

## **PARTICIPATION OF RURAL WOMEN IN PROCESSING AND PRESERVATION OF FRUITS**

**<sup>1</sup>Varsha Hada and <sup>2</sup>Dr. Vishakha Bansal**

<sup>1</sup>Research Scholar, College of Home Science, MPUAT, Udaipur

<sup>2</sup>Associate Professor, All India Co-ordinated Research Project – HECM,  
College of Home Science, MPUAT, Udaipur

E-mails: <sup>1</sup>hadavarsha2801@gmail.com <sup>2</sup>bvishakha29@yahoo.com

**Abstract:** The objective of the present study was to identify the participation of rural women in processing and preservation of fruits in Udaipur District. The study was conducted in Badgaon and Girwa panchayat samities of Udaipur district of Rajasthan state. From each panchayat samiti, two villages were included in the study. The sample consisted of randomly selected 100 rural women, 25 from each village. Interview method was used for data collection. Frequency and percentage were used for analysis of data. Finding of the study reveals that respondents had poor participation in fruit processing and preservation practices with overall mean weighted score of 0.49. The outcome of the study divulges that majority of the respondents (100%) were participating in practice of fruit selection independently or jointly with male members. However, in other activities like washing, grading, processing & preservation, packaging, storage and marketing participation of women was found to be less.

**Keywords:** Participation, Rural women, Processing and Preservation.

### **Introduction**

India is known to be a fruit basket of the world. After china, India has been considered as the second largest producer of fruits and vegetables in the world with 74.877 million metric tonnes production of fruits and 146.554 million metric tonnes production of vegetables for the year 2010-11, as informed by the Minister of State for Food Processing Industries ([www.blogspot.com](http://www.blogspot.com)). The total production of fruits and vegetables in the world is around 370 million metric tonnes. But there is considerable gap between the gross production and net availability of fruits and vegetables due to heavy post-harvest losses.

Due to short life of horticultural crops, as much as 30-35 per cent of fruits and vegetables perish during harvest, storage, grading, transport, packaging and distribution, amounting to a revenue loss of Rs. 500 billion. In India only 2.2 per cent of fruits and vegetables are processed, whereas in countries like USA 65 per cent, China 23 per cent and Philippines 72 per cent are far ahead of India in reducing the wastage and enhancing the value addition and shelf life of the farm products. Hence there is a need for maximum commercial utilization of fruits and vegetables and to adopt production and marketing activities to the requirements of

*Received Dec 1, 2016 \* Published Feb 2, 2017 \* [www.ijset.net](http://www.ijset.net)*

the world market and to cater to domestic demand which over the past year, has been increasing because of various socio-economic factors. If the nutritive value of the processed food products could be maintained, this sector will emerge as a major value-added food industry.

Rural women form the most momentous productive work force in the economy of majority of the developing nations, including India. Historians believe that it is women who first domesticated the crop and initiated the art and science of farming. Women play an important role in agriculture and they are moulder and builder of any nation's destiny. The rural women are very active in cultivation, dairy, fisheries, crop processing and other allied areas. Maheshwari (2001) unveiled that almost 70 per cent of the total population and 84 per cent of the economically active women are involved in agriculture and make up to 46 per cent of the agricultural work force. The result of the research studies indicates that despite the dominance of the labour force, women in India are still facing extreme disadvantages; they have less knowledge, limited access to technology, low capital, low facilities etc. Thus, it is imperative that women should be trained in agriculture and allied areas.

### **Research Methodology**

The study was conducted in Udaipur district of Rajasthan state. There are number of fruits grown in Udaipur district like- Mango, Lime, Banana, Papaya, Guava and Aonla. Out of which three fruits having highest production were selected purposively for the present study. Udaipur district consists of seventeen panchayat samities out of which two panchayat samities- *Badgaon* and *Girwa* were selected purposively on the basis of highest production of the selected fruits. A list of villages was prepared and two villages each from both the panchayat samities namely Badi and Madar from Badgaon panchayat samiti and Sesarma and Bujda from Girwa panchayat samiti were selected for the present study. A village wise list of rural women, who were growing one of the selected fruit in their orchards, was prepared. A sample of 25 rural women was randomly selected from each village making a total sample of 100 rural women from four villages. Data were collected with the help of interview schedule. Frequency, percentage and Mean Weighted Score were used for analysis of the data.

