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Media Effectiveness on Rural Women in Haryana for Vegetables Cultivation

Santosh Rani[1]* and Makhan Lal[2]

ABSTRACT

The present study was conducted in four villages namely, Bhimnagar, Pali of Hisar and Milkpur and Bawanikhera of Bhiwani district of Haryana state. Fifty rural women involved in vegetable cultivation practices from each village were selected purposively, thus comprising a sample of 200 women. The impact of CD was found to be significant for gain in knowledge and change in attitude in all selected villages for all the messages regarding vegetable cultivation. There was a significant difference in the knowledge of rural women at pre and post-exposure stage for all the messages. Education (r=0.257), income (r=0.241), landholding (r=0.179) and area under vegetables cultivation (r=0.180) had positive and significant relationship with knowledge acquisition. Attitude change of rural women was found to be positively and significantly related to education (r=0.296), landholding (r=0.180) and area under vegetable cultivation (r=0.185). Therefore, it may be inferred that respondents who were having cultivation as their main occupation, educated, having higher income, large landholders and more area under vegetable cultivation had acquired knowledge and favourable attitude when exposed them to CD on vegetable cultivation practices.

Keywords: C.D., Attitude, Economics, Knowledge, Rural women, Vegetable

INTRODUCTION

India is the second largest producer of vegetables next to China with 2.8 per cent of the total cropped area and 15 per cent of the world's production under vegetables (Kumar *et al.,* 2011). Vegetable alone contribute 10.61 per cent of the total value of output from agriculture and increasing trends over the years (CSO, 2013). According to National Horticulture Board, during 2014-15, India produced 162.89 metric tons of vegetable with 9.39 million hectare area. However, the productivity is very low (17.3 metric tons per ha) in the country as compared to many other countries. Area, rate of production, productivity and yield obtained of most of the vegetables is low in the majority of vegetable growing states including Haryana due to the lesser knowledge of vegetable production technology.

There is a huge gap between the scientific recommendation technology of vegetable cultivation and their adoption level of rural farm women. Moreover, near about 70 per cent vegetables are grown in rural area and illiteracy rate are more in this area and also farmers and extension worker ratio are very high. Here exists a strong need for extension education and training for the growers to the vegetable production technology.

Women play an important role in the vegetable production. Most of the operations in vegetable production like seed treatment, sowing of seed, nursery raising, transplanting, thinning, irrigation, weeding, gap filling, fertilizers application, harvesting, picking, packaging, loading and unloading of produces and even sometimes marketing are also done by women. However, regardless

[1]DES (Home Science), Krishi Vigyan Kendra, Fatehabad, Haryana
[2]Assistant Scientist, Department of Vegetable Science, CCS Haryana Agricultural University, Hisar-125004, Haryana
*Corresponding author email id: santoshpanwar78@gmail.com

of these variations, hardly any activities occurred in vegetable production in which women are not actively involved.

The media is playing an important role in passing on meaningful information at a faster rate to a large number of farm women in the country. It has emerged as one of the powerful sources of seeking relevant scientific information by our farm women. Anonymous (2009) reported that audio/video cassettes or C.Ds are only used for entrainment. Therefore, tapping and utilization of media for transferring the newly generated technologies regarding vegetable production among the Indian farm women is crucial and significant. This is mainly due to the fact that the vast majority of our farm women belong to remote and rural areas where facilities could not be arranged for sustainable individual or group approaches of technology transfer as it could be highly expensive and difficult in managing information infrastructure, therefore responsibilities and intervention of media in rural transformation is becoming more imperative and challenging. Emancipation of women is an essential pre-requisite for economic development and social progress of the nation. It is essential to evolve a pragmatic and realistic approach to women's development. There is an urgent need to develop the media on improved vegetable cultivation messages to strengthen the technical know-how. Therefore, the present study was planned to develop the relevant media on vegetable production so that rural women can be sensitized for self-reliance.

