Understanding farmer-managed seed systems: Regulatory and non-regulatory influences

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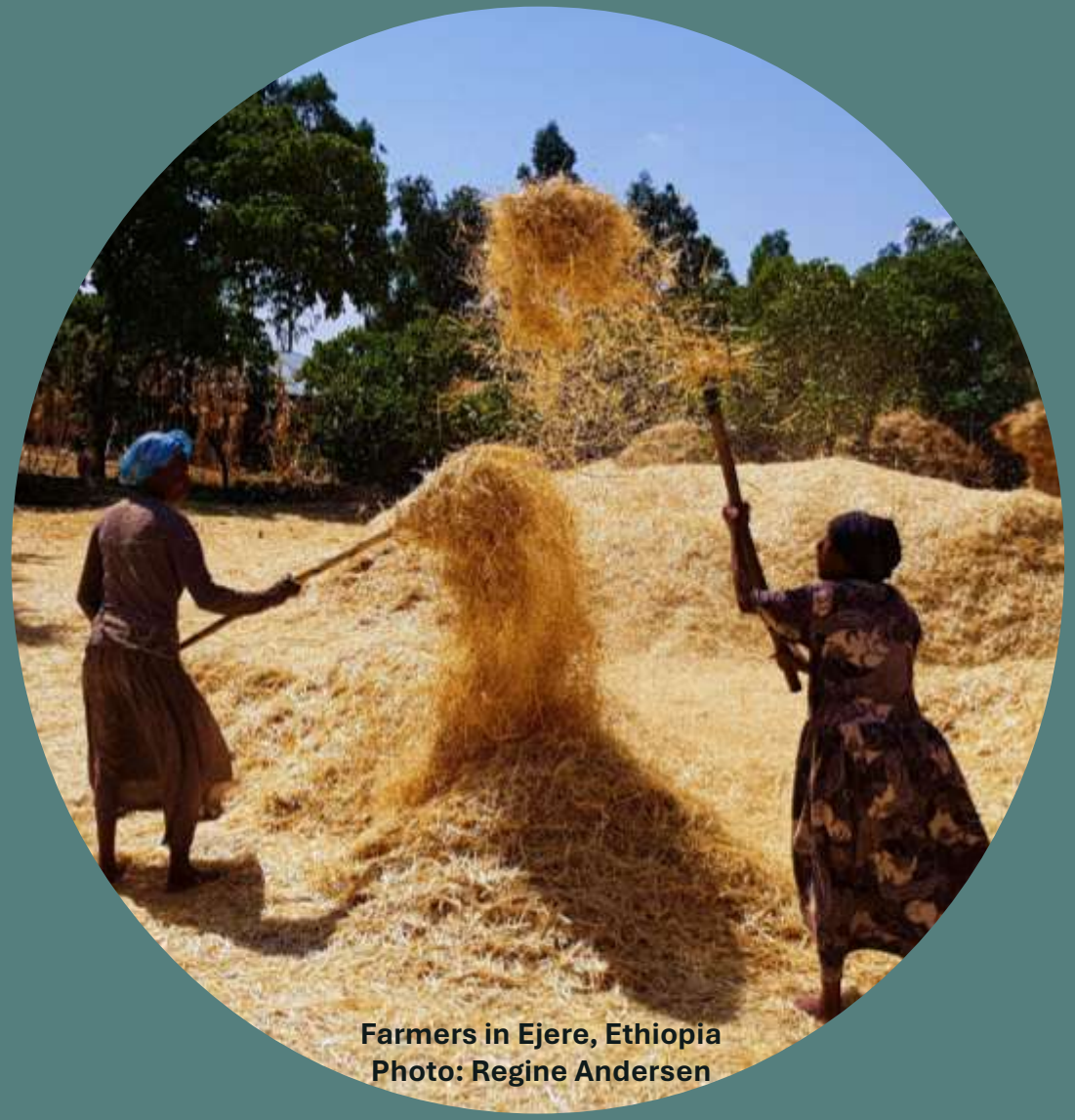


Farmers in Ejere, Ethiopia
Photo: Regine Andersen

WHAT ARE FARMER-MANAGED SEED SYSTEMS?

