



**Driving African Agricultural  
transformation through Building  
Vibrant and sustainable seed  
systems:  
The TAAT experience**

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# Presentation Outline

- 01** The Context & rationale
- 02** TAAT Program & Clearinghouse
- 03** TAAT technology vetting and profiling
- 04** TAAT contribution in developing the seed system in Africa
- 05** TAAT approach for developing seed road maps
- 06** TAAT- Deploying Climate-smart seed varieties: Examples of Successful Brokerage
- 07** The African Cereal and Legume Breeding Consortium( ACLBC)







Technologies for African  
Agricultural Transformation

# The Feed Africa Initiative



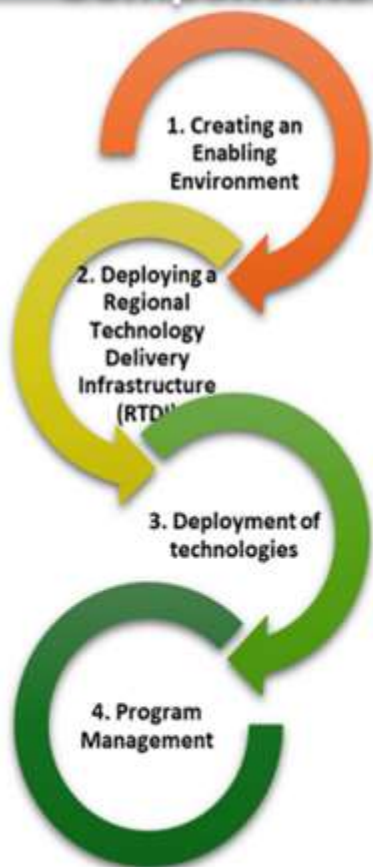
Technologies for African  
Agricultural Transformation

-  TAAT seeks to **increase agricultural productivity** across Africa by deploying proven agricultural technologies to farmers.
-  Agro-ecological zones transcend national boundaries. So, we need a **regional (not national) approach** to technology dissemination.
-  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.

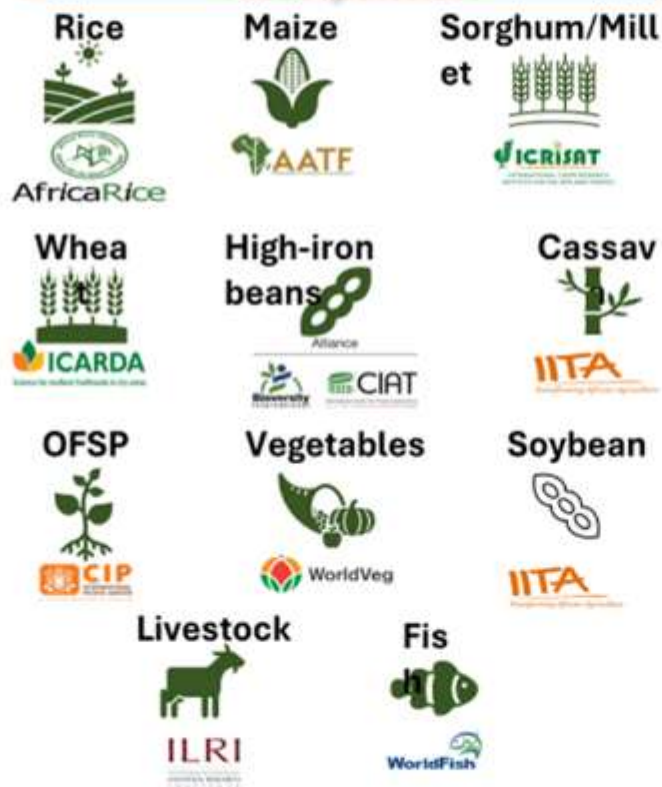
# TAAT Program Components Driving Delivery of Innovative Solutions

TAAT works with 11 commodity compacts and 3 enabler compacts in 34 SSA countries to link CGIAR technologies with large scale IFI investment projects

