Knowledge of Farm Women regarding Various Agricultural Activities

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Abstract

The international development community has recognized that agriculture is an engine of growth and poverty reduction in countries where it is the main occupation of the poor. However, the agriculture sector in many developing countries is underperforming, in part, because women, who represent a crucial resource in agriculture and the rural economy through their roles as farmers, laborers and entrepreneurs, almost everywhere face more severe constraints than men in access to productive resources. The knowledge of farm women regarding various agricultural activities was higher namely in bird watching, harvesting, intercultural operations and lower in land preparation activities, marketing, post-harvest operations, seed bed preparation and processing activities. Majority (71.50 %) of the respondents had medium level of knowledge about the different agricultural activities followed by 25.50 per cent and 3.00 per cent of the respondents with low and high level of knowledge respectively.

Key words: farm women, agricultural activities, knowledge

Introduction

The agriculture sector in many developing countries is under performing, in part because women, who represent a crucial resource in agriculture and the rural economy through their roles as farmers, laborers and entrepreneurs, face more severe constraints than men in access to productive resources. Efforts by national government and the international community to achieve their goals for agricultural development, economic growth and food security will be

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strengthened and accelerated if they build on the contributions that women make and take steps to alleviate these constraints.

The prosperity and growth of a nation depends on the status and development of its women, as they not only constitute nearly half of its population, but also positively influence the growth of the remaining half of the population.

Multi-Dimensional role of women

Agriculture: Sowing, transplanting, weeding, irrigation, fertilizer application, plant protection, harvesting, winnowing, storage etc.

Allied activities: Cattle management, fodder collection, milking, goat rearing, poultry farming, sericulture, sheep rearing, bee keeping etc.

Methodology

Ahmednagar and Solapur districts of Maharashtra State were purposively selected for the present study because of the maximum area under agriculture and allied sectors. Ex-post-facto research design was used for the study. Two tehsils namely Rahuri and Rahata from Ahmednagar district and Malshiras and Pandharpur from Solapur district were purposively selected for the present investigation, as these tehsils have maximum area under agriculture and allied sectors. From each selected tehsil. five villages were selected randomly. Thus a total of 20 villages were selected for the present study. Ten farm women from each village, who were engaged in agricultural activities were randomly selected making a total sample size of 200 farm women. They formed the respondents for the study.

Results and Discussion

Knowledge of farm women regarding various agricultural activities

Knowledge is operationally defined as the awareness gained through the experience of facts, or facts of knowing about something gained through experience. For studying knowledge of respondents, statements were collected

by referring to relevant literature, personal observation in the fields and informal interview with farm women following participatory methods. Knowledge of farm women was studied with reference to eight major concept areas related to activities in agriculture and allied areas.

The opinion of the respondents were elicited on a three point continuum i.e. whether they had complete knowledge, partial knowledge or no knowledge.

The data collected on knowledge of farm women regarding various agricultural activities are presented in Table 1.

Table 1. Distribution of the respondents according to knowledge regarding various agricultural activities

Sr.	Recommended	Complete	Partial	No	Mean	Rank
No.	technology	knowledge	Knowledge	knowledge	score	
A	Land preparation				1.11	IV
1	Leveling of field	27	148	25	1.01	
		(13.50)	(74.00)	(12.50)		
2	Collection of stubbles	153	23	24	1.645	
		(76.50)	(11.50)	(12.00)		
3	Manure application	13	58	129	0.97	
		(06.50)	(29.00)	(64.50)		
4	Manure mixing	13	168	19	0.97	
		(06.50)	(84.00)	(09.50)		
5	Pre sowing irrigation	13	166	21	0.96	
		(06.50)	(83.00)	(10.50)		
В	Seedbed				0.97	VII
	preparation					
1	Nursery bed	7	27	166	0.205	
	preparation	(03.50)	(13.50)	(83.00)		
2	Application of	16	166	18	0.99	
	fertilizer and manure	(08.00)	(83.00)	(09.00)		
	to seedbed					
3	Seed treatment	8	172	20	0.94	
		(04.00)	(86.00)	(10.00)		
4	Sowing					
a.	Direct sowing	165	22	13	1.76	
		(82.50)	(11.00)	(06.50)		
b.	Dibbling	9	169	22	0.935	
		(04.50)	(84.50)	(11.00)		
C.	Planting	13	173	14	0.995	
		(06.50)	(86.50)	(07.00)		

Table 1. Contd...

