



# Study on the Socioeconomic Profile and Knowledge Level of Farm Women about Soybean Processing Techniques

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## ABSTRACT

The present study was conducted on 100 farm women to examine the impact of training programme on knowledge level of farm women about soybean processing technologies. The respondents were trained at KVK Uttarkashi in different aspect of home Science technologies. Pre and post training knowledge score were calculated and analysed the data with the help of paired 't' test and correlation studies. Significant differences were found among pre and post training mean score of all the aspect of the training. The study revealed that majority of respondents (72 %) had medium level of knowledge while 20 per cent of the respondents obtained higher level of knowledge and 8 per cent had low level of knowledge score related to different aspects of precision farming technologies. The attributes viz. education ( $r=0.2307$ ), annual income ( $r=0.1807$ ) and social participation ( $r=0.1968$ ) had positive and highly significant correlation with knowledge of respondents, however, age and marital status were found negatively correlated with the knowledge of respondents.

**Key Words:** Knowledge, Respondents, Home Science, Correlation, Farm women.

## INTRODUCTION

Training is the process of improving the knowledge, skills and changing the attitude of an individual for doing a specific job. Along with the changing situation, the people also need to acquire new knowledge, skills and attitude to keep up with the changing environment. Therefore training has continued to be considered as the most important device for developing an individual and improving his/her work efficiency (Malabasari and Hiremath, 2016). The progresses in any field depend to a large extent on quick and effective dissemination of new practices or technologies among the beneficiaries and bring back of their problems to the research labs for their solution (Gupta and Verma, 2013).

In Uttarakhand, women play a crucial role in all farm-related activities from land preparation to marketing. They contribute a higher proportion of labour in agricultural sector as compared to men, but globally her hard work has mostly been unpaid. She does the most tedious and back-breaking tasks in agriculture, animal husbandry, horticultural crops, caring and rearing of children, and other domestic activities (Sharma *et al*, 2013).

Krishi Vigyan Kendra, Uttarkashi organised many training programmes exclusively for farm women with the aim to make them competent in performing various activities related to home Science and agricultural sciences. Training of five batches of 20 farm women (different villages of Uttarkashi block) were conducted at KVK during 2013-15. Pre and post evaluation of the trainees was done to find out the level of change in their knowledge and skill after undergoing training on technologies regarding processing of Soybean. Hence, this study was conducted with the specific objectives to study the socio personal profile, knowledge level of respondents and relationship between the dependent and independent variables.

## MATERIALS AND METHODS

The present study was undertaken in two blocks of the Uttarkashi district. The gain in knowledge was estimated as difference between the knowledge before and after the exposure of trainings. The knowledge level of respondents in the present study was measured with the help of a knowledge test constructed and standardized by Borua and Brahma

(2012). To measure the knowledge, a respondent was given a score of “one” for correct answer and “zero” for wrong answer. Thus, the summation of all scores treated as the knowledge of the respondents at pre-exposure stage. Similarly post-training knowledge score was calculated separately. A pre tested structured interview schedule was used to collect data. On the basis of score the respondents was classified as having high, medium and low level of knowledge.

**Sample Size:** A total of 100 farm women were selected from six villages randomly. These farm women were trained in home Science on various aspects of processing of soybean at KVK, Uttarkashi. A multi stage sampling technique was adopted for sample selection.

**Data collection and analysis:** The collected data were computed and analyzed by frequency, percentage analysis and suitable statistical tools. The findings were presented as per the expressed responses of the farm women.

## RESULTS AND DISCUSSION

### Socio Personal Profile of the Respondents

#### Age

The Data (Table 1) reveal that majority of the respondents (33%) belong to age group between 12-24 yr followed by 37-48 yr (29). The above findings were in line with the study of Papnai *et al* (2015).

#### Marital status

It was evident that 66 percent of the respondents were married, however 34 percent respondent were unmarried. This may be because majority of the respondents were from middle and old age group so most of them were married.

#### Education and family income

The data (Table 1) reveal that, 27 per cent of the respondents were educated up to primary level followed by middle (25%) whereas 15 per cent of the respondents were illiterate and only 7 per cent had education up to graduation.

