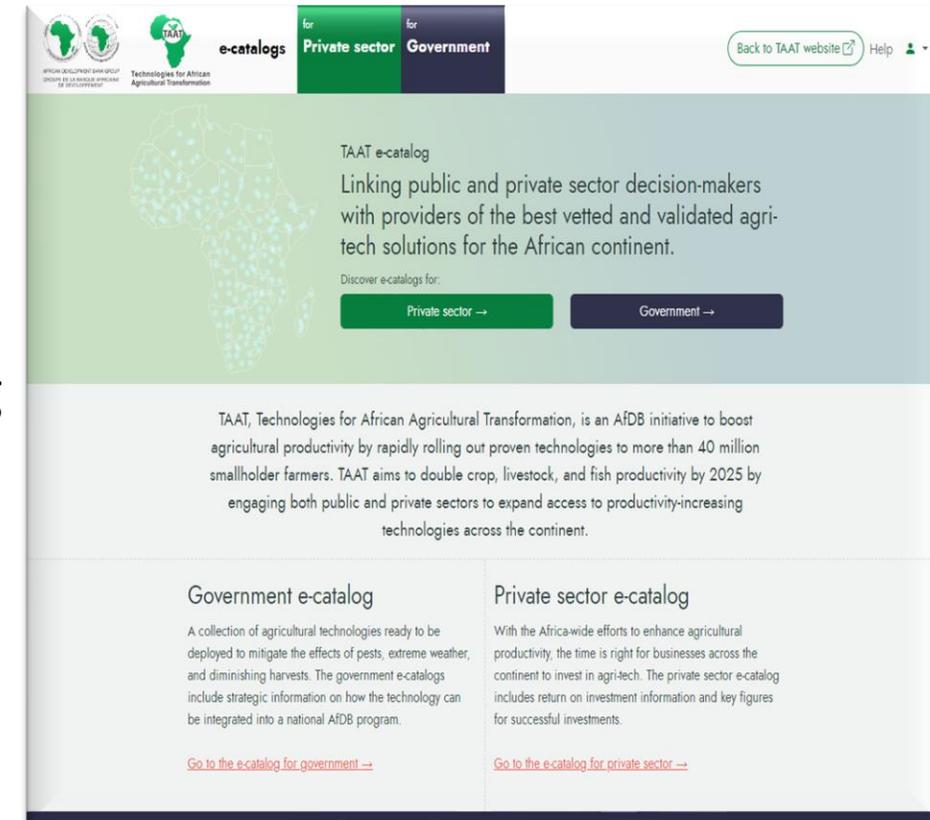
# TAAT technology e-catalogs available online

## 2-TAAT technology e-catalogs, customized to specific audiences, available on-line

- Currently technologies profiled for
  - 1) Government
  - 2) the Private Sector
- 130+ technologies profiled in the database
- e-catalogs offer powerful search, filtering and browsing
- Online help system available



The screenshot shows the TAAT e-catalogs website interface. At the top, there are logos for the African Development Bank Group and TAAT. The main navigation bar includes 'e-catalogs', 'for Private sector', and 'for Government'. A search bar is prominently displayed with the text 'Search'. Below the search bar, there are several filter buttons: 'Category', 'Location', 'Commodity', 'Value chain steps', 'Climate', 'Cost', 'Benefits', and 'Validation'. At the bottom of the interface, there are tags for 'Sweet Potato', 'Uganda', 'Zambia', and 'Improved varieties', along with a 'Clear all' button.



The screenshot shows the main content area of the TAAT e-catalogs website. At the top, there are logos for the African Development Bank Group and TAAT. The main navigation bar includes 'e-catalogs', 'for Private sector', and 'for Government'. A 'Back to TAAT website' button and a 'Help' icon are visible in the top right corner. The main content area features a large green header with the text 'TAAT e-catalog' and 'Linking public and private sector decision-makers with providers of the best vetted and validated agri-tech solutions for the African continent.' Below this, there are two buttons: 'Private sector' and 'Government'. The main content area also features a paragraph of text: 'TAAT, Technologies for African Agricultural Transformation, is an AfDB initiative to boost agricultural productivity by rapidly rolling out proven technologies to more than 40 million smallholder farmers. TAAT aims to double crop, livestock, and fish productivity by 2025 by engaging both public and private sectors to expand access to productivity-increasing technologies across the continent.' Below this, there are two columns: 'Government e-catalog' and 'Private sector e-catalog', each with a brief description and a link to the respective e-catalog.

*To make it easy to select the right technology for your needs*



# TAAT technology profiles

Technology Profiles with content customized for 2 e-catalogs (Private sector and Governments)

Pitches available to download on new Technology Profiles

Overview of Technology Profile

Specific information about the technology

Detailed information, revealed on demand

Full Technology Profile

Agro-Ecological Zones

Categorization column

The screenshot shows a detailed technology profile for 'Integrating rice and fish farming systems Rice-fish culture'. It includes a title, a brief description, a 'Problem' section with bullet points, a 'Solution' section, 'Key points to design your project', and a 'Where it can be used' section. It also features a cost breakdown table and a map of Africa.

Item	Value	Unit
Initial Cost	5,428	USD/ha
Operating Cost	3,016	USD
Benefit	18,188	USD/ha
ROI	115	%
Payback Period	1.50	years

A collage of several TAAT technology profile pages, including 'ABC Grower Biomineralization of weeds using efficient microorganisms', 'Multifunctional biopesticide Ectopicide Agri', and 'Integrating rice and fish farming systems Rice-fish culture'. Each page shows a different technology profile with its own title, description, and key features.



