Sustainable Intensification of Mixed Farming Systems Initiative

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CGIAR System Council drop-in calls with Initiatives

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Mixed Farming Systems Initiative: Key features

- Farming Systems Approach
  - (Crop-livestock-tree integration)

- Multi-scale approach
  - (nested nature of farming systems)

- Multi-criteria assessment
  - (Contribution to all impact areas)

- Systems analysis methods and tools
  - (boundary object for co-learning)

- Participatory research
  - (actor centered approach)

- Socio-technical innovation bundles
  - (concerted action)
The Sustainable Intensification (i.e., production of more food on the same piece of land while reducing the negative environmental impacts) of Mixed Farming Systems can deliver critical outcomes that result in multiple impacts at scale, minimize sectoral trade-offs and leverage/maximize synergies in MFS.

**Sustainable Intensification of MFS**
- Integrates genetic, ecological, and socio-economic innovations & information
- Increases productivity per unit land, labor, capital, etc.
- Considers whole-farm & household issues
- Ensures efficient, prudent use of inputs
- Conserves or enhances natural resources
- Increases resilience, equity & reduces risks

**A ‘Livelihood lens’:** Socio-technical, economic and institutional conditions that rural families are faced with in making decisions for income, food, risk, cultural values, etc.
Interlinked work packages

WP1: Status, Trends & Future Dynamics

WP2: Methods & Tools

WP3: Co-Design of STIBS

Cross-cutting Workstreams support WPs

- Gender
- Scale Readiness
- MELIA
- Comms

SI-MFS delivers Impact at scale

CGIAR’s Impact Areas

- Nutrition, Health & Food Security
- Poverty Reduction, Livelihoods & Jobs
- Gender Equality, Youth & Social Inclusion
- Climate Adaptation & Mitigation
- Environmental Health & Biodiversity
Geographic selection of MFS

<table>
<thead>
<tr>
<th>System</th>
<th>Region</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereal-root crops mixed</td>
<td>West Africa</td>
<td>Ghana</td>
</tr>
<tr>
<td>Highland mixed</td>
<td>East Africa</td>
<td>Ethiopia</td>
</tr>
<tr>
<td>Maize mixed</td>
<td>East and Southern Africa</td>
<td>Malawi</td>
</tr>
<tr>
<td>Highland mixed</td>
<td>South Asia</td>
<td>Nepal</td>
</tr>
<tr>
<td>Rice mixed</td>
<td>South Asia</td>
<td>Bangladesh</td>
</tr>
<tr>
<td>Highland extensive mixed</td>
<td>Southeast Asia</td>
<td>Laos</td>
</tr>
<tr>
<td>Upland intensive mixed</td>
<td>Southeast Asia</td>
<td>Laos</td>
</tr>
</tbody>
</table>
Launches & partner consultations

Global Initiative launch
31 May – 2 June 2022
Addis Ababa, Ethiopia

Ghana launch & partners consultation
12 July 2022
Accra, Ghana

Nepal launch & stakeholder consultation
24 August 2022
Kathmandu, Nepal

Ethiopia launch & stakeholder consultation
25 January 2023
Addis Ababa, Ethiopia

Bangladesh launch & stakeholder consultation
16 November 2022
Rangpur, Bangladesh

Malawi launch & stakeholder consultation
27 - 29 September 2022
Mangochi, Malawi
SI-MFS PRMS results in 2022

- 142 total outputs with good regional distribution
- Good number of outputs related to innovations, knowledge products and capacity development
2022 Mixed Farming Systems Initiative Implementation results: KEY FACTS

- 142 Outputs at the initiative level
- 57 new knowledge products produced
- 98% Open access
- 42 Socio-technical Innovations for MFS
- 98 Partnerships engaged
- 2 Innovation Bundles already in use
- 14 Cross-initiative collaborations engaged (8 established)
- 8 CGIAR centers contributing to Initiative implementation
- Made significant contributions to SDGs Goals 1, 2 and 5
Co-designing socio-technical innovation bundles for the sustainable intensification of mixed farming systems: A methodological note