## 4 Program Components



## 11 Commodity compacts



## 34 SSA Countries



## Private sector

- Farmers
- Seed Companies
- Fertilizer Companies

## 3 Enabler compacts



- Agro dealers
- Machinery Companies
- Processors



# 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**

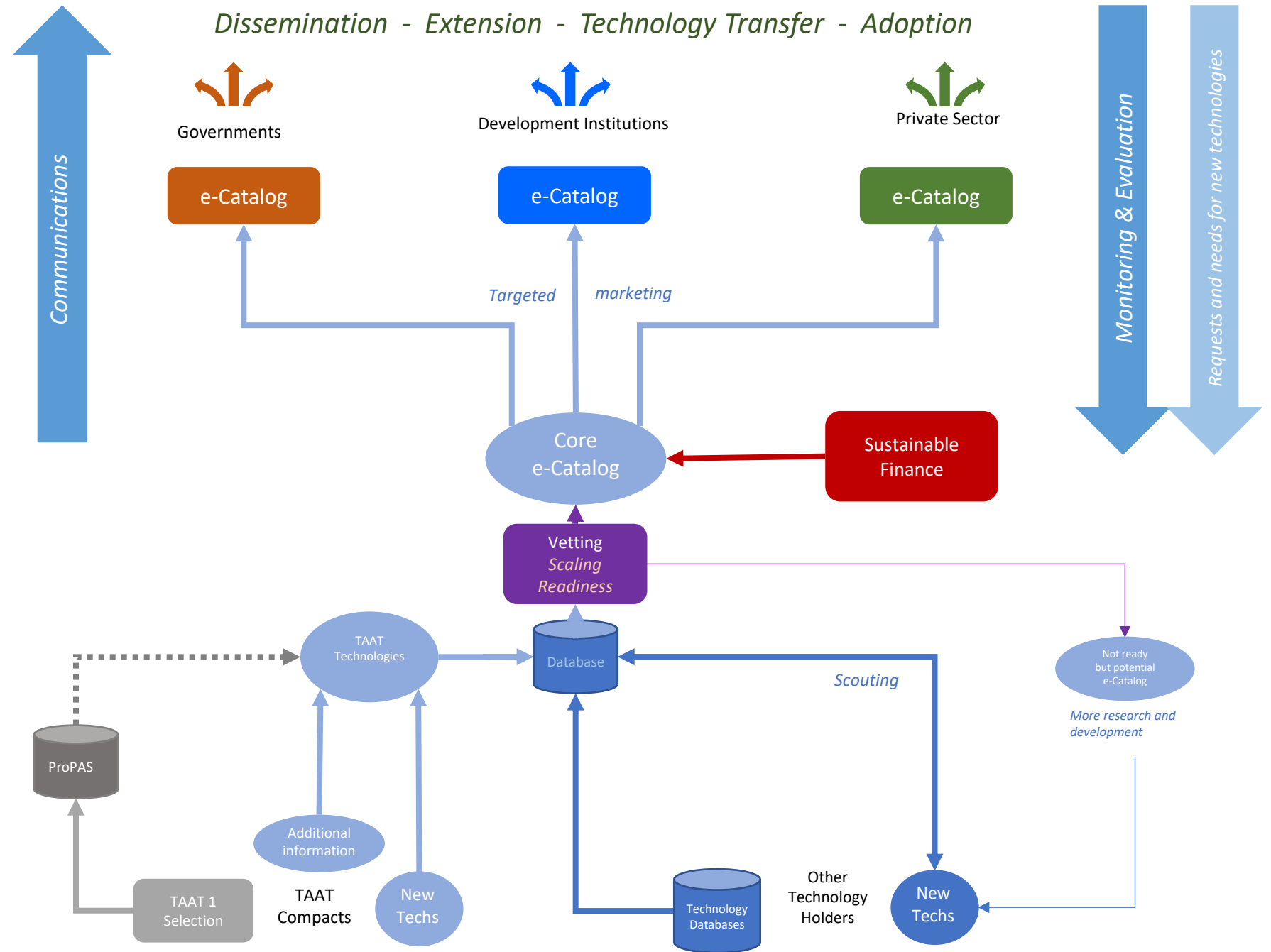
**Promote technologies to public sector**

**Promote technologies to private sector**

**Mobilize resources to catalyze scaling**

**Review & align Compact plans**

# TAAT technology profiling and vetting



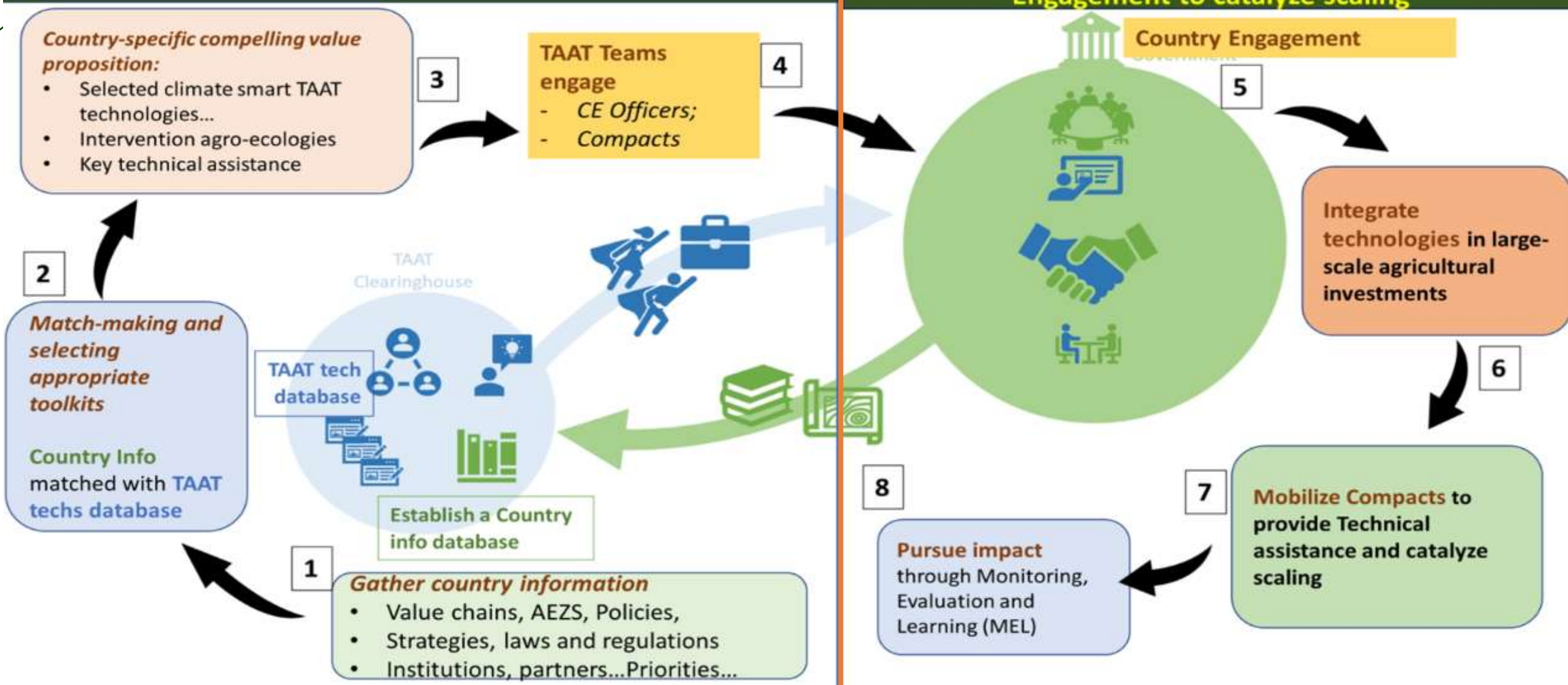
# Strategic approaches and tools for country engagement

## INTERNAL PROCESS

## EXTERNAL PROCESS

### Develop a compelling value proposition

### Integrate TAAT technologies through Country Engagement to catalyze scaling



# Private sector engagement approach



Engaging and linking the private sector to IFIs-funded government initiatives.