Technologies for African  
Agricultural Transformation

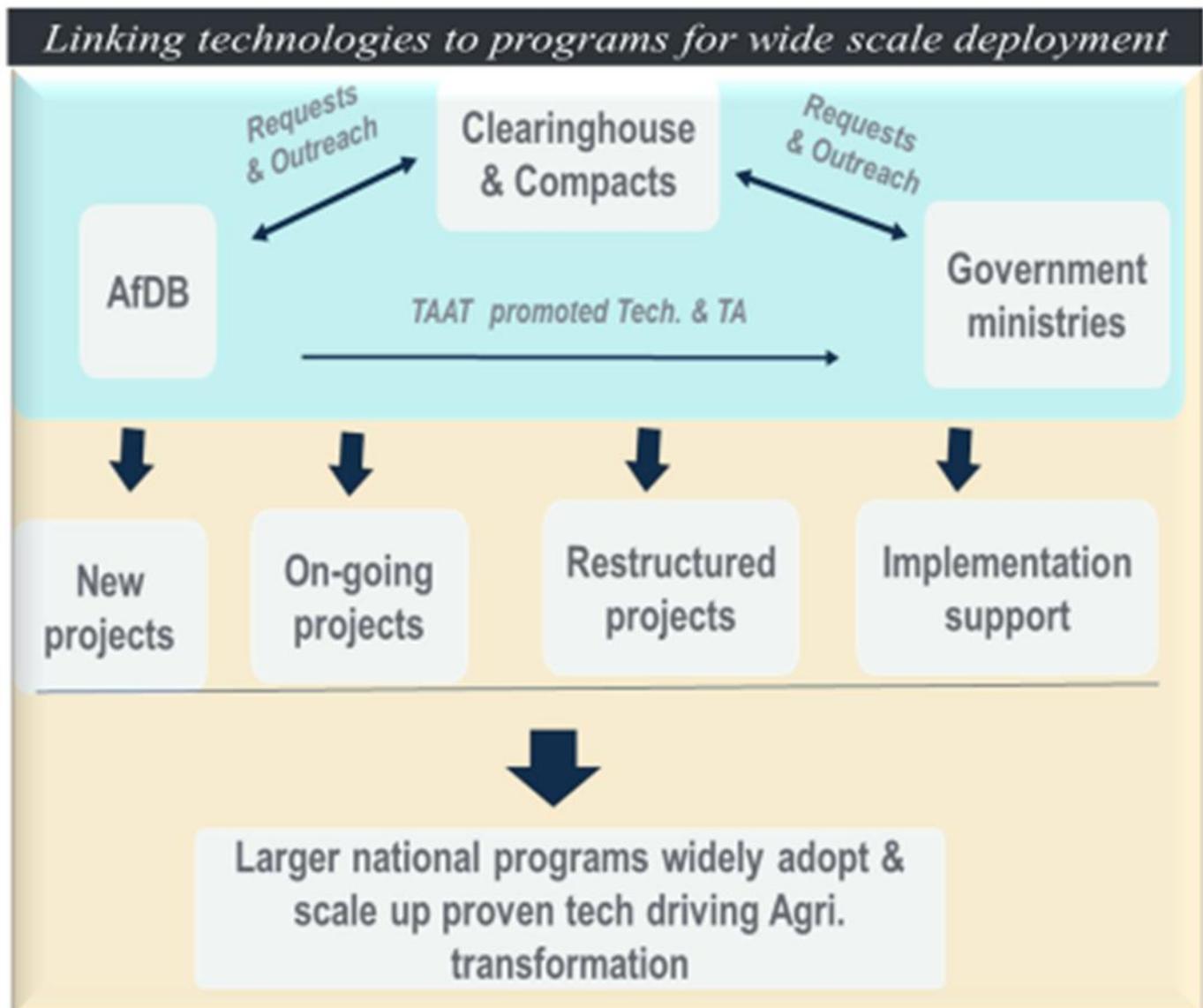
# TAAT e-catalogs

Detailed profiles of validated agricultural technologies for projects and businesses

