Agrobiodiversity key for pro-poor development and ecosystem services

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Biodiversity vs Cultivated Agrobiodiversity in agricultural production systems

Wild Biodiversity

Associated BFA: Biological control agents, pollinators, soil microorganisms contribute to the health and functioning of the agroecological production systems

Negative impact of agriculture on biodiversity also well studied

- Adaptation to biotic and abiotic stresses
- Reservoir of genetic resources
- Key for nutrition
- New market opportunities
- Valuable cultural traditions
- Contribution to the provision of ecosystem services

Intraspecific Diversity in Agricultural Production Systems

- Provision of ***provisioning*** and ***cultural services*** emphasized historically, as well as
- Use of specific ***adaptive traits*** for breeding and marketing

→Role in the provision of ***regulating*** and ***supporting ecosystem services***

→Impact of the counterfactual: ***lack of intraspecific diversity*** on the provision of these services

Some of the following slides have been removed – material unpublished, under review

Scaling Up Modality	Description Moving from Local to National to International Scale
ADAPTATION	An intervention is scaled up by adapting it to other geographical contexts, different beneficiaries and farming communities, and various target agricultural species.
DIFFUSION	An existing intervention is scaled up by communicating it to new stakeholders and by improving the collaboration and partnership among various stakeholders.
REPLICATION	An existing intervention is scaled up to new stakeholders at different sites.
VALUE ADDITION	An intervention is scaled up so that the same people, performing the same task, can earn more and obtain access to new market opportunities.
TEMPORAL SCALING UP	An intervention which is supposed to be introduced for a limited amount of time is scaled up over a longer time frame.

Source: Bernis-Fonteneau et al. 2023. Scaling Up Pro-Poor Agrobiodiversity Interventions as aDevelopment Option

Agrobiodiversity interventions for pro-poor development

Crucial role in sustaining ecological functions in agricultural systems
→ Small-scale farmers rely on this diversity to enhance productivity, income, and resilience against unpredictable climatic and economic conditions

Poorer households in rural areas

- are highly dependent on the agrobiodiversity
- cannot afford substitutes
- use agrobiodiversity as a risk-management strategy
- benefit from the use of local varieties/breeds to improve incomes, food security, nutrition, health, local cultural identity

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Alliance Bioversity & CIAT

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development and Cooperation SDC

Resilient FOOD SYSTEMS

How can DATAR support the production system

Some examples

GOALS
- Improve productivity under particular environmental conditions
- Increase sustainability

ASSESSMENT
- Characterization
- Functional traits

CONSTRAINTS
- Inhibiting policies
- Insufficient genetic diversity in the production system

INTERVENTIONS
- Community Seed Banks
- Biodiversity registry
- Diversity Fairs
- Registration of farmers varieties

MONITORING AND EVALUTION
- Diversity benefits
- Development benefits
- Interventions