Direct engagement with private-sector players to adopt and scale TAAT-vetted technologies



Engaging the private sector through TAAT investment fora and participating in fairs, fora, conferences etc .

Technology Providers

TAAT Compacts

Other international research centers

National research centers

Private sector

# TAAT Clearinghouse

TAAT Technology database & e-catalogs

Country Engagement

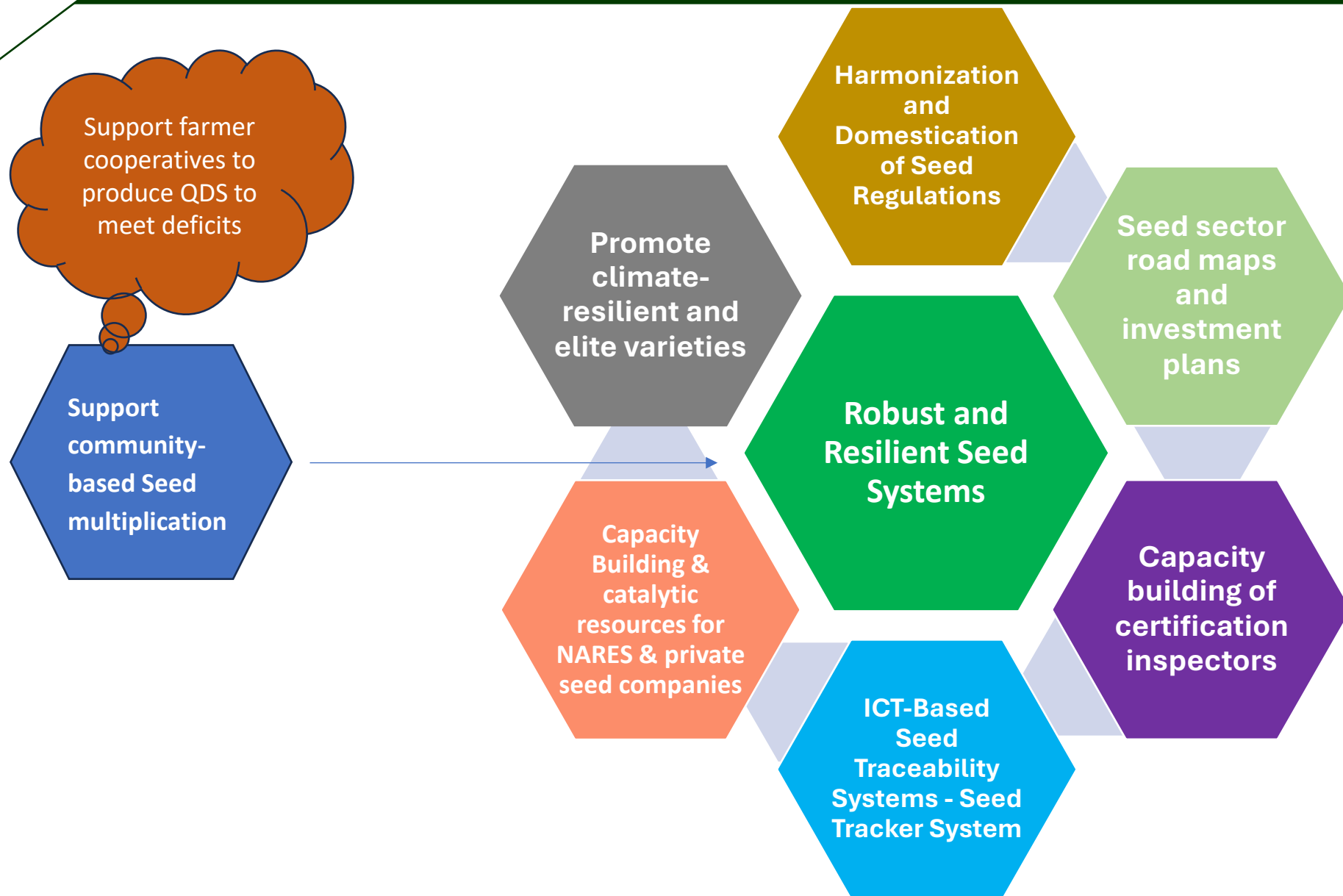
Private Sector Engagement

Decision makers

Governments

Private Sector

# TAAT contribution to building robust and resilient seed systems



# Policy Support for Seed Systems

## Support for domestication and implementation of Harmonized Seed Regulations in ECOWAS & COMESA



*A section of participants 9th ordinary meeting of the Regional Committee for Seeds and Plants of West Africa and the Sahel (CRSPAOS) from 18th to 20th September 2024 in Abidjan, Côte d'Ivoire*



Agro-input supply system assessment



Support to Implementation of Regionally Harmonized regulations



Technical support in Policy formulation, drafting of policy/regulatory Instruments



Capacity strengthening for Policy Implementation



Technical support for Input Supply



Policy Advocacy

- Sustained collaboration with RECs and other Specialized Agencies such as ACTESA and CORAF to accelerate the process of domestication and implementation of the regionally harmonized policy instruments.
- TAAT provided support to ECOWAS, UEMOA & CILSS to organize the 9th Meeting of the Regional Committee for Seeds and Plants of West Africa and the Sahel (CRSPAOS) in Abidjan, Côte d'Ivoire.
- TAAT supported a sensitization workshop for seed stakeholders in to assess the current status of domestication of the COMESA regionally harmonized regulations. A roadmap to finalize of domestication was prepared.



