



## ROLE OF DRY LAND FARM WOMEN IN COTTON FARMING SYSTEM

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### Abstract

The involvement of women in agriculture is as old as the advent of agricultural practices in the world. Women are intensively involved in all the farm operations. However, women's involvement and participation are not always 'visible' as compared to the 'visibility' of men. Moreover, the technologies are said to be gender neutral. Few research studies have shown that most of the technologies in agriculture are not suitable to farm women. The study was taken up with the objective to study the role performance of dry land farm women in sugarcane farming operations. Sample size of 60 garden land farm women were selected using proportionate random sampling technique. Utilizing the data, percentage analysis was taken up to assess the role performance of farm women under dry land farming system. Further, mean percentage was calculated for each of the major role area. The findings on role performance on cotton cultivation operations by farm women out of thirty one items, only eight items indicate that cent percent of the garden land farm women had performed the task namely viz., removal of fuzz from seeds, gap filling, thinning, hand weeding, picking, pinching of terminal bud and storage.

**Keywords:** Role performance, small farm women and cotton technology.

### INTRODUCTION

Technological base for improving productivity and income of the rural population in the field of agriculture has broadened with the success of Green revolution that the country witnessed during mid sixties. Various technological innovations have been released claiming spectacular yield potential at research stations. As a result of this research and transfer of technology programmes, the production has increased over time in the decades, thus balancing the population growth and food production of our country. However, the benefits of the new production technology have accrued mostly to male farmers while the women farmers have been bypassed in the development process.

The involvement of women in agriculture is as old as the advent of agricultural practices in the world. Agriculture is considered as one of the most primitive and oldest forms of human economic activity primarily based on land. Women in the past were intensively involved in all the farm operations. However, women's involvement and participation were not always 'visible' as compared to the 'visibility' of men. The situation has not improved much, even today. Social and institutional setup is unable to take into cognisance the role played and contribution made by women in any areas of economic activity including their participation in agriculture and dairy management. Barker (1997) opined that appropriateness should be defined within the scope of what is technically feasible, economically feasible, socially acceptable, environmentally safe and sustainable.

The present situation demands active participation of women along with men in all walks of life to have better life. Involvement of women in all development activities again demands a proper understanding to assess their needs and extent of fulfilment. With this background and in the absence of empirical evidence, the present study is to assess the role performance of dry land farming in cotton farming activities.

### METHODOLOGY

The study was taken-up in Perambalur district in Tamil Nadu which comprised of maximum area under garden land farming system. A sample size of 60 dry land farm women was taken for analysing the role performance of sugarcane technologies. Ex Post Facto research design was used in the study. The required data was collected by utilising a well structured and pre-tested interview schedule. Each respondent was asked to indicate the roles performed by her. She was also requested to indicate the performance category under which each role was performed by her. Utilising the data, percentage analysis was taken up to assess the role performance of farm women under dry land farming systems. Further, mean percentage was calculated for each of the major role area. Overall mean percentage was also worked out to make interpretations simple and easy.

## FINDINGS AND DISCUSSION

### ROLE OF DRY LAND FARM WOMEN IN COTTON FARMING OPERATIONS

The role of farm women in the dry land area in cotton crop in the major and sub activities viz., land

preparation, planting, inter-cultivation, harvest and marketing were collected and the results are presented in Table-1.

**TABLE-1**  
**ROLE OF DRY LAND FARM WOMEN IN COTTON FARMING OPERATIONS**  
(N = 60)

S. No.	Role items	Farm women	
		Number	Per cent
<b>1.</b>	<b>Field preparation</b>		
	i) Stubble collection	30	50.00
	ii) Application of FYM	18	30.00
	iii) Cleaning the field boundaries	20	33.33
	Mean percentage		37.77
<b>2</b>	<b>Planting</b>		
	i) Selection of seeds	52	86.66
	ii) Removal of fuzz from seeds	60	100.00
	iv) Seed hardening	10	16.66
	v) Arranging labourers	28	46.67
	vi) Seed treatment with chemicals	40	66.66
	vii) Seed treatment with bio-fertilizers	40	66.66
	viii) Sowing the seeds	60	100.00
	Mean percentage		69.04
<b>3.</b>	<b>Inter-cultivation</b>		
	i) Application of fertilizers	20	33.33
	ii) Irrigation	-	-
	iii) Thinning	60	100.00
	iv) Gap filling	60	100.00
	v) Hand weeding	60	100.00
	vi) Cleaning the irrigation channels	20	33.33
	vii) Earthing-up	52	86.66
	viii) Top dressing	7	11.66
	ix) Plant protection measures	-	-
	x) Application of growth regulators	5	8.33
	xi) Pinching of terminal bud	60	100.00
	Mean percentage		52.12
<b>4.</b>	<b>Harvest</b>		
	i) Picking	60	100.00
	ii) Shade drying	52	86.66
	iii) Cleaning the kapas	45	75.00
	iv) Grading the kapas	50	83.33
	v) Transporting to storage house	52	86.66
	vi) Bagging	57	95.00
	vii) Storing	60	100.00
	Mean percentage		89.52
<b>5.</b>	<b>Marketing</b>		
	i) Transporting to the market	8	13.33
	ii) Marketing	10	16.66
	Mean percentage		14.99
	<b>Overall mean percentage</b>		<b>52.69</b>

