

# Farmers' demand for quality seed

## Insights from seed sector transformation projects in Africa & Asia

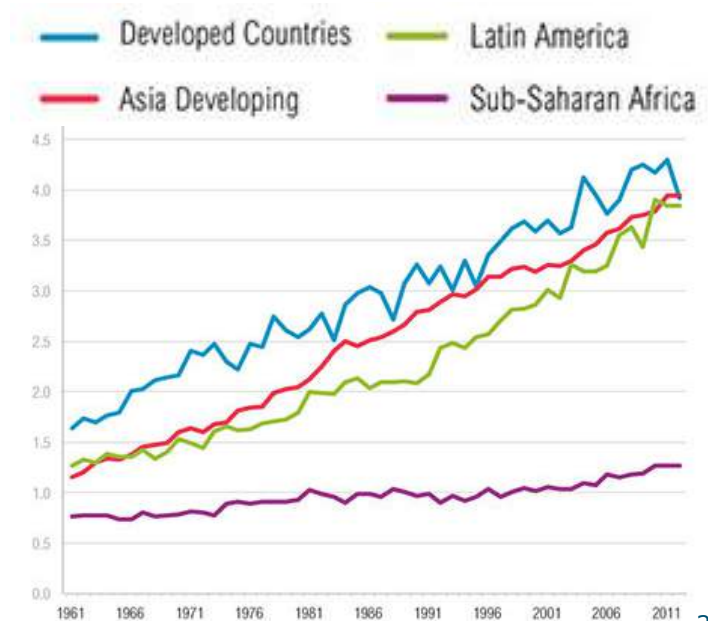
Marja Thijssen, Gareth Borman, Patrick Oyee and Abishkar Subedi, 10 February 2021