Formal seed systems in a nutshell

- Farmers buy certified seeds of registered varieties developed in scientific breeding programmes.
- They buy these seeds from authorised seed shops.
- The seeds have been officially tested for optimal quality.
- The varieties are genetically distinct, uniform and stable.
- They have been evaluated for their adaptation to specific farming systems.
- The seed sources are normally commercial companies or national research programmes.
- The structures of the system are defined by law.

Photo:
Viviana Meixner Vásquez

Farmer-managed seed systems in a nutshell

Photo: Guenay Ulutuncok

- Farmers save, use, exchange and sell farm-saved seed.
- They use local unregistered varieties, locally enhanced registered varieties, **as well as varieties that are protected with plant breeders' rights** – according to their preferences and the availability.
- Through seed selection, they may also enhance or diversify the varieties at hand.
- Exchange and sale normally take place within the local community and neighbourhoods.
- As these systems develop from the ground, there is great variation and diversity between and among them.
- The systems are normally not defined by law, and their practices are more or less tolerated under the law.

WHY DO FARMER-MANAGED SEED SYSTEMS MATTER?

Some pros and cons among smallholder farmers in the Global South

Formal seed systems:

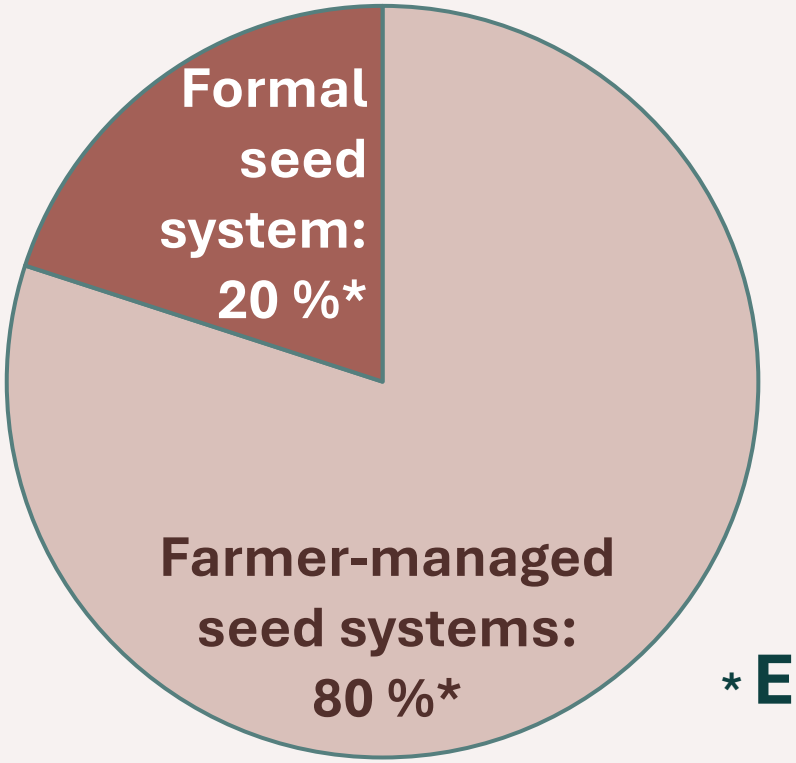
- Varieties are high yielding under optimal conditions and with inputs such as fertilisers and pesticides.
- Optimal conditions cannot be guaranteed and input requires investments which may be risky for smallholder farmers if harvests fail.
- Seeds are normally of high quality.
- Seeds are not accessible for small-holder farmers who cannot afford to buy them and/or they are not always available in time for sowing.
- When widely used, varieties may wipe out local crop genetic diversity.

Farmer-managed seed systems:

