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Perception of farmwomen towards drudgery in agricultural activities: A critical review

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Abstract

Women have a significant role in agricultural sector but it is most unfortunate that the contribution of women in agriculture has not been highlighted and they remain as invisible workers. Farm women work as co-partners in the profession of farming. Participation of rural women in agricultural activities besides household activities which are labour intensive, time consuming, ardous, monotonous, repetitive resulting in fatigue and drudgery. The farm women are continuing with drudgery prone activities in front. This lead to physical and mental exhaustion. Hence, the present review paper focuses on perception of farm women towards drudgery in agricultural activities. The paper explores that the women are facing difficulty in various agricultural activities.

Keywords: *Women, Farm women, Perception of drudgery, Agricultural activities, Drudgery*

Introduction

Women in agriculture play a vital and essential role by participating in various agricultural operations such as crop production, livestock production, horticulture, postharvest operations, agro/social forestry, fisheries and more. The level and extent of women's involvement in agriculture vary significantly from one region to another. The status of women is often described based on their income, employment, education, health, fertility, and their roles within the family, community, and society. Despite their hard work, women are not socially and economically empowered. They face numerous challenges in carrying out income-

generating activities. Women in agriculture are typically associated with traditional subsistence farming, low-yield food crops, poverty, lack of influence, and the inability to adopt innovative farming practices (Shamna *et al*., 2022). Their contribution is essential for the rural economy and food security. Additionally, women bear a significant unpaid workload in household chores and family care, a responsibility that is often overlooked despite its importance (Yoganandham *et al*., 2021).

Women also undertake a greater number of tasks compared to men. Despite their significant contributions to farming, women have largely remained unnoticed as active farmers. The immense involvement of women in agriculture often goes unrecognized by most individuals. Drudgery is commonly understood as the physical and mental exhaustion, monotony, and hardships experienced while performing a job. Numerous agricultural operations and household activities carried out by women entail substantial physical strain, leading to severe health issues in the long term. Due to the excessive workload they bear both on the farm and at home, there is a risk of neglecting their own health (Malek *et al*., 2019).

Agriculture plays a crucial role in the Indian economy, with farm women being the primary workforce involved in various agricultural operations from planting to harvesting. Women are the backbone of the agricultural workforce, contributing to over 79% of farm activities including seeding, transplanting, weeding, fertilizing, plant protection, harvesting, processing, and storage (Tiwari *et al*., 2021).

Materials and Methods

The data on perception of women towards drudgery in agricultural activities were collected by reviewing the recent research studies in print and electronic media. The most related literatures were chosen to be incorporated in the present review to find out the various activities which the women perceived light, moderate and difficult. This indicated the drudgery of postural discomfort in performing the activities.

Results and Discussion

1. Socio-Personal characteristics of farm women

A rural agricultural community's lifestyle can be inferred from its socioeconomic circumstances. Over 70% of women work as farmers, making it one of the traditional occupations passed down through the generations. Women in remote areas: take part in

agricultural labour, family work, dairying, and several other agriculturally related occupations, either directly or indirectly (Yadav and Revanna 2017).

1.1 Age of the respondents

The respondents' age represents the number of calendar years they have completed. The behavior of an individual is influenced by their age, as they are exposed to various situations multiple times. Hence, the age of the farm women is an essential aspect (Patel *et al*., 2017). The majority of farm women are members of the middle age group, which can be attributed to the fact that this age range is considered to be a period of active work for them, as they are responsible for the well-being of their families. Devi *et al*., (2022) carried out a study on assessment of work related health hazards faced by female workers in vegetable cultivation where they found that majority of the respondents (60.33%) were from the age group 31-40 years and only 0.67% of the respondents were from the age group 51-60 years. A similar finding had been reported by Yoganandham (2021) mentioning that women agricultural labourers in rural areas of ranipettai district (25.8%) majority of the respondents belonged to middle age group (41-50 years) whereas only 2.5% of the farm women were from the below 20 years of age. 39.09% of the respondents belonged to age group 21-30 years (Sahu and Lenka 2021). Hence, the table 1 reveals that the women ranged between 21-40 years aged are actively involved in agricultural activities this may be due to their confidence and skilled enough in agriculture and a leisure time activity for them.

