

## **Knowledge of rural women about homestead technologies**

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### **ABSTRACT**

The objective of the present study was to find out the knowledge of rural women about homestead technologies in Chittorgarh district. The study was conducted in *Bhadesar* and *Bassi* panchayat samities of Chittorgarh district of Rajasthan state. From each panchayat samiti, two villages where the homestead technologies have been promoted by the KVK since last five years were included in the study. The sample consisted of randomly selected 100 rural women, 25 from each village. Personal interview method was used for data collection. Frequency distribution, percentage and mean per cent score were used for analysis of data. The knowledge of the respondents about homestead technologies revealed that majority of the respondents (63%) possessed good knowledge about health care component. However, their knowledge was found to be average in nutrition and environmental sanitation components.

**Key Words :** Rural women, Knowledge, Homestead technologies

### **INTRODUCTION**

Indian rural women who fulfill multifarious responsibilities daily without any hue and cry, is the mother, wife or sister responsible for family's well being as well as a farmer producing food for the family. She does not hold any apparent and discrete identity of her own on world platform but undoubtedly perform the most arduous and time consuming work behind the curtain without much resources and technologies at her disposal. Although she does all the multiple productive functions from bearing the children to performing house hold chores, her role has often been underestimated or ignored. It is a matter of great concern that in spite of magnificent tradition of women's participation in the affairs of the family, women still lag behind men in every sphere. In spite of the rapid strides made in scientific and technological development women has not yet received due importance in transfer of technology programmes.

Technological innovations and their reach to the rural women can result in enhancing women's welfare and their empowerment. Low cost, reliable homestead technologies related to nutrition, health and sanitation, drudgery reduction, post harvest technologies etc. can provide a great leap forward for meeting rural women's practical needs for reducing their drudgery, increasing their efficiency and improving family's health condition.

## METHODOLOGY

The study was conducted in Chittorgarh district of Rajasthan state. The district has 11 Panchayat Samities out of these, two Panchayat Samities namely *Bhadesar* and *Bassi* were selected purposively where the homestead technologies have been promoted by the KVK since last five years (2009-2013). Total four villages from two selected panchayat samities were included in the study. Sample for the study consisted of 100 rural women, 25 from each village. Personal interview method was used to collect the data from the respondents. Frequency, percentage, mean percent score were used for analysis of the data.

## RESULTS AND DISCUSSION

### Background information of the respondents :

More than 40 per cent respondents belonged to the age group of 18-30 years and 38 per cent were from 31-45 years of age. Majority of the respondents (60%) were under upper caste category. Regarding education, 29 per cent respondents were illiterate and 24 per cent were educated up to middle level. Only 15 per cent respondents were graduates. Farming was the main family occupation of 89 per cent respondents. All the respondents were involved in some subsidiary occupations like farm labor, business and service. Majority (63%) belonged to nuclear family. More than 40 per cent respondents had small size family consisting of up to 4 members. Majority of the respondents (62%) were small and marginal farmers. Majority of the respondents (75%) were residing in *pucca* houses.

### Knowledge of the respondents about homestead technologies :

Fig. 1 presents knowledge of the respondents about homestead technologies. Critical examination of the knowledge score highlights that the respondents possessed good knowledge about health care (89.30 MPS). However, their knowledge was found to be average in nutrition (66.51 MPS) and environmental sanitation (58.48 MPS).