<https://e-catalogs.taatafrica.org/>



# Government Engagement Strategy for Agricultural Transformation in Africa



**TAAT CH within IITA**

- Transparent selection, vetting & packaging technology

## Approach:

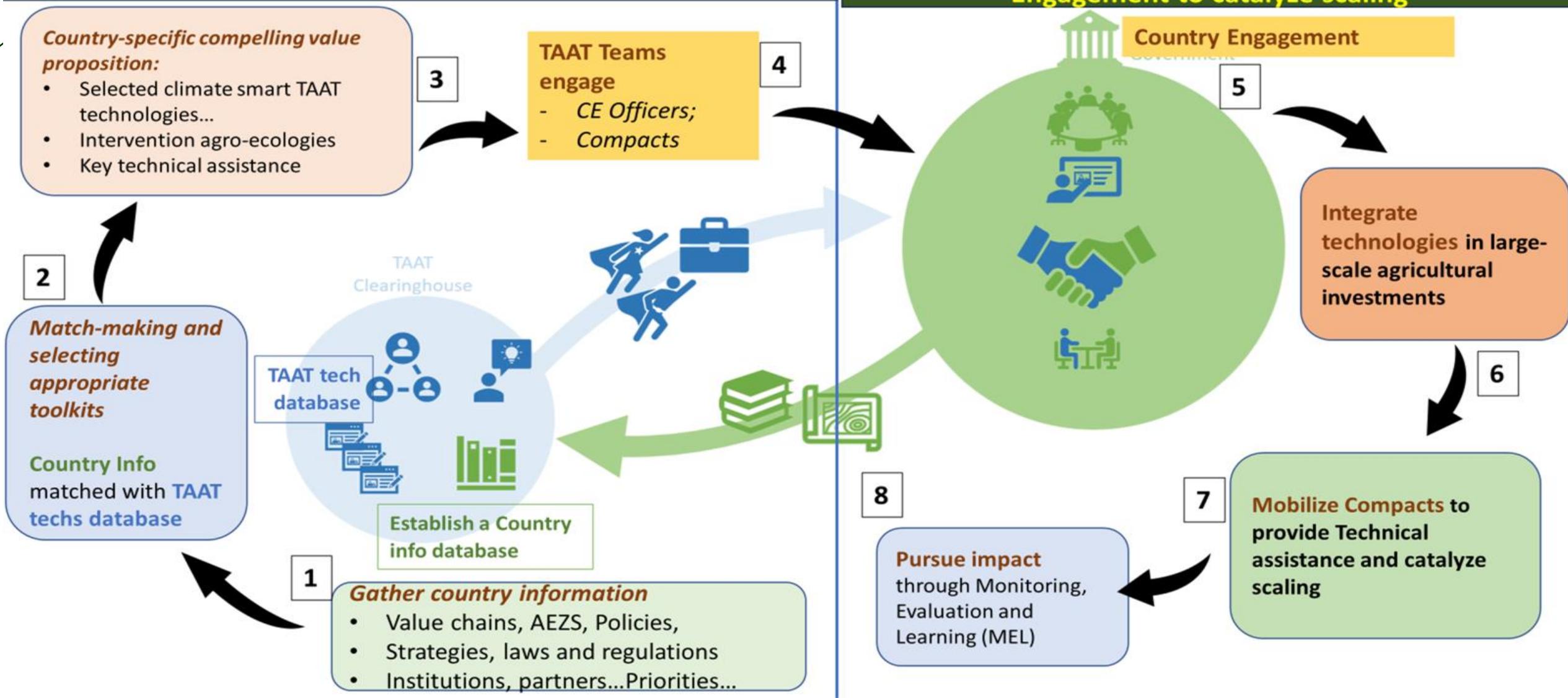
### TAAT CH Team with Compacts

- actively participate in Country missions and engage governments and national partners by strongly coordinating and working closely with Bank's TAAT Coordination Team, Task Managers, Regional Sector Managers and Country Coordinators for inclusion of TAAT vetted technologies in Country's large scale agricultural investments and catalyse their scaling for driving agricultural transformation in RMCs

# Strategic approaches and tools for country engagement

## Develop a compelling value proposition

## Integrate TAAT technologies through Country Engagement to catalyze scaling

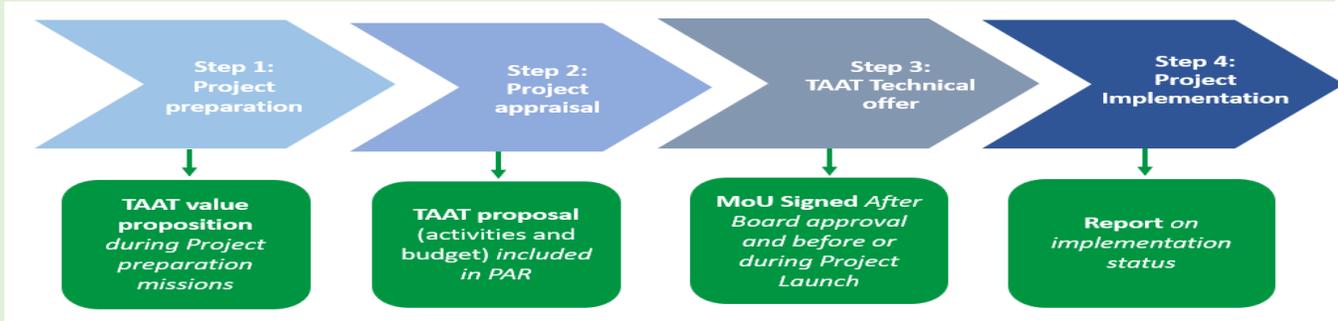




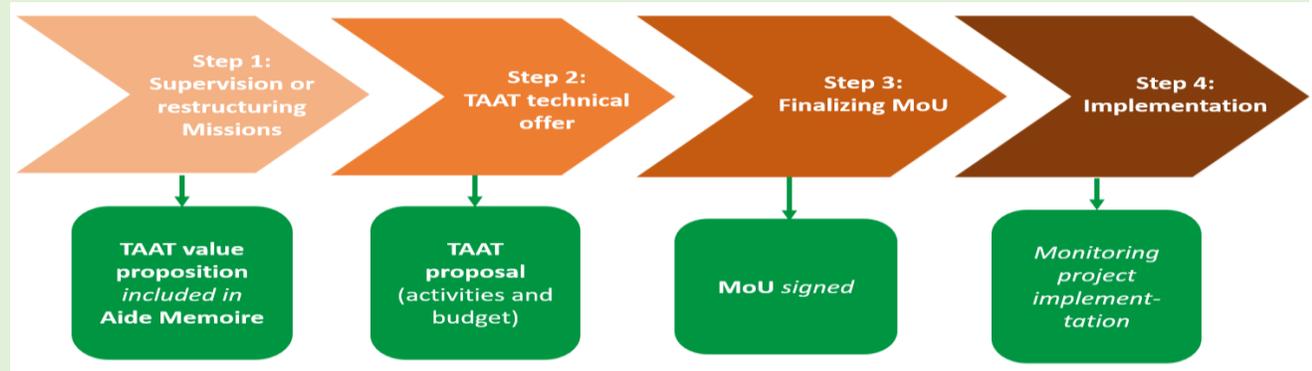
## new, supervision, restructuring of underperforming projects



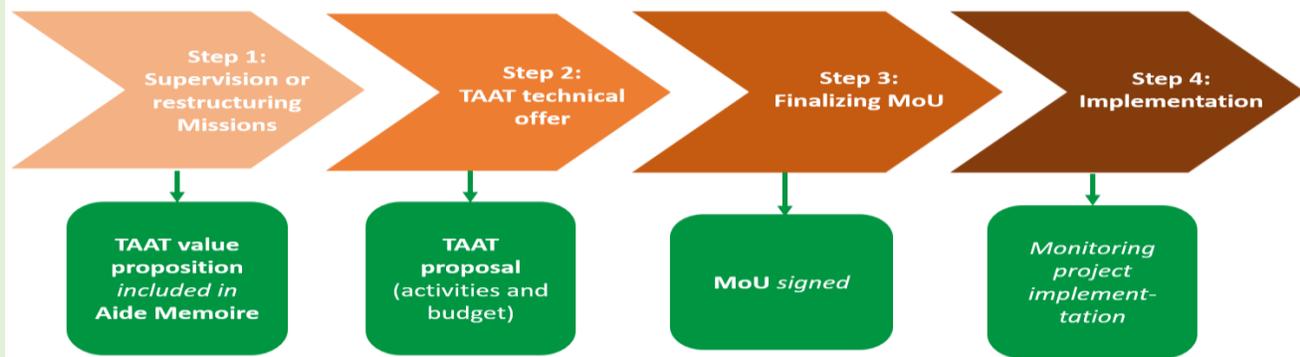
Country engagement for the design of new projects, mainly of AfDB



Country engagement for ongoing supervision/mid-term projects



Country engagement for restructuring of underperforming projects,



# Major Africa-wide Agricultural Initiatives financed by AfDB

## I. African Emergency Food Production Facility (AEFPF)

- ❑ With the global disruption caused by the war in Ukraine, there is an estimated supply gap of 30 million metric tons of wheat, maize, and oilseeds on the continent.
- ❑ The African Emergency Food Production Facility (AEFPF) is designed to boost the local production of cereals and oil grains as the most effective and efficient way to build the resilience of Africa's food systems to respond to these circumstances and mitigate risks to supply in the short to medium term.