OBJECTIVES
1. Ensure proper understanding and adaptation of the systemic approach by the research team
2. Share with multi-stakeholders and engage them at the relevant step of the cycle. Identify the target farming systems to be engaged in the process
3. Define the three years plan of the case study to ensure that the ‘design’ phase will have at least started at the end of the three years.
A common multi-level framework for previously uncoordinated analyses. The One CGIAR Initiatives Joint Workshop on Farming Systems Analysis developed an actionable framework to structure our work. The multi-level framework encompasses diagnosis, intervention identification, scaling up and scaling out. Based on actor analyses at different integration levels, constraints and opportunities are identified based on the interests of the different sets of actors.

We will implement the FSA framework through two ‘use cases’:

1. **Use case #1: Credit access in Kenya**
   - Making better use of existing micro-level data, we plan to develop, perform and scale a climate vulnerability assessment to better evaluate the investment in climate risk insurance to improve climate risk management.

2. **Use case #2: Prioritization and targeting of agronomy-related sustainable intensification options in Malawi**
   - We will make use of newly available micro and macro level data to diagnose investment opportunities for agronomy-related technologies and scale up these results. Topical and regional initiatives will come together in this exercise.
Example in-country capacity building

The Case for Northern Ghana:
- In Partnership with the Ministry of Food and Agriculture (MOFA); Signed 10 MOUs with 10 Scaling Districts
- Liaise with: Research Extension Linkage Committees (RELCS)
- Uses the IREACH Approach: Innovative Research Extension Advisory Coordination Hubs

Example of ONE District (Wa West)
- Over 80 demonstration sites
- Trained 102 Farmers (57 female; 45 male)
- Trained 13 District of Agriculture Officers (4 females; 9 male)
### Plans for 2023

#### Focus 1
- **Work Package 1**: Regional and national CASE STUDIES ON STATUS OF MFS
- **Focus**: DATA REPOSITORIES on status of MFS
- **Tasks**:
  - Liaising with WP3 and WP5 while streamlining DEED cycle for co-designing STIBs
  - Receiving input from all WPs as a central player for co-designing participatory action research

#### Focus 2
- **Work Package 2**: Use cases for SYSTEMS ANALYSIS
- **Focus**: Site-specific METHODOLOGICAL GUIDELINES
- **Tasks**:
  - Liaising closely with the CGIAR-wide Scaling team
  - Working closely across all WPs and sites to ensure scaling issues are addressed

#### Focus 3
- **Work Package 3**: Empirical EVIDENCE FOR SITE-SPECIFIC INNOVATIONS
- **Focus**: Engagement in CO-DESIGN PROCESS
- **Tasks**:
  - Working closely across all WPs and sites to ensure capacity building is addressed locally and regionally

### Priorities
1. Strengthen linkages between and across work packages
2. Strengthen convergence of WPs at the site level
3. Fill missing human resource gaps

### Do More
1. Collaboration and interlinkages with other One CGIAR Initiatives
2. Better articulation of expectations with NARES
3. Balanced portfolio across Africa and Asia

### Initiative Support
1. Offer gender support for all initiative team members to address social equity and inclusion gaps
2. Offer data collection and reporting support at all levels in a seamless way
3. Ensure internal capacity for understanding scaling readiness is developed adequately
4. Streamline coordination and communication within the initiative
Emerging and evolving challenges/risks

- Second batch of initiatives (i.e., less than 12 months implementation)
- Partnership engagement takes time (i.e., low burn rate / carry over)
- Alignment with agricultural seasons (i.e., cropping seasons just starting or missed)
- Traditionally weak inter-disciplinary research (i.e., within initiative and NARES)

Emerging and evolving opportunities

- Innovation packaging with high scaling readiness scores
- Brokering within country inter-disciplinary collaboration
- Centrality of Systems Analysis of MFS within RAFS
- Virtual institute will have influence beyond the CGIAR (multiple global partners)
- Cross-country and cross-entity learnings within and outside the Initiative
Thank you