

Soil Protection and Rehabilitation of Degraded Soil for Food Security (ProSoil) project

Component Madagascar

Seed access schemes planned in the Boeny Region

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Mise en oeuvre par

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für Internationale
Zusammenarbeit (GIZ) GmbH



WORLDWIDE CONSULTANTS

Plan

Why is it important for ProSoil to develop sustainable access to quality seeds for farmers ?

How do we select and produce appropriate mother-seeds ?

How can we ensure that the seeds produced are of high quality and diverse enough to adapt to local conditions and climate change ?

How are the seeds produced distributed to the target farmers?



**Why is it important
for ProSoil to
develop sustainable
access to quality
seeds for farmers ?**

Framework and issues of farmers' access to seeds for ProSoil



Implementing large-scale sustainable soil protection and rehabilitation approaches



Planting crops on the ground (service plants, food crops, cash crops, forage)



Need for access to quality and diversified seeds



Adaptation to local contexts: different agro-ecological conditions, limited means of farmers, market-oriented production (black-eyes, antsoroko, maize), food security (rice, cassava, etc.), degeneration of the qualities of seeds used



Resilience to climate change (drought, irregular rainfall, etc.)

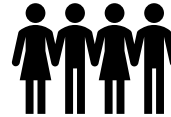


**How do we select
and produce
appropriate mother-
seeds ?**

Participatory variety selection with FOFIFA (1/2)



Exchanges with international research centers (ICRISAT, IITA, CIAT, CIRAD) and national actors (FOFIFA, CTAS)



Inventories of local varieties of interest to farmers (village workshops at different seasons, collection of samples, etc.)



To be adapted



To be improved



Acquisition of accessions (genetic starting material)



Multiplication during some seasons in regional research stations so that the varieties are distinct, homogeneous, stable, with interesting agronomic and technological values (Mangatsa Station for agriculture and Miadàna Station for forage)

Participatory variety selection with FOFIFA (2/2)



Multi-location testing in farmers' environments and Characterization of varieties




Selection of varieties of interest to farmers



Submission to seed system stakeholders represented in a regional committee called "CRCIV" (including seed producers, government technical services, researchers, private company platforms, and farmers' organizations)



Approval of varieties by the Official Seed Control Service (SOC): official registration in the register of seed varieties that can be legally produced and marketed in the national territory



How can we ensure that the seeds produced are of high quality and diverse enough to adapt to local conditions and climate change ?

Implementation of the "Quality Declared Seed" or QDS system (1/3)

Seed production systems in Madagascar :

Informal System

- No specific seed production: uncontrolled seed quality
- Seed drawn from the previous season's production by massal selection;
- Use of local variety but which tends to degenerate from year to year;
- Low cost and largely ensures farmers' access to crop seeds

Conventional System

- Production of seeds by private establishments because it requires human and financial resources
- Standards according to the OECD model, generalized and do not take into account the specificities of regional contexts
- Control and certification procedure over several years;
- Expensive seed prices: not very accessible to farmers;
- Seeds mostly sold through emergency aid, agricultural projects and private companies