# Policy Support for Seed Systems

## Development of Seed Roadmaps and Investment Plans in six (6) countries

These seed roadmaps are designed to help countries invest in their seed systems and build the capacity of value chain actors. This will enable them to consistently supply high-quality seed to farmers, ultimately improving productivity

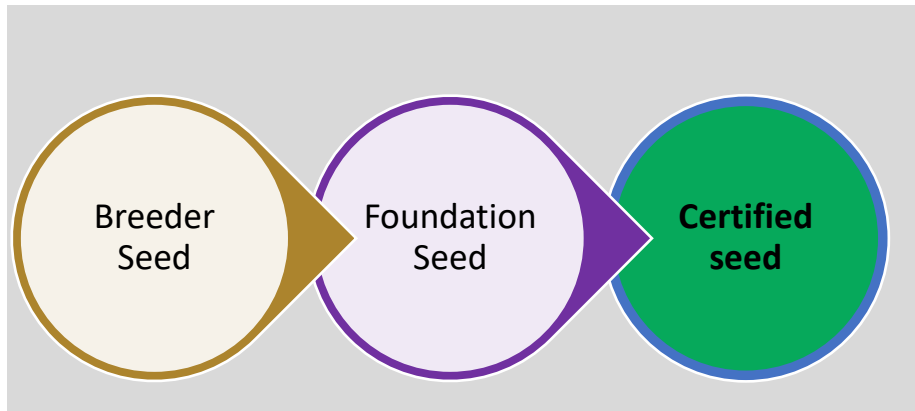
Seed roadmaps have been developed for **Six** countries:

1. **Sierra Leone** (September 2023),
2. **Liberia** (March 2024),
3. **Cameroon** (May 2024),
4. **Benin** (June 2024),
5. **Cote d'Ivoire** (October 2024),
6. **Kenya** (December 2024)



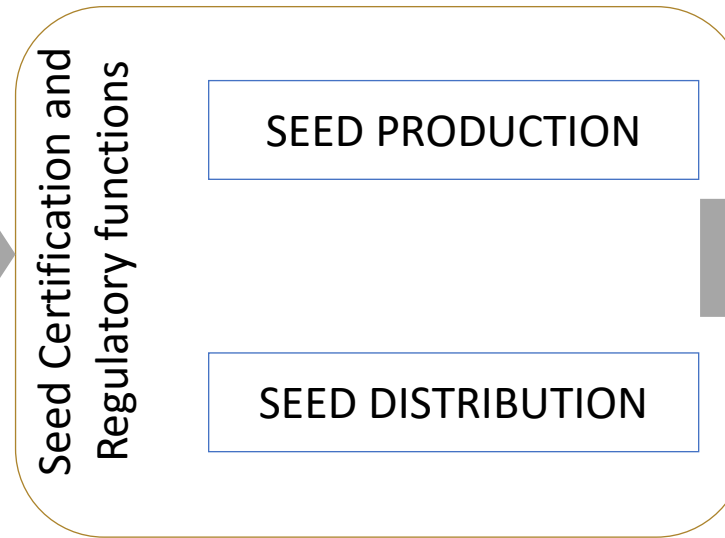
# TAAT approach for developing seed road maps

## 1. Projections based on AEFPP Targets



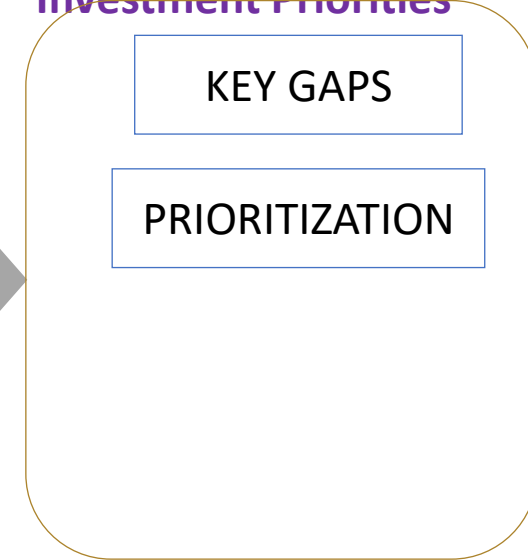
- What are the targets of certified seeds of Maize, Soybean, Wheat and Rice to be deployed under AEFPP in the target countries?
- What are the quantities of Foundation seed are needed to produce the certified seeds?
- What are the quantities of Breeder seeds are needed to produce the Foundation seeds?

## 2. Stakeholder and capacity mapping



- 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?

## 3. Development of Investment Priorities



- 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?

# Progress 4: Capacity Strengthening

## Enhancing seed quality control and inspection in fragile states : Training of Seed Inspectors and Analysts

- Twenty-Seven (27) Seed Inspectors and Analysts from Chad, DRC, Zimbabwe, Mozambique, Somalia, Mali, Niger, Liberia, Sierra Leone

- This training will lead to :

- Enhanced access to quality seeds because of improved quality control
- Improved accuracy in laboratory seed testing reducing incidences of farmers exposure to poor quality seeds in the market
- Adherence to international ISTA standards in seed testing and inspection

**MORE Seed Inspectors and Analysts from Fragile States Benefit from TSF Training**

TSF Policy Success Story | Nairobi, April 2024

**T**echnologies for African Agricultural Transformation (TAAT) is a flagship program of the AfDB aimed at boosting agricultural (crop, livestock and aquaculture) productivity in line with the *Food Africa Strategy* of the Bank. TAAT aims at expanding access to high-yielding agricultural and food production technologies by millions of smallholder farmers across Africa. As the coordinating institution for the Policy component of TAAT, AATF has engaged stakeholders across the RECs of Africa including COMESA, ECOWAS and SADC to identify and support policy reforms in fragile states to improve seed quality control and inspection.