METHODOLOGY

The study was conducted in four phases and each phase having a distinct methodology. In phase I, two districts Hisar and Bhiwani were selected purposively from South-Western zone of Haryana. One block from each district *viz.,* Hansi block from Hisar district and Bawanikhera block from Bhiwani district were selected randomly. From the selected blocks two villages from each block, *i.e.,* Pali and Bhimnagar villages from Hansi block, Milkpur and Bawanikhera villages from Bawanikhera block were selected randomly. Fifty rural women who involved in vegetable cultivation practices from each village were selected purposively, thus comprising a sample of 200 women. Background profile of rural women in terms of socio-personal and economic variables also collected. For assessing the need of the rural women, an inventory pertaining to critical messages and sub-messages was prepared and categorized under three categories most needed, needed and least needed with scores 3, 2 and 1, respectively. Weighted mean scores were worked out and ranks were assigned. Messages having top three ranks and ten sub-messages from each selected messages got upper rank were finally selected for media preparation after consultation with Vegetable Science, Horticulture and Extension Education and Communication Management Department experts. In phase II, media in the form of CD for rural women was prepared on selected messages. Standard procedures for preparation of media were adopted. In phase III prepared media was administered to 30 judges of different departments, field functionaries and Home Scientists for effectiveness and feedback. Standardization was done in terms of reliability, validity and field applicability. In phase IV, the CD was exposed to 120 rural women out of 200 women four already selected villages *i.e.* 30 rural women from each village. The impact of media was assessed in terms of gain in knowledge and change in the attitude of rural women.

Considering the relevance of variables to the topic, a set of independent and dependent variables were selected for the present investigation. Total 13 independent variable *i.e.* background profile of rural women in terms of age, caste, marital status, family type, family size, education of the respondents, type of house, family occupation, income, landholding, area under vegetable cultivation, material possession, farm power possession and 2 depended variables *i.e.* gain in knowledge and change in attitude were considered.

The differences between pre and post exposure scores so obtained were taken as gain in knowledge. Attitude has been defined as the degree of positive or negative affect associated with some psychological object (Thurstone, 1946). A knowledge inventory and attitude statement was developed. Various statistical tools applied included Frequency and percentages, Paired't' test and Correlation coefficient to find out the degree of relationship of the dependent variable with the independent variable.

RESULTS AND DISCUSSION

Rural women profile in terms of age presented in Table 1 revealed that 40 per cent of the respondents were of younger age group closely followed by middle age group (39%) and upper age group (21%), respectively. Caste wise distribution of respondents revealed that 38 per cent belonged to middle caste, 35 per cent were from upper caste and 27 per cent belonged to lower caste categories. The results concerned with marital status depicted that most of the respondents were married *i.e.* 87 per cent. Out of total sample, 59 per cent respondents belonged to the nuclear family system followed by joint family (41%) system. Thirty-six percent respondents had up to 5 members in the family followed by above 6 members (35%) and more than 8 members of the family (29%). Out of total respondents majority (60%) of them were illiterate followed by the primary (10%), educated to middle and secondary school (8%) each, senior secondary (5%) and 6 percent respondents who can read and write only. The Table clearly depicts that 57 per cent respondents had mixed type houses followed by the *pucca* house (41%) and *kaccha* house (2%), respectively. It is well exhibited in Table that 45 per cent of the respondents had cultivation as their main occupation whereas, 40 per cent respondents were found to be agriculture labourers followed by respondents who were in service (6%), caste wise occupation (5%) and business (4%), respectively. The study indicated that 45 per cent of the respondents had a monthly income between Rs. 5,001 to 10,000

Table 1: Background profile of rural women (N = 200)

S.No.	Variable	Category	Frequency	Percentage
Socio-personal and economic variables				
1.	Age	Younger (<30 yrs)	80	40
		Middle (31-45 yrs)	78	39
		Upper (>46 yrs)	42	21
2.	Caste	Lower	54	27
		Middle	76	38
		Upper	70	35
3.	Marital status	Married	174	87
		Unmarried	20	10
		Widow	06	03
4.	Family type	Nuclear	118	59
		Joint	82	41
5.	Family size	Small (Up to 5 member)	72	36
		Medium (6-8 member)	70	35
		Large (Above 8 member)	58	29
6.	Education of respondents	Illiterate	120	60
		Can read and write only	12	06
		Primary	20	10
		Middle	16	08
		Secondary	16	08
		Senior Secondary	10	05
		Graduate/Post graduate	04	02
		Technical/Vocational	02	01
7.	Type of house	*Katcha*	4	2
		Mixed	114	57
		Pucca	82	41

Table 1: cotd...