### PILLARS OF AEFPPF



**\$1.5 billion Africa  
Emergency Food  
Production Facility**

- 37.6 MMT
- 20 M farmers

+10.74 million  
metric tons  
of wheat.

+6 million of rice



+18.36 million  
tons of maize.

+2.5 million metric tons  
of soybean



## II. Dakar-2 Initiative: Commitments of African Presidents to agricultural transformation

**WE, the Heads of State and Government of 34 African countries...AGREE that it is time for Africa to feed itself and fully unlock its agriculture potential..**



# An Action-driven Dakar 2 Initiative for Food Sovereignty And Resilience In Africa



## Clearinghouse focus in Daka2 initiative

- Intensify government engagement operations for linking TAAT vetted technologies to large scale agricultural investments target RMCs
- Support Policy and regulatory reforms for enhancing delivery of seeds and fertilizers and developing market infrastructure and value addition
- Develop a robust national seed system with roadmap and provide technical to NRS and private sector to accelerate the production and delivery of EGS and certified seeds
- Piloting the demonstration of TAAT vetted climate smart technologies with their integrated GAP and past harvest technologies and provide ToTs for extension agents to first-track their large scale and estread adoption by wheat farmers
- Strengthening innovation platform approach by engaging all concerned stakeholders along the value chain for joining planning, implementation and linking farmers to input and output markers

The action-driven Dakar 2 Summit set a planned investment of mobilizing

- ❖ **\$20 billion** by several other partners (WB, IFAD, IsDB..) in support of Africa's agricultural transformation
- ❖ **\$10 billion** by the African Development Bank
- ❖ 44 African countries developed Country Food and Agriculture Delivery Compacts;

# Mapping AfDB, IsDB financed large scale investments in Africa

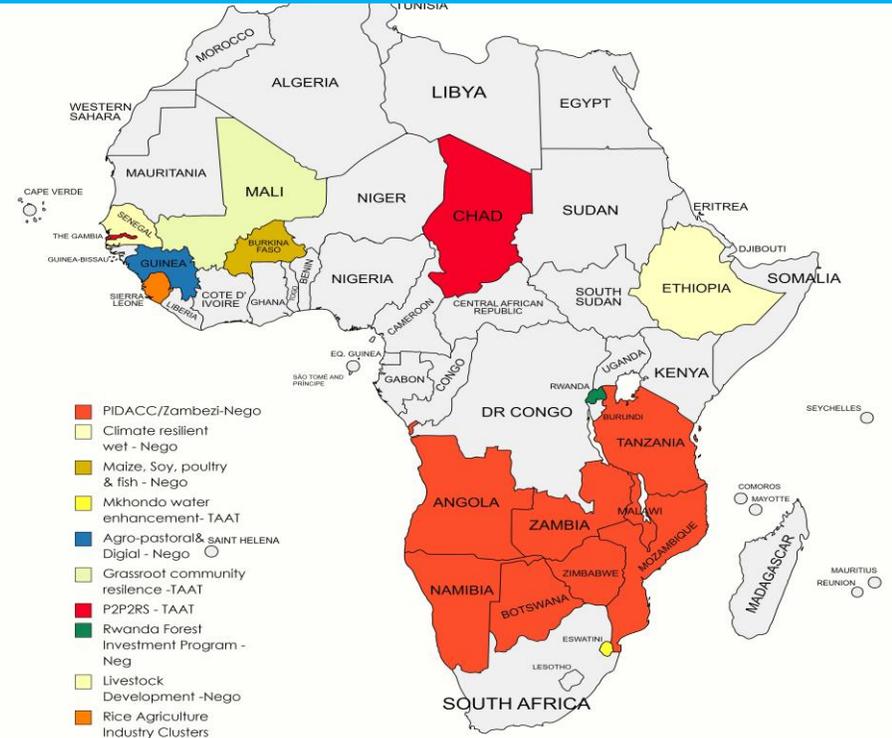
## AEFPF – On-going projects 2023/24



35 countries

Created with mapchart.net

## Non-AEFPF sovereign loan – On-going 2023/24



- PIDACC/Zambezi-Nego
- Climate resilient wet - Nego
- Maize, Soy, poultry & fish - Nego
- Mkhondo water enhancement- TAAT
- Agro-pastoral& Digital - Nego
- Grassroot community resilience -TAAT
- P2P2RS - TAAT
- Rwanda Forest Investment Program - Neg
- Livestock Development -Nego
- Rice Agriculture Industry Clusters -TAAT