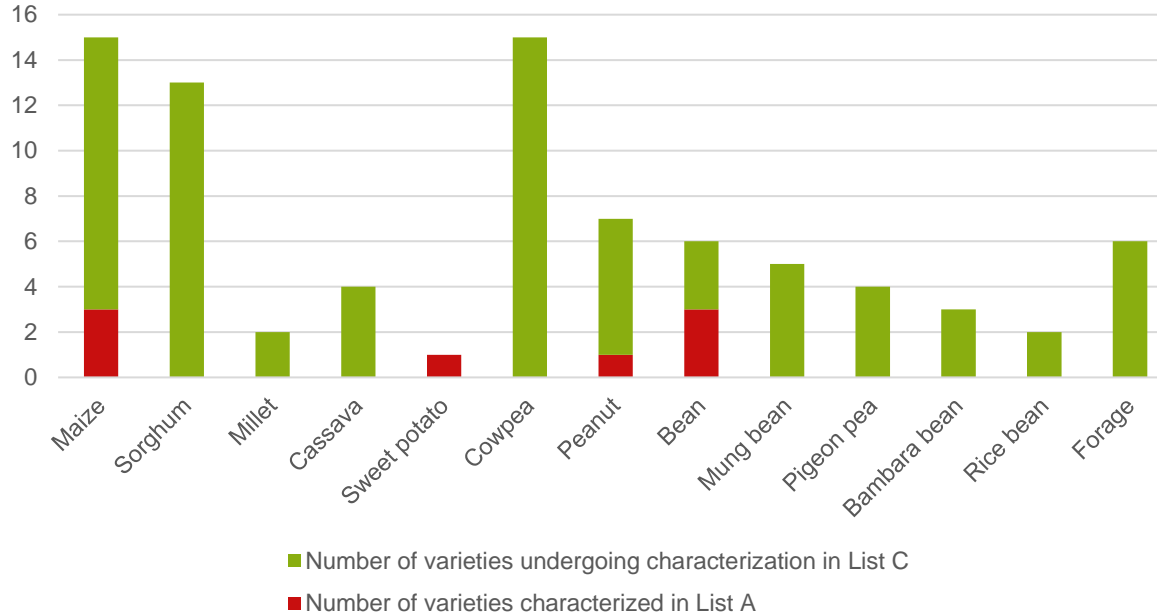
QDS System

- Consensus system: compromise between the capacities of seed farmers and conventional standards;
- Same steps to follow as the conventional system with the Official Seed Control and certification Service
- Flexible standards, corresponding to local agricultural contexts, at lower cost, site close to farmers.

Implementation of the "Quality Declared Seed" or QDS system (2/3)



Register showing a great diversity of seed varieties used:
83 varieties currently used in the Boeny region



Vegetable crop varieties are not yet counted (carrot, tomato, etc.).

And dozens of varieties of sorghum, millet and cajanus are also monitored in the South with CTAS.

Implementation of the "Quality Declared Seed" or QDS system (3/3)



The quality standards are agreed at the level of the regional committee " CRCIV " which represents all the seed actors.



Cultivation rules :

origin of the mother seeds, minimum surface, previous crop, crop association, phytosanitary state of the plots



Control in storage :

proportion of controlled lot, maximum quantity of a lot variable according to the species, sampling



Field controls :

proportion of controlled area, stage of control, spatial isolation, temporal isolation, varietal purity



Laboratory controls :

water content, specific purity, varietal purity, generation number, germination rate