Sr.	Recommended	Complete	Partial	No	Mean	Rank
No.	technology	knowledge	Knowledge	knowledge	score	
5	Irrigation					
a.	Surface irrigation	169	15	16	0.995	
		(84.50)	(07.50)	(08.00)		
b.	Drip irrigation	10	174	16	0.97	
		(05.00)	(87.00)	(08.00)		
c.	Water application by	174	16	10	0.965	
	zari	(87.00)	(08.00)	(05.00)		
C	Inter cultural operations				1.16	III
1	Gap filling	67	119	14	0.965	
		(33.50)	(59.50)	(07.00)		
2	Thinning	80	115	5	1	
		(40.00)	(57.50)	(02.50)		
3	Fertilizer application	14	169	17	0.225	
	*** 1'	(07.00)	(84.50)	(08.50)	1.00	
4	Weeding	174	16	10	1.82	
		(87.00)	(08.00)	(05.00)		
D	Bird watching	169	21	10	1.795	I
	_	(84.50)	(10.50)	(05.00)		
E	Harvesting				1.40	II
1	Cutting of crop	91	94	15	0.98	
		(45.50)	(47.00)	(07.50)		
2	Picking of	177	13	10	1.835	
	pods/fruit/flower	(88.50)	(06.50)	(05.00)		
F	Post-harvest				1.001	VI
	operation					
1	Threshing	76	108	16	0.95	
		(38.00)	(54.00)	(08.00)		
2	Winnowing	176	18	6	1.85	
	C 1'	(88.00)	(09.00)	(03.00)	0.107	
3	Grading	6	25	169	0.185	
	Do alain o /Do alaa aira	(03.00)	(12.50)	(84.50)	0.005	
4	Packing/Packaging	13	143	(22,00)	0.995	
5	Storage	(06.50)	(71.50)	(22.00)	1.025	
3	Storage	(09.00)	139 (69.50)	43 (21.50)	1.025	
G	Marketing	13	145	42	1.005	V
G	mai kenng	(06.50)	(72.50)	(21.00)	1.005	*
Н	Processing	9	12	179	0.15	VIII
11	riocessing	(04.50)	(06.00)	(89.50)	0.13	* 111 1
		[(0 4 .50)	(00.00)	(09.50)		

(Data in parenthesis indicates percentage)

A. Land preparation

In case of land preparation it was revealed that, 74 per cent of the respondents had partial knowledge about levelling of field, majority (76.50 %) of them had complete knowledge about collection of stubble whereas 64.50 per cent of them had no knowledge about manure application. Eighty four per cent and 83.00 per cent of the farm women had partial knowledge about manure application and pre-sowing irrigation respectively.

B. Seedbed preparation

In case of seedbed preparation it was revealed that, equal percentage of the respondents i.e. 83.00 per cent had no knowledge about nursery bed preparation and partial knowledge about application of fertilizer and manure to seedbed preparation. Majority (86.00%) of the farm women had partial knowledge about seed treatment. With respect to sowing practices 82.50 per cent respondents had complete knowledge about direct sowing, majority (84.50 %) of the respondents had partial knowledge about dibbling while 86.50 per cent of the farm women had partial knowledge of planting operation. In irrigation practices majority (84.50 %) of the farm women had complete knowledge of giving surface irrigation to crops. Around 87.00 per cent of the respondents had partial knowledge about drip irrigation activities and complete knowledge about water application by zari to different crops.

