

AKIH

Agrobiodiversity Knowledge and Information Hub

Development of a decision support
facility for agrobiodiversity
conservation and management

Rationale

- Human societies have always adapted agrobiodiversity to enable food security BUT rapid pace, complexity and severity of the global change call for new forms of intervention.
- Climate changes: Increased variability of critical weather parameters
 - temperature during the growing season,
 - timing and intensity of precipitation,
 - frequency of extreme weather events
 - agricultural pest populations,
 - viability of agricultural crops needed for food security.
- → increased uncertainty and vulnerability of smallholder farming systems in many countries, particularly those in less economically developed regions.

Rationale

- Agrobiodiversity and crop diversity are key assets that communities can exploit to adapt to global climactic change
 - Smallholders farming
 - Primary global resource on knowledge and use of ABD.
 - But insufficiently studied and understood.
 - In what ways do smallholder farming practices already address important climate change adaptation behaviors and structures,
 - In what ways are they limited in their ability to respond to climate variability?
 - To what extent and under what conditions is ABD utilized and how can it be more effectively utilized?
- New scientific knowledge, interdisciplinary approaches and methods, and information sources and technologies => opportunity for exploring and applying information-based interventions.

ABD - Climate

- Multiple geographical scales
 - structure of human interaction and organization
 - ecological and environmental processes
- → integrated approach designed and developed, with local communities
- → use of information technology to mitigate farmer and farmer society vulnerabilities
- → distributed information facility
 - recognizes how crop and farming systems are part of broader ecological landscapes
 - makes that information available to farmers

Overall ambition

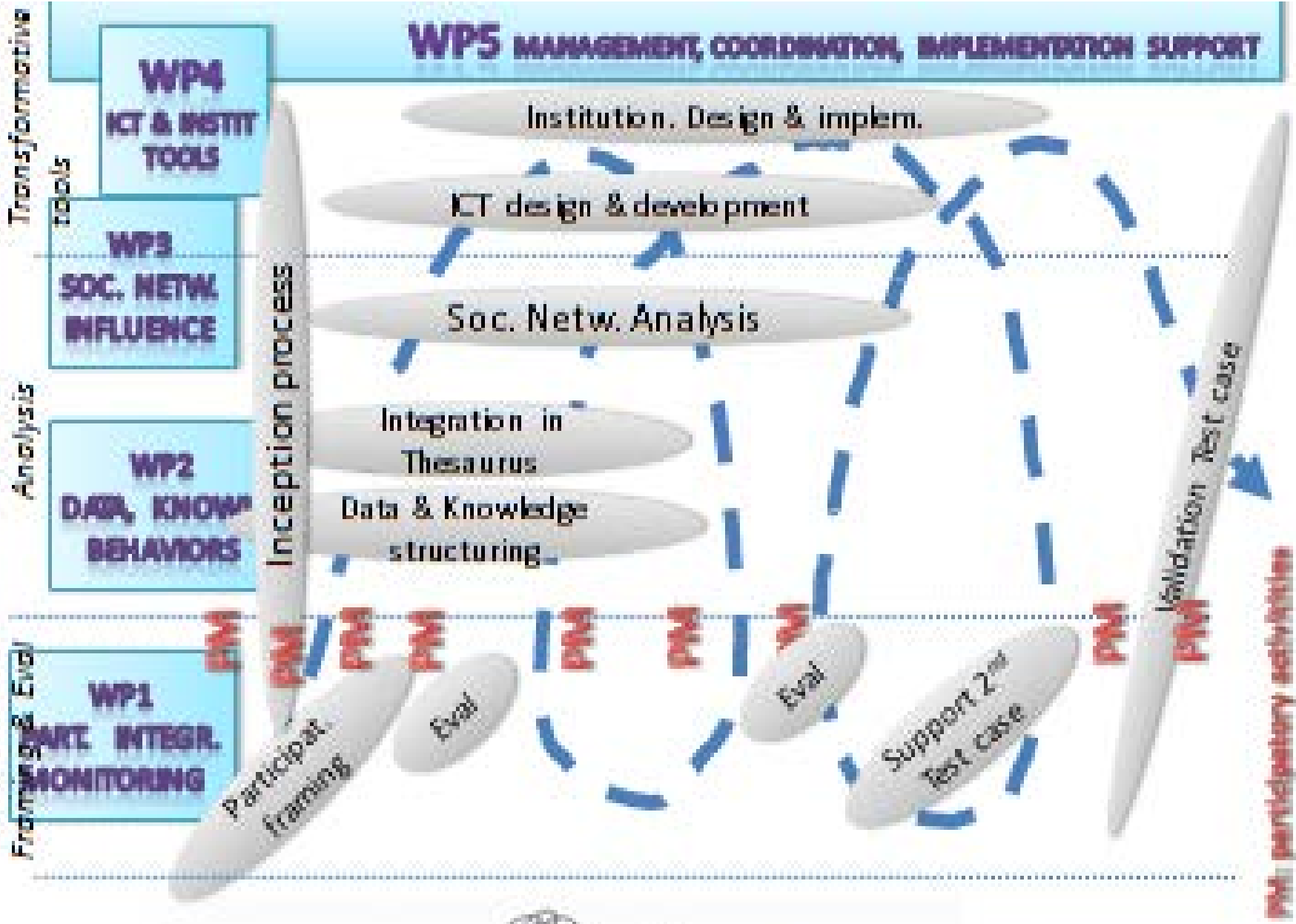
- To increase our understanding on how ICT could be used to combine local practical knowledge with globally-relevant knowledge and information
- for more informed choices to be made by various communities on agrobiodiversity management in response to global changes.

