





Measuring Seed Sector Performance Workshop: Mainstreaming Agrobiodiversity in Sustainable Food Systems 25 October 2016, Abidjan



Agricultural biodiversity nourishes people and sustains the planet

Photo credit: LI-BIRD/A.Subedi



BACKGROUND



Diversity and sustainable food systems: trends, goals and targets

"What is required is a fundamentally different model of agriculture based on diversifying farms and farming landscapes" , iPES 2016





Diversity and sustainable food systems: gaps

- there is no **consistent** way of tracking agrobiodiversity in food systems.
- monitoring is scattered, using different methods, at different scales, for different reasons

If we cannot measure diversity, we cannot manage it.







Background – objectives and timeline

A consistent, long-term monitoring system for agrobiodiversity applied across four sustainable food system dimensions,

- To provide insights into agrobiodiversity trends for different sectors and in different locations
- To furnish key data for allocation of financial resources
- To demonstrate how agrobiodiversity contributes to SDGs and the CBD
- 2016: Interacting with partners, experts, developing foundation
- 2017: Feasibility study
- 2018: Testing with pioneer countries and companies



AGROBIODIVERSITY INDEX



What is the Agrobiodiversity Index?

A consistent, long-term monitoring system for agrobiodiversity to be applied across four sustainable food system dimensions:



Nutritious, diverse diets

Productive and resilient farms and landscapes Farmers' access to diverse varieties of quality seeds Integrated conservation of agrobiodiversity



METHODOLOGY



Methodology – type of indicators



- Diet diversity indicators
- Food market/value chain diversity indicators
- Enabling environment indicators

- Ecosystem services indicators
- Wild biodiversity
- Enabling environment indicators



- Access
- Quality
- Supply
- Innovation
- Conservation of seed
- + Enabling environment



- In situ conservation
- Ex situ conservation
- On-farm conservation
- Enabling environment indicators

Methodology – Data in...





Methodology – Data out



Methodology – challenges and assumptions

- Consistently reliable and available secondary and primary source data
- Complementarity with existing tools, metrics, indices
- Application at multiple levels (companies and countries)
- Application to investor decisions including timeframes



Next steps

- Convention on Biological Diversity Side Event <u>5 December</u>
- Feasibility study: stakeholder consultation, architecture and governance
- Testing in pioneer countries and private partners
- Developing investment instrument(s) and trialing
- Rolling out to additional locales and companies
- Periodic validation and improvement
- Report every two years





Thank you



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Methodology –seed dimension indicators

- Extent of participatory plant breeding
- Range of materials considered in breeding programs, eg
 - Use of traditional varieties as foundation seed or
 - Extent orphan crops incorporated in breeding programs
- Number of species for which crop improvement investments made
- How public monies are spent when it comes to breeding R&D (which crops)
- Capacity and success rate of farmers who want to register their varieties



Secondary sources seed data (sample)

- FAO plant breeding inventory
- Agricultural research investments
- WB Living Standards Measurement study Integrated Surveys on Agriculture
- ATSI? EBA?



Methodology – sample of draft indicators







Minimum Dietary Diversity for children <2 Diversity of retail outlets % dietary energy from non-staples

Shannon Index of production applied to FAOSTAT data **Remote sensing:** Land-use intensity Landscape heterogeneity Geographic source of varieties **FAO plant breeding inventory** Agricultural research investments Ex situ enrichment index Percentage of cultivated land under farmers' varieties/landraces