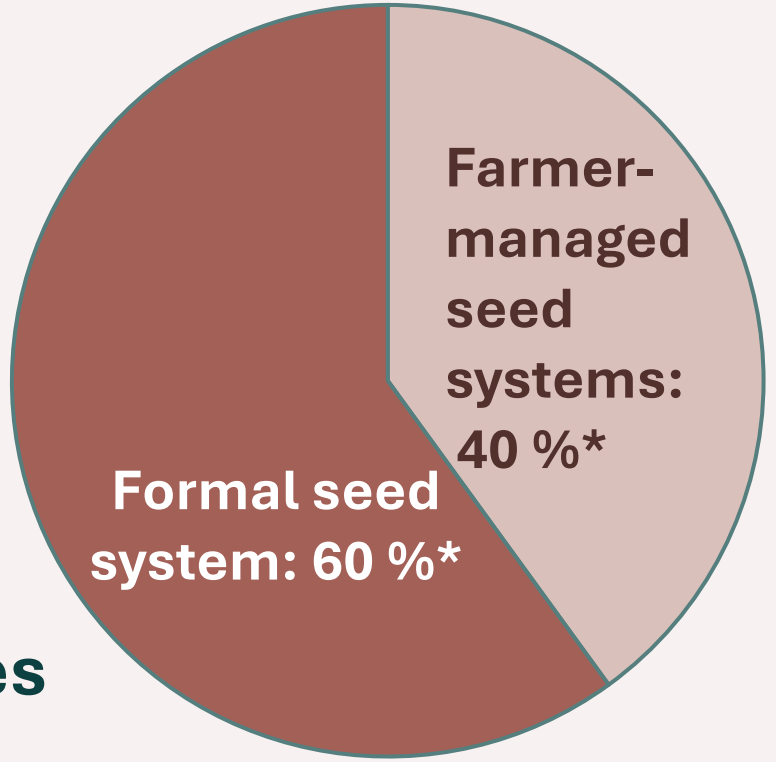
- Varieties are adapted to local conditions and climate change and thus normally regarded as robust.
- There is little effort to systematically improve local varieties and thus they are often not as high yielding under optimal conditions.
- Seeds are locally available and accessible in time for sowing.
- The seeds are of varying qualities: As there is no certification system, trusting the producer is essential.
- Local crop genetic diversity is main-tained on-farm for future generations.

Seed sources in the Global South - Examples

AFRICA



INDIA



* Estimates

FMSS are estimated to supply the large majority of seed used by African smallholder farmers, commonly reported as approximately 80–90%, although estimates vary by country, crop and the indicator used (Louwaars & de Boef, 2012; Biemond, 2013; McGuire & Sperling, 2016).

In India, roughly 35% to 46% of the seed used for general field crops comes from FMSS, though this share varies considerably by crop type (Pal, G., Sripathy K.V., U. Bhaskar K., K. Kumari, S.P. J. Kumar, D.K. Agarwal, S. Kumar, 2022)

Mkombezi CSB, Malawi:
The diversity block
Photo: Regine Andersen

Experiences from Malawi

Based on results from the DIVERSIFARM research project, led by the FNI. See e.g. Andersen R., V. Meixner Vásquez and R. Wynberg, 2022

