# Participation of tribal agroforestry practicing women in different farming operations

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Received: 05.07.2022/Accepted: 24.08.2022

### **ABSTRACT**

A study was conducted at Jawhar Tahsil of Palghar district of Maharashtra during 2018 to find out the participation of tribal woman traditionally practicing different agroforestry systems and their knowledge about farming operations. It was found that household work was wholly performed by the women followed by weeding, harvesting, threshing, sowing of rice/finger millet/prosso millet with 96.67, 93.33. 86.67 and 83.33 per cent involvement respectively. Their minimum role was in adoption of modern technologies (16.67%) followed by plant protection (23.33%) and decision making in crop management activities (26.67%). More than half of the women (51.67%) were having low followed by medium (45.00%) and high (3.33%) level of knowledge about different agroforestry practices and agricultural operations. Study showed that the maximum agricultural operations about agroforestry were performed by tribal women but they were less involved in decision making.

**Keywords:** Tribal women; agroforestry; farming operations; knowledge

# INTRODUCTION

Women play a significant and crucial role in agricultural development from preparing of land to selecting seeds, sowing to transplanting the seedlings, applying manures/fertilizers/pesticides, weeding, harvesting, winnowing and threshing. Women empowerment has the potential to improve their roles in agricultural production while enhancing nutritional and food security (Mulema et al 2019). India is predominately an agrarian economy. Despite having a developmental phase, 70 per cent of its population still lives in rural areas of which 60 per cent households are engaged in agriculture as their main source of income. Agriculture is an engine of growth and poverty reduction in developing countries where it is the main occupation of the poor (Slathia 2014). Rural women in India constitute the most important working force in agriculture. Nearly 63 per cent of all economically active men are engaged in agriculture as compared to 78 per cent of women in India (Kanani 2020). Rural women pursue multiple livelihood strategies often managing complex households. Their activities typically

include producing agricultural crops, tending animals, processing and preparing food, working for wages in agricultural or other rural enterprises, collecting fuel and water, engaging in trade and marketing, caring for family members and maintaining their homes. Rural women are the major contributors in agriculture and allied fields. Her work ranges from crop production, livestock production to cottage industry. Despite such a huge involvement, her role and dignity have yet not been recognized (Jayasheela 2015). In truth, women are involved in all aspects of agriculture, from crop selection to land preparation, seed selection, planting, weeding, pest control, harvesting, crop storage, handling, marketing and processing (Ghosh and Ghosh 2014). So far the extension agencies, farm advisory services, planners and policy makers have been approaching the male counterparts to improve and influence decisions relating to farm business though most of the agricultural operations are being performed by women. As a result most of the technologies transferred have not beeen adopted. Therefore, it is of vital importance to study the role performance of farm women in different agroforestry activities.

### **METHODOLOGY**

The study was conducted in Jawhar Tahsil of Palghar district, Maharashtra under tribal sub-plan (TSP) implemented by Government of India for development of tribal farmers. For this study, the farmers selected under TSP in scheme AICRP on Agroforestry were considered as sample of the study with the objectives to study the participation of tribal women in agroforestry farming operations and assess the knowledge level of tribal women in modern farming. There were 60 farm families practicing agroforestry selected under TSP. From these families, 60 farm women were selected as the respondents for the study.

Ex post facto research design was used for analysis of the data. To collect the data, interview schedule was prepared. The data were collected through personal interview and observations. To assess the knowledge of women, knowledge test was developed. Collected data were tabulated and analyzed by using suitable statistical methods like frequency,

percentage and standard deviation (Gomez and Gomez 1984).

#### RESULTS and DISCUSSION

The data given in Table 1 show that household work was wholly performed by the women. It was followed by weeding, harvesting, threshing, sowing of rice/finger millet/prosso millet with 96.67, 93.33. 86.67 and 83.33 per cent involvement respectively of the tribal women. Their minimum role was in adoption of modern technologies (16.67%) followed by plant protection (23.33%) and decision making in crop management activities (26.67%).

Thus it was observed that, though maximum agricultural operations were performed by women, they were least involved in decision making activities. The findings are in line with the observations of Chandra et al (2013). The results also revealed that involvement of women was minimum in activities like plant protection and adoption of new technologies.

Table 1. Participation of tribal women in different agricultural operations

Operation	Respondents		Rank
	Frequency	Percentage	
Application of FYM	45	75.00	VIII
Land preparation	35	58.33	X
Raising of nursery	34	56.67	XI
Sowing of rice/finger millet/prosso millet	50	83.33	V
Transplanting of rice/finger millet/prosso millet	49	81.67	VI
Fertilizer application	40	66.67	IX
Weeding	58	96.67	II
Plant protection	14	23.33	XV
Harvesting	56	93.33	III
Threshing	52	86.67	IV
Storage	48	80.00	VII
Sale of products	29	48.33	XII
Taking care of animals	27	45.00	XIII
Household work	60	100.00	I
Decision making in crop management activities	16	26.67	XIV
Adoption of modern technologies	10	16.67	XVI

Table 2. Knowledge level of tribal women about different agroforestry practices and agricultural operations

Level	Respondents (n= 60)		
	Frequency	Percentage	
Low	31	51.67	
Medium High	02	45.00 3.33	
Medium High	27 02	45.00 3.33	

The data presented in Table 2 indicate that just more than half of the women (51.67%) were having low followed by medium (45.00%) level of knowledge about different agroforestry practices and agricultural operations. Only few women (3.33%) women had high knowledge. It shows that majority of tribal women were not aware and possessed less knowledge about different agroforestry practices and agricultural operations which might be due to the reasons that respondents had less contact with extension personnel, minimum participation in training programmes and less mass media exposure (Diawuo et al 2019).

#### CONCLUSION

It can be concluded that participation of women in household work and farming operation like weeding, harvesting threshing sowing etc was more. The practices which had low participation of women were decision making, plant protection and adoption of new technologies. The study suggests that the practices which had low participation of farm women should be given due attention by extension personnel. The knowledge level of women was also low to medium. Therefore, for effective technology transfer, extension agencies should concentrate on women particularly on those aspects which are predominantly performed by women. Efforts should be made to improve the knowledge of tribal women about agroforestry and agricultural practices by educating them through trainings, film shows, exhibitions, field visits, demonstrations etc.

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