**Table 1. Socio Personal profile of the respondents.**

**N= 100**

S r . No.	Variable	Category	Per cent
1	Age	12-24	33
		25-36	25
		37-48	29
		>48	13
2	Marital status	Married	66
		Unmarried	34
3	Education level	Illiterate	15
		Primary	27
		Middle	25
		High school	16
		Intermediate	10
		Graduation	7
4.	Income of the family	<5000	15
		5001-10000	40
		10001- 20000	30
		>20000	15
5.	Family Size	Nuclear	36
		Joint	48
		Extended	16
6.	Land holding	Marginal	66
		Small (1-2ha)	29
		Medium (2-4 ha)	05
		Large>4 ha	0
7.	Mass media exposure	Radio	4
		TV	100
		News paper	2
		Mobile	78
8.	Social participation	Mahila mandal	3
		Dairy/ cooperative society	10
		SHG	32
		Panchayat	5
		No membership	50

The results of the study were in conformity with the finding of Kular (2014). The majority of the respondents (40%) fall under the income group of

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Rs. 5001 -10000 income group followed by 30 per cent under Rs. 10001- 20000 income group. Fifteen per cent of the respondents equally found under the income category of Rs. <5000 and Rs. >20000.

The majority of respondents (48%) had joint families followed by 36 per cent nuclear families while only 16 per cent of the respondents belonged to extended family. Sixty six per cent of respondents were small farmers having land holding of one to two hectares followed by marginal category (29%). Very few farmers belonged to medium (5%) category.

### Social participation

It is evident from table 1 that 32.00 per cent of the respondents were involved in SHGs followed by 10.00 per cent Dairy/ co-operative societies, 05.00 per cent in social and political institutions like Panchayat and 03.00 per cent in societies were involved in Mahila/ Yuvati Mangal Dal. But majority of the respondents (50 per cent) were not having any involvement in any social institutions.

### Mass media exposure

Regarding media exposure of farm women, only 4 per cent of them had access to radio whereas 100 per cent watch television regularly, and majority of them (78%) were having mobile phone. The findings of the study were in line with that of Shivraj and Philip (2016).

### Knowledge level of farm women

**Table 2. Pre and post training knowledge score of the respondent. (N=100)**

Sr. No.	Knowledge level	Pre training (%)	Post Training (%)
1.	Low	95.0	8
2.	Medium	5.0	72
3.	High	0	20

The findings regarding pre- training knowledge score of the respondent (Table 2) revealed that the majority (95%) of the respondents had low knowledge level followed by medium (5%) while

none of the respondents obtained high level of knowledge score before participating in the training programme. After acquiring trainings, majority of the respondents (72%) had medium level of knowledge score, followed by 20 per cent high level of knowledge score while 8 per cent of the respondents obtained lower level of knowledge score related to different aspects of technologies. Hence, there was a considerable change in the knowledge level of trainees. Similarly, Gupta (2013) reported that majority of farm women (55.55%) had medium knowledge level with 28.08 average knowledge score. About 21.11 per cent of them had low knowledge level with 16.52 average knowledge score, whereas 23.33 per cent had high knowledge level with 41.95 average score.

### Extent of gain in knowledge of farm women

It was worth to mention that significant differences were found among pre-and post training mean scores of all the aspects of the training. Thus, the respondents were able to gain sufficient knowledge at post training programme.

### Relationship between socio-personal characteristics and knowledge gain on home science technologies

The data (Table 5) show the correlation between knowledge level and socio-personal characteristics of trainees. The attributes like education ( $r=0.2307$ ), annual income ( $r=0.1807$ ) and social participation ( $r= 0.1968$ ) had positive and highly significant correlation with knowledge of respondents. Whereas age ( $r= -0.2022$ ), and marital status ( $r=0.1998$ ) had significantly negative correlation with knowledge gain. Similarly, Yadav (2008) found that training need or knowledge level had positive and significant relationship with personal and socio economic characteristics, viz. education( $r=0.2895$ ), social participation( $r=0.1795$ ) and overall socio economic status( $r=0.2994$ ).

## CONCLUSION

It could be inferred that majority of the farm women had shown the medium level of knowledge.