*Trainers going through a practical session in a wheat field at ZEPHOS Nakuru. PHOTO: Daniel Egede*

funding supported a mega capacity strengthening exercise. In March 2024, the Policy Enabler Component convened a capacity strengthening workshop for seed inspectors and analysts from Chad, DRC, Zimbabwe, Mozambique, Somalia, Mali, Niger, Liberia, Sierra Leone.






# TAAT contribution in developing the seed system in Africa

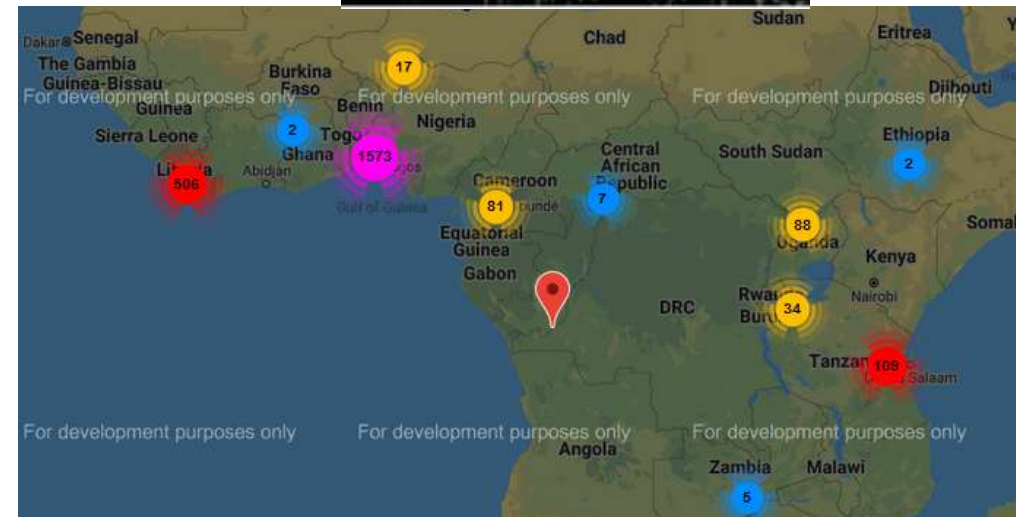
**Table 1. Technical assistance provided by TAAT CH in partnership with TASA and Policy Enabling Compact on the seed systems and seed roadmap in 25 priority African countries**

#	COUNTRY	Seed Assessment 2022.2023	Seed strategy & roadmap in 2023-2024
1	Burkina Faso	On-going	Planned
2	Cameroon	On-going	Planned
3	Zimbabwe	On-going	Planned
4	Chad	On-going	Planned
5	Cote d'Ivoire	On-going	Planned
6	DRC	On-going	Planned
7	Ethiopia	Completed	On-going
8	Ghana	Completed	On-going
9	Kenya	Completed	On-going
10	Madagascar	On-going	Planned
11	Malawi	Completed	On-going
12	Mali	Completed	On-going
13	Mozambique	Completed	On-going
14	Niger	Completed	On-going
15	Nigeria	Completed	On-going
16	Rwanda	Completed	On-going
17	Senegal	On-going	Planned
18	South Sudan	Completed	On-going
19	Burundi	On-going	On-going
20	Tanzania	Completed	On-going
21	Togo	On-going	On-going
22	Uganda	Completed	On-going
23	Zambia	Completed	On-going
24	Somalia	On-going	On-going
25	Comoros	On-going	On-going

Support to seed systems through:

- ☛ **Seed gap assessment for 33 countries** for all priority value chains for AEFPP projects;
- ☛ Provision of technical specifications, standards and potential suppliers for seed procurement;
- ☛ **Seed roadmap** under development by the TAAT Policy compact in collaboration with TASA in **25 countries**;

- Cassava Seed Tracker to track and help with certification
- Cassava Business Connector app for market links





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# **TAAT- Deploying Climate Smart Seed Varieties Across the Continent**



# Examples of successful Brokerage

## Transforming the Sahel into a breadbasket

With operations in seven countries namely Burkina Faso, Chad, Mali, Niger, Nigeria, Senegal and Sudan, TAAT Sorghum and Millet compact produced and distributed to farmers, approximately 540.6 MT of certified millet seeds and 851 MT of certified sorghum seeds.