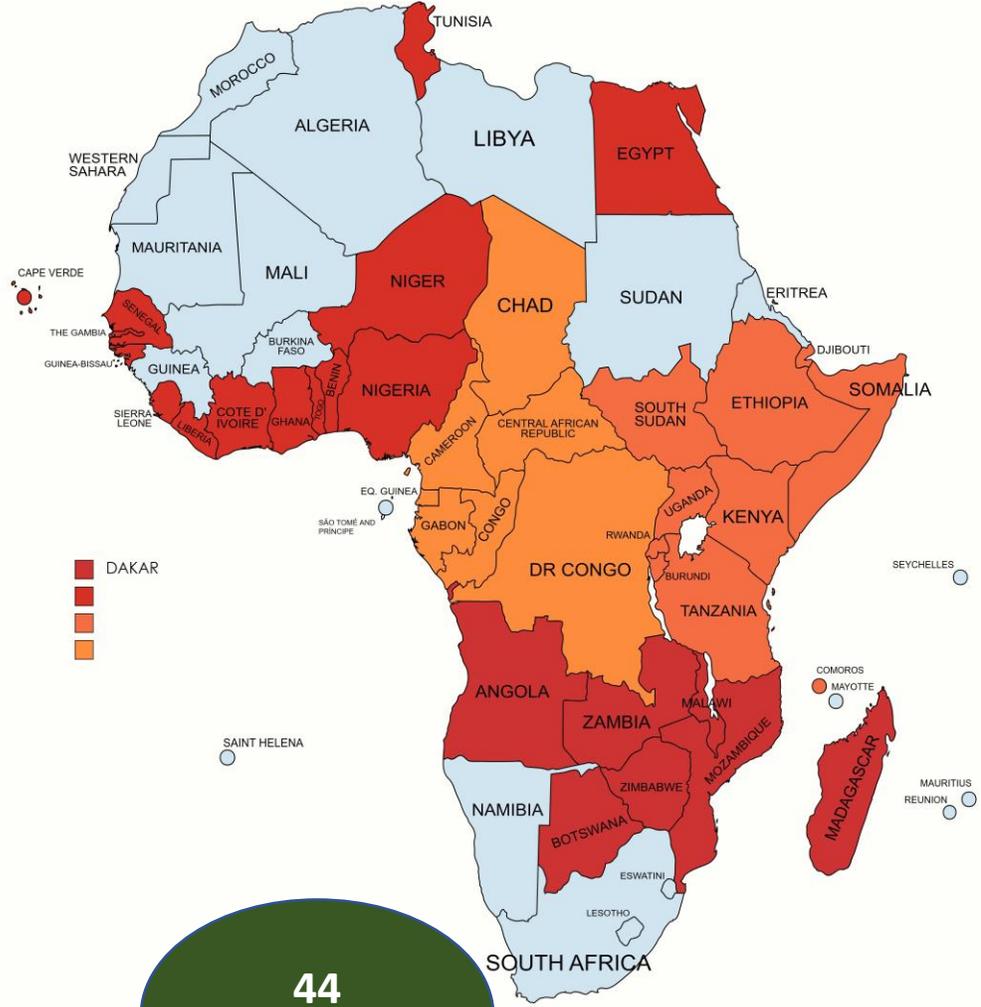
17 countries

Created with mapchart.net

# Mapping AfDB, IsDB financed DAKAR 2 and Pipeline Projects

Pipeline 2023

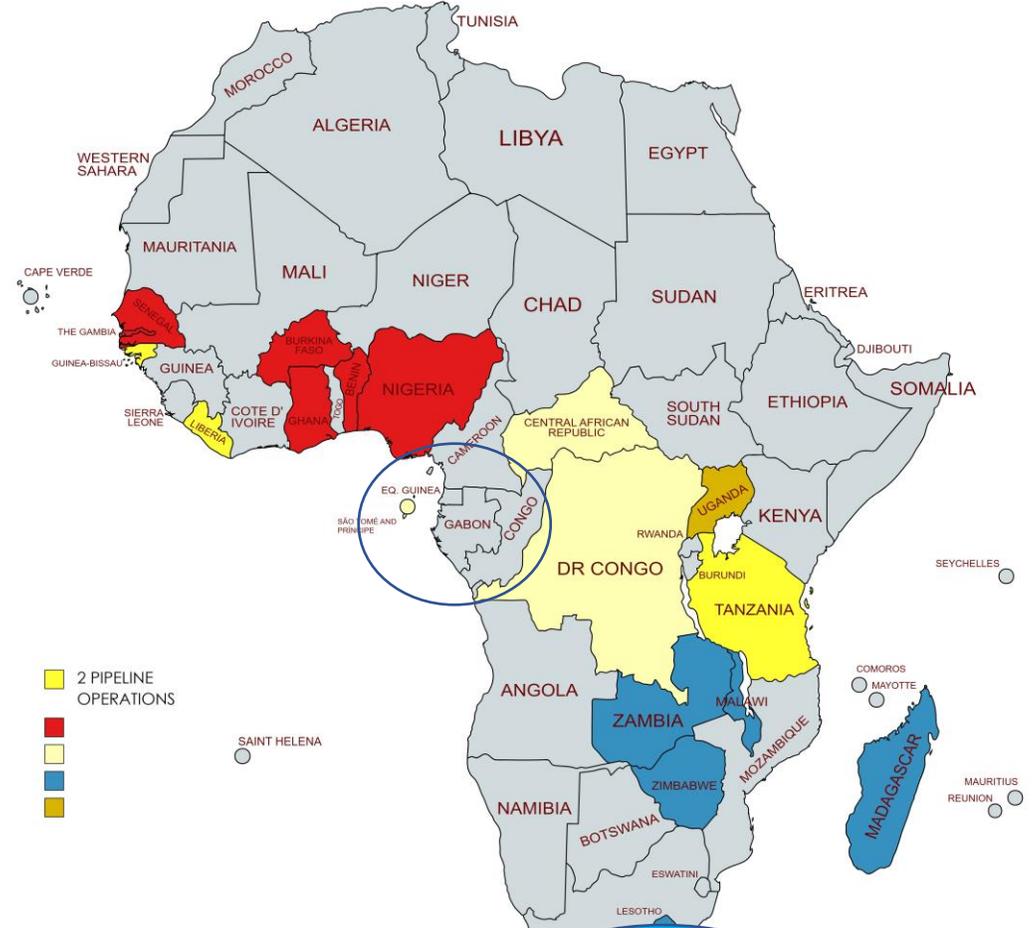
## DAKAR 2 initiatives



44 countries

Created with mapchart.net

## Sovereign loan pipeline projects



18 countries

Created with mapchart.net



Technologies for African  
Agricultural Transformation

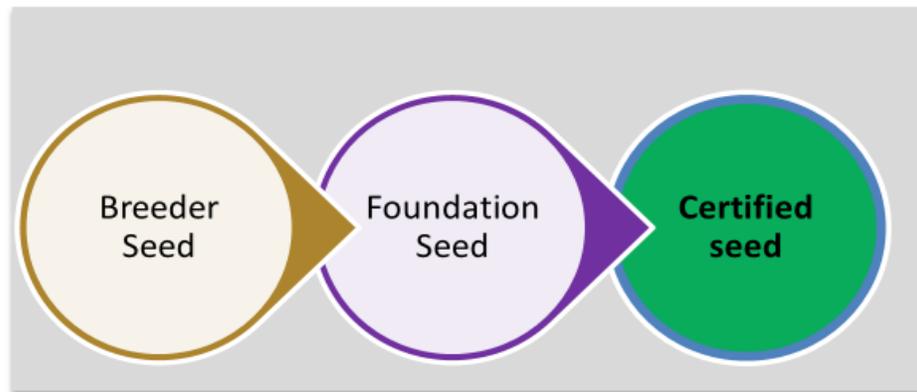
# TAAT country engagement: Areas of key Technical Assistance to AEFPF/Dakar2/IsDB target countries