S.No.	Variable	Category	Frequency	Percentage
8.	Family occupation	Cultivation	90	45
		Agril. Labourer	80	40
		Caste occupation	10	05
		Business	08	04
		Service	12	06
9.	Monthly income	Below Rs. 5,000	20	10
		Rs. 5,001-10,000	90	45
		Rs. 10,001-20,000	56	28
		Above Rs. 20,000	34	17
10.	Land holding	Land less	80	40
		Marginal (Upto 2.5 acre)	40	20
		Small (2.5-5.0 acre)	42	21
		Medium (5.0-7.5 acre)	24	12
		Large (Above 7.5 acre)	14	07
11.	Area under vegetable cultivation	No land	96	48
		1-2 acre	70	35
		3-4 acre	24	12
		5-6 acre	10	05
12.	Material possession	Low	72	36
		Medium	82	41
		High	46	23
13.	Farm powers possession	Low	154	77
		Medium	42	21
		High	04	02

followed by 28 per cent of the respondents who had income upto Rs. 10,001 to 20,000 followed by 17 per cent of the respondents who earn income above Rs. 20,000.

More than one-third of the respondents (40%) were landless whereas one-fifth of the respondents (20) per cent had land up to 2.5 acres and near about one fifth (21%) of the respondents had land 2.5-5.0 acres. The Table indicates that 48 percent respondents having no land regarding vegetable cultivation followed by 35 and 12 per cent who cultivated land between 1 to 2 acres, 3 to 4 acres for vegetables, respectively. Only 5 per cent respondents had cultivated land between 5-6 acres of vegetables. Data regarding material possession reveal that out of total sample, the majority of the respondents (41%) had medium material possession followed by low (36%) and high material possession (23%), respectively. Data regarding farm power possession revealed that out of total respondents, the majority of the respondents (77%) had low farm power machinery followed by medium type (21%) farm power machinery. Similar findings were reported by Gita (2010) which revealed that most of the respondents were of younger age group, illiterate, married and having medium family education status, the joint family having 5-6 members and farming was their main occupation. Deepti (2008); Renu (2009) and Yadav (2013) also reported similar findings.

Sufficient gain in knowledge regarding vegetable cultivation practices was recorded for each message *viz*., tomato, okra and cucurbits cultivation practices. It may, therefore, be concluded that women succeeded in acquiring knowledge after exposing them to CD on

Table 2: Change in attitude of rural women regarding vegetable cultivation practices in selected villages of two district of Haryana (N=120)

Name of villages	Pre-exposure (Mean score)	Post-exposure (Mean score)	Change in attitude (Mean score)	't' values
Bhimnagar	31.40	42.83	11.43	10.56*
Pali	31.60	43.57	11.97	13.37*
Milkpur	30.77	43.93	13.17	13.99*
Bawanikhera	30.93	45.27	14.33	14.87*
Overall	31.17	43.90	12.73	13.20*

*Significant at 5% level of significance

vegetable cultivation practices. This reflects the effectiveness of the Compact Disc (CD). Similar results were also obtained by Jain (2005); Asrani (2006); Khurana *et al*. (2007); Sindhu and Thakur (2011) and Yadav (2013).

The pre-exposure, post-exposure and change in attitude mean scores along with 't' values have been presented in Table 2. It is evident that respondents had succeeded in changing their attitude at the post-exposure level. A significant change in attitude regarding all the selected messages of vegetable cultivation practices was observed in the selected villages *viz.*, Bhimnagar and Pali village of Hisar district and Milkpur and Bawanikhera village of Bhiwani district of Haryana state separately as well as in the pooled sample. Similar results reported by Jain (2005); Kumari and Sethi (2012); Thakur and Verma (2012) and Yadav (2013).

Correlation analysis of impact of media on socio-demographic profile

In order to find out the relationship between socio-personal and economic variables with knowledge and attitude of the respondents, Pearson product correlation coefficient was applied. The data pertaining to these aspects have been presented in the following Table 3. It is evident that three variables *viz* education (r =0.483* and r =0.939*), land holding (r =0.396* and r=0.368*) and area under vegetables cultivation (r =0.360* and r=0.392*) had positively and significantly correlation with knowledge acquisition and favourable attitude of the respondents in Bhimnagar village of Hisar district regarding vegetables cultivation practices, whereas all other variables were found to be non-significant. It may, therefore, be inferred that respondents had cultivation as their main occupation, educated, having a *pucca* house, large land holders, more cultivated area under vegetables and had more favorable attitude and acquired knowledge through CD exposure regarding vegetable cultivation practices. Whereas in Pali village of Hisar district data indicated that knowledge acquisition of rural women was found to be positively and significantly correlated with age (r =-0.367*), education (r =0.366*), monthly income (r=0.362*), landholding (r=0.356*), area under vegetables cultivation (r=0.396*). Regarding attitude of respondents to education (r =0.375*), land holding (r=0.357*), area under vegetables cultivation (r=0.365*) were found to be positively and significantly correlated. It may be, therefore, inferred that respondents having cultivation as their main occupation, educated, higher income, having a *pucca* house, large landholders and more cultivated area under vegetables had acquired more knowledge and having a positive attitude after exposure of CD.