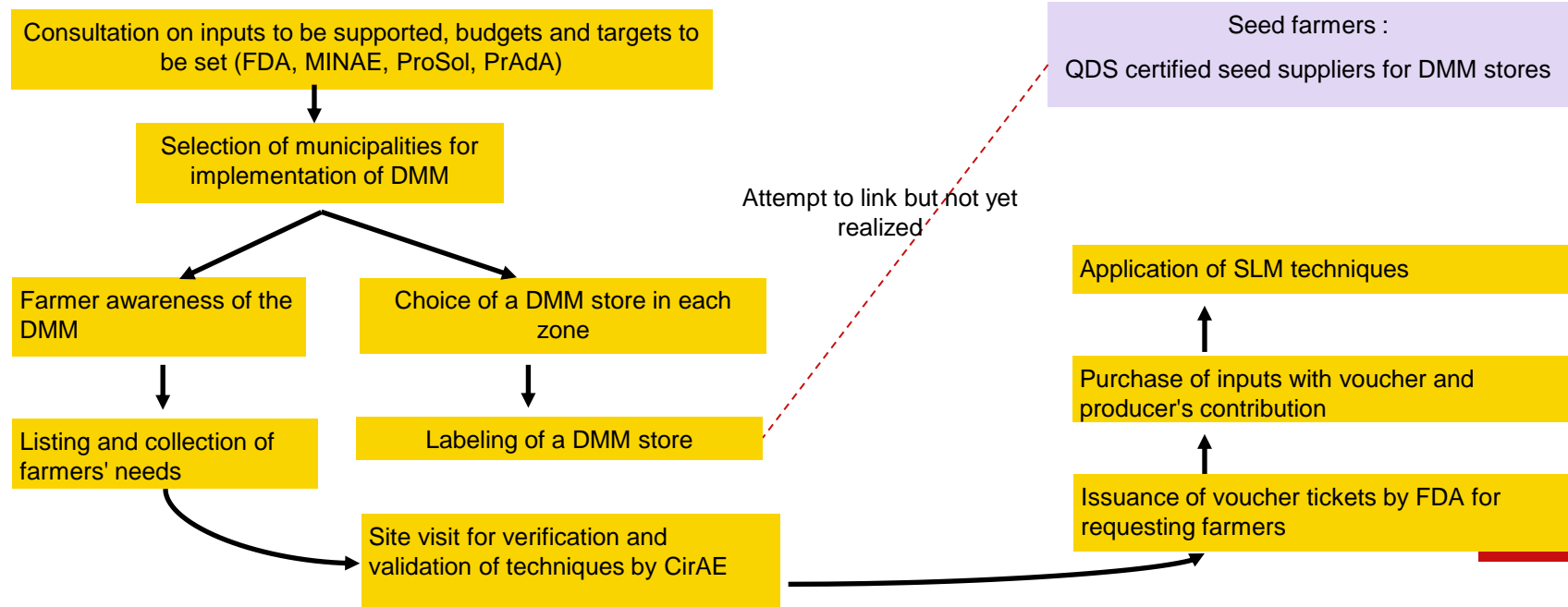


**How are the seeds
produced
distributed to the
target farmers?**

Testing the DMM mechanism (Dokany Mora ho an'ny Mpamokatra)



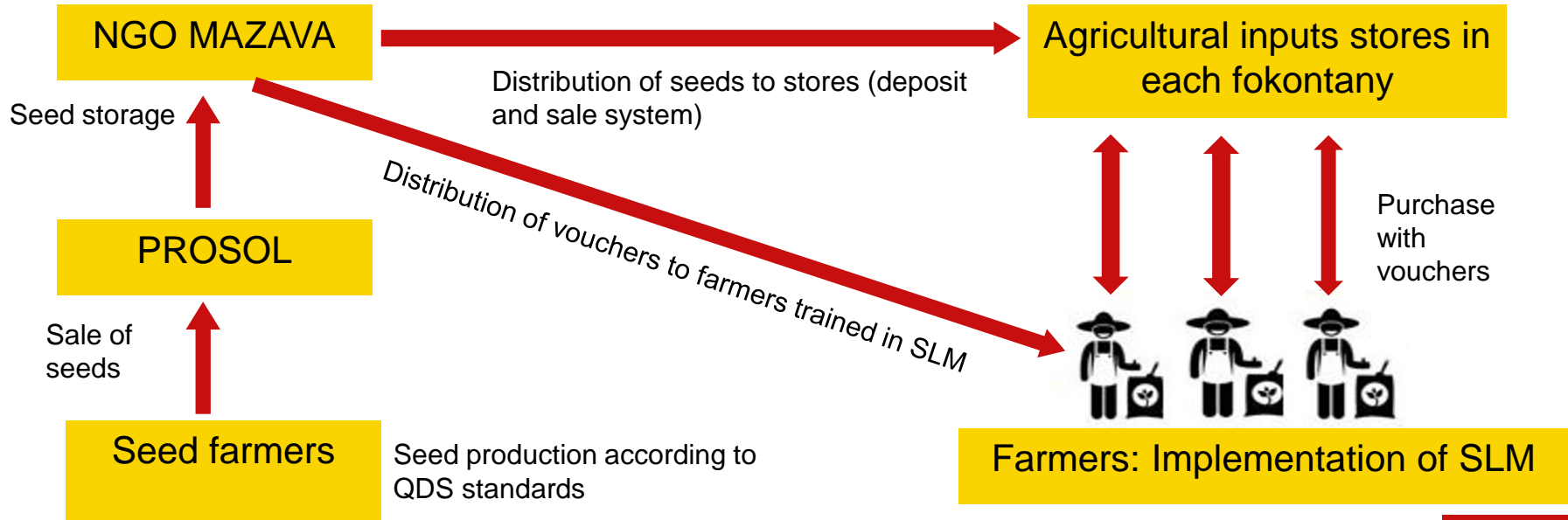
DMM = Store selected (by open tender) **by the Ministry of Agriculture, at the level of which it subsidizes the price of certain priority inputs** such as legume seeds (subsidized at 90%) and agricultural equipment (subsidized at 70%) for SLM application.



Test distribution through a local NGO and local stores



A seed distribution test through the NGO Mazava and 4 stores in the commune of Tsaramandroso is underway using vouchers : 85% of the prices are subsidized; the 15% paid by the beneficiaries ensures the income of the shopkeepers.





Thank you

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