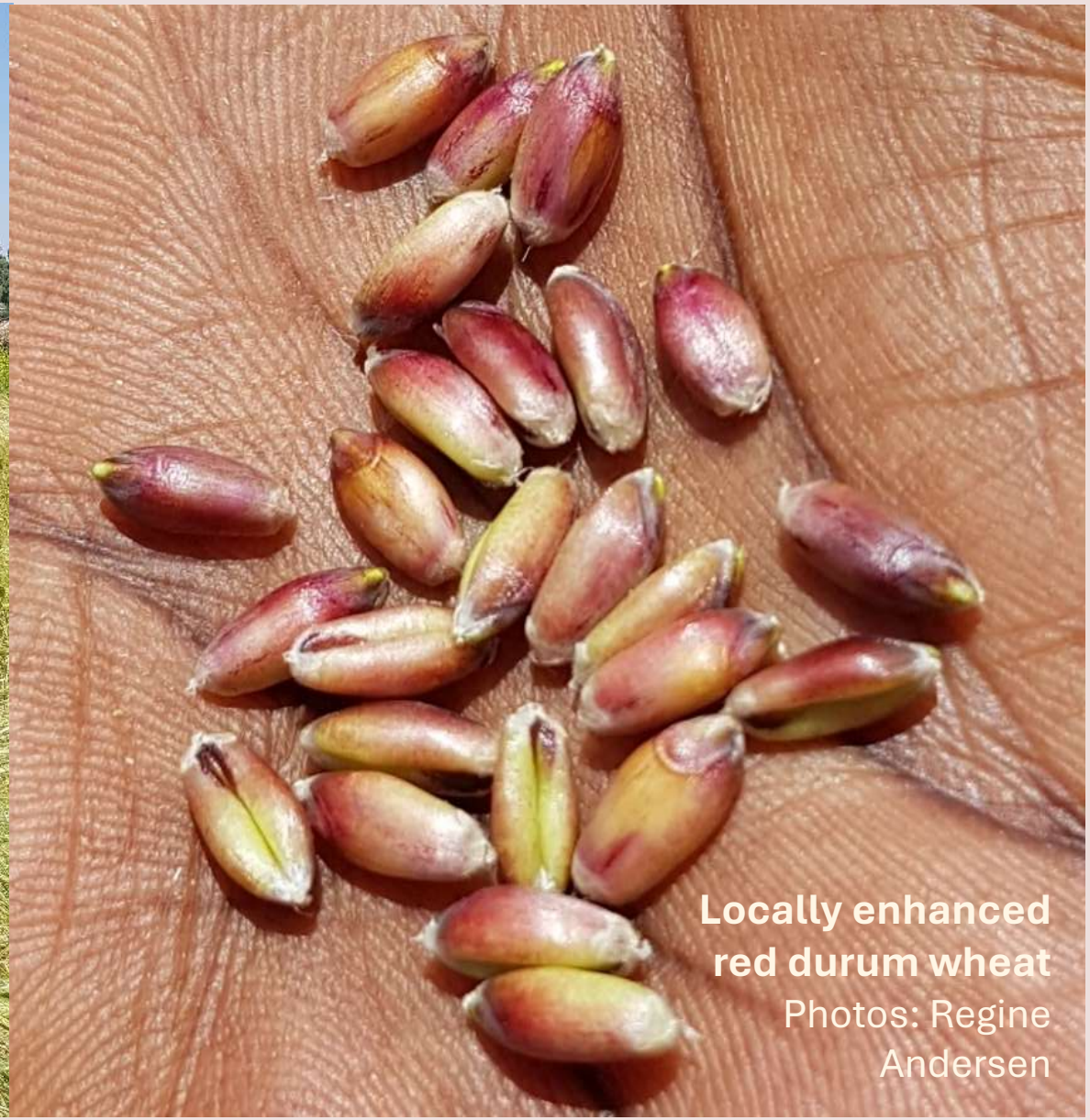
- The lean period is getting longer due to climate change: Many farmers have had to offer their seeds as food. Seed shortage & genetic erosion are results.
- When asked what they wish to grow if seed were available, consulted farmers in different parts of Malawi said they prefer enhanced local varieties.
- Community seed banks are central platforms for enhancing farmer-managed seed systems

Experiences from Ethiopia: Ejere Community Seed Bank

Photo: Regine Andersen

Locally enhanced, nutritious high-yielding varieties

Ayelu Dinku, Farmer, Ejere



Locally enhanced red durum wheat

Photos: Regine Andersen

A STRIKING PARADOX

Legislation, policies and financial support primarily favour the formal seed system, while the farmer-managed seed systems that provide most of the seed in many countries of the Global South remain largely neglected.

Both types of seed systems are needed

- Both types of seed systems play a pivotal role in promoting seed and food security and both should be promoted to develop their full potentials in this regard.
- There are great potentials in enhancing farmer-managed seed systems from within, including through support from the formal seed sector.
- The formal seed sector can learn from farmer-managed seed systems about farmers' participation and involvement to become more demand-oriented.

REGULATORY AND NON-REGULATORY INFLUENCES

Regulatory influences

Smallholder farmers in the Global South are normally subsistence farmers who sell their surplus when possible, to buy what they cannot grow.

They do normally not differentiate between local and **commercial varieties that are protected with plant breeders' rights**, but save and use what they prefer.

Small-holder farmers **need flexibility** to continue these customary practices.

As long as seed is not labelled for marketing, this is **private non-commercial use**. Plant variety protection legislation should safeguard such flexibility. This is critical.

Non-regulatory influences

Rather than largely neglecting farmer-managed seed systems, seed policies and support schemes should actively promote these systems and community seed banks, enabling them to realise their full potential to contribute to seed and food security in the Global South.

The International Treaty

ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Adopted in 2001 and entered in to force in 2004.

<u>Objectives:</u> Conservation and sustainable use of plant genetic resources for food and agriculture (PGRFA) and fair and equitable sharing of benefits arising from their utilization – for sustainable agriculture and food security.

<u>Special provisions</u> on Farmers' Rights related PGRFA.

www.fao.org/plant-treaty

www.farmersrights.org

Members of Mkuli CSB
Photo: Regine Andersen