- Identifying seed supply gaps and informing the country for sourcing additional quantity of certified seeds from other countries of similar agro-ecological zones
- Providing technical specifications for the supply and quality assurance of certified seeds;
- Supporting policy and regulatory reforms facilitating access to improved seeds and fertilizers to farmers
- Developing the seed roadmap and seed system aligned with the country's strategy and AEFPF targets
- Upgrading the skills of NARS seed technicians on EGS and private enterprises engaged in certified seed production on quality seed production and management programmes;
- Demonstrating TAAT vetted climate-resilient varieties with integrated packages in representative large scale intervention sites to fast-track a widespread technology adoption
- Providing ToTs on on GAP, harvest and post harvest management for extension agents, SMSs

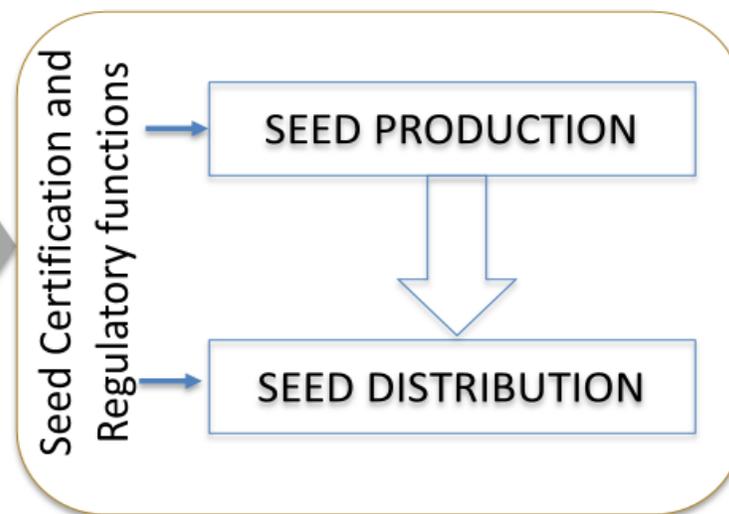


# TAAT approach for developing seed system & road map

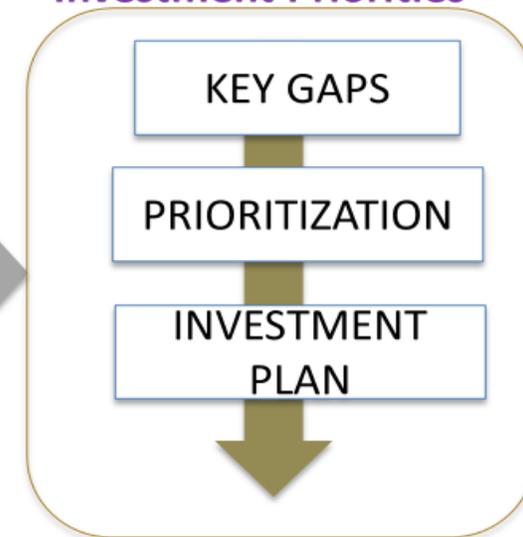
## 1. Projections based on AEFPP, DAKAR2 Targets