C. Inter-cultural operations

In case of inter-cultural operations it was observed that, majority(59.60 %) of the respondents had partial knowledge about gap filling followed by 33.50 per cent with complete knowledge about gap filling; 57.50 per cent of respondents had partial knowledge about thinning operation followed by 40.00 per cent of the respondents with complete knowledge about thinning operation. The majority (84.50 %) of the respondents had partial knowledge about fertilizer application

whereas 87.00 per cent of the respondents had complete knowledge of weeding operation.

D. Bird watching

In case of bird watching it was observed that, majority(84.50%) of the respondents had complete knowledge about bird watching followed by 10.50 per cent with partial knowledge and 5.00 per cent with no knowledge about bird watching.

E. Harvesting

In case of harvesting it was revealed that, 47.00 per cent of the respondents had partial knowledge about cutting of crops followed by 45.50 per cent with complete knowledge about it. Majority (88.50 %)of the farm women had complete knowledge about picking of pods, fruits and flowers.

F. Post-harvest operations

In case of post-harvest operations it was observed that, 54.00 per cent of the respondents had partial knowledge about threshing operation followed by 38.00 per cent with complete knowledge about it. Majority (88.00 %) of the respondents had complete knowledge about winnowing operation whereas 84.50 per cent of the respondents had no knowledge about grading practice. Majority (71.50 %) of the respondents had partial knowledge about packaging practice whereas 69.50 per cent of the respondents had partial knowledge about storage activity.

G. Marketing

In case of marketing it was observed that, majority (72.50%) of the respondents had partial knowledge about marketing followed by 21.00 per cent of the respondents with no knowledge and 6.50 per cent of the respondents with complete knowledge about marketing operation.

H. Processing

In case of processing it was observed that, the majority (89.50 %) of the respondents had no knowledge about processing followed by 06.00 per cent of the respondents with partial knowledge and 4.50 per cent of the respondents with complete knowledge about processing operation.

The data in Table 1 further indicates the rank order of knowledge of farm women regarding various agricultural activities. It is arranged in descending order and presented as bird watching (1.79), harvesting (1.40), intercultural operations (1.16), land preparation (1.11), marketing (1.005), post-harvest operations (1.001), seedbed preparation (0.97) and processing (0.15).

It implies that, the knowledge of farm women regarding various agricultural activities was higher in bird watching, harvesting, inter-cultural operations and lower in land preparation activities, marketing, post-harvest operations, seed bed preparation and processing activities.

Table 2. Distribution of the respondents according to the level of knowledge about agricultural activities

Sr. No.	Knowledge of agricultural activities	Number of respondents(200)	Percentage
1	Low (Up to 27)	51	25.50
2	Medium (28 to 31)	143	71.50
3	High (32 and above)	06	03.00
	Total	200	100.00

Mean = 29.08 S.D = 2.38

The data in Table 2shows that, the majority (71.50 %) of the respondents had medium level of knowledge about various agricultural activities followed by 25.50 per cent of the respondents with low and 3.00 per cent with high level of knowledge.

The above findings are in line with those of Wasim *et al.* (2009), Pandey *et al.* (2010), Singh, B. and Srivastava, S. (2012) and Mishra Palak (2013).

Implications

- 1. In order to improve women's work efficiency, Government and Extension workers should plan and execute need based training programmes.
- 2. Ensure coverage for Social Security and legal protection of rural women workforce, particularly women heads of household, given that women in the mentioned region participate in agricultural activities and spend a lot of time, but they do not have any support from government agencies.
- 3. Efforts should be made to make the males of our society sufficiently open minded to accept the ability of the women in the field of planning and managing, in case of farm related activities.
- 4. The findings of this study reported that majority of the respondents had medium level of knowledge about agricultural activities and allied sectors. Therefore, there is an urgent need to provide them sufficient knowledge regarding agricultural activities by means of training given by KVKs and NGOs.

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