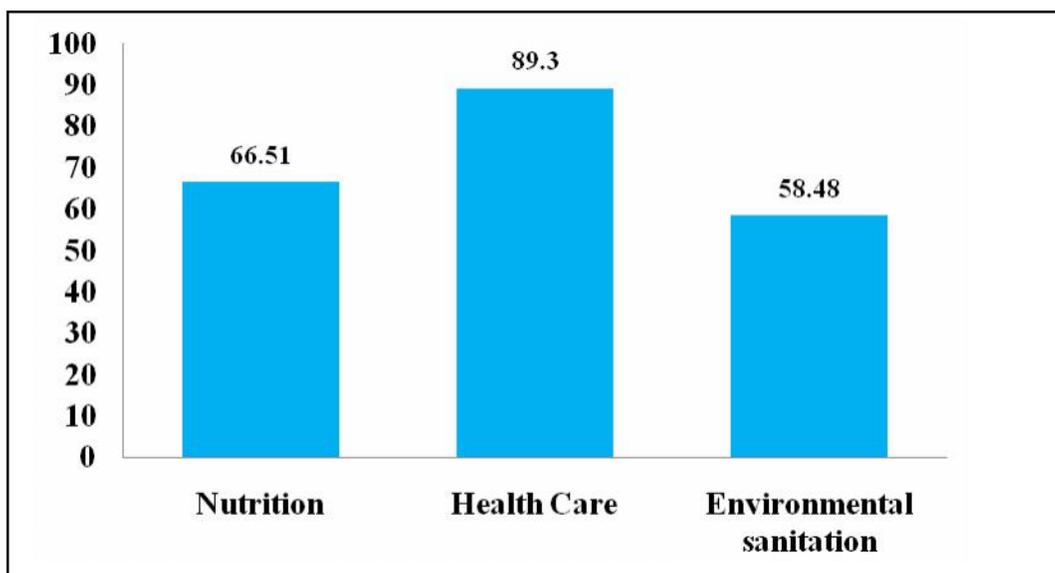


Fig. 1 : Knowledge of respondents regarding homestead technologies

An in depth enquiry into knowledge of the respondents in different components was made to find out specific deficiencies in knowledge so that necessary efforts can be made to increase the knowledge of the rural women about homestead technologies.

### **Nutrition :**

With regard to knowledge of the respondents regarding nutrition, Table 1 depicts that nearly three fourth of the respondents (74%) knew about concept of balanced diet, 72 per cent respondents knew that intake of imbalanced diet results into improper growth and development and 58 per cent reported that it may cause malnutrition. Regarding food groups, cent percent respondent knew that cereals, pulses, fruits and vegetables, milk and milk products and oil and fat should be included in the daily diet. Similarly, 59 per cent respondents also knew that sugar and jaggery are the important constituents of the balanced diet. However, only 12 per cent women had knowledge that nuts and oil seeds are also important part of the food groups. With regard to functions of food, all the respondents knew that food provides energy and 94 per cent respondents were aware of the fact that food helps in proper growth and development and prevention from diseases. With respect to methods of cooking, majority of the respondents (94%) had knowledge about pressure cooking, 77 per cent were aware about boiling method and only 2 per cent respondents had knowledge about roasting.

Regarding knowledge about points to be considered while cooking, 100 per cent respondents knew about washing hands before handling food, cutting vegetables in big pieces, washing vegetables before cutting, washing of pulses and rice before cooking, keeping food covered and avoiding use of excess water in cooking. Similarly half of the respondents (50%) were aware of the fact that food should be cooked on low flame and 36 per cent knew that food should not be heated again and again. When the respondents were asked about methods of improving nutritive value of food stuffs, majority had knowledge about sprouting (69%) and combination of food groups (59%) while, only 2 per cent respondents had knowledge about fermentation. Knowledge of the women regarding nutritional problems prevalent among children was very poor as only 23 per cent respondents knew about PEM (Protein Energy Malnutrition), 12 per cent knew about vit. A deficiency, 11 per cent had knowledge about beri-beri and goiter diseases and only 7 per cent respondents knew about vit. D deficiency in children due to poor nutrition. The respondents possessed good knowledge about nutrition related problems among rural women as majority of them knew about fatigue (81%), anemia (72%) and underweight (67%).

### **Health care :**

Table 2 depicts knowledge of the respondents about health care practices. All the respondents had knowledge of keeping the body healthy *i.e.* cleaning teeth, eyes, nails, hairs and cloths regularly. Similarly cent respondents knew that hands should be washed properly after defecation, before eating food and cooking. Cent percent respondents had knowledge that unhygienic surroundings (74%), imbalanced diet (74%) and impure drinking water (86%) are the main reasons for getting sick.

Kiri (2001) also observed good knowledge (61-77%) of the rural women in personal health, hygiene and cleanliness, household cleanliness, food handling and health services. Fair knowledge about safe drinking water was exhibited by 55 per cent respondents.

**Table 1 : Knowledge of the respondents about nutrition (n=100)**

Sr. No.	Aspects	f / %
1.	Concept of balanced diet	74
2.	Consequences of imbalanced diet	
	a) Malnutrition	58
	b) Improper growth and development	72
3.	Food groups	
	a) Cereals	100
	b) Pulses	100
	c) Fruits and vegetables	100
	d) Milk and milk product	100
	e) Oil and fat	100
	f) Sugar and jaggery	59
	g) Nuts and oil seeds	12
4.	Functions of food	
	a) To provide energy	100
	b) Proper growth and development	94
	c) Prevention from diseases	94
5.	Methods of cooking	
	a) Boiling	77
	b) Pressure cooking	94
	c) Roasting	2
6.	Points to be considered while cooking food	
	a) Washing hands before handling food	100
	b) Cutting big pieces of vegetables	100
	c) Washing vegetables before cutting	100
	d) Washing pulses and rice before cooking	100
	e) Cooking food on low flame	50
	f) Keeping food covered	100
	g) Avoiding use of excess water in cooking	100
	h) Avoiding heating of food again and again	36
7.	Methods of improving nutritive value of food stuffs	
	a) By combination of food groups	59
	b) Fermentation	2
	c) Sprouting	69
8.	Nutritional problems prevalent among children	
	a) Protein Energy Malnutrition (PEM)	13
	b) Vit A deficiency	12
	c) Rickets	7
	d) Beri – beri	11
	e) Goiter	11
9.	Nutritional problems prevalent among rural women	
	a) Anemia	72
	b) Under weight	64
	c) Fatigue	81

