The SAMS FRAMEWORK

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Presentation Overview

- Background to SAMS Development
- Why SAMS?
- SAMS
  - Goal
  - Strategic Pillars
  - Desired impacts
SAMS : Sustainable Agricultural Mechanization Strategy

- Developed as a joint initiative of FAO and CSAM.
- Launched in December 2011, to promote the sustainable use of mechanization in agricultural production systems.
Why SAMS?
Key Challenges for the Region’s Agricultural Sector

- Across the region, there is a need to:
  - Meet growing and changing food demands of a growing population.
  - Respond to impacts of demographic change in rural areas owing to urbanization.
  - Use natural resources in a more sustainable way.
  - Increase energy efficiency.
  - Promote innovation to enhance resilience to climate change and other risk factors.
  - Reduce post-harvest losses, assure food safety and quality.
What the challenges also highlight:

- The need to focus on the development of **sustainable agricultural production systems**
  - Systems that maintain **optimal production without jeopardizing production factors**.

**SAM** is an important element of sustainable agricultural production systems.
SAMS

- SAMS is a planning strategy that contributes to agricultural sustainability, while meeting food self sufficiency, generating economic development and inclusive growth as well as social benefit.

- SAMS is part of the enabling environment for the development of sustainable production systems and for the effective use of SAM.
Goal of SAMS

To address food security, poverty alleviation and environmental sustainability through the sustainable intensification of agriculture, by creating an enabling environment.

Pillars of the SAMS Framework

Pillar 1
Surveys, assessments, and analyses of the current status of SAM

Pillar 2
Enabling policies and institutions for SAMS development

Pillar 3
Human capacity development

Pillar 4
Financial support to enhance investment in SAMS

Pillar 5
Advocacy on SAM

High Level Multi-Stakeholder Consultation on Sustainable Agricultural Mechanization Strategy for Asia and the Pacific Region
Pillar 1. Surveys, Assessments and Analyses of the Current Status of SAM

Identification of possible interventions

- Assessment of:
  - Agricultural practices and analysis of supply chains.
  - Intra- and inter- institutions involved in AM
  - Use of targeted subsidies for innovative implements for sustainable agriculture

- Identification and assessment of technologies suited to specific ecological zones.

- Analysis of existing policies
Pillar 2. Enabling Policies and Institutions for SAMS Development

Formulation and implementation of policies and strategies that lead to government interventions.

- Development of:
  - Public-private partnerships.
  - Testing and standards formulating mechanisms for AM.
  - R & D institutions to enhance innovation in AM.
- Review and harmonization of policies and regulations designed to attract investments in SAMS.
- Institution of quality assurance of machinery, equipment and mechanization services.
Pillar 3. Human Capacity Development

Development of a knowledgeable, trained and disciplined labor force.

- Capacity building of:
  - Farmers, extension staff and local government officials
  - Manufacturers and distributors of supply inputs.

- Enhancing information dissemination on mechanical power technologies (including environmental, social, economic aspects and innovations made to agricultural machinery).
Pillar 4. Financial Support to Enhance Investment in SAMS

- Review and harmonization of policies and regulations designed to attract investments in AM.
- Increasing financing for AM from the private sector.
- Improving access to:
  - Loans for the purchase of mechanization inputs.
  - Financing for mechanization activities through the establishment of a mechanization promotion fund.
Pillar 5. Advocacy on SAM

- Promoting a strategic vision for SAM based on national development objectives;
- Facilitating information sharing and lessons learnt about good practice on SAM;
- Ensuring effective participation by all stakeholders in SAM processes;
- Developing and maintaining partnerships with the scientific community;
- Ensuring wide dissemination of knowledge generated on SAM and contributing to policy and decision making processes.
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Dimensions of the SAMS Strategy

- Geography
- Level of Development
- Ecosystem specificities

Policy
Advocacy
Research and Development
Knowledge sharing
Capacity development
Innovation

Large Farms

Action Areas

- Partnerships
- Standards and testing
- Occupational health and safety
- Maintenance and repair
- Investment
- Finance and credit
- Institution development

Outcomes

- Food Security
- Poverty Alleviation
- Environmental Sustainability

Small holder
High Level Multi-Stakeholder Consultation on Sustainable Agricultural Mechanization in Asia and the Pacific

**Desired Impacts of SAMS**

- **Socially Beneficial**
  - Food Security
  - Safe Food Supplies
  - Poverty alleviation
  - Worker health and safety

- **Economically Viable**
  - Income
  - Marketing
  - Trade

- **Environmentally Sustainable**
  - Food Production
  - Water use
  - Soils
  - Climate
  - Emissions
  - Energy use

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- Food Security
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<table>
<thead>
<tr>
<th>Service</th>
<th>Requirement (Billion USD)</th>
<th>% of Cumulative Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary crop production</td>
<td>1,684</td>
<td>57</td>
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<tr>
<td>Downstream support services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Cold and dry storage</td>
<td>1266</td>
<td>24</td>
</tr>
<tr>
<td>• Rural and wholesale markets</td>
<td></td>
<td>22.2</td>
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<tr>
<td>• First stage processing</td>
<td></td>
<td>58.8</td>
</tr>
</tbody>
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Cumulative Investment Requirements for East Asia-2005/07 to 2050

Source: Capital Requirements for Agriculture in Developing Countries to 2050. FAO Rome (2009)

(All numbers are in 2009 US$ values)

Thank you