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Introduction to the Case Studies on Women's Empowerment for Innovative and Sustainable Agricultural Mechanization in China

12th APFSD
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"Leveraging digital innovations to improve the work of women in agriculture"- Side Event of the 12th Asia-Pacific Forum for Sustainable Development
28 February 2025, Bangkok, Thailand

Women in Agriculture

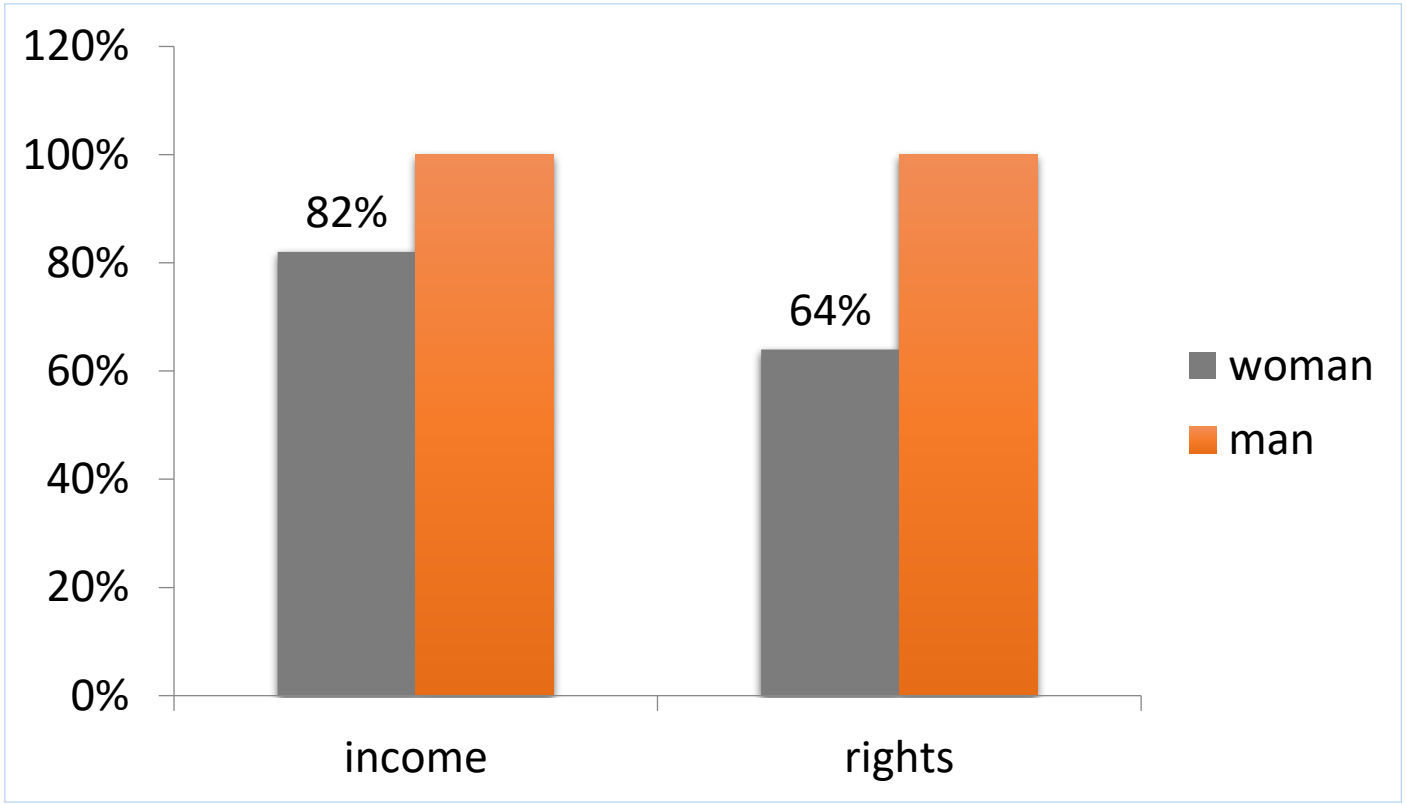
Industrialization and urbanization have contributed to the growing feminization in agriculture, positioning women as key contributors to food security.

