Strategies for implementing gender-transformative sustainable agricultural mechanisation within smallholder agriculture production

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Introduction

Agriculture is a vital industry that provides livelihoods to millions of people worldwide. The farming community relies on natural and man-made resources, such as land and farm machinery, to produce the food that sustains us.

However, social and cultural norms surrounding agricultural production can result in an uneven distribution of essential resources necessary for sustainable agricultural mechanisation.

Sustainable agricultural mechanisation (SAM) is a farming practice that uses appropriate machinery to remove drudgery, enhance agricultural production efficiency, and be economically and environmentally friendly. Promoting equality among farmers and advocating for SAM is crucial to ensuring fair and sustainable farming practices.

Therefore, it is necessary to adopt gender-transformative approaches to promote inclusive and sustainable agricultural mechanisation. This will help remove gender barriers and support women, who play a crucial role in agriculture, in accessing and adopting mechanisation practices.

Objective: The work presents strategies for promoting gender-transformative sustainable agricultural mechanisation and policy recommendations that can promote implementation.

Gender Transformative Sustainable Agricultural Mechanisation

The Gender-Transformative Sustainable Agricultural Mechanisation (GTSAM) approach is designed to address gender inequalities in farming communities by reshaping social and cultural norms. GTSAM focuses on providing smallholder farmers with appropriately scaled machinery and ensuring that they have access to affordable equipment that is culturally adaptable to promote and sustain gender equity. GTSAM approaches aim to integrate sustained gender equity into the social and cultural norms of farming communities. Through the progressive adaptation of gender norms that compromise men's and women's access to SAM, the GTSAM approach aims to ensure that female farmers receive the acceptance they deserve within their communities.

Policy recommendations

1. Provide training to agricultural extension agents in gender-transformative approaches.
2. Offer seed funding through policy initiatives to encourage commercial banks to develop products that promote equitable access to machinery.
3. Offer incentives to researchers to study and develop innovative gender-transformative approaches to sustainable mechanisation.

Methodology

Quantitative and qualitative data were used to understand gender dynamics in machinery acquisition, access, and utilisation by smallholder farmers in Asutsuare, Ghana. The study utilised quantitative data from 320 farmers and qualitative data from key informant interviews and focus group discussions to emphasise the need for a gender-transformative approach to sustainable agricultural mechanization [1].

Results

The data analysis revealed that there was marginal difference between machinery use for male and female farmers and female farmers used more machinery for their field activities [2].

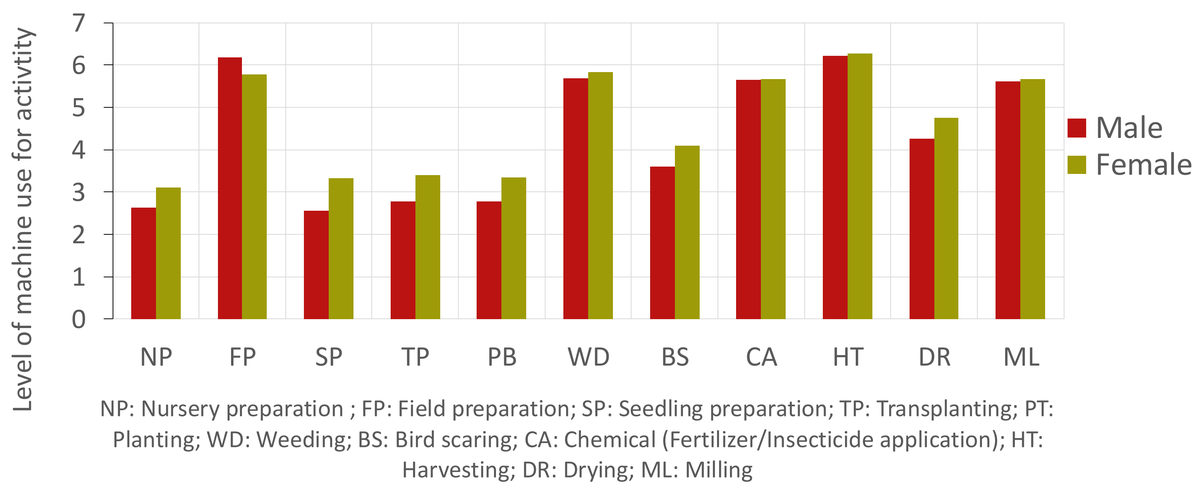

Figure 1. Level of machinery use by male and female farmers.

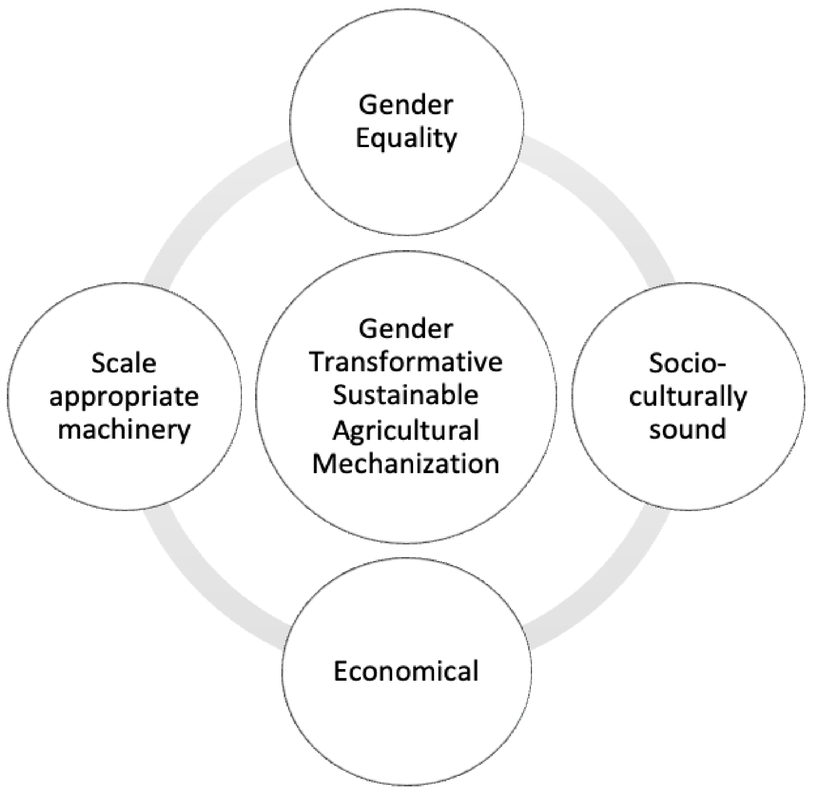

Figure 2. Gender Transformative Sustainable Agricultural Mechanisation

Strategies to achieve GTSAM

- Focus on effective research, innovative programs, and proper documentation for successful GTSAM initiatives.
- Continuously develop the capacity for implementing GTSAM initiatives and involve all stakeholders. Additionally, training programs should establish relationships, encourage collaboration, and raise awareness and sensitise communities on the benefits of GTSAM for individuals, households, and the community more broadly.
- Engage with farming communities by working with community leaders and duty-bearers to redefine norms.
- Ensure long-term financial viability by diversifying funding sources for GTSAM programs.

References

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2. Dorvlo, S. Y., Mkandawire, E., Roelich, K., & Jumbe, C. B. L. (2024a). Evaluation of gender dynamics in the mechanisation of smallholder rice production. [Unpublished manuscript]

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