Constraints Faced by Functionaries in Watershed Management: A Case Study

Subhas Chand[1], A. K. Sikka[2], R. C. Srivastava[3] and Sundarambal[4]

1. Sr. Scientist, CARI, Port Blair-744 101 A&N Islands 2. Director, ICAR Research Complex, Patna,
3. Director, CARI, Port Blair 4. Sr. Scientist, CSWCRCI Res. Centre, Oty (Tamil Nadu)
Corresponding author E-mail:subhash@cari.res.in

ABSTRACT

This study was conducted to identify the constraints faced by the watershed functionaries while implementing Integrated Wasteland Development Programme (IWDP), which was implemented by CSWCRTI, Research Centre, Ooty in Annur block (1997-2002), Coimabtore district of Tamil Nadu and Drought Prone Area Programme (DPAP), implemented by Water Technology Centre (WTC), Tamil Nadu Agricultural University (TNAU), Coimbatore district of Tamil Nadu in 15 watersheds during 1995-1999. Major constraints encountered by watershed functionaries at different levels in DPAP and IWDP watersheds are discussed in this paper. These constraints included difficulties in getting the contribution for different works, insufficient seed money to sustain the SHGs, difficulties in management of CPRs, difference in wage rates, frequent transfer of the staff, insufficient incentive to secretary and volunteers etc. The suggestions offered by the sample households and watershed functionaries were to increase the contribution for individualized activities, fixing the responsibilities to maintain the common works, increasing the project period and increasing the seed money to SHGs to carryout the appropriate income generating activity and frequent visits of PIA after withdrawal of the project.

Keywords: Integrated wasteland development programme (IWDP); Watershed functionaries;

Watershed management has now become the new paradigm for natural resources conservation. Micro-scale water resource development is the foundation of any watershed development programme supported by number of other protection, production and livelihood support interventions. The importance and concern of this approach is evident by the wide variety of state/national/ international programmes and institutions involved in management of watersheds. In ninth five year plan it was emphasized to make watershed programme as a national movement.

Ministry of Rural Development, Government of India has laid down some guidelines for development and implementation of watershed programme. While execution of watershed programmes by different agencies, these guidelines needs to be followed for its success. These guidelines need to be modified based on the feed back and problems of field functionaries because of certain problems and reasons. Hence, an effort has been made in this paper to identify various constraints faced by different agencies and watershed functionaries involved in watershed programmes in Coimbatore district of Tamil Nadu (*Sikka, A.K. et. al., 2000 & 2001*).

The general features of DPAP watersheds are presented in the Table 1. It was observed that on an average watershed size was found to be 500 ha. under drought prone area programme. The average size of land holding was observed to be 1.27 ha. The total population of these watersheds was 36999 with average family size 4.68.

Table 1. General feature of DPAP watersheds

S.No	Socio economic parameters		Value/details
1.	Total area of watershed		8642
2.	No. of watersheds		15
3.	Annur	(Area in ha.)	1600
4.	Avinashi	(Area in ha.)	2045
5.	Sulur	(Area in ha.)	1755
6.	Palladam	(Area in ha.)	1325
7.	Tirupur	(Area in ha.)	1738
8.	Population of watersheds		36999
9.	Literacy (%)		49
10	Average land holding size (ha.)		1.27
11.	Employment generation (Mandays)		66200

It was found that about 67 per cent families belonged to backward caste followed by scheduled caste (31 per cent) and most backward caste (2 per cent) respectively. Based on the socio-economic survey conducted, general socio-economic conditions of watershed are presented in Table 2.

Table 2. General socio-economic condition in IWDP watershed

S.No	Socio-economic parameters	Values/details
1	Number of families	288
2	Population	1146
3	Average family size(Number)	4.17
4	Literacy per cent	47
	Male	65
	Female	45
5	Major occupation (per cent)	
	Agriculture	56
	Land less labourers	38
6	Average land holding (ha.)	1.78
7	Average annual income (Rs.)	18,158
8	Major live stock	Cows, Buffaloes Bullocks, sheep & goats.
9	Av.annual milk production/family (L)	579
10	Average fuel consumption/family	
	Fuel wood (q)	21.8
	Kerosene (L)	34.8
11	Number of metalled road	2
12	Number of primary school	1 (1950)
13	Nearest bank and post office	Palayam (6km)
14	Nearest primary health centre	Annur(7km) & Pogallur (5km)
15	Nearest veterinary dispensary	Pogallur (5km)
16	Nearest market	Annur (7km)
17	Number of cottage industries	1 (spinning mill)
18	Number of petty/tea shops	3