**Table 3. Comparative mean scores of pre training and post training knowledge of respondents**

N= 100

Sr. No.	Parameter	Pre training	Post training	Difference	t-value	Mean of difference +
1.	Scientific name of the soybean	0.37	0.86	0.49	-7.3859	-0.45
2.	Acid used to making soy Paneer	0.21	1.0	0.79	-19.298	-0.79
3.	Quantity of Paneer obtained one kg soybean	0.04	1.0	0.96	-48.744	-0.96
4.	Use of water in 1 kg soybean	0.79	1.0	0.21	-5.13	-0.21
5.	Enzymes found in the soybean	0.05	1.0	0.95	-43.37	-0.95
6.	Grinding of the soybean	0	1.0	1.0	-48.744	-0.96
7.	Nutritive value of soybean	0	0.93	0.93	-26.944	-0.88
8.	Soybean soaked in the water	0	0.91	0.91	-25.74	-0.87
9.	Soybean is cooked for	0	1.0	1.0	-48.744	-0.96
10.	Soybean by product name is	0.03	1.0	0.97	-36.267	-0.93
11.	Cooking temperature of soybean is	0.96	1.0	0.04	-2.031	-0.04
12.	Soy Paneer name is	0.03	1.0	0.97	-36.267	-0.93
13.	Making soy Paneer employment is	0.72	1.0	0.28	-6.2048	-0.28
14.	The venue of the programme is	0.77	1.0	0.23	-5.2842	-0.22

**Table 4. Correlation co-efficient between knowledge of Home Science technologies and socio-personal characteristic.**

Sr No.	Variable	Correlation coefficient
1.	Age	-0.202279*
2.	Education	0.2307191*
3.	Marital status	-0.199873*
4.	Annual income	0.180753*
5.	Family size	-0.06526861
6.	Land holding	-0.04414382
7.	Mass media exposure	-0.06037303
8.	Social participation	0.1968466*

\*significance at (P&lt;0.05)

The significant increase of knowledge level of farm women may be due to the training methodology adopted and also continuous effort made by the trainers. Surely after the training programme, farm women will disseminate the technologies to the other farm women at village level and solve the problems very efficiently. Training programme

helped in capacity building of rural women by creating awareness, increasing the knowledge about innovative technologies and practicing improved skills which will help in the empowerment as well as generation of self employment for rural women.

## REFERENCES

- Borua S and Brahma A K (2012). A study on the knowledge level and extent of adoption of selected technology by rural youth trained in KVK of AAU in Assam. *J Acad and Indust Res* 1(7): 374-378.
- Gupta S (2013). Knowledge level of the farm women in improved home science technologies. *Asian J Home Sci* 8(2): 395-398.
- Gupta S and Verma S (2013). Impact of KVK on knowledge level of farm women. *J Rural Agric Res* 13(2): 87-89.
- Kular S S (2014). A study on Anganwadi workers in rural ICDS blocks in Punjab. *Int J Humanities and Soc Sci Intervention* 3(9): 01-04.
- Kumar A (2014). A study of the development of primary education in Uttarkashi district (Uttarakhand) from 2001 to 2014. *Int J Humanities and Soc Sci Intervention* 3(8): 16-24.

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- Papnai G., Bhardwaj N., and Kashyap S.K. (2015). Farmers' Media Preferences for Designing Agri-Based Distance Learning Courses for Hill Region of Uttarakhand. *Indian J Open Learning* **24** (3):103-114
- Malabasari R T and Hiremath U S (2016). Effect of Krishi Vigyan Kendra training programme on knowledge and adoption of Home Science and agricultural technologies. *J Farm Sci* **29** (2): 251-256.
- Shivraj P and Philip H (2016). Role of mass media in changing awareness level on climate change among small and marginal paddy farmers of Tamil Nadu. *Int J Humanities and Soc Sci Interventions* **5**(4):45-50
- Sharma P, Singh G P and Jha S K (2013), Impact of training programme on knowledge and adoption of preservation technologies among farm women- A comparative study. *Indian Res J Ext Edu* **13**(1): 96-100.
- Yadav N (2008). *Designing Training Module on Entrepreneurship Behaviour for Women Engaged in Sericulture: A Study in Uttarakhand*. Ph. D. Thesis. Department of Agricultural Communication, G. B. Pant University of Agriculture & Technology, Pantnagar.

Received on 16/10/2017

Accepted on 30/11/17