Table 1: Age of the respondents

Author/s, year, sample size (N), locale of the study	**Below 20 years**		**21-30 years**		**31-40 years**		**41-50 years**		**51-60 years**		**61-70 years**	
	n	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Devi *et al*., (2022) N=300 Jorhat district of Assam	-	-	59	19.67	181	60.33	58	19.33	2	0.67	-	-
Yoganandham (2021) N=120 Ranipettai district of Tamil Nadu	3	2.5	20	16.7	23	19.1	31	25.8	22	18.3	21	17.5
Sahu and Lenka (2021) N= 110 Bargarh district of	-	-	43	39.09	32	29.09	22	20	13	11.82	-	-

Odisha												

1.2 Education level of the respondents

In terms of educational attainment, it was found that while a greater proportion of farm women had completed their elementary and intermediate school education, 33.67 percent of them were illiterate. Because of this, the government and other nonprofit organisations are trying to promote women's welfare and development. Additionally, the government is making every effort to ensure that everyone has access to education through various initiatives, including adult education (Yadav and Revanna 2017). 31 percent of the farm women had completed their elementary education, 28.50 percent had completed their secondary school, 21.50 percent were illiterate, 16.50 percent had finished their upper secondary education, and 2.50% had graduated (Patel *et al*., 2017). (Pandey *et al*., 2020) investigated occupational health hazards and drudgeries perceived by the women farmers in western zone of Uttar Pradesh and found that majority (34.17%) of the farm women were illiterate. Tiwari *et al*., (2021); Biradar (2021); Yoganandham (2021); Pandey *et al*., (2020); Sachan *et al*., (2019); concluded that majority of the respondents were illiterate followed by elementary, middle, and high schools. This could be because there are elementary, middle, and high schools in the hamlet as well as more advanced secondary schools in neighbouring communities.

Table 2: Education level of the respondents

Author/s, year, sample size (N), locale of the study	**Illiterate**		**Primary**		**Junior high school**		**High school**		**Intermediate**		**Graduate / posgraduate**	
	n	%	n	%	n	%	n	%	n	%	n	%
Sarmah *et al*., (2023) N= 120 Assam	5	4.16	6	5	18	15	47	39.1	32	26.6	12	10
Tiwari *et al*., (2021) N= 120 Gumla District, Jharkhand	55	45.83	27	22.5	08	6.67	10	2.50	-	-	-	-
Biradar (2021) N= 120 Karnataka	109	90.84	-	-	-	-	11	9.16	-	-	-	-

Yoganandham (2021) N=120 Ranipettai district of Tamil Nadu	62	51.7	42	35	-	-	12	10	4	3.3	-	-
Sahu and Lenka (2021) N= 110 Bargarh district of Odisha	-	-	35	31.82	17	15.45	29	26.36	-	-	-	-
Pandey *et al*., (2020) N=960 Western zone of U.P	328	34.17	263	27.40	176	18.33	69	7.19	87	9.06	37	3.85
Sachan *et al*., (2018) N=100 Kanpur district of U.P	42	42	-	-	30	30	15	15	12	12	1	1
Tripathi *et al*., (2018) district N= 120 Bulandshahr of western Uttar Pradesh	48	40	45	37.50	13	10.83	7	5.8	4	3.33	3	2.5
Yadav and Revanna (2017) N=300 Tumakuru district in Karnataka state	101	33.67	79	26.33	57	19	29	9.67	25	8.33	9	3
Patel *et al*., (2017) N=200 Junagadh district of Gujarat state	43	21.50	62	31	-	-	57	28.50	33	16.50	5	2.5

1.3 Family type of the respondents

In terms of family type was categorized as joint, nuclear and extended. Various studies shows that more number of farm women lived in nuclear family (Sarmah *et al*., 2023); (Devi *et al*., 2022); (Tripathi *et al*., 2018); (Yadav and Revanna 2017). In contrast with this maximun farm women belonged to joint family than nuclear family (Biradar 2021). In line with this statement maximum farm women belonged to joint family (56%) and 43.3% belonged to nuclear family (Surabhi *et al*., (2016). Eighty-nine percent of the farm women lived in nuclear families. Farm women were more likely to be in nuclear families. This is something

that is commonly seen in lower socioeconomic societies, especially in rural India (Yadav and Revanna 2017).