DATAR
Diversity Assessment Tool for Agrobiodiversity and Resilience

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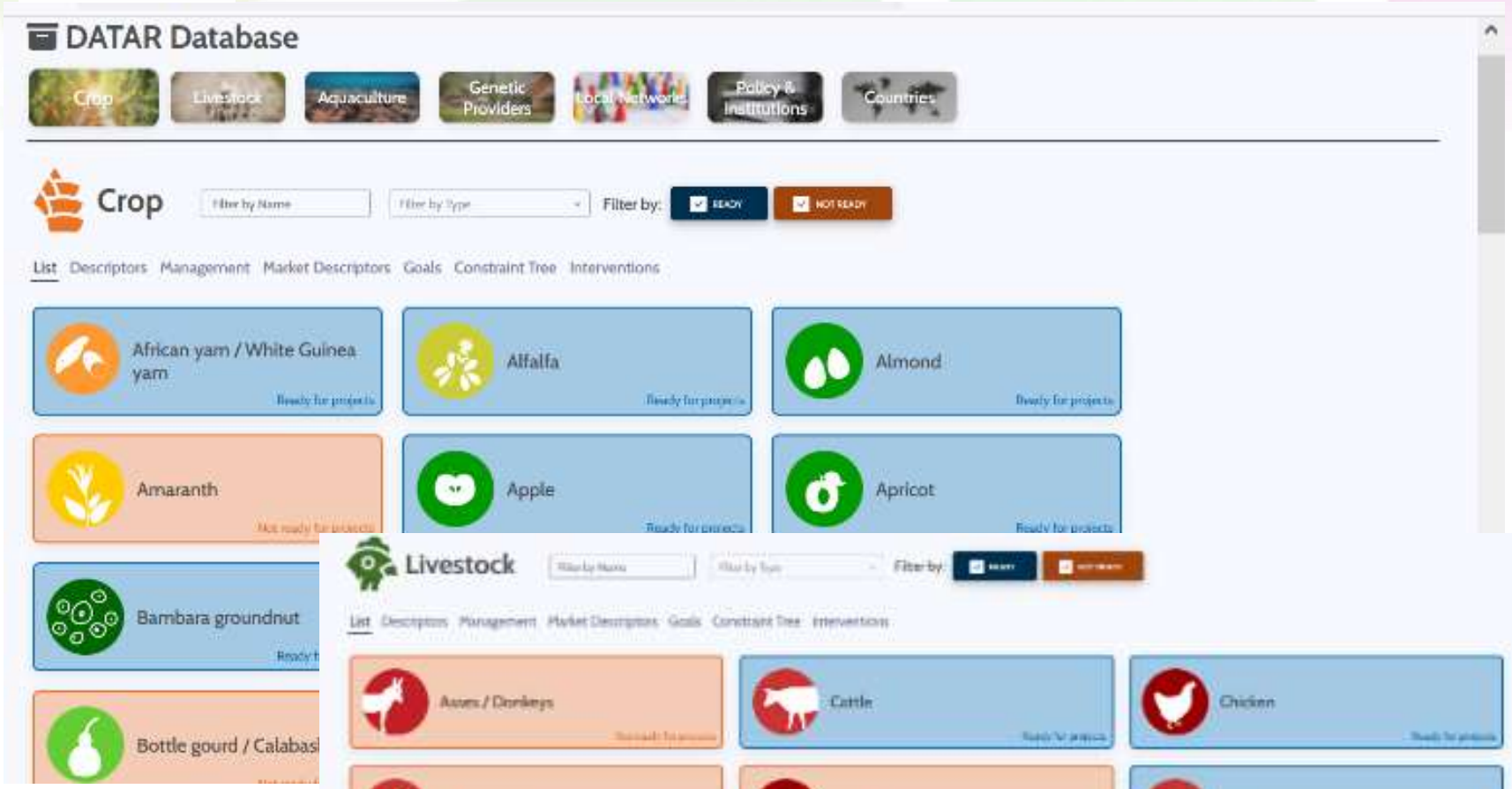
Selecting Target species with the Community



