



CSAM

Centre for Sustainable
Agricultural Mechanization



NIAAM

10th Regional Forum on Sustainable Agricultural Mechanization in Asia and the Pacific

Gender Mainstreaming in Sustainable Agricultural Mechanization

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Closing thoughts

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Final thoughts

1. Gender-sensitive design of agricultural mechanization is important
2. Move beyond design to enabling women's access to mechanization
3. Focus on extension
4. Address barriers in adoption
5. Enabling Environment – policies & hiring of women
6. Recommendations for CSAM

Women in agriculture

- **Agricultural Labor**

- In many contexts, more women than men are involved in agriculture but are more marginalized
- Men have more access to mechanization, are in formal agriculture, high physical effort tasks
- Women are in more in informal low skill tasks, time consuming and manual.
 - Gender pay gap with agricultural wages

- **Mechanization/ Innovation use**

- Men tend to use mechanization
- Women are not using mechanization, tend to do more underpaid, undervalued, manual and work that is laborious. Constrained by many factors like lack of land ownership, low literacy and confidence levels, lack of access to finance and information, discriminatory social norms.

Design & development of gender-responsive mechanization

• Insights

- Design for bigger machines is harder for women (also varies by terrain)
- High price of technologies is a barrier

• Innovative Practices

- Test with women farmers!
- Small tools that are light, easily accessible and usable by women. Affordability is key
 - Build skills to use these innovations
- Adaptation of existing large mechanization to be more gender- sensitive
 - Gender anthropometric factors
- Engaging women farmers in using other innovative technologies
 - Digital agricultural tools, automated tools
 - Mechanization service provision and hiring

Dissemination of gender-responsive mechanization

• Insights

- Importance of extension in disseminating mechanization awareness and training to use the same
- Awareness, knowledge and focused training is missing for women

• Innovative practices

- Engaging women in mechanization training and capacity building
 - Training methods for low literacy and skills (Enable extension to be gender sensitive in training methods)
 - Intentionally inviting women for training on mechanization
- Women trainers for women farmers

Adoption of gender-responsive mechanization

• Insights

- Lack of land ownership that affects access and usage of mechanization
 - Collateral is difficult because of land ownership
- Mechanization pricing (affordability) is a key barrier for continued adoption
- Role of “confidence” in using machinery & social norms are a barrier

• Innovative practices

- Access to mechanization through cooperatives, groups, farmer organizations that cater to women
 - Mechanization service, hiring of mechanization, group services
- Ensuring usability & reflecting needs and priorities for women
- Financial accessibility – subsidy, credit, other innovative methods?
- Enabling women’s land ownership through formal titles

Enabling environment for gender responsive mechanization

• Insights

- Engaging more women in Ag engineering education
- Engaging women in ag engineering positions in research, design, testing and management of institutions
 - Field work, digital computer related work
- Reassess ag policies for gender sensitivity
 - Include provision for gender mainstreaming in ag mechanization

• Innovative practices

- **Policies:** subsidies, grants from government
- Community of practice for female engineers for capacity building, technical training, networking, peer-mentoring and support systems
- Additional grants from government for women in research and engineering
- Quota system for hiring women in both public and private sector

Recommendations for CSAM

- **Consider gender dimensions in mechanization standards**
 - Gender-sensitive design specifications
 - Development & training of testing systems for women-friendly mechanization
- **Capacity building**
 - Conducting assessments to identify gendered needs with mechanization
 - Awareness & skills
 - Pilot training programs
- **Creating Communities of Practice**
 - Forum for peer-to-peer learning, share best practices, knowledge sharing across Asia-Pacific
 - Provide recognition to women engineers

Thank you



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