

**RESEARCH ARTICLE :**

# Knowledge level of disadvantaged women beneficiaries on production technologies of horticultural crops in Tripura

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**SUMMARY :** The study was conducted among the women beneficiaries of Divyodaya Krishi Vigyan Kendra, Tripura West district of Tripura. A total of 200 respondents belonging to SC and ST population were selected randomly from the 14 purposively selected villages. The study revealed that 49.00 per cent of the respondents had high level of knowledge followed by 37.50 per cent in medium and 13.50 per cent respondents in low level of knowledge category on production technologies of horticultural crops. The socio-personal characteristics like age ( $r=0.761$ ), educational level ( $r=0.890$ ), mass media exposure ( $0.767$ ), family's operational land holding ( $r=0.649$ ) and social participation ( $r=0.759$ ) had positive and highly significant relation whereas marital status ( $r=0.541$ ) and family type ( $r=0.534$ ) had positive and moderately significant relation with the knowledge level of women beneficiaries on production technologies of horticultural crops.

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**KEY WORDS :**

Women beneficiary,  
Knowledge level,  
Production  
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Horticultural crop

## **BACKGROUND AND OBJECTIVES**

Agricultural development is a complex process and a challenging one as well. To work in harmony for bringing about stable and sustainable growth in agriculture, four sub systems such as research, extension, support and client of the agricultural development process have been recognized. So, far as the client system is concerned, it encompasses both men and women as equal partners. Unquestionably women play a significant and crucial role throughout the third world. In addition to farm work, in which they are

actively involved with men, the burdens of almost all the household chores fall on them. But despite the global consensus as to their vital role both on the farm and in the household, their importance in and contribution to agriculture are not adequately reflected in the available statistic which perhaps obscure more than they reveal. Moreover, it is found that agricultural extension networks do not provide them with satisfactory services and hence, there is an urgent need for a better understanding in this regard for developing effective extension and training programme

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to increase the knowledge level of rural women.

### Objectives :

- To study the knowledge level of disadvantaged women beneficiaries on production technologies of horticultural crops in Tripura.
- To study the socio- personal characteristics of disadvantaged women beneficiaries.
- To study the relationship of knowledge level of disadvantaged women beneficiaries with their selected socio- personal characteristics.

## RESOURCES AND METHODS

The study was conducted among the women beneficiaries of Divyodaya Krishi Vigyan Kendra, Chebri, Tripura West. A purposive cum random sampling technique was followed to draw the sample for the study from Tripura West district of Tripura. 14 villages from the district were selected purposively based on the availability of women beneficiaries in the villages from amongst the disadvantaged group of SC and ST population. Then a total of 200 respondents from the 14 villages were selected randomly for the study. Along with the knowledge level of the respondents, the socio-personal characteristics like age, educational level, mass media exposure, marital status, family's operational land holding, family type and social participation (Trivedi and Pareek, 1963) were also studied to find out the correlation between the socio-personal characteristics and knowledge level of the respondents.

### Measurement of knowledge level:

To measure the knowledge level of respondents, scale of Das *et al.* (2002) was used. The 37 statements of the scale were presented in front of the respondents for their views in three point continuum against each statement whether they 'know thoroughly', 'know some what' and 'not known'. According to their responses in these categories scores were assigned in the following manner (Table A).

Sr. No.	Categories	Scores
1.	Know thoroughly	2
2.	Know somewhat	1
3.	Not known	0

The horticultural crops included in the scale were mango, citrus, banana, papaya, coconut and vegetables like cabbage, cauliflower, tomato, cowpea, cucurbits, chilli and leafy vegetables which are important horticultural crops in Tripura and the respondents had undergone training on these aspects earlier. The technological aspects covered were land preparation, sowing or planting method, plant protection measures, intercultural operations, mulching, fertilizer application method and fertilizer dose, harvesting etc.

The cumulative scores for each respondents was worked out by summing up the scores obtained by a respondent for 37 statements. The respondents were then classified (Dasgupta, 1989) by dividing the theoretical range (0-74) into the following three categories (Table B).

Sr. No.	Categories	Scores
1.	Low	0-24
2.	Medium	25-49
3.	High	50-74

Data collection was done by personal interview method with the help of pre-structured schedule. The collected data were coded, tabulated and analyzed in accordance with the objectives of the study by using appropriate statistical tests. Apart from calculating frequency, percentage and t test; Karl- Pearson's product moment co- efficient of correlation were also used to find out the relationship between the socio personal characteristics with the knowledge level of the respondents on production technologies of horticultural crops.

## OBSERVATIONS AND ANALYSIS

Table 1 shows the respondents according to their socio-personal characteristics with their frequency and percentage whereas Table 2 shows distribution of the respondents based on their knowledge on production technologies of horticultural crops and the relationship between the socio personal characteristics and knowledge level of the respondents is shown in the Table 3.