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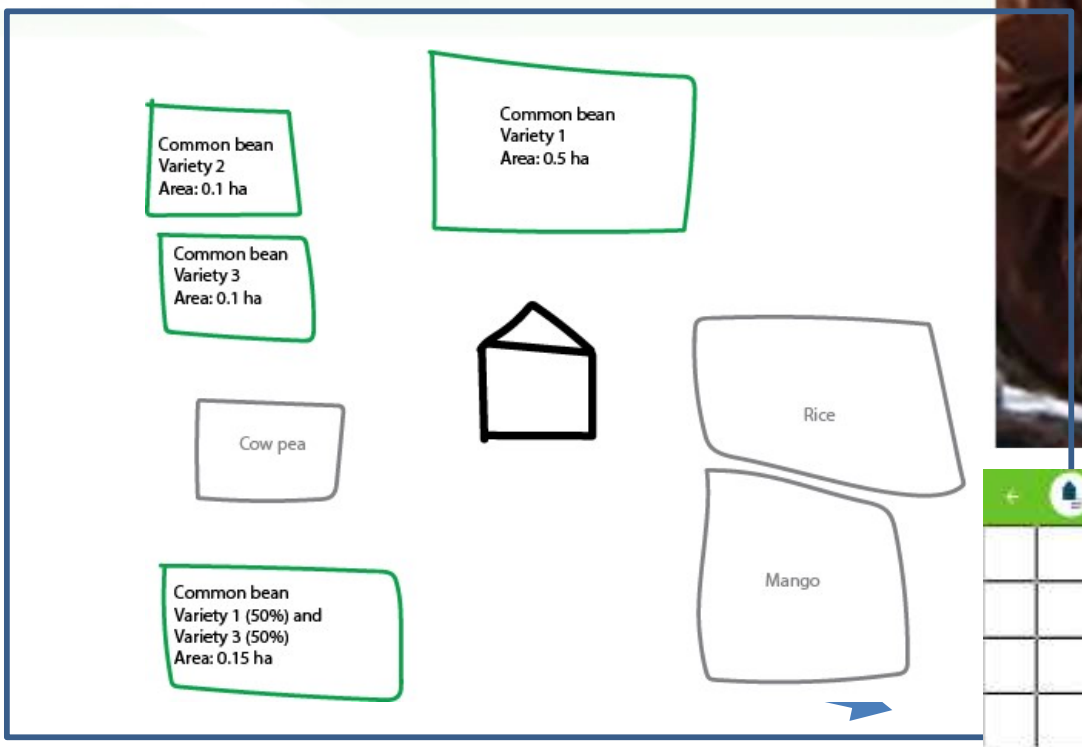
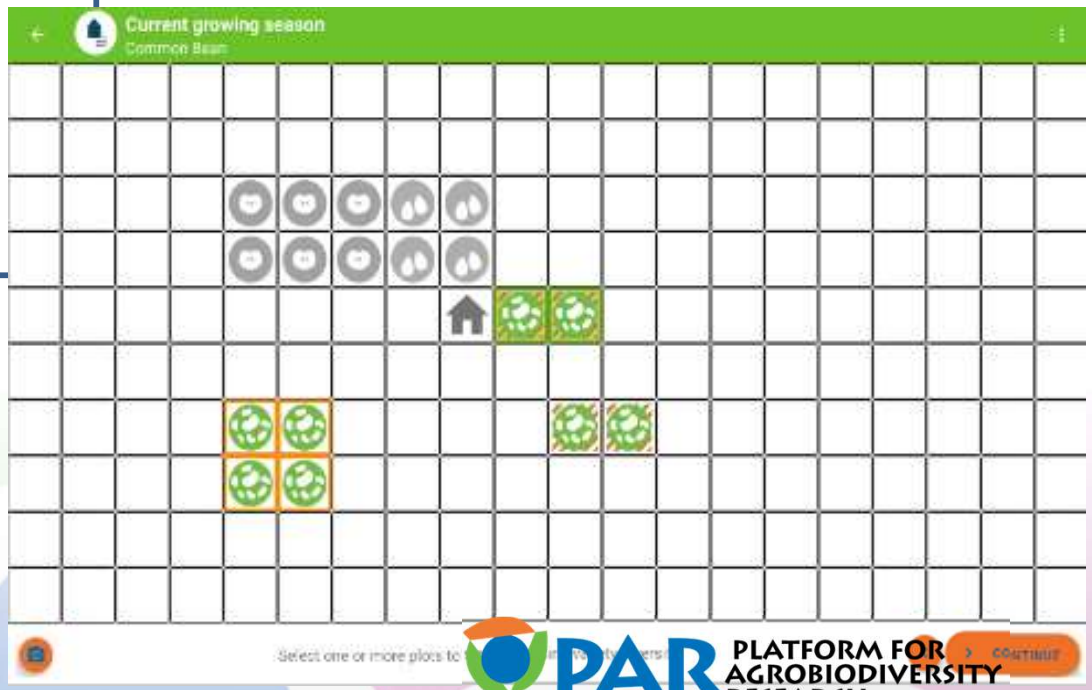
Data Collection – surveys

DATAR
Diversity Assessment Tool for Agrobiodiversity and Resilience

Household Surveys





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Key Informant Survey (KIS)

Management

Survey to collect information on agricultural management practices and genetic diversity choices and strategies.

Local networks

Survey to collect information on local institutions and networks, and the dynamics of the social fabric in link with agro biodiversity.

Site level surveys

Genetic material provider

Survey to collect information on Genetic Material Providers and the varieties / breeds / farmed types of different target species they provide.

DATA INPUT

OUTPUT TABLES

Market

Survey to collect information on market aspects for the different target species (it includes market costs and values, transport, processing, labour involved etc...)