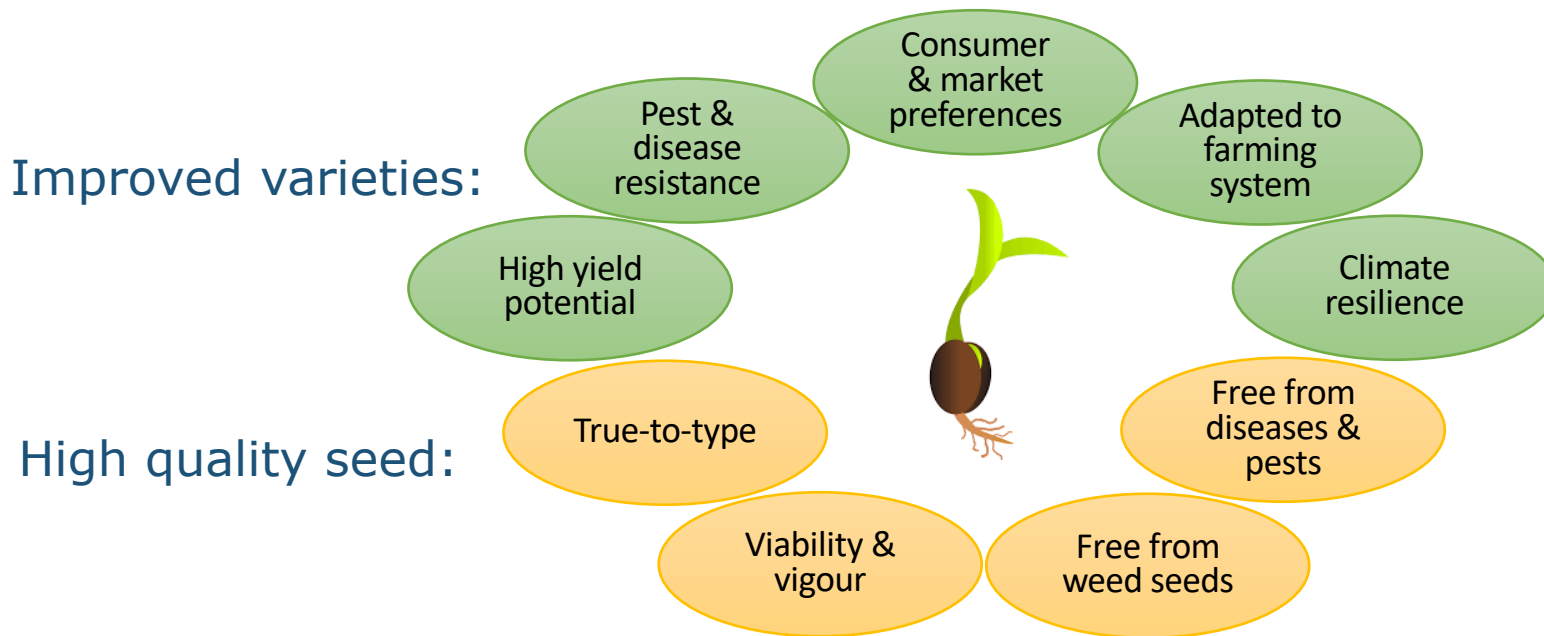
# Setting the scene

- Between 2000 and 2010, cereal crop yields in SSA increased only one-third to one-half the global average
- Experts attribute up to 50% of the yield gap in SSA to limited use of quality seed and improved varieties
- Despite massive investments in crop improvement and formal seed systems for 50 years, 80-90% of the seed used by farmers in SSA is obtained from informal seed systems

[http://www.wri.org/sites/default/files/uploads/cereal\\_yields\\_0.jpg](http://www.wri.org/sites/default/files/uploads/cereal_yields_0.jpg)



# Seed is the carrier of the variety



In addition, seed needs to be available at the **right time**, at the **right place**, in the **required quantity**, and at an **affordable price**