Table 3: Family type of the respondents

Author/s ,year, sample size (N), locale of the study	**Nuclear**		**Joint**		**Extended**	
	n	**%**	**n**	**%**	**n**	**%**
Sarmah *et al*., (2023) N= 120 Assam	66	55	45	37.5	9	7.5
Devi *et al*., (2022) N=300 Jorhat district of Assam	164	54.67	136	45.33	-	-
Tiwari *et al*., (2021) N= 120 Gumla District, Jharkhand	58	48.33	62	51.67	-	-
Biradar (2021) N= 120 Karnataka	23	19.17	97	80.83	-	-
Tripathi *et al*., (2018) N= 120 Bulandshahr of western Uttar Pradesh	78	65	42	35	0	0
Yadav and Revanna (2017) N=300 Tumakuru district in Karnataka state	207	89	93	11	-	-
Surabhi *et al*., (2016) N=150 Gujarat	65	43.3	84	56	1	0.67

2. Women participation in agriculture activities

In addition to their involvement in domestic tasks such as cooking, childcare, and family care, a significant number of women also participated in various agricultural activities. Agricultural activities are segregated into three operations- Pre-operational, Operational and Post-operational agricultural activities

2.1 Pre-operational agricultural activities

Pre-operational agricultural activities includes land preparation, levelling and making ridges and furrows, clod crushing, digging, ploughing, harrowing etc. Specifically, more than half of the women engaged in farming were actively engaged in tasks such as digging (65.0%) and clod breaking (54.1%) (Sarmah *et al.,* 2023). Farm women engaged in a diverse array of agricultural and livestock tasks. The majority of them were responsible for tasks such as digging, sowing, manuring and drying grain. Jahan and Khan (2016) investigated on the

participation of farm women in various agriculture and allied activities and reported that women participated in pre- operational agriculture activities such as levelling of land (80.5%), removal of trash (93.5%) and seed treatment (21.5%), which was the minimum participation. Shilparani *et al*., (2015) concluded that women participation in different agricultural operations in Karnataka found out that 15% were involved in clod crushing, 12.5% in land preparation, 83.4% in seed cleaning. Maximum number of population were involved in seed cleaning. 2% of farm women involved in ploughing, 85% in removal of trash, 5% in levelling of land. It was showed that least involvement of farm women was found in ploughing (Chayal and Dhaka 2016). Among the selected pre-operational agricultural activities, ploughing was least practiced by women (Biradar 2021).

2.2 Operational Agricultural Activities

Agricultural activities encompass all tasks involved in the day to day management and execution of farming operations. This includes activities such as planting, fertilizer appilication, weeding etc. These activities are essential for the ongoing case and maintenance of crops throughout the growing season or production cycle. A study carried out by Sharma *et al*., (2023) in Assam stated that 85% and 90% of farm women were involved in sowing and transplanting respectively. Maximum no. of farm women participated in weeding, irrigation and sowing (Shilparani *et al*., 2015); (Khare *et al*., 2019); (Biradar 2021); (Jahan and Khan 2016).

2.3 Post Operational Agricultural Activities

Post agricultural activities refers to tasks carried out after the main farming activities are completed, typically after harvesting. These activities include activities like cleaning, storing, value- addition, marketing etc. They are essential for maximizing the value of the harvest and preparing for the next growing season. Drying of produce and processing were major farm activities which were completely done by farm women. Similarly findings were reported by Sharma et al., (2023) Shilparani *et al*., (2015); Khare et al (2019) ;Biradar (2021); Jahan and Khan (2016); Chayal and Dhaka (2016). Hence, it can be said that women play a note worthy role in agriculture.

3. Level of drudgery perception by farm women

Drudgery refers to the unpleasant aspects of work that hinder productivity in various tasks (Technical module, 2009). However, the use of women-friendly farm tools and equipment can help alleviate this issue and enhance output. Drudgery is commonly associated with

arduous labor, monotony, time-consuming tasks, and the utilization of traditional tools that lead to improper working postures in the field (Singh *et al*., 2018).

9.00% of farm women found land preparation to be a challenging task, with 27.00% considering it the most difficult. Only 4.00% of respondents viewed it as a natural activity. The survey indicated that all participants engaged in this task seasonally, spending an average of 373.65 minutes on land preparation. Women experienced physical strain during land preparation, such as back pain, knee pain, shoulder pain, muscle pain, and muscle stretching (Malek *et al.,* 2019).

Women are actively involved in agriculture, as well as in allied sectors like animal husbandry and weaving, where their contribution surpasses that of men. Some agricultural tasks are considered challenging, while others are more manageable, and some are perceived as easy and light for women working on farms, depending on the workload and level of physical exertion. A majority of farm women find activities such as land preparation, including clearing jungles, breaking clods, digging, and ploughing to be difficult. However, tasks like seed treatment and sowing are seen as moderately challenging. In terms of crop care, irrigation is considered difficult if there is no access to water pump facilities or a reliable water supply for the fields; otherwise, it is seen as a moderate task. Manuring, applying fertilizers, filling gaps, resowing and thinning, weeding, and inter-cultivating in the crop fields are perceived as moderate activities. Harvesting, especially of grain crops and delicate fruits, is considered difficult due to the physical exertion involved and the need for careful handling to prevent damage. The majority of farm women found land preparation activities, such as leveling, making ridges and furrows, clod breaking, and digging, to be challenging. Similarly, sowing, transplanting, and planting were also perceived as difficult tasks by most farm women.