DATA INPUT

OUTPUT TABLES

Policy & Institutions

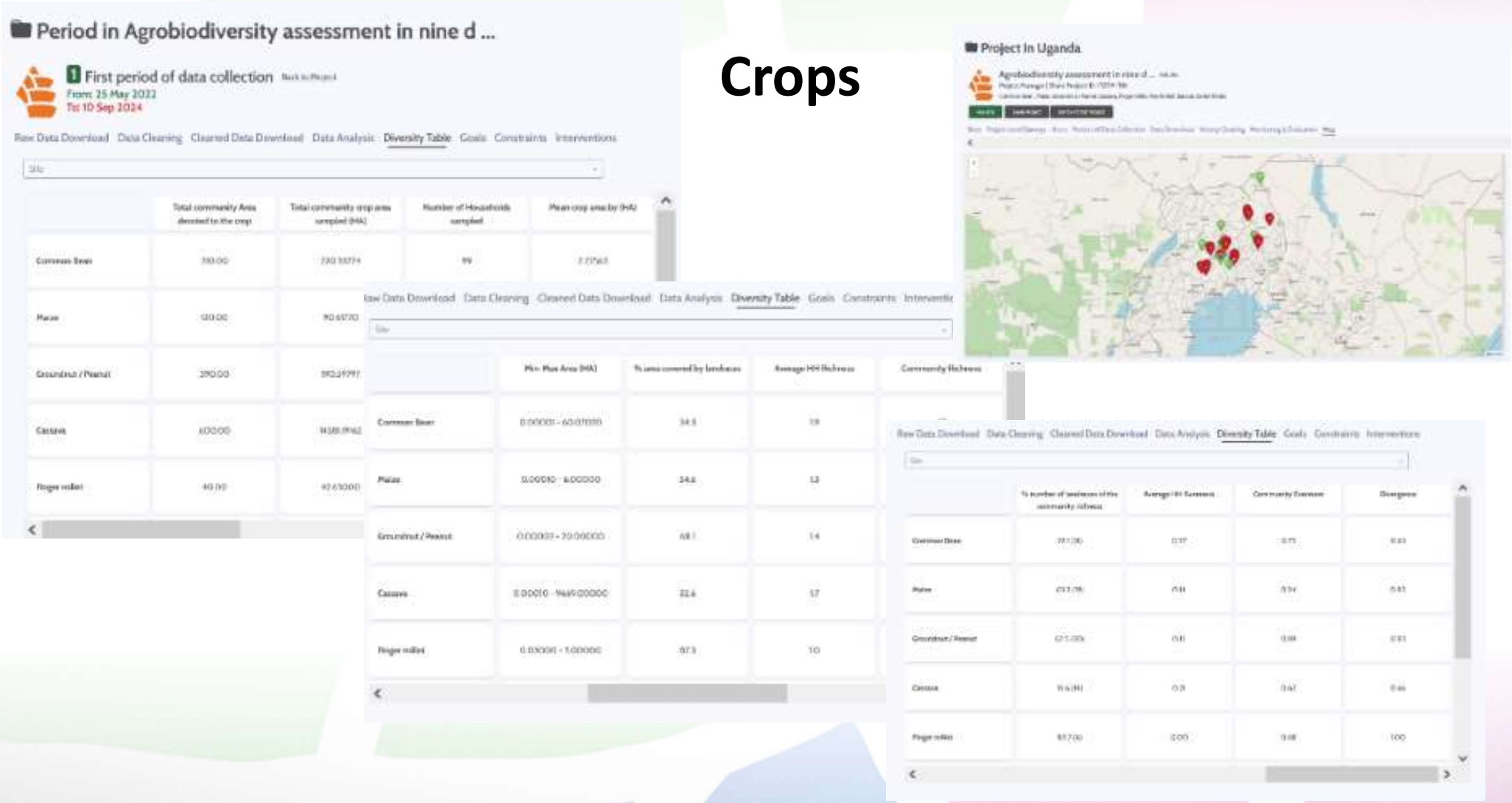
Survey to collect information on national policies and regulations applying to genetic material and products and their flows for the crop, livestock, and aquaculture sectors.