The findings presented in Table 1 reveal that highest percentage of sampled respondents (42.50 %) belonged to 35 years and above followed by 4.00 per cent belonged

to 20- 24 age group category as lowest percentage. As regards to marital status, the findings presented indicate that 90.50 per cent of the respondents were married while 7.00 per cent of the respondents were found widowed. Again, the educational level of the respondents varied from illiterate to graduate and above. The table further

**Table 1 : Distribution of the respondents according to their socio-personal characteristics (n=200)**

Characteristics	Categories	Frequency	Percentage
Age	20- 24 years	8	4.00
	25- 29 years	45	22.50
	30- 34 years	62	31.00
	35 years and above	85	42.50
Educational level	Illiterate	2	1.00
	Can read and write	7	3.50
	Upto primary school	60	30.00
	Upto class X	122	61.00
	Upto class XII	18	9.00
Mass media exposure	Upto degree level or above	1	0.50
	Low	137	68.50
	Medium	55	27.50
	High	8	4.00
Marital status	Single	5	2.50
	Married	181	90.50
	Widow	14	7.00
Family's operational land holding	Marginal	136	68.00
	Small	73	66.50
	Big	1	0.50
Family type	Nuclear	37	18.50
	Joint	163	81.50
Social participation	No membership	178	89.00
	Member of one organization	13	6.50
	Member of more than one organization	6	3.00
	Office bearers (secretary/president etc.)	3	1.50

**Table 2 : Distribution of the respondents based on their knowledge on production technologies of horticultural crops (n=200)**

Sr. No.	Categories	Frequency	Percentage
1.	Low	27	13.50
2.	Medium	75	37.50
3.	High	98	49.00

**Table 3 : Relationship between the knowledge level on production technologies of horticultural crops and socio-personal characteristics of respondents (n=200)**

Sr. No.	Characteristics	r value	t value
1.	Age	0.761**	10.776
2.	Educational level	0.890**	12.620
3.	Family's operational land holding	0.649**	9.196
4.	Mass media exposure	0.767**	13.17
5.	Marital status	0.541**	7.012
6.	Social participation	0.759**	10.776
7.	Family type	0.534**	3.564

\*\* denotes significance at 0.01 level of probability  
df = n-2 = 200-2 = 198 for all cases

shows that majority (61.00 %) of the respondents belonged upto class X category and a lowest of 0.50 per cent had education upto college level category. It is also observed from the table that 68.50 per cent of sampled respondents belonged to low mass media exposure category followed by 4.00 per cent belonged to the highest mass media exposure. It was found that majority (68.00 %) of the respondents had marginal size of family's operational land holding followed by 0.50 per cent with small size of land holding. But majority (81.50 %) of the respondents had joint family. Again, 89.00 per cent of the respondents had no membership to any organization and only 1.50 per cent of the respondents were office bearers.

A critical perusal of the data presented in Table 2 reveals that majority (49.00 %) of the respondents possessed high level of knowledge while 37.50 per cent possessed medium and 13.50 per cent respondent possessed low level of knowledge on production technologies of horticultural crops which is similar to the findings of Shrivastava *et al.* (2002) that in case of practice wise level of knowledge in chili cultivation, nearly 14.00 per cent to 24.00 per cent had high level of knowledge.

From the Table 3, it is evident that characteristics like age (0.761), educational level (0.890), mass media exposure (0.767), social participation (0.759) and family's operational land holding (0.649) showed positive and highly significant correlation with the knowledge level of the respondents at 0.01 level of probability. Characteristics like family type (0.534) and marital status (0.541) showed positive and significant correlation with the knowledge level of the respondents at 0.01 level of probability. Thus, it implies that with the increase of age, educational level, mass media exposure, social participation and family's

operational land holding, the knowledge level of the respondents on production technology of horticultural crops also increases and changes in the family type and marital status also knowledge of respondents increases.

### Conclusion :

Target oriented training programme have to be formulated to enhance the knowledge level of disadvantaged women beneficiaries on production technologies of horticultural crops. Extension agencies have to be more active in providing several exposures to the woman farmers for enhancement of knowledge on different production technologies.

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### REFERENCES

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- Das, M. Dutta**, Deka, C.R. and Devi, B. (2002). Scale to measure the knowledge of rural women about production technologies of horticultural crops. *J. Agric. Sci. Soc. NE India*, **15**(2): 203-206
- Dasgupta, S.** (1989). *Diffusion of agricultural innovations in village India*, Willey Eastern Ltd., NEW DELHI (INDIA).
- Nath, D.** and Bhattacharyya, A.K. (2002). Extent of participation of the rural youth in selected rice cultivation practices. *J. Agric. Sci. Soc. NE India*, **15** (2): 216- 222
- Shrivastava, K.K.**, Trivedi, M.S. and Lakhera, M.L. (2002). Knowledge and adoption behaviour of chilli growers. *Agril. Extn. Rev.*, **14** (4): 22-25.
- Trivedi, G.** and Pareek, V. (1963). 'Socio-economic status scale', measurement in extension research. Instruments developed at IARI (1963 to 1972). Division of Agricultural Extension, IARI, NEW DELHI (INDIA).

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