## 2. Stakeholder and capacity mapping



## 3. Development of Investment Priorities

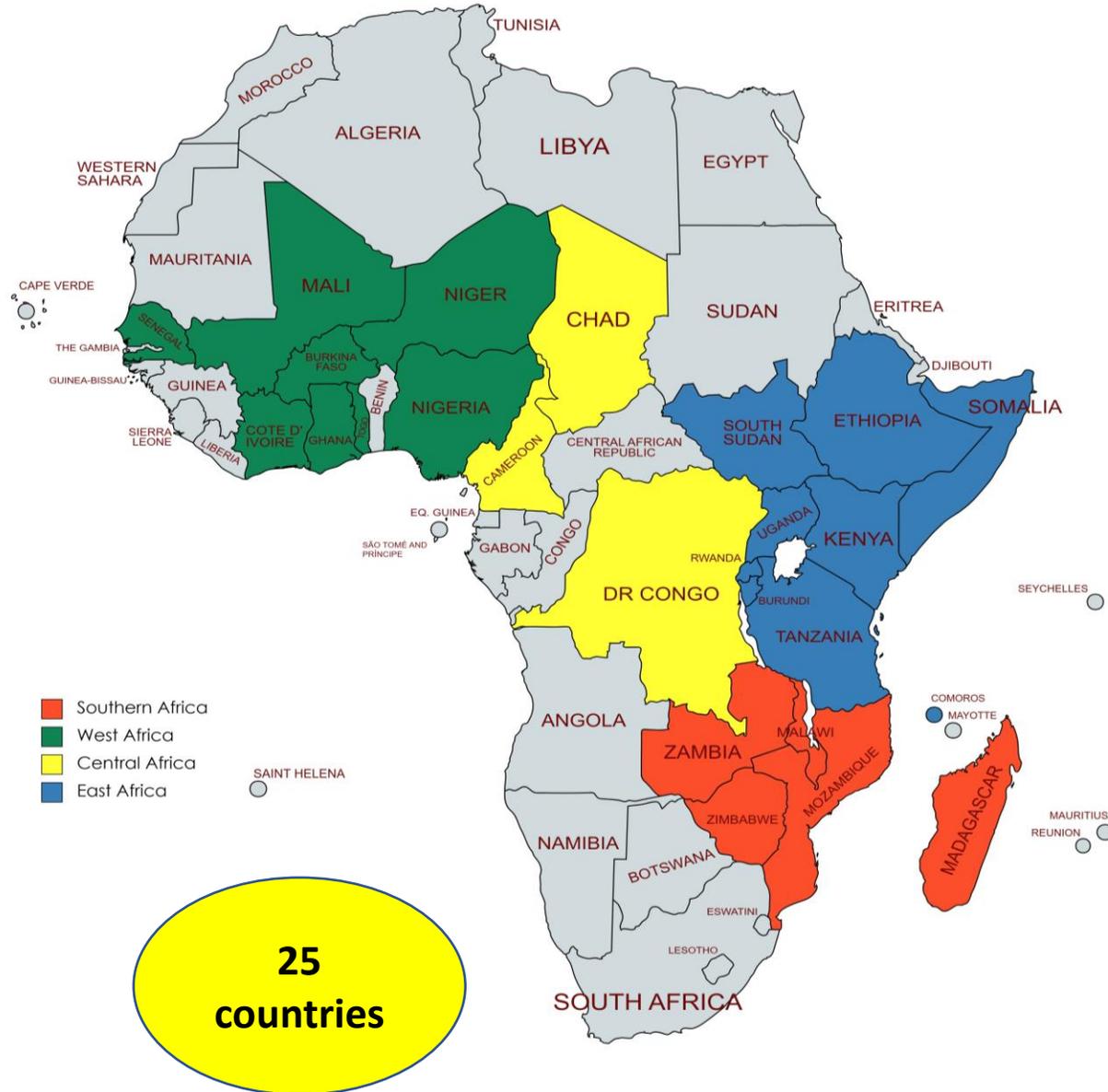


- What are the targets of certified seeds of Maize, Soybean, Wheat and Rice to be deployed under AEFPP in the target countries?
- What are the quantities of Foundation seed are needed to produce the certified seeds?
- What are the quantities of Breeder seeds are needed to produce the Foundation seeds?

- ✓ Who is involved in the production of breeder, foundation and certified seeds for target crops and varieties?
- ✓ What is the role of private and public players in each category of seeds?
- ✓ What is the capacity of each actor?
- ✓ What is the projected supply based on the capacity?
- ✓ Does the supply match with the projected demand?
- ✓ What are the seed distribution pathways and which actors are involved?
- ✓ Are there any infrastructure and capacity gaps in production and distribution of seeds?

- What are the short-term measures to address the gaps (e.g., import of seed)?
- What are the long term measures to address the gaps?
- What are the priority actions and their investment needs?
- Which actors will be involved in the investment?
- What are the timelines for the actions?

# Mapping seed sector assessment and seed road map in RMCs



# Delivering a Successful TAAT Program

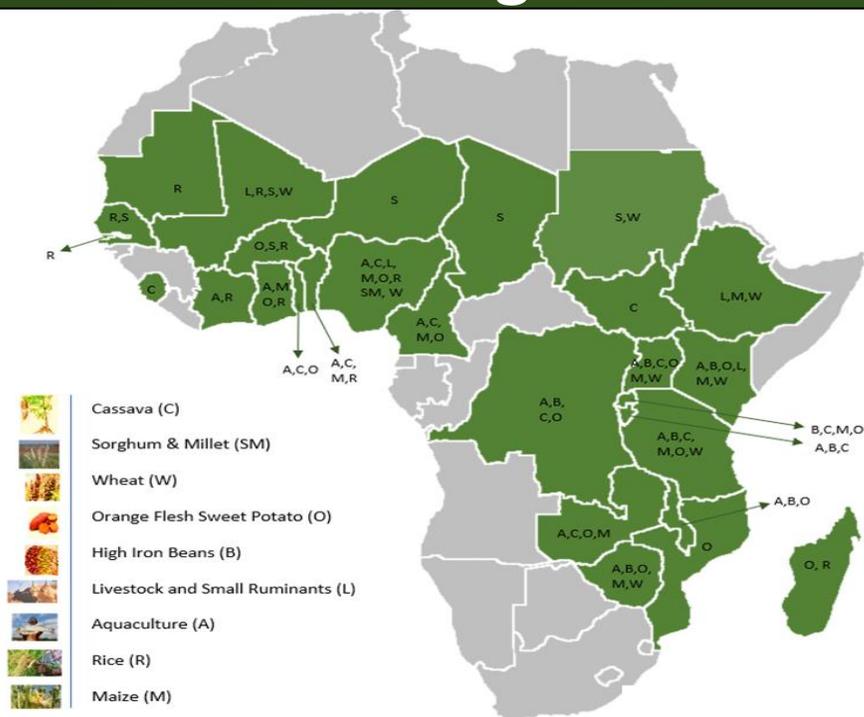
## TAAT Footprint across SSA countries

TAAT currently offers over **120 Technologies** which can transform African agriculture

TAAT Technology providers are: **11 commodity and 3 cross-cutting or enabler Compacts**



# TAAT Country engagement for the integration of proven technologies into large scale agricultural investments in RMCs (Oct 2022-Dec 2023)



*Countries covered:*

**25 AEFPP**  
**19 non-AEFPP**

**USD 1.7 billion**  
*investment influenced by TAAT climate-smart technologies (including USD 866.87 million for AEFPP and USD 837.1 million for non-AEFPP projects)*

**USD 44.78 million**  
*Mobilized to provide Implementation Support by TAAT Compacts with national partners*

**45**  
*cases of TAAT technologies incorporated into national and regional agricultural investment projects financed through AfDB's sovereign loans and grants outside of the AEFPP initiative*

The TAAT Team has mapped all relevant AfDB financed large scale agricultural investments, including DAKAR 2 initiative and pipeline projects for Central, West, East, and Southern Africa

**62**  
*cases of TAAT-vetted technologies incorporated into national and regional agricultural investment projects financed through the AEFPP*

## Government Engagement with Ministers



# Private sector engagement achievements

1



**29** climate-smart **crop varieties** (cassava, rice and wheat) adopted by **17 private seed companies**

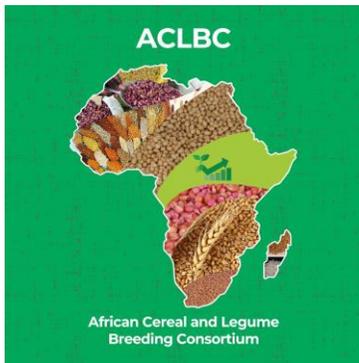
2



Engagement with over **20 private seed companies** to disseminate TAAT proven technologies with compacts (e.g. Mitsui/ETG conglomerate, PICS Global LLC, Fertile Ground, SeedCo., Ecobasic Seeds, Premier Seeds, CANDEL, Africa-Agriculture, the Farmer House etc.)

