

# Involvement of Farm Women is Different Straineous Farm Activities

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## Abstract

Most of the research work have been done in agricultural field in viewing the men as a farmer. Hence all the new technology and improved tools are based on men's body anatomy. But now the invisible work on farms & homes by rural women is how being talked about seriously. Women have been treated as specific target group in most recent rural development programmes, improvement in skill & employment of women in rural areas has been the focus of broad-based extension as well as agricultural scientist have also started paying attention to the role played by women & need for empowering them to contribute to production. For enhancing their skills it is necessary to reduce their physical stress & strain & labour time, this will improve their quality of work. Present study is useful in developing the new technology tools according to women's need for doing farm and home activities.

**Keywords:** Ergonomic, Postural analysis, farm activities, discomfort while farm activities stress management.

## Introduction

Women who first domesticated crop plant and there by initiated the art and science of forming, while men went out for hunting. Women started gathering seeds from native Hora and by cultivating those of interest from the point of view of food, feed, fodder, fibre and fuel, women regarded as "Creator of all green things". Besides her domestic duties she provides crucial supports to the family through the earning wages doing labour & carrying out household production activities.

Agriculture is the largest industry in India & women participate in almost in all agricultural operations such as transplanting, weeding, threshing, winnowing etc. Nearly half of available global human resource is women. Women is her husband's real treasure & help male & do every kind of field labour except driving & ploughing. The daily work schedule of rural women is very demanding & arduous. The day for her starts is early hours of morning & she is the last retire to bed at night. It is estimated that during the peak period a women works for about 8-9 hours in agriculture, 4 hours in household chores as against 5 hours for each activity during ordinary days. Thus, they daily put 17-18 hours of productive manual labour. "Women constitute 50% of the agricultural work force in India giving India the highest degree of female participation in agriculture (Tamilselvi & D. Somas Undamn 2000) In this context the present study aimed to the involvement of farm women in different straineous farm activities.

## Aim of The Study

To fulfill this aim following objectives were taken –

1. To study the activities done by farm women
2. To study the discomfort related to adopted postures during the farm activities.
3. To study the practices used for energy management.

## Hypothesis

Ho : There is no significant difference between postures of farm activities and physical strain.

## Research Methodology

The adopted research methodology in order to achieve the objective of the study both descriptive experimental desigas were planned. Descriptive design was choosen to find out different types of farm activities & different postures adopted by them. The experimental design was useful to study muscular stress & postural stress while performing farm activities. Pre-coded interview schedule was used as tool for data collection. Before constructing schedule a preliminary survey was conducted in farm to make



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rapport & become aware with problems faced by farm women by asking information question with farm. A pilot study was conducted to establish the validity of tools on a sample of 10 farm women. Total 50 farm women were considered as sample for the descriptive data collection. For experimented data collection various parameters taken for recorded of weight, height & muscular stress. The instruments were used for collection of experimental data were weighing balance measuring tape, stethoscope, stop watch. Weighing balance were used to measure the body weight in Kg. Measuring tape were used to measure the height in centimeter, stethoscope were used to near heart beat / minute by counting the heart beats/

minute. Stop watch was used to observe the time while taking the heart beats of individuals. The collected data were tabulated & analyzed with the help of subjective frequency, percentage, mean, correlation coefficient & rational statistics, standard deviation, paired 't' test, etc.

**Results & Discussion**

Involvement of women in different farm activities was categorized in three types i e. Occasionally, regularly & never. The table 1.0 shows, that weeding & harvesting were performed regularly by all farm women where as transplanting, winnowing, carrying were performed regularly, by 86%, 80% & 90% farm women respectively.

**Table Participation of farm women in different Agricultural activities –N=50**

S.N.	Particular Activity	Occasionally		Regularly		Never	
		F	%	F	%	F	%
1-	Weeding	-	-	50	100	-	-
2-	Land preparation	3	6%	-	-	47	94%
3-	Seed Treatment	2	4%	-	-	48	96%
4-	Use of chemical fertilize FYM	-	-	-	-	50	100%
5-	Showing/ Transplanting	7	14%	43	86%	-	-
6-	Irrigation	3	6%	-	-	47	94%
7-	Spraying insecticide/ dusting	1	2%	-	-	49	98%
8-	Harvesting	-	-	50	100%	-	-
9-	Winnowing	-	-	50	100%	-	-
10-	Carrying	4	8%	45	90	1	2%

**Table – 2 Distribution of the respondents on the basis of work load various home related tasks.**

S.N.	Tasks	Frequency	%
1-	Cooking	38	76
2-	Cleaning by home	34	68
3-	Cleaning of utensils	48	96
4-	Child rearing	50	100
5-	Cattle fed/ fodder cutting	48	96

Table 2 Reveals that work load of different household activities shows that 96% women involved in cleaning of utensils & cattle fed/ fodder cutting

where as child rearing were preformed by 100 percent farm women's and cooking & cleaning of house were done by 76% & 68% farm women respectively.

**Table 3 –Distribution of the respondents on the basis of stress rating in different activities N=50**

S.N	Activity	Stress ratings									
		Very Severe		Severe		Moderate		Low		Very Low	
		F	%	F	%	F	%	F	%	F	%
1.	Weeding	19	38	25	52	4	8	2	4	-	-
2.	Harvesting	24	48	22	44	2	4	2	4	-	-
3.	Carrying	12	24	11	22	25	50	2	4	-	-
4.	Winnowing	2	4	8	16	20	40	16	32	4	8

**Table – 4 Observatory analysis of pastoral discomfort during weeding.**

Posture	Body part	Very severe	Severe	Moderate	Low	Very Low
Squatting	Neck	-	25(50%)	14(28%)	9 (18%)	24%
	Shoulder	-	6(12%)	38(76%)	5(10%)	1 (2%)
	Upper neck	-	-	45 (90%)	5(10%)	-
	Upper arm	5 (10%)	30(60%)	15 (30%)	-	-
	Mid back	-	-	6 (12%)	38(76%)	6(12%)
	Lower arm	21(42%)	27(54%)	-	2 (4%)	-
	Lower back	30(60%)	18(36%)	2(4%)	-	-
	Buttock	46 (92%)	4 (8%)	-	-	-
	Palms	39 (78%)	11 (22%)	-	-	-
	Fingers	18(36%)	27(54%)	2(4%)	3(6%)	-
	Thigh	10(20%)	25(50%)	10(20%)	3(6%)	2(4%)
Leg	3 (6%)	27 (54%)	17(34%)	3(6%)	-	

Among all four selected activities squatting posture was adopted during weeding. In this posture maximum severe pain in neck was 50% & minimum 4% respondents complaint for very low body pain in neck. Very severe pain perceived in Buttock 92%, Lower back 60%, Palms 78%, Lower arms 42%, Fingers 36%, Thigh 20% & Leg 6% respectively.

#### **Conclusion**

Thus use can conclude that maximum involvement of farm women were found in harvesting, carrying, weeding and winnowing. The most stressed body part during different farm activities on the basis of very severe & severe body pain were lower arm, lower back, buttock, palms, fingers, thigh & leg. Carrying was most strenuous farm activity among weeding, harvesting, carrying & winnowing.

#### **Way forward**

- 1- Load preferably, should not be carried on head.
- 2- Organise work in such a way that one stoops as less as possible.
- 3- Adequate relaxation time should be provided during the farm activity.

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