Germplasm selection, sourcing, production and supply for restoration of forests and agroforest landscapes

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Based on

and
From the point of view of germplasm input supply, FLR requires:

- adapted productive planting material (germplasm)
- species that useful to rural people and/or have product markets

Germplasm input supply thus requires:

- a large number of quality seed sources (many species and environments)
- efficient distribution networks for seed and seedlings
- well organised networks and hubs for information flows
Forest landscape restoration (FLR) and germplasm

Current situation:

Germplasm delivered to smallholder farmers generally has a quality that would be considered unacceptable by the industrial tree plantation or agriculture sectors.
Provision of germplasm is characterized by the \textbf{BROKEN CHAIN}.

\textbf{Sources and nursery networks are not integrated into value chains.}
Provision of germplasm is characterized by the **BROKEN CHAIN**

*Input supply and value chains in restoration*

**Sources and nursery networks** are not integrated into value chains.
Why the broken chain? - Institutional constraints, not technical

A key problem causing the broken chain is a focus on supply to meet short term planting targets => projects financing collection of seed and distribution of seedlings

Symptom of the market failure = predominant use of farmland seed sources, which are poor substitutes for good quality seed sources (seed orchards and natural forests).

Ideal alternative: create demand-based production and distribution networks

<= investments in quality sources + seedling distribution networks + knowledge networks
Mending the broken chain? - Institutional constraints, not technical
How to get there?

The institutional constraints for **tree seed and seedling** inputs are the same as that of for agriculture, where smallholders also face problems of accessing **crop seed**.

A solution would require solving a bundle of constraints, much like the **approach of AGRA (Alliance for a Green Revolution in Africa)**,

The differences lie in the nature of seed sources and seedling networks, Solutions are principally the same – finding a balance between **public and private roles**

More details in the forthcoming article!