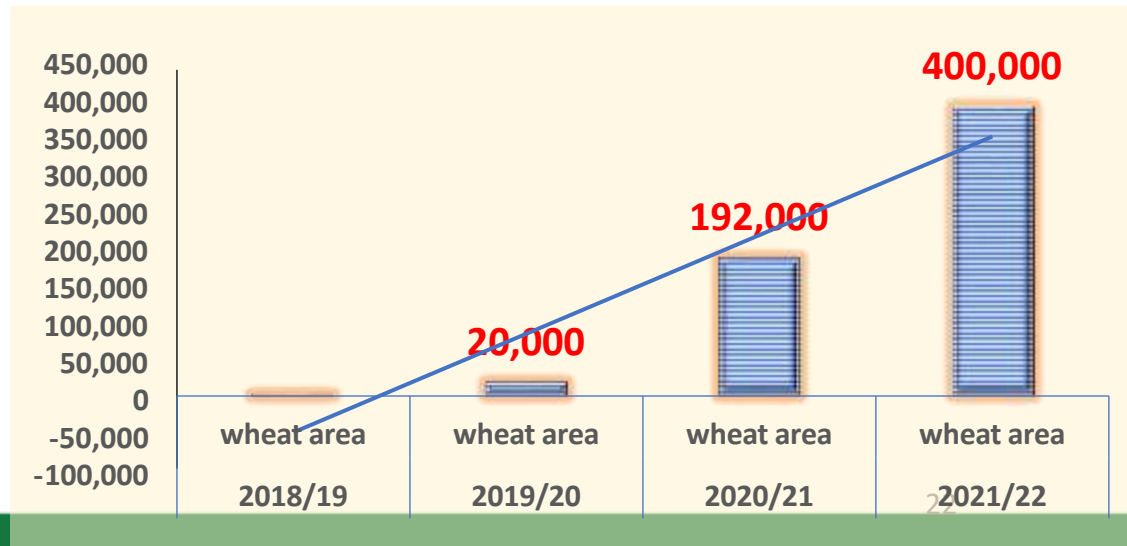
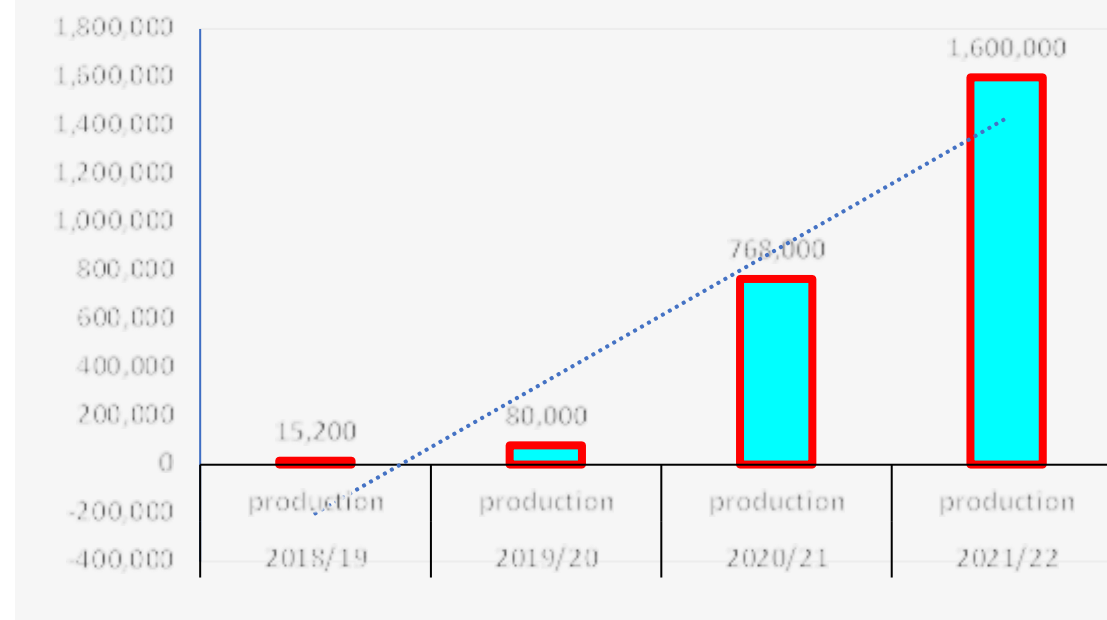
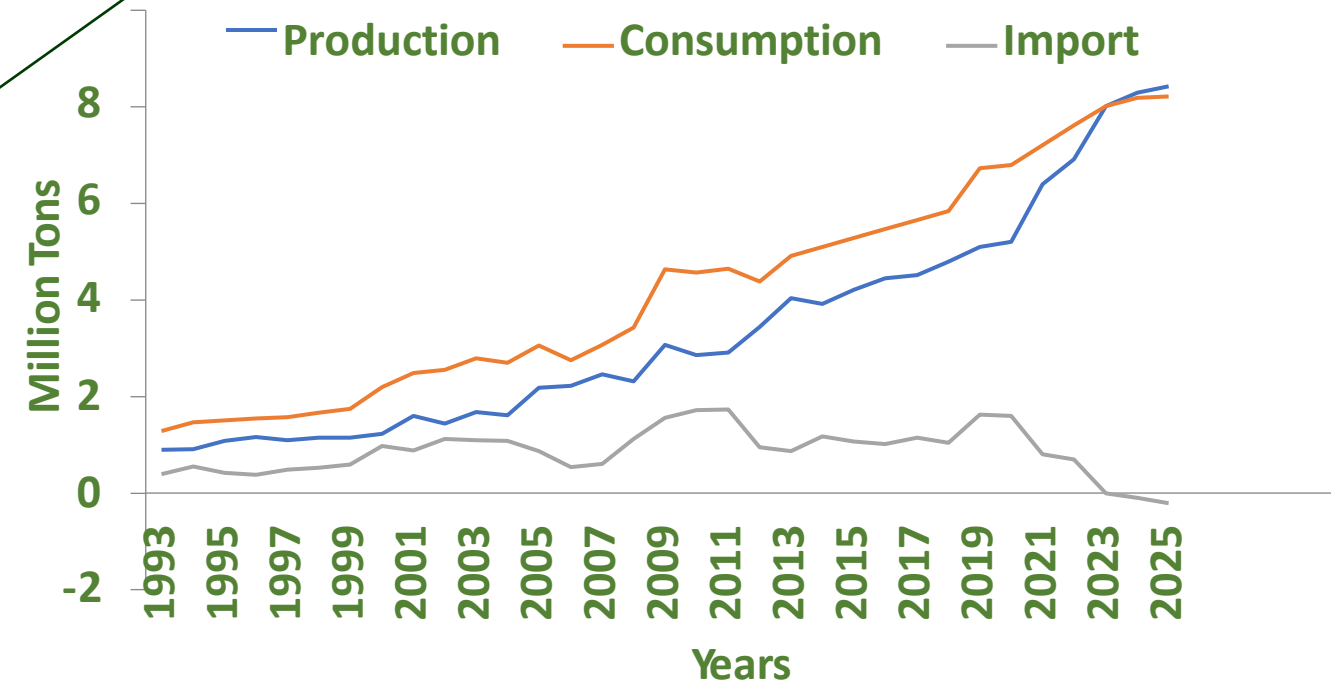
The average yield for sorghum was 3 MT/Ha while that for sorghum was 4 MT/ha. The compact in association with the TAAT- Water Enabler Compact organized farmer field schools for demonstration of the performance of sorghum and millet varieties