METHODOLOGY

This investigation was carried out in Integrated Wasteland Development Programme (IWDP) implemented by CSWCRTI, Research Centre, Ooty in Annur block (1997-2002), Coimabtore district of Tamil Nadu and Drought Prone Area Programme (DPAP) implemented by Water Technology Centre (WTC), Tamil Nadu Agricultural University (TNAU), Coimbatore district of Tamil Nadu in 15 watersheds during 1995-1999. The watersheds were characterized by a stretch of undulating to moderately slopy land. The average rainfall is about 600 mm with over 40 per cent of the rains being received in the North East monsoon. The area comes under semi-arid subtropical region with high evaporative demand. IWDP programme was funded by Ministry of Rural Development. While DPAP programme was funded jointly by the Ministry of Rural Development, GOI and Government of Tamil Nadu on watershed basis. To investigate and to identify the constraints encountered by different functionaries, this study was carried out in IWDP Salaiyur and DPAP watersheds. A stratified random sampling was adopted to select the watersheds, villages covered and the beneficiaries. Apart from direct beneficiaries, nodal institution, PIA and watershed level functionaries were contacted for detailed data collection. Total of 135 and 125 households in IWDP and DPAP watersheds, respectively were contacted for final data collection.

RESULTS AND DISCUSSION

Constraints encountered by the nodal agency: It is observed from the study that the nodal agencies of both DPAP and IWDP felt that the duration of the project i.e. 4 years was not sufficient to carryout the activities satisfactorily and complete in time. The reason is that always there are chances of delay in official machinery, such as release of fund from the government and the transmission of the same to the field level, non availability of labourers due to various reasons, climatic factors, etc. Delay in release of fund was the major problem (76%) experienced by the DPAP nodal agency whereas it is not a major problem felt by IWDP as it was expressed by only 18 per cent of the respondents. This is due to the fact that the transmission steps are very less between the govt. and the nodal agency in IWDP. The other major problem reported by the nodal agency of DPAP was frequent change of staff involved in the programme. However, this problem was not faced by the nodal agency of IWDP watershed.

Constraints encountered by PIA: The analysis of constraints perceived by PIA revealed that the problems related to the WDT members of the DPAP watershed project were more and vital. In this project the WDT members were SRFs who were paid very meager amount (ie. Rs.2500 pm as consolidated pay) which was not commensurating with their qualification. As a result, the moment they get better opportunities they left this job. Again to appoint a WDT member the processing time was more. Moreover they needed to be trained as they were not much experienced. All these reasons totally hampered the progress of the project considerably. As in the case of IWDP the WDT members were the scientists and hence this problem did not arise. The delay in release of funds, curtailed the effective project period to carry out all the activities. Within this short span the number of watersheds, the PIA had to be covered were 15 with an area of 8642 ha which was a herculean task. Moreover, the PIA had taken this effort for the first time.

Table 3. Constraints faced by PIA

S.No.	Constraints	DPAP	IWDP
1	Delay in release of fund by the nodal agency	82	-
2	Frequent change of nodal officer	75	-
3	Frequent change/ quitting of WDT members	70	-
4	WDT members paid less	76	-
5	WDT members less experienced	38	-
6	Project activities time bound/ project period insufficient	63	-
7	Lack of people's participation	78	-
8	Lack of co-operation/ coordination from line departments	36	30
9	Difficulty in getting contribution to various works	58	57

People's participation was not to the appreciable level in DPAP watersheds expressed by 75 per cent of the respondents which had resulted in lack of co-operation in carrying out the project activities (Table 3). But it was not a major problem in the case of IWDP. The other major constraint experienced by both the PIAs was difficulty in getting the contribution from the people for the common works (58%). The reasons behind it were the inability of the people, suspicion over the PIA and watershed functionaries. Further, people felt that it was a govt. work hence, they expected full expenditure should be borne by the government. As in the case of IWDP, adequate efforts were made by the PIA to build up confidence and rapport with the people and this resulted in good cooperation and participation in the programme.

Constraints faced by watershed functionaries at local level : The major constraints faced by the watershed functionaries (watershed President, Chairman, Secretary and volunteers and watershed committee members) were analyzed and the same was presented in Table 4. It could be inferred that the constraints viz, insufficient honorarium to the watershed secretary and volunteers, lack of follow up action of training programme, difficulty in getting contribution for common works and difficulty in maintaining plantations in common lands were experienced by the majority of the watershed functionaries in both the watersheds. Most of the secretaries/ volunteers were all of the opinion that it was worthless to spend whole day for these meager salary. Moreover, they found it difficult to move from one place to another without any conveyance when the watershed works were going on in different places simultaneously.

