

Research Notes

Components of watershed project - a comparative analysis of strengths and weaknesses

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Ministry of Rural Development, Government of India developed a common guideline and circulated to all concerned for effective implementation of watershed development programme through out the country. The guideline envisages a well defined and clearly stated operational procedure. The goal has been set from the user's perspective, well organized structure mentioning the responsibility of each individual in the hierarchy and participatory programme formulation, implementation, monitoring as well as evaluation. Since, the guideline framed for empowering people around watershed to develop and implement the programme, utilize allotted funds and evaluate the progress of work, it is necessary to make a comparative analysis of the strengths and weaknesses of each component for which the present investigation is designed.

The study was undertaken during 2004 in four blocks of Kandhamal district in Orissa. A total of 82 watershed beneficiaries president, chairman, secretary and volunteers of the association and members from user groups, self help groups, women groups as well as minor communities were randomly selected for the investigation. Similarly, 34 Project Personnel Comprising 3 Districts Advisory Committee Members, 9 Project Implementation Agency (PIA) and 22 Watershed Development Team members (WDT) were also randomly selected.

Goal, structure, programming and functioning are the major components of watershed projects as envisaged in the guideline. Preliminary discussions at length were made with the people involved in the process of implementation of the project on assessing the strengths and weaknesses of each component. Thus, 14 statements in goal, 11 in structure, 14 in programming, 8 in functioning as the strengths and 7 statements in goal, 6 in structure, 6 in programming, 8 in functioning as the weaknesses were finalized for the study. Responses were collected over the statements on a three point continuum i.e. agree, undecided and disagree and scoring made as 3, 2 and 1 respectively. Information were collected through personal interview with the respondents and comparative analysis made.

It is revealed from the table that the beneficiary respondents expressed more of weakness than strengths in goal, structure, programming and functioning of the watershed project which is completely reverse in case of project personnel. Both categories of the respondents observed comparatively less strength in functioning of the watershed project compared to other components. The functioning of the project largely depends on goals, structure and programming. Since less strengths was experienced by both project personnel and beneficiaries, it is necessary to remove the weaknesses for implementing the programme in desired direction. It is also further revealed that there was

Table 1. Comparative analysis of strengths and weaknesses

Sl.No.	Project component	Mean score					
		Strengths	Weakness	Strengths	Weakness	Strengths	Weakness
1.	Goal	2.33	2.89	2.71	2.23	14.02	22.84
2.	Structure	2.42	2.97	2.65	2.05	8.86	30.98
3.	Programming	2.41	2.69	2.61	2.10	7.66	21.93
4.	Functioning	2.25	2.85	2.40	2.06	6.25	27.72

Table 2. Correlation among variables strength in relation to overall programme

Sl.No.	Variable	Beneficiary (N=82)		Project personnel (N=34)	
		'r' value	't' value	'r' value	't' value
1.	Goal and Structure	0.399**	2.715	0.672**	3.518
2.	Goal and Programming	0.733**	6.728	0.084	0.326
3.	Goal and Functioning	0.495**	3.448	0.021	0.080
4.	Structure and Programming	0.343**	2.277	0.477**	2.104
5.	Structure and Functioning	0.430**	2.976	0.011	0.044
6.	Programming and Functioning	0.321*	2.114	0.360	1.495

**Significant at 0.01 level; * Significant at 0.05 level

Table 3. Correlation among variables of weaknesses in relation to overall programmes

Sl.No.	Variable	Beneficiary (N=82)		Project personnel (N=34)	
		'r' value	't' value	'r' value	't' value
1.	Goal and Structure	0.243	1.562	0.071	0.276
2.	Goal and Programming	0.343*	2.282	0.290	1.714
3.	Goal and Functioning	0.698**	6.087	0.549*	2.543
4.	Structure and Programming	0.292	1.903	0.353	1.462
5.	Structure and Functioning	0.273	1.774	0.530*	2.421
6.	Programming and Functioning	0.348*	2.317	0.659**	2.391

**Significant at 0.01 level; * Significant at 0.05 level

significant difference about weakness between both categories of respondents in all aspects of watershed project under investigation. This may be due to low exposure, knowledge and understanding of the project by watershed people. It is therefore suggested that sufficient exposure and understanding must be made for the beneficiaries as well as project personnel particularly PIA and WDT before implementation of the project.

