RESEARCH ARTICLE :

Effects of income on the communicational variable- A case of watershed development programme in Jabalpur district

■ **SONAM AGRAWAL* AND NALINKHARE**

SUMMARY : The watershed development programme (WDP) initially envisaged as a measure for poverty alleviation and improved livelihoods has gained even greater importance. This study was conducted during year 2014- 15 in the Jabalpur district of M.P. The totals of 200 respondents were selected randomly for the study. Results showed that chi-square analysis of the selected four independent variables with dependent variable (*i.e.,* income) indicated that, the variable extension participation, mass media exposure, contact with developmental agency, and cosmopliteness were positively significant at 0.05 per cent level of significance. The communicational profile analysis clearly indicated that majority of the beneficiaries had low extension participation, medium level of mass media exposure, low contact with development agencies and medium level of cosmopolitness.

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BACKGROUND AND OBJECTIVES

Watershed is defined as "natural hydrologic entity that cover a specific area expanse of land surface from which the rainfall runoff flows to a defined drain, channel, stream, or river at any particular point."

The watershed development programme (WDP) initially envisaged as a measure for poverty alleviation and improved livelihoods has gained even greater importance in light of the worldwide recognition of its effectiveness in combating climatic change. In India several Ministries namely, Ministry of Rural Development and Ministry of Environment and Forests have been involved in Watershed Development Programs with substantial variation in their approaches.

Madhya Pradesh is the second largest state of Indian Union with a total geographical area of 4.43 lakh square kms. It is predominantly rain-fed farming state. The average productivity is less than 20 per cent. This is mainly on account of lack of irrigation facility. Thus the government of Madhya Pradesh has given high priority for development of dry-land agriculture on watershed basis. In Madhya Pradesh Three hundred eighty five watershed development projects are in operation, covering 8,52,755

hectares of geographical area and out of which 5,74,296 hectares of cultivated area are with a huge amount of budgetary production for overcome the problem of watershed management it is very important progrmme which increases the production and productivity.

RESOURCES AND METHODS

The present study was conducted in Jabalpur district of M.P. Out of the 7 blocks in Jabalpur district, Kundam block was selected for the study. A list of farmers (beneficiaries) from selected villages was prepared with the help of Gram Panchayat and out of which 25 per cent *i.e.,* 200 beneficiaries were randomly selected for the study. The study was designed to know the communicational character of the beneficiaries and there relation with income of selected beneficiaries. The data was obtained through pre-tested structured schedule with the help of interview. The collected data were quantified, classified, tabulated and presented on the basis of frequencies and percentages, average and standard deviation.

OBSERVATIONS AND ANALYSIS

In order to know the communicational status of respondents, it is important to study these characteristics. In all, 4 variables were studied. The data showed that the higher percentage (61.50%) of the beneficiaries belonged to low level of extension participation (Table 1). Regarding

the mass media exposure the finding indicates that most of the beneficiaries had moderate (42.50%) exposure (Table 1). This finding is supported by Singh (1991), Bain (2002) Dhuware (2003) and Mewara (2005) Paigwar (2006). As regard to contact with development agencies, the beneficiaries had low contact (42.50%). This might be due to the low level ofcosmopoliteness and lowlevel mass media exposure. The finding of the present study is in agreement with the findings of Bain (2002) Dhuware (1999) and Mewara (2005) Paigwar (2006). At last the cosmopoliteness higher percentage (40.50%) had medium level of cosmopoliteness.

The data presented in Table 2 showed the relationship between extension participation and income of the beneficiaries. It was observed that in the low extension participation group 29.27 per cent had low income, followed by 39.02 per cent had medium and 31.71 per cent had high income.

Similarly, in medium extension participation groups, 13.89 per cent belonged to low income group, 72.22 per cent had medium and 15.89 per cent had high income. While in the case of high extension participation group, 48.78 per cent belonged to low income group followed by 39.02 per cent belonged to medium and 12.20 per cent had high income.

The $\chi 2$ value 21.836 was found to be significant at 5 per cent level of probability. Thus, Null hypothesis was rejected and it can be concluded that there was significant relationship between extension participation

Table 1 : Shows the profile of watershed beneficiaries

Sr. No.	Variable	Beneficiaries		Mean	S.D
		Frequency	Percentage		
1.	**Extension participation:**			9.44	6.60
	Low	123	61.50		
	Medium	36	18.00		
	High	41	20.50		
2.	**Mass media exposure**			37.69	17.74
	Low	65	32.50		
	Medium	85	42.50		
	High	50	25.00		
3.	**Contact with extension agencies**			7.59	3.64
	Low	85	42.50		
	Medium	74	37.00		
	High	41	20.50		
4.	**Cosmoolitness**			6.12	2.77
	Low	55	27.50		
	Medium	81	40.50		
	High	64	32.00		

and employment.

The data presented in Table 3 showed the relationship between mass media exposure and income of the beneficiaries. It was observed that in the low mass media exposure group 18.46 per cent had low income, followed by 46.15 per cent had medium and 35.49 per cent had high income.

Similarly, in medium mass media exposure groups, 29.41 per cent belonged to low income group, 56.47 per cent had medium and 14.12 per cent had high income. While in the case of high mass media exposure group, 48.00 per cent belonged to low income group followed by 24.00 per cent belonged to medium and 28.00 per cent had high income.

The χ^2 value 22.680 was found to be significant at

5 per cent level of probability. Thus, Null hypothesis was rejected and it can be concluded that there was significant relationship between mass media exposure and employment.