DATA INPUT

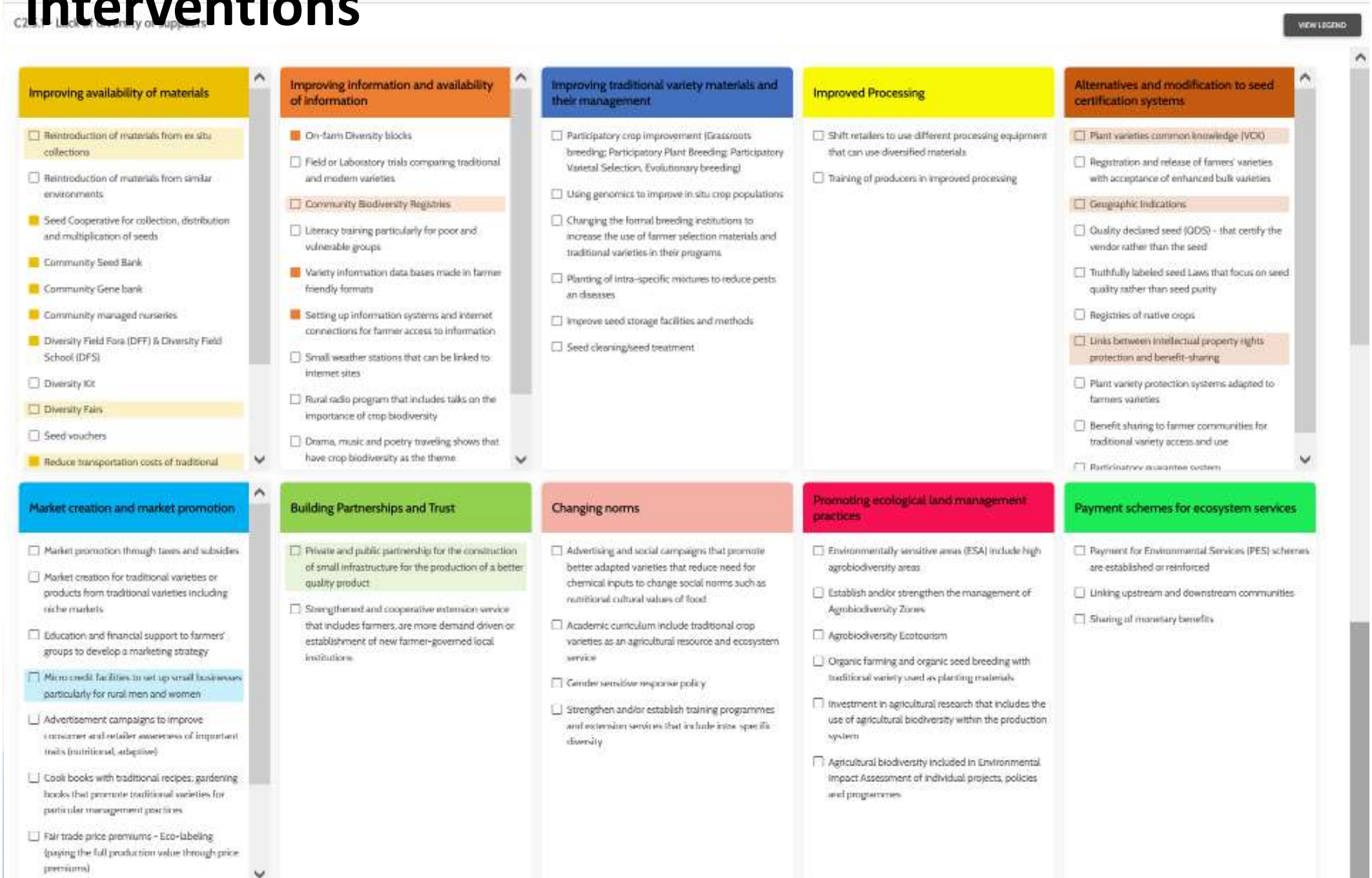
OUTPUT TABLES

Project/Country level surveys

DATAR automatically calculates all GEF Tracking Tool for Agrobiodiversity Indicators at project and site levels



10 categories of agrobiodiversity-related interventions



www.datar-par.org

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Thank you!

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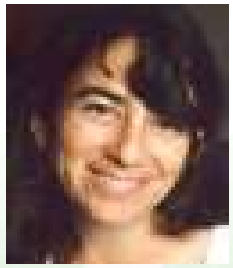

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