#### FIELD PREPARATION

There are three sub-practices under land preparation viz., cleaning the field boundaries, application of FYM and stubble collection. Among these

roles, the farm women of dry land were involved to a greater extent in stubble collection (50.00 per cent) compared to cleaning the field boundaries (33.33 per cent) and application of FYM (30.00 per cent). The role

performed by the farm women with respect to land preparation activities was also found to be low which is evident from the mean percentage value of 37.77. Most of the land preparation operations involved more drudgery and the traditional tools used by women for these operations were least effective and more energy consuming. Hence, the farm women would have performed these tasks to a lesser magnitude. This finding is in confirmation with that of Deshpande and Ali (2002) who reported that most of the farm women were involved in energy saving and less drudgery involving activities.

### PLANTING

It could be seen from the table that under planting operations in cotton, cent per cent of the farm women of dry land were involved in removal of fuzz from seeds and sowing the seeds. More than four-fifth of the small farm women had performed the task of selection of seeds (86.66 per cent). Two-third (66.66 per cent) of them were involved in seed treatment with chemicals, seed treatment with bio-fertilizers followed by arranging labourers (46.67 per cent). Nearly one-third of the farm women (30.00 per cent) were engaged in application of manures and only one-sixth of the women (16.66 per cent) were involved in seed hardening. From the perusal of the results, it may be concluded that a higher percentage of women were involved in planting operations. Most of the activities in planting operations is gender neutral and can be performed by women and men alike, that is why the mean percentage value was also on the increase (69.04). Dry land women had jointly involved in application of fertilizers, seed hardening and treatment of seeds with chemicals and bio-fertilizers as they were men-oriented activities. This finding corroborates with the findings of Arul raj (2013) who also reported that majority of farmers had greater role in planting operations.

### INTER-CULTIVATION

It could be seen that cent per cent of the farm women were engaged in thinning, gap filling, hand weeding and pinching of terminal buds. More than four-fifth of the women were involved in earthing-up (86.66 per cent) and one-third (33.33 per cent) under each of them were engaged in application of fertilizers and cleaning the irrigation channels (33.33 per cent). Only a less percentage of the women were involved in the tasks viz., top dressing (11.66 per cent) and application of growth regulators (8.33 per cent). None of them were involved in irrigation and plant protection measures.

It could be inferred that the overall mean percentage value crossed more than fifty per cent (52.12) as they had played major role in thinning, gap filling, hand weeding, topping and earthing-up. Irrigation and plant protection practices involved more physical strain and required equipments for operation. Further, they were relatively arduous jobs to be carried out by women folk. Only the remaining eight practices were women

oriented, involving less physical strain. Further, they were eco-friendly and could be pursued easily by the farm women compared to other practices. This finding is in agreement with the findings of Deshpande and Ali (2002).

### HARVEST

From the data in table, it could be seen that cent per cent of the farm women were engaged in picking and storing operations. Most of the women were involved in bagging (95.00 per cent), shade drying (86.66 per cent), transporting cotton to storage house (86.66 per cent) and grading the kapas (83.33 per cent). Seventy five per cent of the women were engaged in cleaning the kapas.

A high overall mean percentage value of 89.52 was noticed under the major area of harvest as the farm women were engaged in all the sub-practices. Among them, all of them were involved in picking and bagging operations. Due to the possession of small sized land holdings, it is quite natural for the respondents to involve in harvesting operations, besides harvest being a traditionally adopted practice by the farm women might be the reasons for their higher involvement. This finding is in line with the findings of Shanthi(2004).

### MARKETING

From the table, it could be observed that only one-sixth (16.66 per cent) and (13.33 per cent) of the women were engaged in marketing and transporting the produce to the market respectively. It could be observed that only a low overall mean percentage of 14.99 was observed as the women were involved in these activities to a lesser extent. Generally, marketing of produce was carried out by men folk. Women's dual role in farm and home activities together with their low literacy rate and social stigma prohibit the rural women's movement outside the village acted as barriers in the marketing of produce. This finding is in agreement with the findings of Vengatesan and Santha Govind (2009).

The overall role performed by small farm women of dry land in cotton cultivation activities was found to be only 52.69. This might be due to the fact that dry land farming provide adequate employment generation only for a minimum number of women days. Hence, women would have ventured in allied and off-farm activities. Further, most of the dry land activities are repetitive and monotonous, involving high drudgery and the traditional tools used by dry land women for these operations were perceived by women as least productive and energy consuming.

### CONCLUSION

Majority of the farm women were found to have only medium level of role performance in cotton technology by Farm Women. Since the farm women were involved in farming and off-farm activities and often jointly with their husbands in performing different agricultural operations. Women extension agents should take efforts to create awareness and to impart knowledge

and skill on production, processing and marketing technologies through periodical training and campaigns. They may be given intensive training especially on dairy, goat rearing and poultry keeping for practising intensively in their farms.

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