The impact of the training programme could be realized only when the follow up action were taken up. In both the watersheds the watershed functionaries felt that follow up of training programmes was very difficult due to various socio-economic and technical problems. The reasons for the difficulty in getting contribution were discussed already. There was difficulty in maintaining the plantation on common land due to lack of commitment of the people, scarcity of water etc. as expressed by majority of watershed functionaries. The watershed guidelines were not clear to the watershed functionaries as reported by 79 per cent and 42 per cent of the respondents in DPAP and IWDP programmes, respectively. After completion of the work, the PIA has taken more time to inspect the work which caused an inordinate delay for payment as expressed by 58 per cent of the watershed functionaries of DPAP. This problem was not faced by the IWDP.

Table 4. Constraints faced by watershed functionaries

S.No.	Particulars	DPAP	IWDP
1	Guidelines not very clear	79	42
2	Delay in starting the project	65	-
3	Insufficient salary to secretary and volunteer	72	65
4	Delayed exposure visits/ trainings	58	25
5	Project wage rate less than the local wage rate	56	49
6	Difficulty in running SHGs	77	24
7	Suspicion over watershed functionaries	85	14
8	Difficulty in getting contribution for common works	51	47
9	Fear of taking land by government	63	54
10	Less involvement of technical personnel	57	-
11	Lack of people's participation and cooperation	80	37
12	Difficulty in maintaining plantations in common land	76	73
13	Delay in inspection of works and payment	58	-
14	Less importance to animal husbandry component	53	52
15	Social conflicts among the people	41	36
16	Fixed unit cost norms	69	-
17	No provision for strengthening already existing structures	75	-
18	Difficulty in utilizing Watershed Development Fund (WDF)	76	-

The animal husbandry is an important component of the farming community of the watershed area. But the project had given least importance to the livestock in DPAP and IWDP watersheds. If it was given proper

attention to the livestock the individual income could have been increased. This may facilitate them to adopt watershed development works where the investment is required and their living standard could have been increased.

There was less involvement of technical personnel in DPAP watershed as reported by 57 percent of the respondents and there was delay in inspection of works and payments. Though there is flexibility in deciding the unit cost norms in watershed guidelines, the PIA of DPAP had fixed the unit cost norms just for the operational convenience. This had created problem for the watersheds functionaries as expressed by 69 per cent of the respondents. This problem was not there in IWDP. The watershed functionaries of both watersheds have expressed that there was social conflict among the people which also acted as a hindrance in carrying out watershed development works. Around 75 per cent of the respondents in DPAP watershed reported that there was no provision for strengthening of already existing structure and there was difficulty in utilizing the watershed development funds.

Constraints encountered by the SHGs: SHGs were not viable in DPAP watersheds unless they were given good amount of seed money as loans to generate a better income. In IWDP watershed the major constraints reported by more than 40 per cent of the respondents were insufficient seed money, lack of market linkages of SHG activities, lack of credit facilities from banks and difficulty in recovery. In order to sustain the SHGs activities in watershed programmes seed money could have been substantially increased so that they could take up some remunerative income generating activity.

Constraints encountered by user groups/beneficiaries : The constraints namely difference in wage rate, difficulties in maintaining the CPRs, difficulty to contribute in terms of cash for common works and fear of taking the land hence objection of some watershed activities were reported by the beneficiaries in DPAP watersheds (Table 5) same problems existed in IWDP. The other constraints experienced by the beneficiaries were some watershed activities not carried out in time and the some activity/works were not useful to the beneficiaries in both the watersheds. Similarly summer ploughing could have been taken up just before onset of monsoon as expressed by 42 per cent beneficiaries. In IWDP also more casualties of tree seedling planted in common land was observed. In DPAP watershed some beneficiaries have reported that there were improper site selections for construction works also due to fixed unit cost norms.

Table 5. Constraints encountered by user groups/beneficiaries

S.No.	Constraints	DPAP	IWDP
1	Some activities not carried out timely	46	22
2	Unable to contribute for community work	77	65
3	Fear of taking land	62	-
4	Difficulty in maintaining common property resources	81	78
5	Difference in wage rate	97	-
6	Some works/activities not useful	39	-
7	Improper site selection for some construction works	35	-

CONCLUSION

Based on this investigation, the constraints identified in implementing the watershed programmes, as expressed by different agencies involved were too many. In order to maintain the continuity of the programme, the same Nodal officer should continue till the end of the project. Community organization development programmes needed to be strengthened by creating enough awareness by rapport building. People of the project area should be brought into the confidence and responsibility/ commitments should be specified. Judiciously benefit sharing mechanism should be devised for all. The guidelines of watershed development should be made flexible and easy to understand to all of the end stakeholders.

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