On the other hand, seed treatment, seed production, layout, and seed bed preparation were considered moderate activities by almost half of the farm women. In terms of crop care, sowing and weeding were seen as difficult tasks, while manuring and irrigation were viewed as moderate and light activities by slightly less than half of the farm women. Lastly, all activities related to harvesting were found to be difficult by the majority of farm women. Same results were found for the post harvesting operations. Majority of the farm women perceived post harvest operations as difficult to perform activities. For the livestock activities, dung collection and making dung cake were perceived as moderate activities by little less

than half of the farm women while rest of the activities were categorized as difficult to perform by majority of the farm women. It can be concluded that most of the agricultural activities and livestock were perceived as difficult to perform by majority of the farm women. This can be due to inadequate posture, long duration of exhaustive and repetitive work and lack of sufficient rest (Surabhi *et al*., 2016). Agricultural activities can be perceived as difficult to perform, moderate and light activity by farm women according to their work load.

3.1 Perceived work load in land preparation

The table no. 7 reveals that land preparation such as levelling and making ridges and furrows, clod breaking, digging and so on were perceived as difficult to perform activities by majority of farm women Sarmah *et al*., (2023). Surabhi *et al*., (2016) reported that Levelling and making ridges and furrows, Clod breaking and Digging were perceived as difficult to perform by majority of farm women. 1.3 % of farm women perceived Levelling and making ridges and furrows as moderate to perform whereas no one perceived Harrowing, Ploughing, Digging and Clod breaking as light activity. Biradar (2021) indicated that levelling and making ridges and furrows (98.33%) were perceived as difficult to perform activities by majority of the farm women.

3.2 Perceived work load in sowing and transplanting

Sarmah *et al*., (2023) found seed treatment, sowing were perceived as moderate activities to perform by farm women while Biradar (2021) concluded sowing (89.16%) and transplanting (87.50%) were perceived as difficult to perform by majority of the farm women. Surabhi *et al*., (2016) also indicated the activities perceived as difficult by majority farm women.

3.3 Perceived work load in crop-care

Under crop care activities, farm women stated that irrigation was perceived as difficult to perform if water pump facility and supply of water to the crop field was unavailable otherwise it was perceived as moderate activity to perform. Manuring, fertilizer application, gap filling and re sowing, thinning, weeding and inter culturing operation in crop field were perceived as moderate activities (Sarmah *et al*., 2023). Weeding and interculturing (98.33%) were perceived as difficult to perform activities, while irrigation (42.50%), gap filling and re sowing/ thinning (41.67%) were perceived as moderate activities by the farm women (Biradar 2021). Manuring and irrigation were perceived as moderate and light activities by little less than half of the farm women (Surabhi *et al*., 2016).

3.4 Perceived work load in harvesting of the crop

Harvesting includes picking, cutting, plucking and planking. It is a crucial step as it determines the yield and quality of the crops. All the activities related to harvesting were perceived as difficult to perform by the majority of farm women (Surabhi *et al*., 2016); (Biradar 2021); (Sarmah *et al*., 2023).

3.5 Perceived work load in post harvest operations

Regarding post- harvesting operations, majority of farm women perceived shelling, decortications, stripping, sieving as difficult to perform activities (Biradar 2021). Especially through traditional and old aged techniques or absence of improved tools or device, these tasks are perceived as difficult to perform whereas drying and sieving perceived as moderate activities to perform but sometimes leads to backache and pains in hands as stated by most of the respondent (Sarmah *et al*., 2023). (Surabhi *et al*., 2016) also indicates same result and concludes that majority of farm women perceived post harvest operations as difficult to perform

Conclusion

Hence, it can be concluded that there is involvement of farm women in the majority of agricultural activities and they do not express drudgery as a major health issue and suffer silently (Tiwari *et al.,* 2021). Majority of the agricultural activities were drudgery prone. A large no. of women population are working in agricultural sector and performs strenuous tasks. Various studies explores that women are being struggling without any consideration of workload demand, physical fitness, nutritional status and their biological status as they perform a dual role of a home maker and farmwoman. The aggregate workload plays on them is so high that it becomes incompatible with their physical fitness leading to fatigue and drudgery and thereby lowering efficiency and impairing health issues in the long run.

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