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Project Personnel's Perception on Watershed Development Activities under National Watershed Development Projects for Rainfed Area (NWDPRA)

Purushottam[1], S.K. Jha[2] and Baldeo Singh[3]

ABSTRACT

Project personnel under National Watershed Development Projects for Rainfed Area (NWDPRA) were selected to study the perception on relatively important watershed activities and involvement in watershed projects. The majority (67.0 %) of project personnel were Graduate followed by Masters (21.0 %) and Doctorate degree (12.0 %), indicating that the staff was adequately qualified. It was found that the project personnel perceived conservation and production measures (115) more importantly over socio-economic and management aspects (77) for the success of watershed project. It was further observed that these personnel were not much clear to their task in watershed development. The overall 21 activities of their involvement in watershed projects were identified. The involvement of them in socio-economic and management aspects (65) was higher over resource conservation and production measures (47). Than total multiple responses of them were higher (192) under relatively important watershed activities over their involvement in watershed activities (112). Indicates significant gaps between the perceived activities and performed activities under the watershed projects. Further, the responses of project personnel on effectiveness of training in watershed indicated that majority (77.14 %) desired for practical and problem-solving training based on local experiences and training programmes to be organized at the village (55.71%), watershed (31.42 %) and district levels (21.12 %).

Key words: Project personnel, Perception, Training, Watershed project

INTRODUCTION

Current approaches and strategies for rainfed farming are based on the concept of conservation of rainwater for holistic and integrated development of watersheds. It includes farming systems approach, management of common property resources and augmenting family income and nutrition levels through household production systems. Centrally sponsored National Watershed Development Project for Rainfed Area (NWDPRA) was started in 1991 in most of the states and Union Territories. The outcome of watershed management programme depends much on how effectively it is planned, implemented and involves the local people. The successful implementation, rural developments project needs with regard to the various organizational options at a fairly early stage in a multi disciplinary team. It is also necessary to spell out the various tasks assigned to each member of the multi-discplinary team and to fill key positions with adequately skilled persons (Jayaraman, 1982). An analysis of NWDPRA shows that more attention was paid to water conservation work than soil conservation work (Singh, 1989). Training is one of the important activities of the watershed projects. The bottom line for most of the training programme is effectiveness but little attention has been paid why training programme is ineffective. Training effectiveness usually determined by assessing some combinations of the criteria and trainees' reaction to evaluation of programme (Krickpatrics**,** 1967).

METHODOLOGY

Data were collected from 70 project personnel from Bihar state working at various positions. Majority of those personnel were Assistant Soil Conservation Officer of Soil and Water Conservation Department. Those personnel were purposively selected and contacted. The structured schedule with open-ended questions was developed and used as data collection device. Multiple responses were received from the respondents. The qualitative data so collected were analyzed, classified and variables were grouped under a specific category. Thus, the perceived activities were categorized and their multiple responses were worked out and ranked in order.

RESULTS AND DISCUSSION

Personnel characteristics and awareness

Project personnel had their education either in agriculture or in agricultural engineering. Majority (67.0 %) of them were graduate followed by masters (21.0 %) and doctorate degree (12.0 %), indicates that they were adequately qualified. The experiences of project personnel in watershed development showed that majority of the personnel were having 1 to 15 years of experience. It was also observed that respondents were not very much clear to express their length of experience

Division of Agriculture Extension, Indian Agriculture Research Institute-100012, New Delhi, India
Present address: [1]Sr. Scientist, Indian Institute of Pulses Research, Kanpur, Uttar Pradesh

in watershed development. This may be because they had doubt that the experience of soil and water conservation and watershed development was similar or different.

About sixty six per cent project personnel were not aware of any successful watershed projects of the country and thirty four percent were aware of about 14 such projects of the state. Total eighty five per cent had correct perception to objectives of watershed development project and fiveteen per cent could not respond correctly. Those responded correctly gave holistic meaning of watershed development and others were able to give only part of it. It means majority of them had correct perception to objectives of watershed development project.

Relative importance of watershed activities

Project personnel all together 16 categories of perceived activities were identified for successful watershed project (Table 1). The perception of project personnel on the important activities of watershed indicated that resource conservation and production measures were relatively more important than socio-economic and management aspects of the watershed projects. In case of resource conservation, the rainwater harvesting and appropriate use were perceived as most important aspect (32.85%), followed by crop production for food requirements (30.00%), fodder production (27.14%), conservation of soil and water (22.85%), judicious use of available natural resources (20%), plantation of trees (18.47%) and cattle care and improvement (12.85%) respectively. In the category of socio-economic and management aspect of watershed development, a great variation in the perception was observed. The project staff showed their meaningful concern to integrated and holistic watershed development (47.14%) followed by improvement in socio-economic status (24.28%) and human resource development (14.28%). The other factors such as need-based plan wise development, collective community movement and implementation of plans in time were seemed to be very important factors for success of the programme, but were perceived as least important by project personnel. Some of the activities were not meaningfully represented and seem to be vague. Bagchee and Bagchee (1992) concluded that institutional development is important as the physical development of the watershed, but is a generally neglected aspect of watershed development programmes.

The study revealed that in totality, project personnel expressed more importance to conservation and production components and less to socio-economic and management. They had varied perception on socio-economic and management aspects but had higher importance towards integrated and holistic aspect of development.