They play unique roles in areas such as biomass fuel collection, food processing and agricultural product marketing.

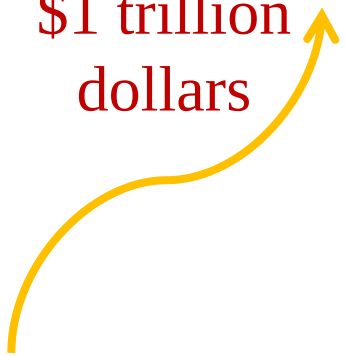
2011	2022	2022	2022	2022	after 2020
in developing countries	in USA	in Germany	in Japan	in China	in many sub-Saharan Afiran countries

Women in Agriculture

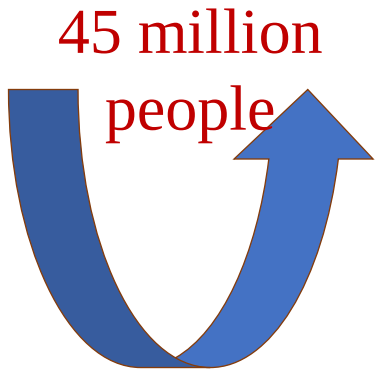
Despite their significant contribution, women face significant inequalities.



Closing the gap of gender in agrifood systems, could :



Increase global GDP by nearly $1 trillion dollars



lift 45 million people out of food insecurity

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Women with Agricultural Mechanization

Agricultural Mechanization has significantly improved :

- the division of labour
- reduced the burden on women in agricultural production

Access to digital technologies made it:

- easier for women to acquire knowledge and resources needed for agricultural production
- enabling them to take on independent roles or share traditional male responsibilities in agricultural production

We should leverage digital innovations to address barriers faced by women farmers and promote gender equality and women's empowerment in agriculture.

Case Studies

Case Study I

Female Drone Pilot

Case Study II

New Sugarcane Farmer

Case Study III

Female President of Cooperative

Case Studies

- Expanding the application of drones
- Application of intelligent assisted driving system
- Provision of plant protection services by drones

- Innovative implementation of machine-compatible planting models
- Promoting full mechanization and expanding sugarcane plantations
- Encouraging neighbouring sugarcane growers to adopt modern practices

- Transitioning to precision agriculture
- Expanding to pre- and post-production stages
- Promoting standardized management and developing the cooperative brand
- Helping cooperative members and neighbouring smallholders reduce costs and increase income

Case Studies

A. Addressing labour shortages

B. Standardizing cooperative management

C. Enhancing smart agriculture innovations

D. Promoting green agricultural practices

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Challenges for Women

Public scepticism

women often faced doubts about their skills and the quality of their work. They having to invest significant time and effort to gain the trust and respect of male peers and communities.

Family pressure

As women take on the roles traditionally assumed by men, they may encounter resistance from family members who uphold traditional gender roles.

Machinery- and technology-related challenges

Women in agriculture often face additional barriers to accessing the latest equipment or training, which can hinder their efficiency and productivity.

Machine operating environment

In challenging terrain such as hills and mountains, or under extreme weather conditions like intense sunlight and heavy rain, poses significant challenges for operators, especially for women.

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Recommendations

01

Support and empower women for sustainable agricultural mechanization.

- support their roles as machinery operators, professional service team members and decision makers

02

Enhance research and development of agricultural machinery for women.

- Features such as ergonomic controls, enclosed cabins and automated systems should be integrated

03

Expand education and training for women in professional skills.

- Increase access to education and training programmes

04

Strengthen the legal framework to protect women's rights in agricultural mechanization.

- enforcing anti-discrimination policies, ensuring equal pay, safe and equitable working conditions.

05

Develop comprehensive social support systems for women in agricultural mechanization.

- implement family-friendly policies, for enabling women to balance professional and personal responsibilities

THANK YOU !

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