# Constraints in Effective Transfer of Technology to the Farm Women through KVKs Shobhana Gupta

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#### **ABSTRACT**

The major constraint for low agricultural production in India is considered to be lack of transfer of technology from the research laboratories to its ultimate users, which is the farm household. Furthermore, it is not possible for the farmers to increase their size of land holding. Rather, it is going on decreasing day by day, due to increasing population and continuous fragmentation of land. Hence, the only solution to the above problem is to conduct more practical researches and to provide intensive and frequent exposure to the farming community for adopting new technology which can help them to obtain higher production per unit area. The researcher in this study has tried to find out the constraints in effective transfer of technology to the farm women through KVKs. It was found that the scientists perceived "Lack of motivation among the farm women" while the farm women perceived "Lack of resources and inputs" as major constraints in the effective implementation of KVK activities.

**Key words:** Constraints, Farm women, Scientist, Trainers.

The Krishi Vigyan Kendras continue to play a vital role in carrying out the latest technology from the laboratory to the fields and also feeding back the practical field problems to the laboratory for further research. Through the various important activities being carried out in these Kendras at the district, block and village level for imparting latest technology to the farmers and farm women, the latest technical knowhow is transferred from the research stations to the ultimate user, i.e., the farmer in a speedy way. Hence, looking to the importance of the KVKs it is imperative that the role, organization and functions of these Kendras must be evaluated on scientific lines and suggests some measures to strengthen them. It is believed that scientist working at KVKs might have difference of opinion about the roles prescribed for them and the roles perceived by them. It is believed that the activities of the KVKs will increase the knowledge level of farm women and that will increase their awareness and motivate them to work effectively. Indian agriculture has an impressive long-term record of taking the country out of serious food shortages, given heavy reliance on its pluralistic extension system. In India, extension has a mixed record. At one side, it shows role in promoting productivity, sustainable resources use, and agricultural development (Singh, 1999), on other side, public extension has fallen short of expectations. Planning Commission (2008) narrated that the links between research, extension, and farmers are seen to be inadequate and uncoordinated. Extension has grown over last six decades and is traditionally funded, managed and delivered by the public sector. Indian agriculture is becoming more pluralistic in nature, where a large number of private sector firms and civil society extension service providers co-exist with this public extension system.

Swanson (2006) found that there are insufficient funds for operational costs, training, and capacity development, which limits the activities and continual development of the extension staff. Singh, et

al. (2011) and Singh, et al. (2012) have also tried to narrate the issues related to effective operations and utilization of human resources and research through ATMA model. However, the emerged issues have been resolved through the new guidelines issued in 2010. With these views in mind from the available literature, the present study was conducted to find out the constraints in effective transfer of technology to the farm women through KVKs with following objectives

- (i) To study the demographic characteristics of the farm women.
- (ii) To study the personal characteristics of KVK trainers.
- (iii) Identification of various constraints faced by Subject Matter Specialists and farm women in transfer and adoption of recommend technologies.

#### **METHODOLOGY**

The study was conducted in Jodhpur district of Rajasthan. Jodhpur district comprises total nine Panchayat Samities. Out of which two Panchayat Samities namely, Mandore and Luni were selected purposely, because these Panchayat Samities are under the working areas of Home Science programme of the KVK, Jodhpur. Out of these two Panchayat Samities, three villages from each Panchayat Samiti were selected randomly. A list of all the beneficiaries of the KVK was obtained from its office and fifteen farm women from each village were taken by simple random sampling technique. Thus, the total farm women contacted were (15x6) 90. Also, 20 subject matter specialists from KVK, CAZRI as well as the SMS from the NGO who were instrumental in various programmes of KVK formed a part of the sample of the present investigation. Thus, the total sample comprised (90+20) 110 respondents.

The data were collected with the help the of an interview schedule specially designed to fulfill the objectives of the study. To collect the data, the respondents were individually interviewed by the investigator herself after making good rapport with

them. Mailed questionnaire was used for the KVK trainers. The data, thus, collected were transferred on work table and tally sheets. They were then processed, tabulated and analyzed and given statistical treatments, in light of the objectives set forth and tested by applying appropriate statistical tests like arithmetic mean, standard deviation, frequency and percentages.

#### **RESULTS AND DISCUSSION**

# Demographic characteristics of farm women Socio economic status.

The respondents were classified into three categories based on their socio economic status.

Table 1
Categories of farm women on the basis of SES

S. No	Categories	Scores	No of Respondents
1.	Low	24-35	53
2.	Medium	35-46	31
3.	High	46-57	6
		Total	90

The Table depicts that 53 respondents were under Low SES, whereas the scores of 31 respondents and only 6 respondents were under Medium and High SES respectively.

# Age

Table 2 depicts categories on the basis of the age of respondents. Three categories were formed depending on their age; that is, young, adult, and old. It was found that 49 respondents were under young category, 37 were under adult category, while only 4 were under old category.

Table 2
Categories of farm women according to their age

S. No	Categories	Age	No of Respon dents
1.	Young	Below 30 years	49
2.	Adult	30-40 years	37
3.	Old	Above 40 years	4
		Total	90

#### **Educational level**

Table 3 depicts the categories according to level of education of respondents. It was found that 69 were educated below primary level, 13 were educated till primary and 8 were educated above primary level.

# Size of land holding

Table 4 depicts the categories according to size of land holding of respondents. It is evident that 64 fell in small category, 20 in medium and 6 in large farmers' category.

#### Caste

Table 5 depicts categories on the basis of caste

Table 3
Categories of farm women according to their level of education

S. No.	Education	No of Respondents
1.	Below Primary	69
2.	Primary	13
3.	Above Primary	8
	Total	90

Table 4
Categories of farm women according to size of land holding.