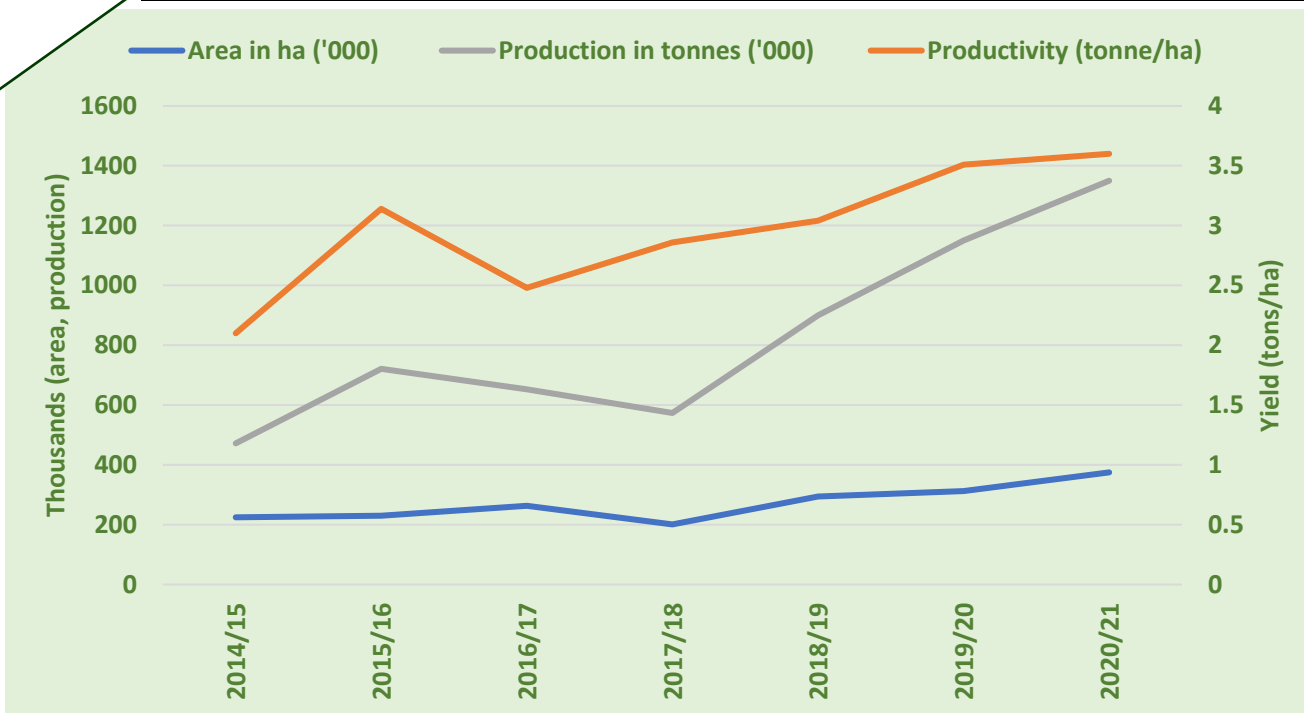
**CHAKTI** Biofortified - High in Iron (60 ppm) & Zinc (65 ppm); High yield (1.5 t/ha); Early maturity (65 days)



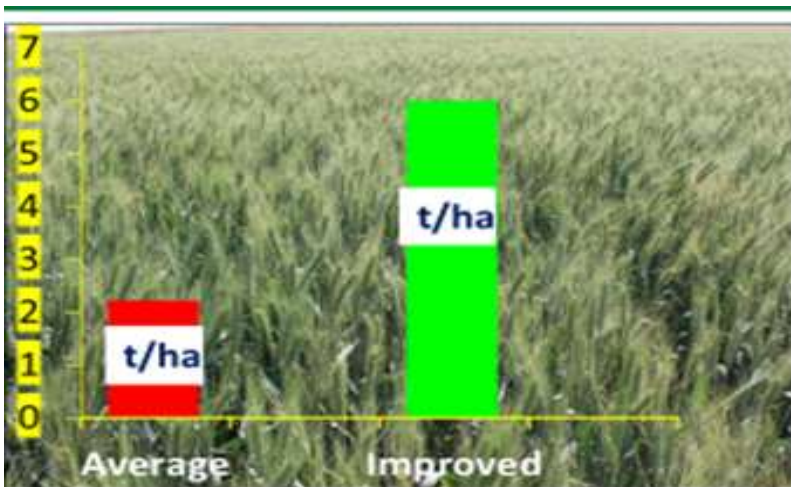
## Trajectory of Ethiopia's Wheat Transformation from Import to Export



## Trajectory of Sudan's Wheat Transformation visited by the Prime Minister



TRANSFORMATIVE WHEAT IMPACT			
	2017/18	2020/21	% increase
Area (ha)	201,000	375,000	87
Yield (t/ha)	2.3	3.6	57
Production (t)	472,000	1,350,000	187
% self sufficiency	22	55	33
			\$ US 385 M