Table 2 : Knowledge of the respondents about health care (n=100)		
Sr. No.	Aspect	f / %
1.	Considerations for keeping the body healthy	
	a) Teeth should be cleaned daily to avoid germs, cavities & diseases	100
	b) Eyes be cleaned daily to avoid eye diseases	100
	c) Nails be cut regularly to keep them clean	100
	d) Hairs be cleaned daily	100
	e) One should take bath daily	100
2.	Washing hands	
	a) After defecation	100
	b) Before eating food	100
	c) Before cooking	100
3.	Importance of wearing clean cloths	
	a) To prevent skin diseases	100
	b) To prevent bed odour of perspiration	3
4.	Reasons for getting sick	
	a) Unhygienic surroundings	100
	b) Imbalanced diet	74
	c) Impure drinking water	86

**Environmental sanitation :**

Data presented in Table 3 show knowledge of the respondents about environmental sanitation. Majority of the respondents knew that environmental sanitation is important for controlling insects and mosquitoes and for prevention from diseases. The respondents had knowledge that surroundings of a house can be kept clean by cleaning house everyday (100%), use of covered dustbin (83%) and outlet of drainage in soak pit/ kitchen garden (58%). Regarding proper disposal of household garbage, equal number of respondents (66%) knew about compost pit and burning of garbage however, only 13 per cent respondents had knowledge about dumping of garbage in a pit.

Looking to the importance of safe drinking water for human beings an effort was made to assess knowledge of the rural women about this aspect. Table 3 clearly indicates that majority of the respondents had knowledge that tap water is safe source of drinking water as it is cleaned and supplied from public water supply system. Similarly covered well was also considered as a safe source of water by more than half of the respondents (58%). Only 17 per cent respondents had knowledge that hand pump is also a safe source of drinking water. Regarding the domestic methods of cleaning water, information presented in the table reveals that use of double layered filter cloth and alum was known to 87 and 45 per cent respondents, respectively whereas, only 12 per cent respondents knew about boiling method.

With respect to the precautions in handling and storage of water, all the respondents reported that water container should be cleaned daily, water should be kept covered, water container should be kept covered while bringing it home from the source of water, handled *laddle* should be used and water be kept above the ground level. Further with respect to identification of dirty water, majority of the respondents knew that taste of water is not good (79%), gives bad odour (77%) and water is yellowish in color (72%). Nearly half of the respondents had knowledge about proper disposal of dirty water towards kitchen garden. None of the respondents had knowledge about use of soak pit.

**Table 3 : Knowledge of the respondents about environmental sanitation (n=100)**

Sr. No.	Aspects	f / %
1.	Importance of environmental sanitation	
	a) For controlling insects and mosquitoes	100
	b) To prevent diseases	78
2.	Ways to keep surroundings of a house clean	
	a) By cleaning house everyday	100
	b) Use of covered dustbin	83
	c) Having smokeless <i>chulha</i> in kitchen	0
	d) Having outlet of drainage in soak pit/ kitchen garden	58
3.	Proper disposal of household garbage	
	a) Compost pit	66
	b) Burning of garbage	66
	c) Dumping of garbage	13
4.	Safe sources of drinking water	
	a) Tap	100
	b) Hand pump	17
	c) Covered well	58
5.	Water born diseases	
	a) Jaundice	32
	b) Cholera	0
	c) Fluorosis	87
	d) Diarrhoea	76
6.	Domestic methods of cleaning water	
	a) Boiling	12
	b) Use of double layered filter cloth	87
	c) Use of alum	45
7.	Ways to keep drinking water clean	
	a) Cleaning water container daily	100
	b) Keeping water covered	100
	c) Covering water container while bringing it home from the source of water	100
	d) Using handled <i>laddle</i>	100
	e) Keeping water above the ground level	100
8.	Identification of dirty water	
	a) Water is yellowish in color	72
	b) Gives bad odour	77
	c) Taste of water is not good	79
9.	Proper disposal of sullage	
	a) Use of soak pit	0
	b) Towards kitchen garden	58

**Conclusion :**

Based on the findings it could be concluded that the respondents had good knowledge about health care component however, their knowledge was found to be average in nutrition and environmental sanitation components. Hence, in order to improve knowledge of the rural women about homestead technologies it is utmost important to educate and train them in the nutrition and environmental sanitation components.

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