S. No.	Type	Size of Land Holding	No of Respondents
1.	Small	No Land- =1 Ha	64
2.	Medium	1 – 2.5 Ha	20
3.	Large	2.6 - 4 Ha	6
		Total	90

of the respondents. It was seen than out of 90 respondents, 41 were of lower caste, 4 of upper caste and 45 were of other caste.

Table 5
Categories of farm women according to caste

S.	Caste	No of
No.		Respondents
1.	Lower	41
	caste	
2.	Upper	4
	caste	
3.	Other	45
	caste	
	Total	90

#### Size of family

Table 6 depicts the categorization of the respondents according to size of family. The figures in the table show that 13 respondents belonged to small families (up to five family members) whereas 77 respondents belonged to large families (above five family members).

Table 6
Categories of farm women according to size of family.

S. No.	Type of Family	No. of Family Members	No. of Respondents
1.	Small family	Upto 5	13
2.	Large family	Above 5	77
		Total	90

Table 7
Categories of KVK Trainers
according to Age

S.No	Age	No. of respondents
1.	Below 35	5
2.	35-50	10
3.	Above 50	5
	Total	20

### Personal characteristics of KVK trainers Age

The above table shows that 10 respondents were at the age group from 35-50 years, while 5 respondents were above 50 years of age and 5 of the respondents were below 35 years of age.

### Educational qualification

Table 8
Categories of KVK trainers according to educational qualification

S. No.	Educational qualification	No. of respondents
1.	Under Graduate	3
2.	Post Graduate	12
3.	Doctorate	5
	Total	20

The above Table 8 shows that 12 respondents completed Post Graduation, 3 respondents completed Graduation while 5 respondents were having Ph.D. (Doctorate) in their respective disciplines.

# Gender

The Table 9 shows that 31 respondents were male and 19 respondents were female.

Table 9
Categories of KVK Trainers according gender

S.No	Gender	No. of respondents		
1.	Male	31		
2.	Female	19		
	Total	50		

# Constraints in effective transfer of technology through KVK

The data in the Table 10 and 11 presents the constraints in effective transfer of technology by KVK as perceived by KVK trainers & farm women. Their responses were recorded against twelve aspects.

# (i) As perceived by KVK trainers

It is evident from the Table 10 that "Lack of motivation among farm women" was ranked first important while the last constraint felt was "political interference".

From the finding mentioned above, it may be stated that due to lack of suitable technologies, the farm women and scientist do not have the motivation to implement the programme effectively. There is lack of resources and inputs with farm women which is coupled with Paucity of funds, lack of interpersonal relationships, lack of training facilities and transport facilities and thus leads to ineffective programme implementation. The above findings are in line with the findings of Bhatnagar and Singh (1973) and who found that lack of resources, inadequate researches and interpersonal relationships are the various constraints often mentioned by the SMS in performing their roles.

#### (ii) As perceived by farm women

It is evident from the Table 11 that "Lack resources and input" was ranked first important while only three farm women perceived "Political interference" as a constraint in effective implementation of KVK programmes.

It can be said that due to lack of resources, inputs, motivation and recognition, the farm women do not participate in the effective implementation of KVK programmes. Lack of interpersonal relationships coupled with lack of transport and training facilities, lack or leadership and emphasis on table work lead to ineffective programme implementation. The findings are in line with the findings of Sharma (1985) who found that lack of proper implementation of programme, lack of awareness, no active participation of local people and lack of technical guidance are the important constraints in effective implementation of a programme.

Table 10
Constraints in effective implementation of KVK programme as perceived by KVK trainers. (N=20)

				(11-20)
S. No.	Type of Constraint	Number of Responses	Percentage of Responses	Rank Position
1	Lack of interpersonal relationships	11	55	5
2	Inadequate technologies suited to the farm women's conditions	9	45	7
3	Lack of transport facilities	8	40	8
4	Lack of resources and inputs with farm women	15	75	2
5	Lack of motivation among farm women	18	90	1
6	Lack of incentives and recognition to the scientists	10	50	6
7	Lack of leadership at KVK	7	35	9
8	Lack of training facilities at KVK	11	55	5
9	Specialists being used more as a journalist than extension personnel	14	70	3
10	Paucity of funds for extension work	14	70	3
11	More emphasis on table work	12	60	4
12	Political interference	3	15	10

 $\begin{array}{c} \text{Table 11} \\ \text{Constraints in effective implementation of KVK programmes as perceived by farm women.} \\ \text{(N=90)} \end{array}$ 

S. No.	Type of constraint	Number of Responses	Percentage of Responses	Rank Position
1	Lack of interpersonal relationships	35	38.88	7
2	Inadequate technologies suited to the farm women's conditions	25	27.77	9
3	Lack of transport facilities	15	16.66	10
4	Lack of resources and inputs with farm women	65	72.22	1
5	Lack of motivation among farm women	55	61.11	3
6	Lack of incentives and recognition to the scientists	10	11.11	11
7	Lack of leadership at KVK	40	44.44	6
8	Lack of training facilities at KVK	30	33.33	8
9	Specialists being used more as a journalist than extension personnel	60	66.66	2
10	Paucity of funds for extension work	45	50	5
11	More emphasis on table work	50	55.55	4
12	political interference	3	0	12

# CONCLUSION

Based on findings of the study, it can be concluded that the constraints perceived by KVK trainers and farm women should be taken care by the planners for effective transfer of technology. More programmes should be organized for various categories of farm women in the villages. For such

training camps the extension personnel having first hand knowledge should be invited from time to time so that the farm women as well as KVK trainers may develop confidence in their subject matter knowledge.

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