

Evaluation of women friendly agricultural tools and technologies

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Introduction

Women comprise 70% of the agricultural workforce (NPC, 2021) and 53% of the economically active women engage in agriculture (NSO, 2023). Women's work in agriculture is often labour-intensive, time-consuming, repetitive, and involving tasks that are both physically demanding and monotonous (Mishra et al., 2016). At least one family member per household, mainly men, are working overseas (NSO, 2023), which has further increased the workload for women. In this regard, the study aims to investigate women friendly agricultural tools and technologies available in Sudharpaschim and to determine the major qualifiers for the adoption of such tools and techniques.

Research questions

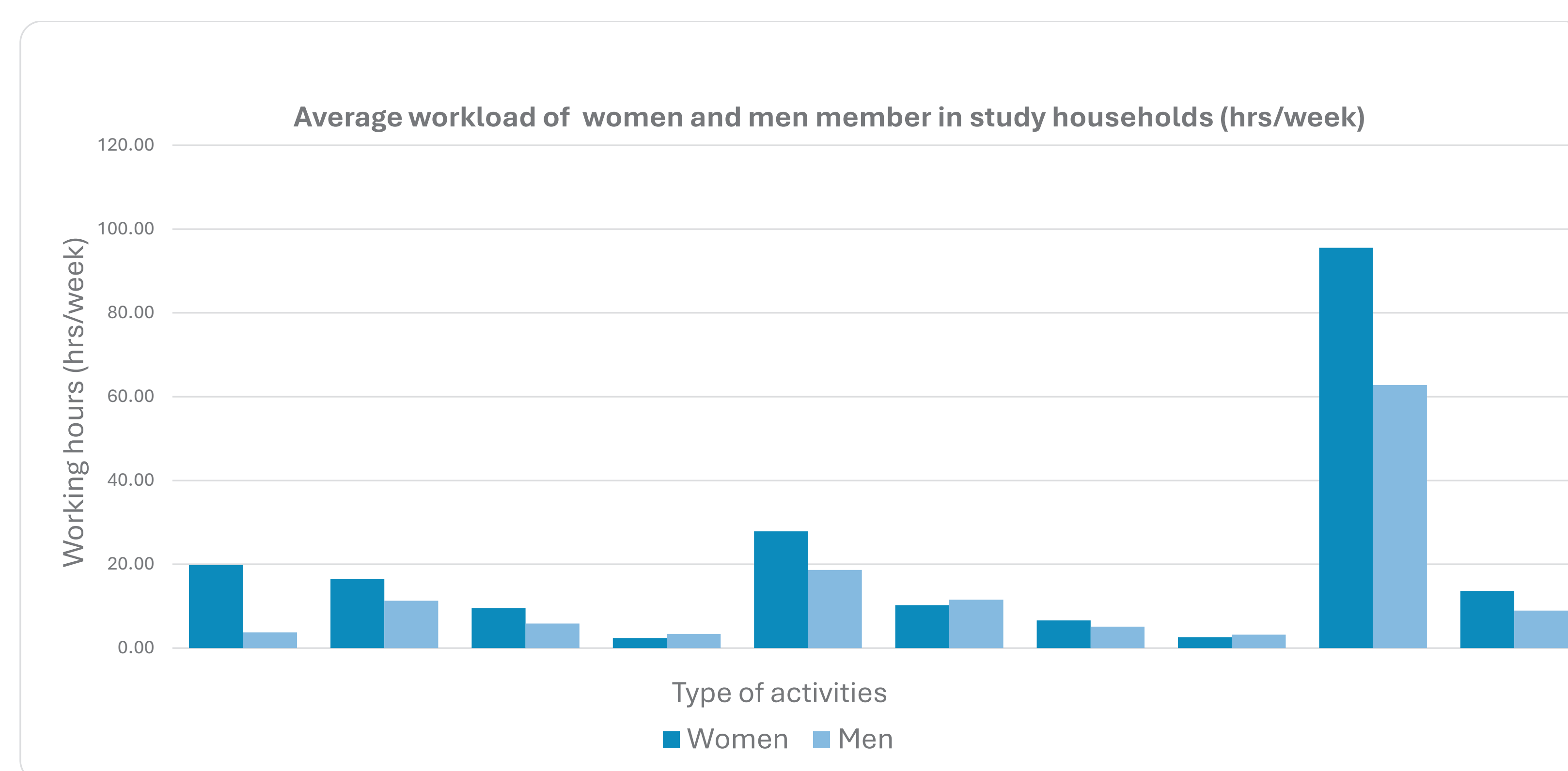
- What women friendly agricultural tools and technologies are being adopted by farmers in Sudurpashchim Province?
- What are the major qualifiers for women friendly agricultural tools and technologies in the study area?

Methodology

Study area: Doti, Bajura and Kailali
Data collection: Households survey, group discussion and field observation
Sampling: Simple random sampling
Data analysis: Descriptive statistics, diagramming and ranking

Key findings

- Women have average daily workload of 13.65 hrs which is significantly higher as compared with men (8.97 hrs). Weekly involvement of women is maximum (27.89 hrs) for performing agricultural activities.
- Current women friendly agricultural practices in the study areas are ghatta (water mills), grain processing mills, water collection tank, drip irrigation, pipe irrigation, water lifting electric pump, and thresher.
- Women friendly agricultural tools and techniques that need to be introduced and promoted are grain processing mills, water harvesting tank, drip irrigation, grass and chaff cutters, plastic mulching, ridge maker, herbicides, mini tractor and auto-rickshaw, dairy processing tools at household level, bio-pesticides manufacturing at community level, nursery at community level, harvester, maize hauler, apple picking ladder, jab planter, thresher, automatic feeder and aerator for fish farming in Kailali, winnower, rice weeder, improved shed, on the spot composting, and fodder cultivation. Some non-agricultural tools like mixture/grinder, washing machine at community level, biogas (low altitude) and cooking gas (higher altitude), improved cookstoves, induction heater etc can also reduce their workload.
- Qualifiers for increased adoption and use are size (small), affordability, availability, knowledge/facility for repair and maintenance, daily/multiple use tools, drudgery reduction capacity, time saving, and productivity enhancement.
- Major determining factors for adoption of women friendly tools and techniques are the age of the senior woman in the family (-), the size of family (-), agricultural land (+) and livestock holding (+), absence of male member of the family (+).



Conclusion

- Women are overloaded with household, agricultural and social activities.
- People are aware about the women friendly tools and techniques and their role in time saving and drudgery reduction. However, only a few farming households are adopting them due to poor affordability and lack of alternative job opportunities.
- Adoption of most of the women friendly tools and techniques can be scaled up by developing mechanisms for ownership and use on a shared community basis.