### **Results and Discussion**

#### Background information of the respondents

This section deals with the general information of the respondents like age, caste, marital status, education, family occupation, family structure, membership of organization, land holding, housing, livestock ownership, dwelling for livestock and training attended.

**Table 1** Distribution of the respondents on the basis of background variables

n= 100

S. No.	Variables	f / %
A.	Age	
	• 18 - 30 years	43
	• 31 - 45 years	38
	• 46 - 60 years	19
B.	Marital Status	
	• Unmarried	0
	• Married	99
	• Widow	1
	• Divorced	0
C.	Caste	
	• SC/ST	0
	• OBC	40
	• Upper middle class	0
	• Upper caste	60
D.	Education	
	• Illiterate / Unlettered	29
	• Can read and write / littered	6
	• Primary School	13
	• Middle School	24
	• High School	13
	• Graduate and above	15
E.	Family occupation	
	a. Main occupation	
	• Farming	89
	• Service (govt. or private)	11
	b. Subsidiary occupation	
	• Farm Labor	36
	• Business	44
• Service	20	
F.	Family structure	
	a. Type	
	• Nuclear	63
	• Joint	37
	b. Size	
	• Small	45
	• Medium	38
• Large	17	
G.	Organizational membership	
	• No membership	100
	• Member of a formal organization	0
	• Office bearer of formal organization	0
	• Member of a non-formal organization	0
	• Office bearer of non-formal organization	0
	• organization	0

**Age:** Data in Table 1 reveal that 43 per cent respondents belonged to the age group of 18- 30 years followed by 38 per cent respondents who were in the age group of 31-45 years whereas, 19 per cent respondents were in the age group of 46-60 years.

**Marital status:** Table 1 indicates that majority of the respondents 99 per cent were married and only one respondent was widow.

**Caste:** Table 1 further revealed that majority of the respondents 60 per cent were under upper caste category whereas, 40 percent respondents were from OBC.

**Education:** It can be seen from the Table 1 that more than one fourth of the respondents 29 per cent were illiterate. Out of the literates, 24 per cent were educated up to middle level while, 15 per cent had their education up to graduation level and above. Primary and higher secondary education was completed by 13 per cent respondents whereas, there were only 6 per cent respondents who could just read and write.

**Family occupation:** With regard to occupational status Table 1 reveals that farming was the main family occupation of majority of the respondents 89 per cent and 11 per cent respondents had service as their main family occupation. All the respondents were also involved in subsidiary occupation along with farming. Critical review of the table reveals that more than 40 per cent of the respondents were engaged in business as a subsidiary occupation along with farming. Similarly, 36 per cent were engaged as farm labour and 20 per cent respondents had service as a subsidiary occupation.

**Family Structure:** Visualization of Table 1 clearly indicated that majority of the respondents 63 per cent were from nuclear family and rest 37 per cent belonged to joint family. Regarding the size of family, Table 1 reveals that more than 40 per cent of the respondents had small size family consisting of up to 4 members while, 38 per cent had medium size family consisting of 5-8 members and some of them 17 per cent had large family size of more than 8 members.

**Organizational membership:** Data presented in Table 1 indicated that none of the respondents had any organizational membership.

**Table 2** Distribution of the respondents on the basis of ownership of fixed assets  
n = 100

S. No.	Variables	f / %
A.	Land Holding	
	• Landless	16
	• Marginal (1.0 to 2.5 acres)	19
	• Small (2.6 to 5.0 acres)	43
	• Medium(5 to 10 acres)	16
	• Large (>10.0 acres)	6
B.	Housing	
	• <i>Katcha</i> house	6
	• Mixed house	19
	• <i>Pucca</i> house	75

Land Holding: Data in Table 2 indicates that 43 per cent respondents had land holding of 2.6 - 5.0 acres (Small farmers) while 19 per cent had land holding between 1.0 to 2.5 acres (Marginal farmers). There were 16 per cent respondents who had land holding between 5 to 10 acres (Medium farmers) whereas, 16 per cent respondents were landless. There were only 6 per cent respondents who had land holding more than 10 acres (Large farmers).

Housing: Data presented in Table 2 clearly highlight that majority of the respondents 75 per cent were residing in pucca houses and 19 per cent had mixed houses whereas, a very few of them 6 per cent lived in kutch houses.