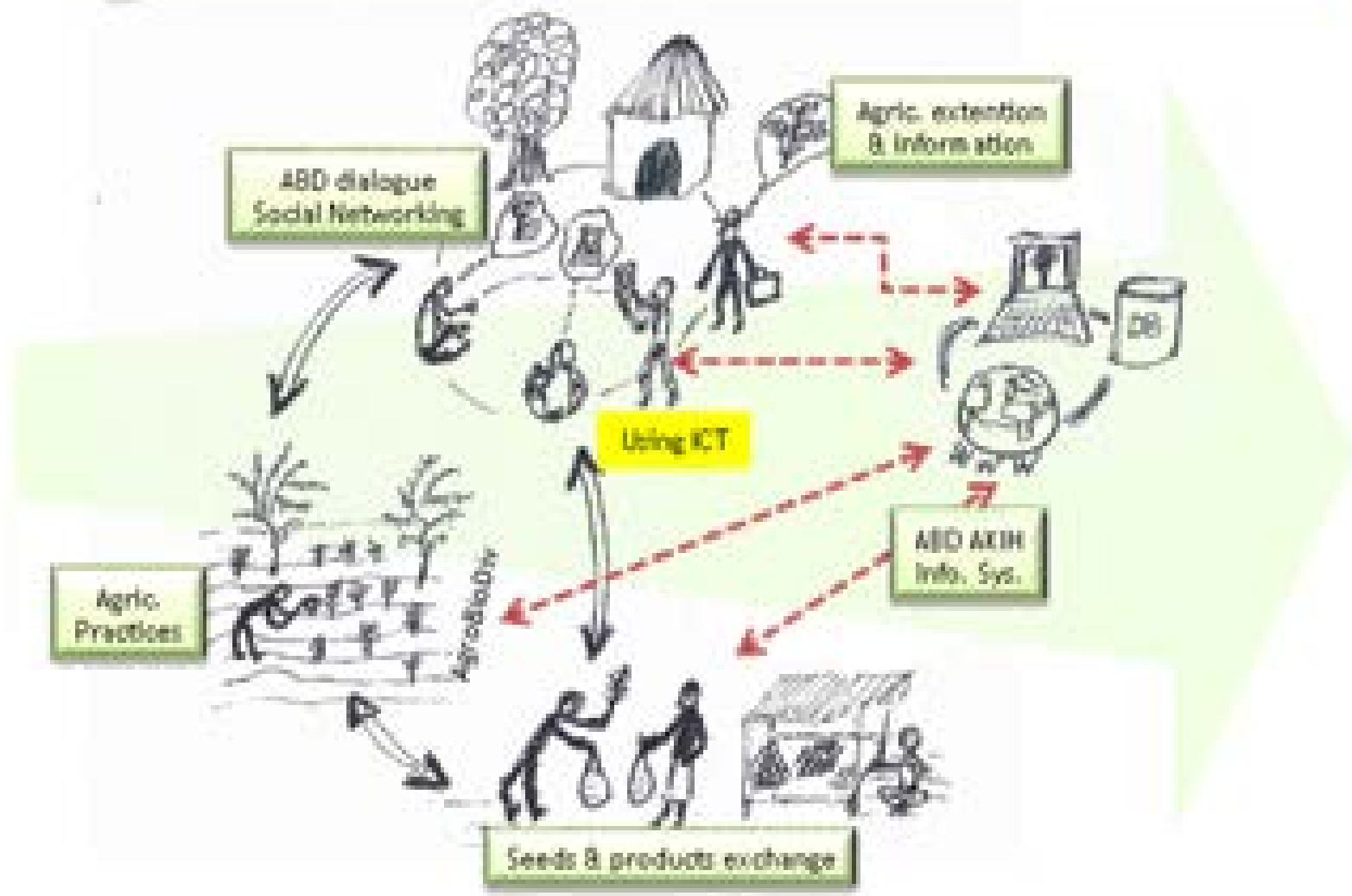
Research questions

- 1) What knowledge about crop diversity generated at different scales (understood as geographic, temporal and social) by various communities (scientists, practitioners, farmers, and government) could be relevant in a context of global changes?
 - Aggregation existing and new information on crop diversity and associated practices, the physical and social environment in which these are conserved, exchanged and used.
- 2) What collective arrangements and social processes are in place for information sharing and structuring and how could they be further enhanced
 - Social network data and analysis to determine information flows,
- 3) What are the different information and communication protocols, tools and collective arrangements with which communities can increase access to a broader range of relevant, usable information to improve their response capacity to exogenous global changes?
 - Ensure constant interactions throughout the project with stakeholder communities acting simultaneously both as users and producers of data, information and knowledge.

WPs

- WP1: participatory monitoring and assessment methods.
 - support all other WPs, including ICT solutions structuring, sharing and mobilization.
 - ensure coherence between the practices, needs and constraints of the partner communities, and the AKIH knowledge model, process and infrastructure.
 - support and monitor integration and implementation of the process between the communities, the researchers and the other stakeholders' groups.
 - assess generalizability and transferability of the results to other contexts with low AKIH interventions.
- WP2: controlled vocabulary (standards) included in a multi-thematic thesaurus of agrobiodiversity.
- WP3: social network analysis methods to understand how information and materials (eg. Seed) are exchanged between farmers and other actors.
- WP4: technical design of the information and communication system. integrate collectively
- WP5: coordination, knowledge management and dissemination.





AKIH → NA4MA

- A Platform for Agrobiodiversity Research-
Agropolis partnership: contributing to land-sharing land-sparing debate through introducing agrobiodiversity information
- = NA4MA (New Approaches for Management of Agrobiodiversity)



The Green Movement of Sri Lanka Inc.

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