Data regarding the relationship in Milkpur village of Bhiwani district indicated that as far knowledge acquisition was concerned four variables *viz.* education (r=0.411*), land holding (r=0.362*), and area under vegetable cultivation (r=0.375*) had a significant and positive relationship after exposure of CD. Regarding attitude of respondents to education (r =0.398*), land holding (r=0.360*), area under vegetables cultivation (r=0.364*) had significant and positive relationship after exposure of CD on vegetables cultivation practices. Means respondents who were having cultivation as their main occupation, educated, large landholders and more cultivated area under vegetable cultivation had acquired knowledge and favourable attitude when exposed them

Table 3: Correlation analysis of impact of media on socio-demographic profile of rural women regarding vegetables cultivation practices in selected villages of Hisar and Bhiwani districts of Haryana

Particulars	Villages									
	Bhimnagar (n=30)		Pali (n=30)		Milkpur (n=30)		Bawanikhera (n=30)		Overall (n=120)	
Independent variables	Knowledge 'r' value	Attitude 'r' value	Knowledge 'r' value	Attitude 'r' value	Knowledge 'r' value	Attitude 'r' value	Knowledge 'r' value	Attitude 'r' value	Knowledge 'r' value	Attitude 'r' value
Age	-0.054	-0.053	-0.367*	0.175	0.162	0.153	-0.019	0.045	-0.070	0.078
Type of family	0.047	0.061	-0.051	-0.011	-0.134	0.246	0.043	-0.203	-0.017	0.157
Size of family	-0.244	-0.214	-0.034	0.181	-0.045	-0.007	0.001	0.237	-0.075	0.079
Education	0.483*	0.939*	0.366*	0.375*	0.411*	0.398*	0.367*	0.419*	0.257*	0.296*
Income	0.086	0.002	0.362*	-0.292	0.046	-0.091	0.413*	-0.005	0.241*	-0.101
Land holding	0.396*	0.368*	0.356*	0.357*	0.362*	0.360*	0.356*	0.354*	0.179*	0.180*
Area under vegetables cultivation	0.360*	0.392*	0.396*	0.365*	0.375*	0.364*	0.306*	0.317*	0.180*	0.185*

*Significant at 5% level of significance

to CD. Whereas in Bawanikhera village of Bhiwani district data showed that knowledge and attitude of rural women were found to be positively and significantly correlated with education (r =0.367* and 0.419*), income (r=0.413*), landholding (r= 0.356* and 0.354*) and area under vegetables cultivation (r =0.306* and 0.317*) after exposure to CD on vegetables cultivation practices.

The data presented in Table 3 bring to light that the overall relationship between socio-personal and economic variables with gain in knowledge and change in attitude of rural women regarding vegetables cultivation practices in selected villages *viz.*, Bhimnagar, Pali, Milkpur, and Bawanikhera of two districts Hisar and Bhiwani of Haryana indicated that education (r=0.257* and r=0.296*), income (r=0.241*), land holding (r=0.179* and r=0.180*), area under vegetables cultivation (r=0.180* and r=0.185*), were found to be positively and significantly correlation with knowledge acquisition and attitude change when exposed them to CD on vegetables cultivation practices. It inferred that respondents who were having cultivation as their main occupation, educated, having higher income, large landholders and more area under vegetables cultivation had acquired knowledge and favourable attitude when exposed them to CD on vegetables cultivation practices. Jain (2005); Asrani (2006); Asrani (2009); Gita (2010) and Yadav (2013) also support the findings. It could also establish a relationship with education, occupation, income, landholding, and area under vegetable cultivation.

CONCLUSION

Regarding relationship between socio-personal and economic variables with gain in knowledge and change in attitude of rural women regarding vegetables cultivation practices in selected districts of Haryana indicated that occupation, education, income, land holding, area under vegetables cultivation were found to be positively and significantly correlated to knowledge acquisition and attitude change when exposing them to CD on vegetables cultivation practices. It may therefore, be inferred that respondents who were having cultivation as their main occupation, educated, higher income, large landholders and area under vegetables cultivation had acquired knowledge and favourable attitude when exposure them to CD on vegetables cultivation practices. It is quite encouraging to record that majority of the respondents were illiterate, yet succeeded in gaining sufficient level of knowledge and change in attitude after the media exposure. This highlights the importance of media exposure which could further be tried on other messages for the transfer of technology in Home Science, Agriculture, and allied fields.

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