# Example of Successful Brokerage

## 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





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# Cassava Compact: The Semi- Autotrophic Hydroponics Technology for rapid production of clean cassava planting materials



- ✓ Cassava seed production more efficient
- ✓ Easy to up-scale to the required production outputs
- ✓ Healthy and clean planting materials

- ✓ Ease of transportation of planting materials
- ✓ Faster movement of new varieties
- ✓ Assured true to type
- ✓ Traceability

# Maize Compact- Climate smart maize varieties & Hybrids

## 1. Drought tolerant and high yielding

### – WEMA DroughtTEGO hybrids

- ✓ 3 – 5t/ha under moderate drought
- ✓ 7 – 12t/ha under optimum conditions

## 2. Maize Lethal Necrosis (MLN) disease tolerant hybrids:

- ✓ MLN tolerance put in drought tolerant
- ✓ germplasm

DroughtTEGO achieved in Tanzania:

- 10.2t/ha with WE2109
- 9.5t/ha with WE4114



Left – WE2109  
Right – WE4114



**WE6103 DroughtTEGO in Uganda: 7.5 – 8.0t/ha**



## DroughtTEGO Performance in Nigeria

- SAMMAZ 62 (WE5229) – 8.4t/ha
- SAMMAZ 63 (WE5202) – 8.1t/ha
- SAMMAZ 68 (WE8206) – 8.7t/ha



**WE3106 in Kenya**

**Agronomy services**

## 3. Biofortified Pro-Vitamin A Orange Maize

- ✓ Biofortified maize varieties rich in Vitamin A are available
- ✓ Pro-Vitamin A content: **7 – 15 ppm**
- ✓ Contribute to food and nutrition security
- ✓ Preferred livestock feed
- ✓ Orange maize varieties being commercialized in:
  - **Ghana, Nigeria, Mali, Cameroon, DRC, Rwanda, Tanzania, Malawi, Zambia & Zimbabwe**
- ✓ Value of biofortified maize is **10% to 20%** higher than that of non-biofortified maize



**Pro-Vitamin A Orange Maize**

Farmer [awareness](#) and demand creation required especially to those used to white maize



# TAAT High Iron Bean Compact – Examples of successful Brokerage

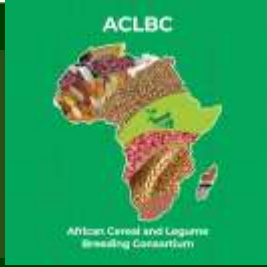
er women and children through  
ans

TAAT High Iron Beans Compact focused on the distribution and use of improved High Iron Bean varieties (32 biofortified) that are also high in zinc to improve immune functions and iron to reduce anaemia in women and children, therefore improving cognitive and physical development in children under 5.

A collaboration between TAAT and the Pan-African Bean Research Alliance (PABRA) has facilitated the cultivation of **169,229 ha with HIB.** **Over 898,308 farmers were reached with 48,461 MT of certified seeds of various HIB varieties**



# Partnership with the African Seed Trade Association (AFSTA)



## The African Cereal and Legume Breeding Consortium (ACLBC)



***ACLBC is a joint initiative of AFSTA and the TAAT program of IITA, hosted under the umbrella of AFSTA and convened by the TAAT.***

## **Objectives of ACLBC**

- Provide the seed companies- Members of AFTSA with high-yielding and performant varieties/hybrids.
- Assist the seed companies in developing their varieties/hybrids and conduct multi-location adaptability tests of new varieties/hybrids.
- Strengthen the capacity of seed companies in hands-on seed production and maintenance techniques with an emphasis on hybrids.
- Conduct joint demonstrations to showcase and promote high-performing TAAT-vetted varieties/hybrids.

# Benefits of ACLBC Membership



Access to **3 exclusive varieties/hybrids**

**Lead Access Period - At least 24 months exclusivity**

## **Annual workshop**

- showcase new outputs,
- Field test results
- Results of advanced testing and adaptability trials

**Participate in the implementation of projects on cereal and legume development.**

Collaborate with member in **organization of seminars/ webinars on topics relevant**



## Membership:

Seed Companies applying for ACLBC membership should be a member of AFSTA or one of its National Associations

## Annual Membership Fee:

- National: - **500US\$**
- Regional:- **1,000US\$**
- International:-**1,500 US\$**

*NB: Lifetime registration - 100US\$*

## Duration of membership:

Valid for a calendar year from 1 January to 31 December

- Companies can register at any time of the year, but the fee is the same regardless of the date of the registration

## Invited Members:

Non-Profit Organizations (NPOs) (e.g. national agriculture research systems, higher education institutions) can participate in ACLBC activities as knowledge partners solely by invitation

# ACLBC is Progressing



**1**  
An Evening With  
ACLBC  
Kigali 30th July 2024



**Inception  
Launch of the  
ACLBC  
Breakfast Side-  
event at AFS  
3rd Sept 2024**

**Effective  
transfer of  
seed varieties  
launched**

**3**  
Acceptance of  
first members a  
total of 16 for  
the moment





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AFRICAN DEVELOPMENT BANK GROUP  
GROUPE DE LA BANQUE AFRICAINE  
DE DEVELOPPEMENT

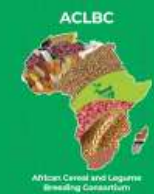


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## AFRICAN CEREAL AND LEGUME BREEDING CONSORTIUM ACLBC

Join ACLBC to gain exclusive access to cutting-edge seed technologies and drive rapid innovation in crop breeding while enhancing your competitive edge in the seed Business.

<https://taat-africa.org/private-sector-engagement/>  
[taat-africa@cgiar.org](mailto:taat-africa@cgiar.org)





AfricaRice



Thank you for your attention



BILL & MELINDA GATES foundation



Alliance

