MECHANIZATION OF AGRICULTURE

MARKET DYNAMICS:
CHINA, INDIA, SRI LANKA & THAILAND
STUDY

- **Purpose**
  - To gain rich insights into market dynamics of the selected countries, that will benefit members in producing/sourcing appropriate machinery primarily

- **Objectives**
  - Analyse the structure and dynamics of the market
  - Assess the current demand for farm machinery by application
  - Evaluate the unmet demand and future trends
SCOPE OF THE STUDY: MECHANIZATION OPPORTUNITIES & CHALLENGES ACROSS THE PROCESS

- **Land Preparation**
  - Crop Types & Degree of Mechanisation

- **Planting/Seeding**
  - Crop Types & Degree of Mechanisation

- **Plant Protection/Crop Management**
  - Crop Types & Degree of Mechanisation

- **Harvesting**
  - Crop Types & Degree of Mechanisation

- **Post Harvesting**
  - Crop Types & Degree of Mechanisation
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<td>China</td>
<td>India</td>
<td>Sri Lanka</td>
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**OVERALL FINDINGS**
FACTORS DRIVING DEMAND FOR MECHANIZATION

- Growth in food production/agricultural activities
- Government initiatives
- New generation shying away from traditional agriculture – promotes mechanisation
- Subsidies for mechanisation
  - Boon in China & India
  - Places the burden on the end-users in Sri Lanka & Thailand
- Promotion of ‘Custom Hiring Centers' – The Indian Government initiative as well as in China
MAJOR CHALLENGES

- Three major constraints
  - Fragmented and marginalizing land holding
  - Cost of financing
  - Labour shortage/migration

- Other issues
  - Sustainability Issues
    - Environment friendly, emission issues
  - Gender friendly machinery (Women)
    - Requires more attention
OPPORTUNITIES

- Applications
  - Bed making, bund preparation, Land levelling
  - Seeding & Planting
  - Crop management
  - Harvesting
  - Post harvest: Produce drying, straw & residual treatment

- Crops
  - Paddy, Corn, Sugarcane, Cassava, Pulses & Seeds, Yams, Vegetables
- Supply Chain network
  - Closer dialog between stakeholders
    - Reduce gap between product design and application
    - Transfer new technology in a user-friendly manner to the farmer
  - Information sharing
- Gender (Women) friendly product development
- Moving final assembly in proximity to markets
- Cost effective financing mechanism
RECOMMENDATIONS

- Feasibility of establishing custom hiring centers
- Markets & marketing
  - Deeper understanding of market dynamics and information flow
  - Standardised spare parts
  - After-sales-service, reliability and adaptability
  - Training & capacity building of channel partners
• CLIMATE SMART FARMING (CONSERVATION AGRICULTURE)
• EMPOWERMENT OF YOUTH AND WOMEN FARMERS
• PROMOTING AGRI ENTERPRISES vs SUBSISTENCE FARMING
• CREATING AGRIPRENEURS!

Machines with appropriate technology and that are geographically suitable
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THANK YOU!

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