3

Creation of the ***African Cereal and Legume Breeding Consortium (ACLBC)*** hosted under the AFSTA umbrella to attract over 200 seed companies operating in Africa to adopt and scale



# TAAT

Partnership is the largest in Africa



NATIONAL  
AGRICULTURAL  
RESEARCH &  
EXTENSION  
SYSTEMS

SUB-REGIONAL  
ORGANIZATIONS

PRIVATE  
SECTOR

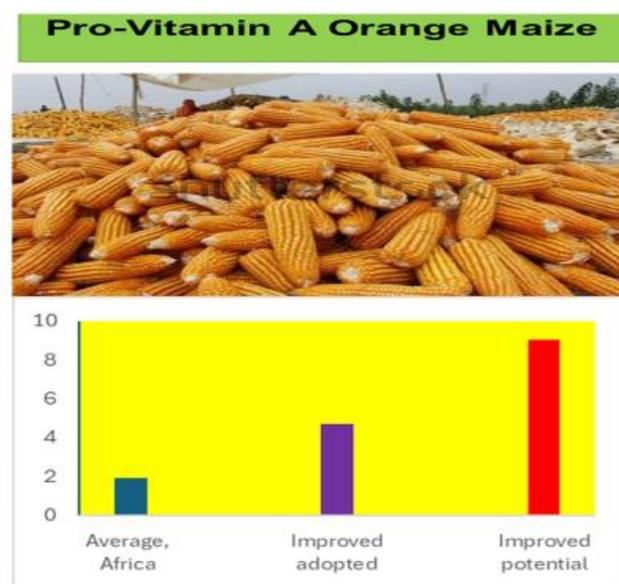
Examples of transformative  
TAAT success stories

## Maize varieties for Africa

TAAT Maize Compact with partners catalyzed the scaling of climate-smart maize technologies such as the elite Water Efficient Maize for Africa (WEMA) varieties.

TAAT facilitated the production and dissemination of **21,983 tons of climate-smart maize** by seed companies for nearly **879,320 ha of cultivated area**.

Through its extensive partnership network, the TAAT has reached **2,302,585 farmers with climate-smart maize varieties** with average maize yields of 2.68 t/ha. The compact has been able to catalyze the production of 2,331,111 MT of maize grain.



# Some examples of transformative TAAT success stories: Rice

## Towards Self-sufficiency in Rice



The TAAT Rice Compact disseminated **67,739 MT** of seeds of climate-adapted and high-yielding rice varieties which were planted on **1,354,780 ha** and benefited **2,252,987 farmers**, boosting rice production by 5,039,579 MT of paddy and 3,326,122 MT of milled rice.



### Good Agricultural Practices

Nursery Management



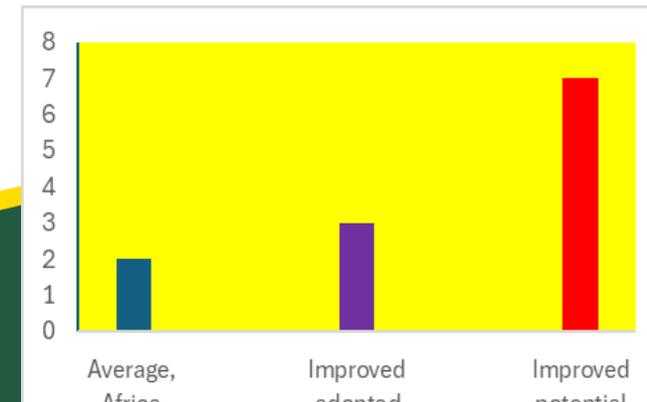
Well Prepared Low-lands



Transplanted Field



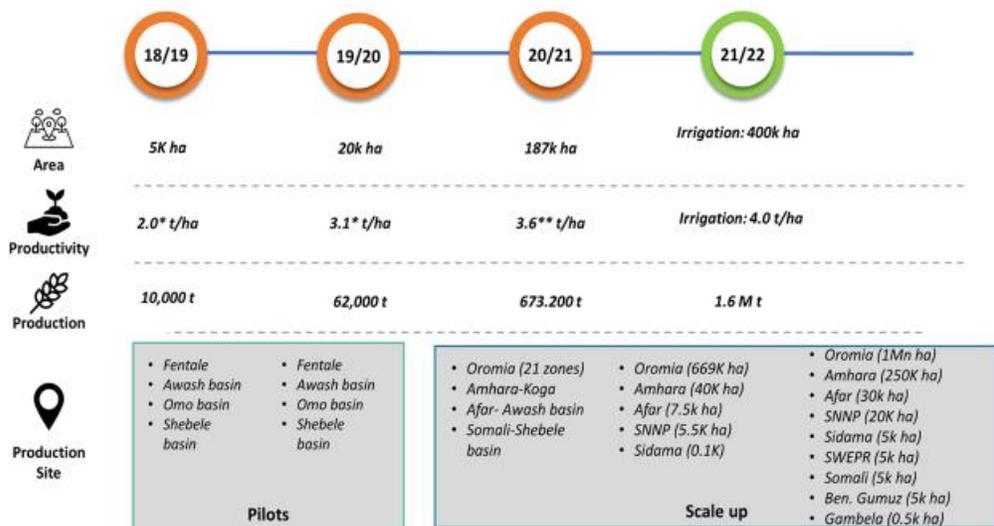
Maturing Stage



# Some examples of transformative TAAT success stories: Wheat



Irrigated wheat has increased dramatically over the past 4 years achieving over 400K ha in 2021/22 and over 1M ha planned for 2023/24





Technologies for African Agricultural Transformation

# Some examples of transformative TAAT success stories: Cassava



President Obasanjo is investing about \$0.3 million in 2022

Large-scale adoption of HQCF processing and SAH for EGS production by **BAB** in the Agricultural Transformation Agenda (**ATA-DRC**)





Technologies for African  
Agricultural Transformation

# Expanding TAAT Partnership with CORAF

## Possible areas of collaborations

- Explore mechanisms to link TAAT technology database with CORAF and jointly promote proven climate smart technologies in the in West and Central Africa region and across Africa
- Foster complementarity between TAAT and CORAF to jointly participate in country engagement missions for integrating proven technologies into large scale investments financed by IFs (AfDB, IsDB, WB, IFAD)
- Joint resource mobilization for food system transformation in West and Central Africa region.
- Institutionalize West and Central Africa Technology trade fairs to commercialize proven technologies by engaging private sector.
- Strengthen the delivery of technologies through collaboration between TAAT Compacts and Regional and National and Centers of Specialization Excellence (NCoS/RCE)



TAAT team presenting technology catalogs at the MITA marketplace





Thank you for your attention



AfricaRice



Alliance