Table 1: Relative importance of activities of watershed projects as perceived by project personnel

n=70

S.No.	Perceived activities	No. of respondents	Percentage	Rank
	Resource conservation and production measures			
1.	Rain water harvesting and appropriate use	23	32.85	I.
2.	Crop production for food requirement	21	30.00	II.
3.	Fodder production	19	27.14	III.
4.	Conservation of soil and water	16	22.85	IV.
5.	Judicial use of locally available natural resources	14	20.00	V.
6.	Plantation of trees	13	18.57	VI.
7.	Cattle care and improvement	09	12.85	VII.
	Total	115		
	Socio-economic and management aspects			
1.	Integrated and holistic development	33	47.14	I.
2.	Improvement in socio- economic status	17	24.28	II.
3.	Human resource development	10	14.28	III.
4.	Generating employment through house-hold component	06	08.57	IV.
5.	Cultural and moral development	03	04.28	V.
6.	Need based plan wise development	03	04.28	VI.
7.	Collective community movement	02	02.85	VII.
8.	Implementation of plan in time	02	02.85	VIII.
9.	Development of cluster of villages	01	01.43	IX.
	Total	77		
	G. total	192*		

*multiple response

Involvement in watershed activities

The overall 112 multiple responses received from the 70 project personnel showed that they had little to say on their involvement in watershed projects. The project personnel were also not much clear on their involvement in watershed activities. It indicated lack of clarity or vagueness in their specific tasks. A task is a piece of work to be accomplished. There might be some ambiguity in the assigned task itself. The task clarity has relevance to goal setting. The skill and knowledge requirement for a complex task is also necessary (Campbell, 1988). The listed 21 perceived activities in the watershed projects were identified. The project personnel involvement in socio-economic and management activities was higher (65) than resource conservation and production activities (47). The majority of project personnel were found involved in organizing training (28.57%) followed by soil and water conservation work (18.57%), coordination, peoples mobilization and technical services (12.85%) each, motivating the farmers (11.43%), vegetative development (10.0%) and crop demonstrations (8.57%) *etc*.

It is evident from the Tables 1and 2 that the total multiple responses of project personnel were higher (192 nos.) under the category of relative importance of watershed activities over the involvement in watershed

activities (112 nos.). It indicated that there were significant gaps between the perceived activities of the success of watershed projects over the performed activities of the project.

Table 2: Perception of project personnel on the involvement in project activities

n=70

Sl. No.	Perceived activities of involvement	No. of respondents	Percentage	Rank
	Socio-economic and management aspects			
1.	Organizing training programme	20	28.57	I.
2.	Coordinating project activities	09	12.85	II.
3.	Mobilization of people	09	12.85	III.
4.	Motivating the farmers	08	11.43	IV.
5.	Economic improvement	05	07.14	V.
6.	Conducting farmers meetings	04	05.71	VI.
7.	Translating guidelines	04	05.71	VII.
8.	Implementation and supervisory work	03	04.28	VIII.
9.	Handling audio visual aids	02	02.85	IX.
10.	Assistance to senior staff	01	01.43	X.
11.	Working as leader of team	01	01.43	XI.
	Total	65		
	Resource conservation and production measures			
1.	Soil and water conservation work	13	18.57	I.
2.	Technical services	09	12.85	II.
3.	Vegetative development	07	10.00	III.
4.	Crop demonstrations	06	08.57	IV.
5.	Construction of ponds	03	04.28	V.
6.	Watershed area development	03	04.28	VI.
7.	Survey and project preparation	02	02.85	VII.
8.	Subsidy distribution among farmers	02	02.85	VIII.
9.	Collection of ITKs	01	01.43	IX.
10.	Algal production	01	01.43	X.
	Total	47		
	G. Total	112*		

*multiple response

Training effectiveness in watershed projects

Training is an important instrument to provide knowledge and development of the skills. Higher numbers of responses (167) were received on effectiveness of the training in watershed.

Table 3: Perceived factors for training effectiveness

n=70

Sl. No.	Perceived factors	No. of respondents	Percentage	Rank
1.	Practical trainings based on local experience to solve the farmers problem	54	77.14	I
2.	Organize trainings at village level	39	55.71	II
3.	Organize trainings at watershed level	22	31.42	III
4.	Organize trainings at district level	15	21.42	IV
5.	Continuous and intensive trainings	08	11.42	V
6.	Use of audio-visual aids (charts, poster, film, pamphlet, loudspeaker)	07	10.00	VI
7.	Oral training not class room teaching	06	08.57	VII
8.	Awareness camp and fair in each month	05	07.14	VIII
9.	Training on activity / component wise	04	05.71	IX
10.	Involve scientists in training	03	04.28	X
11.	Develop faith in the programme	02	02.85	XI
12.	Organize awareness programme on local market days	01	01.43	XII
13.	Emphasize adult to adult trainings	01	01.43	XIII
	Total	167*		

*multiple response

These responses indicated that majority (77.14 %) desired for practical trainings based on local experiences. Such trainings would help to solve farmers' problem. About 55.71 per cent reported that such trainings should be organized at village level, 31.42 and 21.12 per cent of them wanted training at watershed and district level, respectively. They emphasized that training in watershed development should be intensive and on regular basis (11.42 %). More use of an audio-visual aids, awareness campaign, involvement of scientists in training, emphasis on development of faith and awareness programme on market were also reported and emphasized by the project personnel to make training really effective in watershed programme.

It was observed that 37 per cent personnel had not attended any training on watershed development. The observations recorded revealed that training received by project personnel had little practical utility. Therefore, it did not help in effective management of different activities of watershed projects.

CONCLUSION

A gap was observed between the perceived activities and performed activities for the success of watershed projects. The vagueness was found in the perception of project personnel on their involvement in watershed activities where as the perception on relatively important watershed activities was clear and further it was more clear on training effectiveness.

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