In the context of development, the intervening variable like structure, programming and functioning with goals are much important to reveal direct and indirect relationships. To examine such hypothesis, attempt was made to find out relationship among these variables for the strengths as well as weaknesses between two groups of samples. The analysed information are presented herewith.

Results contained in the table indicate that positive correlation was found between goal and structure ($r = 0.399$), goal and programming ($r = 0.733$) and goal and functioning ($r = 0.495$) in case of watershed beneficiaries. In interacting manner, structure and programming, structure and functioning and programming and functioning had almost high correlation value. In other words, the strengths of the ingredients of watershed programme if properly understood and acted upon must reveal positiveness. In case of project personnel, the correlation was observed between goal and structure ($r = 0.672$) and structure and programming ($r = 0.477$) leaving all other variables as non-significant. It seems that there is correlation gap relating to goal and programming goal and functioning, structure and functioning as well as programming and functioning.

The correlation analysis are of indicative of facts that comparatively low involvement of project personnel fail to reveal correlation between most of the factors which was not the case with watershed beneficiaries.

Similar attempt was also made to correlate the variables associated with weaknesses which is presented in table 3.

Data in the table indicated that the watershed beneficiaries had high positive correlation in case of weakness between goal and functioning ($r = 0.698$), low correlation between goal and programming ($r = 0.343$) as well as programming and functioning ($r = 0.348$). In case of project personnel, significant positive correlation exists between goal and functioning ($r = 0.549$), structure and functioning ($r = 0.530$) and programming and functioning ($r = 0.659$).

It is therefore revealed that there was low involvement of beneficiaries in goal and functioning, goal and programming and programming and functioning which may be the factor for non-achievement of the end results. The project personnel involved in the implementation observed weaknesses in goal and functioning due to their non-involvement in these activities.

As revealed from the study the watershed beneficiaries expressed more of weaknesses in the goal, structure, programming and functioning of the project which are opposed by project personnel. Both of them expressed comparatively less strengths in functioning of the project than other components. The correlation analysis of strengths among all components of the project indicated for low involvement of project personnel. Similarly, the analysis of weaknesses

revealed that there was low involvement of beneficiaries which may be the factor for non-achievement of the end results. The study therefore suggested that sufficient exposure should be given to the beneficiaries as well as project personnel particularly PIA and WDT for a detail understanding about the guideline for successful implementation of the project.

References

- Robin, J., Miller, J.G. and Hildreth, W.B. (1989). Handbook of strategy management (Ed.) Marcel Dikker, INC, New York.
- Venkateswarlu, K. (1997). Concept of SWOT analysis, SWOT analysis of National Agricultural Research System, NAARM, Hyderabad : P - 1.

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Assessment of preferences of farmers using participatory approach

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A study was conducted using Participatory Rural Appraisal techniques as part of a project on Technology Assessment and Refinement through Institution Village Linkage Programme during September, 2003 in a village called Sankaramangalam of Palakkad district, Kerala. Eighty participants including farmers, their representatives, youths, farmwomen, people involved in agricultural business, teachers and extension officers participated in the programme. They were categorised into 5 groups. Through focused group discussion each group was facilitated by a team of researchers to record their preferences of crops, rice varieties using Matrix ranking technique of participatory approach.

For assessing the preference of crops in the area, participants of all the groups were asked to enlist the major crops grown in the area and then develop criteria to rank various crops. They were asked to give their preference

for crops in relation to the identified parameters. The average of the scores assigned by each group for a particular crop was summed up and the crop getting the highest score was identified as the first preferred crop. Ranks were given based on the descending order of the total scores. A large number of farm youth were found unemployed and observed the trend of migrating to gulf countries. Hence there was a need to promote agro-based enterprises in the area for self employment generation. Therefore a similar exercise was done with farm youth to assess the preference of various agro-based enterprises.

Matrix ranking of crop preference:

In this method, the group members were asked to give their preference of crops based on the characters of crops and benefits obtained from them. They were asked to develop a matrix having the crops in a line on the top as columns and the characters/benefits on the