**Table 3:** Distribution of the respondents on the basis of their socio-economic status  
n = 100

S. No.	Socio-economic Status	f / %
(i)	High	0
(ii)	Medium	20
(iii)	Low	80

Socio-economic status: On the basis of scores obtained by the respondents in different aspects of socio-economic status scale, the respondents were categorized as having high, medium and low socio-economic status. Data in Table 3 point out that majority of the respondents 80 per cent had low socio-economic status whereas, 20 per cent respondents belonged to medium category of socio-economic status. No respondent was found in the category of high socio-economic status.

**Table 4** Component wise distribution of the respondents by their participation in different fruit processing and preservation practices.

					n=100
S.No.	Practices	Independently f/%	Jointly with male members f/%	No participation f/%	MWS
1.	Fruit selection	32	68	0	1.32
2.	Washing	0	52	48	0.52
3.	Grading	20	23	57	0.63
4.	Calculating cost of input to output	0	0	100	0
5.	Purchasing of raw material for preparing products	0	8	92	0.08
6.	Preparation of preserved products	30	0	70	0.6
7.	Packaging	25	21	54	0.71
8.	Storage	0	32	68	0.32
9.	Marketing	0	26	74	0.26
<b>Overall mean weighted score</b>					<b>0.49</b>

Table 4 depicts that fruit selection was performed independently by 32 per cent and jointly by 68 per cent with MWS of 1.32. It was further found that in washing of fruits 52 per cent of respondents were participating jointly with male members with MWS of 0.52. However in other activities namely grading, packaging, storage and marketing 21-26 per cent of respondents were participating with male members, independent participation of women in these activities was very low due to the reasons that these activities are technical in nature in which very sound knowledge is required and women did not had knowledge regarding these aspects. Majority of the respondents were not involved in calculating cost of input to output, purchasing of raw material for preparing products and in preparation of preserved products either at domestic or commercial level this was due to the lack of knowledge regarding this aspect.

Similar study conducted by Khatri (2013) in her study stated that majority of the respondents were not involved in processing either at domestic or commercial level this was due to the lack of knowledge regarding this aspect.

Amin *et al.* (2009) studied 'Participation level of rural women regarding post-harvesting activities in Pakistan' and reported that most of the activities related to take the crop to the market and mills were performed by the husbands (67.97%) with limited participation in food preservation and processing whereas, the wives were mainly involved in cleaning of store rooms, storage of agricultural products in bags and preparation of marmalades and pickles.

The participation of women was very high in storage, drying, packaging of grains and low in marketing.

### **Conclusion**

On the basis of findings, it could be concluded that majority of the respondents were married (99%), illiterate (29%), had joint family (37%) with medium family size (16%). Further it was found that 38 per cent were in the age group of 31-45 years and belonged to upper caste (60%). Farming was the main family occupation of all the respondents. Some of the respondents were involved in subsidiary occupations like farm labour (36%). More than sixty per cent (62%) respondents were small and marginal farmers. No respondents were having organizational membership. With respect to land holding (43%) respondents had land holding between 2.6 to 5.0 acres. Majority of the respondents (80%) belonged to low socio-economic status and 20 per cent were from medium socio-economic status. Based on the findings it can be concluded that participation of the respondents was very low in fruit processing and preservation practices with overall mean weighted score 0.49. In activities namely grading, packaging, storage and marketing 21-26 per cent of respondents were participating with male members, independent participation of women in these activities was very low due to the reasons that these activities are technical in nature in which very sound knowledge is required and women did not had knowledge regarding these aspects. Majority of the respondents were not involved in calculating cost of input to output, purchasing of raw material for preparing products and in preparation of preserved products either at domestic or commercial level this was due to the lack of knowledge regarding this aspect.

### **References**

- [1] [www.blogspot.com](http://www.blogspot.com)
- [2] Khatri, A. 2013. Technological needs of farm women regarding post-harvest practices of Kinnow (*Citrus Deliciosa*) in Sri Ganganagar district of Rajasthan. An unpublished thesis submitted to Maharana Pratap University of Agriculture and Technology, Udaipur, Rajasthan.
- [3] Amin, H., Ali, T. and Zafar, M.I. 2009. Participation of rural women regarding post-harvest activities in Pakistan. *Pakistan Journal Life Social Science*. **7**(2):136-139.
- [4] Maheshwari, R. 2001. Occupational Health Hazards Experienced by Farm Women. An Unpublished M.Sc. Thesis. Rajasthan Agricultural University, Bikaner.