The data presented in Table 4 showed the relationship between contact with extension agencies and income of the beneficiaries. It was observed that in the low contact with extension agencies group 57.65 per cent had low income, followed by 18.82 per cent had medium and 23.53 per cent had high income.

Similarly, in medium contact with extension agencies groups, 6.76 per cent belonged to low income group, 62.16 per cent had medium and 31.08 per cent had high income. While in the case of high contact with extension agencies group, 17.08 per cent belonged to low income

Table 2 : Association between extension participation and income of the beneficiaries

Extension participation	Income			Total
	Low	Medium	High	
Low	36 (29.27)	48 (39.02)	39 (31.71)	123 (100.00)
Medium	5 (13.89)	26 (72.22)	5 (15.89)	36 (100.00)
High	20 (48.78)	16 (39.02)	5 (12.20)	41 (100.00)
Total	61	90	49	200

χ^2 Cal =21.836**significant at 0.05 level of probability with 4 d.f.

Table 3 : Association between mass media exposure and income of the beneficiaries

Mass media exposures	Income			Total
	Low	Medium	High	
Low	12 (18.46)	30 (46.15)	23 (35.39)	65 (100.00)
Medium	25 (29.41)	48 (56.47)	12 (14.12)	85 (100.00)
High	24 (48.00)	12 (24.00)	14 (28.00)	50 (100.00)
Total	61	90	49	200

χ^2 Cal =22.680**significant at 0.05 level of probability with 4 d.f.

Table 4 : Association between contact with extension agencies and income of the beneficiaries

Contact with extension agencies	Income			Total
	Low	Medium	High	
Low	49 (57.65)	16 (18.82)	20 (23.53)	85 (100.00)
Medium	5 (6.76)	46 (62.16)	23 (31.08)	74 (100.00)
High	7 (17.08)	28 (68.29)	6 (14.63)	41 (100.00)
Total	61	90	49	200

χ^2 Cal =36.339**significant at 0.05 level of probability with 4 d.f.

Table 5 : Association between cosmopolitness and income of the beneficiaries

Cosmopolitness	Income			Total
	Low	Medium	High	
Low	35 (63.64)	12 (21.82)	8 (14.54)	55 (100.00)
Medium	14 (17.28)	38 (46.91)	29 (35.80)	81 (100.00)
High	12 (18.75)	40 (62.50)	12 (18.75)	64 (100.00)
Total	61	90	49	200

χ^2 Cal =45.637**significant at 0.05 level of probability with 4 d.f.

group followed by 68.29 per cent belonged to medium and 14.63 per cent had high income.

The χ2 value 36.339 was found to be significant at 5 per cent level of probability. Thus, Null hypothesis was rejected and it can be concluded that there wass significant relationship between contact with extension agencies and employment.

The data presented in Table 5 showed the relationship between cosmopolitness and income of the beneficiaries. It was observed that in the low cosmopolitness group 63.64 per cent had low income, followed by 21.82 per cent had medium and 14.54 per cent had high income.

Similarly, in medium cosmopolitness groups, 17.28 per cent belonged to low income group, 46.91 per cent had medium and 35.80 per cent had high income. While in the case of high cosmopolitness group, 18.75 per cent belonged to low income group followed by 62.50 per cent belonged to medium and 18.75 per cent had high income.

The χ2 value 45.637 was found to be significant at 5 per cent level of probability. Thus, Null hypothesis was rejected and it can be concluded that there was significant relationship between cosmopolitness and employment. Singh *et al.* (2013) and Kudachi *et al.* (2014) also worked on the related topic.

Conclusion :

On the basis of above findings and discussion, it can be concluded that the studied variables had significant relationship with income generation. The phases indicate that watershed can significantly contribute to strengthening the beneficiaries in the agricultural sector. Therefore, these cases have to be expanded to meet the diverse needs of production by overcoming the constraints apparent in different areas.

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REFERENCES

Bain, R.P. (2002). Impct of bernenalla national watershed development programme on knowledge and adoption of watershed technology among beneficiaries of Sihora block of Jabalpur district (M.P.). M.Sc. (Ag.) Thesis, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, M.P. (INDIA).

Dhuware, S.R. (2003). A study on watershed programme with reference to management practices followed by beneficiaries of Panagar block of Jabalpur district, M.P. M.Sc. (Ag.) Thesis, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, M.P. (INDIA).

Kudachi, Mithun P., Bheemappa, A., Rudrapur, Shreeshail and Biradar, Anil (2014). Adoption of recommended soil and water conservation practices among the beneficiaries of Sujala Watershed Project in Northern Karnataka. *Agric. Update*, **9**(4): 484-488.

Lyaqet Ali (2001). Found that highest percentage (55.65%) of the respondents belonged to backward caste, followed by SC/ST and general castes. He further reported that caste had no significant relationship with income and employment generation of the beneficiaries.

Mewara, Y.S. (2005). Impact of watershed development programme (WSDP) on dynamics of farmers lifestyle in Sehore district (M.P.). M.Sc. (Ag.) Thesis, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, M.P. (INDIA).

Paigwar, Vaibhav (2006). Impact of watershed development programme (WSDP) on tribal farmers in relation to employment and income generation in Kundam block of Jabalpur district (M.P.). M.Sc. (Ag.) Thesis, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, M.P. (INDIA).

Singh, R.A., Sharma, V.K. and Pal, S.B. (2013). Watershed based front line demonstration is a path of prosperity to Bundelkhand farm families. *Agric. Update*, **8**(1&2): 42-44.

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