# Functional seed systems

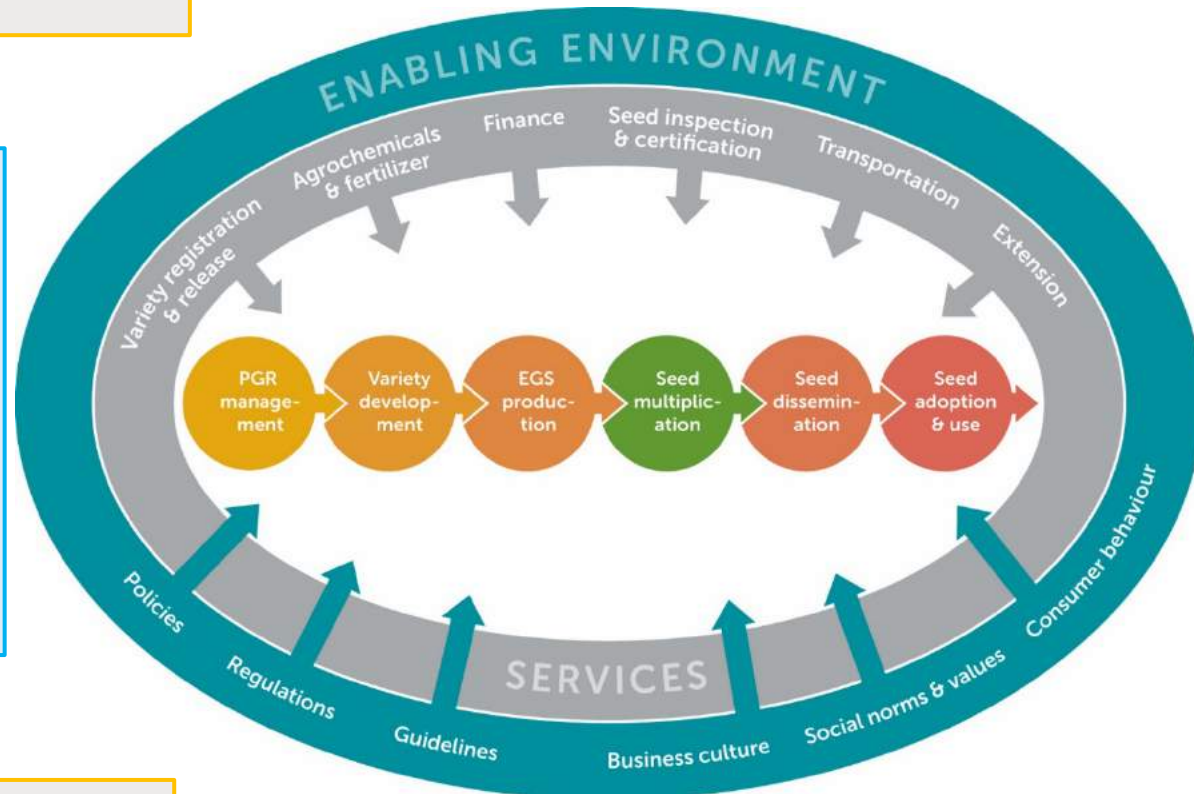
Upstream investments

Research and technology development

Functional seed systems to deliver high quality seed of improved and farmer preferred varieties to farmers

Downstream investments

Linking farmers to value chains and markets



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# Investing in functional seed systems

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- Aim: to improve farmers' access to quality seed of improved and farmer preferred varieties
- Seed systems:
  - Farmers use seed from different sources or seed systems
  - Seed systems vary among crops, reproduction systems, geographies
  - Consider varieties, seed quality, availability at the right time & place, quantity and affordability
- Focus today:
  - Understanding farmers' demand
  - Increasing farmers' demand

# Understanding farmers' demand

## 1: Understanding local seed systems in Tigray, Ethiopia

- Objective: Identification of nodal farmers and their motivations for sorghum seed exchange
- How: Seed network analysis
- Findings: Highly localized networks with social capital as major driver to exchange seeds
- Relevance: Insight in how to increase the adoption of new varieties



ISSD Ethiopia; Rodier & Struik, 2018:

<https://research.wur.nl/en/publications/nodal-farmers-motivations-for-exchanging-sorghum-seeds-in-northwe>

# Understanding farmers' demand

## 2: Understanding farmers' variety preferences in Ethiopia

- Objective: Evaluate variety performance and farmers' variety preferences
- How: On-farm variety evaluation and selection plus crowdsourcing (35,000 farmers, 20 crops, 343 varieties)
- Findings: Surprisingly, improved sorghum variety preferred in Tigray; local varieties of durum wheat preferred in Oromia
- Relevance: Increase diversity and reduce farmer risks; supporting targeted seed production and variety promotion



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# Understanding farmers' demand

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## **3: Understanding farmers' willingness to pay for quality seed in Northern Uganda**

- Objective: Assess if information is a constraint to adoption of certified maize seed
- How: RTCs with information intervention and seed auctions
- Findings:
  - The information intervention increased farmers knowledge, but did not increase willingness to pay for certified seed
  - Reported barriers include affordability, lack of information on the benefits and source, distance to suppliers
- Relevance: Need to work on multiple adoption barriers



# Increasing farmers' demand

## 4: Creating awareness on quality seed, new varieties, and improved agronomic practices in Uganda

- Objective: Create understanding on value of quality seed, and develop capacity to create a return on investment
- How: Promotion activities including media campaigns, demonstrations, and training on good agronomic practices
- Findings: All approaches led to increased adoption, with training being very important; also radio shows a clear impact
- Relevance: Farmers have seen increased income through vegetable production using quality seed



ISSD Uganda & ISSD Africa:

[https://issdafrica.files.wordpress.com/2020/10/sowing\\_the\\_seed\\_adoption\\_processes\\_of\\_good\\_hortic.pdf](https://issdafrica.files.wordpress.com/2020/10/sowing_the_seed_adoption_processes_of_good_hortic.pdf)

# Increasing farmers' demand

## 5: Promoting digital technology in Myanmar

- Objective: Increase farmers' access to quality seed of improved varieties
- How: Mobile based application system that connects the seed sellers and farmers in one platform
- Findings: Seed sales of improved varieties of rice increased
- Relevance: Farmers have more options on variety and seed sellers choice nearest to their production environment



# Increasing farmers' demand

## 6: Using seed vans in Northern Ghana

- Objective: Increase farmers' access to quality seed of improved varieties
- How: Seed vans traveling to rural communities, providing seed and information
- Findings: Seed sales of agro-dealers increase
- Relevance: It pays off to invest in last mile approaches



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# Thank you

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For more information  
please visit:

[www.ISSDseed.org](http://www.ISSDseed.org)

