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# Impact of Watershed Development Programmes of Watershed Organization Trust (WOTR) on the Beneficiaries in Ahmednagar District

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#### ABSTRACT

WOTR (Watershed Organization Trust) is one of the non government organization working in Maharashtra since 1993. This trust constructed 36 watersheds in Maharashtra. The critical coverage area of the project is 31,536 hectares. it was observed that there was a need to undertake the study by the professional institutional source to examine the impact of the Watershed project on agricultural development and extent of the benefits derived by the beneficiaries from programme implemented by the WOTR. Results revealed that higher proportion of the beneficiaries i.e. 78.00 per cent in the middle age category of 36 to 50 years, while, in case of the nonbeneficiaries 75.00 per cent belonged to the middle age category. A majority (69.00 per cent) of the beneficiaries was educated while; in case of non-beneficiaries most of them (48.00 per cent) were illiterate. Most of the beneficiaries (62.00 per cent) and non-beneficiaries (68.00 per cent) together possessed Class-III soil type. A majority of the beneficiaries (64.00 per cent) and non-beneficiaries (51.00 per cent) used medium level of sources of information. The social participation of beneficiaries was found to be higher than that of nonbeneficiaries. Forty two per cent of beneficiaries had land holding up to 1 ha. while, 62.00 per cent of the non-beneficiaries had land holding up to 1 ha. Relatively higher per cent of beneficiaries (85.00) had annual income in between Rs. 21,501 to 1,50,000 than the non-beneficiaries(60.00). Most of the beneficiaries i.e. 60.00 were found to be from medium category of socio-economic status while, 61.00 per cent of the non-beneficiaries were found to be from low category of socio-economic status. It is also observed in the study that the crop production and productivity, cropping intensity, employment, annual income, cropping pattern and socioeconomic status were found to be changed in positive direction in case of the beneficiary respondents. Over all impact of watershed project was found to be in the medium category for the beneficiary respondents while, it was in low category for the non-beneficiary respondents.

Watershed development concept was the outcome of this need for conserving the precious soil and water resources. One of the participating NGOs in this dialogue was the Social Centre, and NGO working in Ahmednagar district, Maharashtra, founded by Fr. Hermann Bacher in 1968. Fr. Bacher was present at the NGO workshop held in 1987 at Aurangabad and outlined the idea of setting up of a large-scale watershed development programme, which later came to be called the Indo-German Watershed Development Programme (IGWDP). WOTR (Watershed Organization Trust) is one of the non government organizations working in Maharashtra since 1993. This trust constructed 36 watersheds in Maharashtra. The critical coverage area of the project is 31,536 hectares. it was observed that there was a need to undertake the study by the professional institutional source to examine the impact of the Watershed project on agricultural development and extent of the benefits derived by the beneficiaries from programme implemented by the WOTR. In eighth five year plan, nine talukas, out of 14 talukas were selected from Ahmednagar district under NWDP-RA. The various works and treatments in these identified watersheds were completed by end of 1995-96 by the WOTR. Reports suggest that good results are achieved by Watershed Organization Trust. However, it is observed that there is need to undertake the study by the professional institute source to examine the impact of the watershed project on agricultural development and extent of benefit derived by the beneficiaries from programme implemented by the WOTR.

A systematic study in this direction would bring

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out the impact on the beneficiaries and their feedback towards the WOTR. It was therefore felt necessary to undertake the present investigation entitled, Impact of Watershed Development Programmes undertaken by the Watershed Organization Trust (WOTR) on the beneficiaries in Ahmednagar District with following objectives.

- 1. To study the personal, socio-economic, situational and communication characteristics of respondents.
- 2. To study the impact of selected agricultural development activities on the profile of respondents.

# METHODOLOGY

The present study was carried out in Ahmednagar District of Maharashtra, where various Watershed development and welfare programmes are implemented by the WOTR for their beneficiaries. Ahmednagar is head office of WOTR for Maharashtra state. Near about 13 watersheds are developed by WOTR in Sangamner Taluka. Sangamner (some part of Akole tahsil) was purposively selected for the present study where the watershed sampled area is located. There are 13 watershed projects in Sangamner tahsil out of which 5 in 5 villages were already completed and rest are in progress. The five beneficiary villages and five nonbeneficiary villages from same area were selected for the study. From the list 20 beneficiaries from each village were selected on the criteria of more number of activities benefited by them. From other 5 village's 20 nonbeneficiaries group from each of them were selected. Thus, in all 200 respondents were selected.

# **RESULTS AND DISCUSSION**

It is apparent from Table-1 that relatively higher proportion of the beneficiaries i.e. 78.00 per cent belonged to the middle age category.

Table-1: Distribution of the respondents according to their age.

SI. No.	Age (years)	Be	umber of eneficiaries N=100)	Ben	Number of Non- Beneficiaries (N=100)		Overall (N=200)	
		No.	Per cent	No.	Per cent	No.	Per cent	
1.	Young (upto 35)	5	5.00	12	12.00	17	8.50	
2.	Middle (36 to 50)	78	78.00	75	75.00	153	76.50	
3.	Old (51 and above)	17	17.00	13	13.00	30	15.00	
	Total	100	100.00	100	100.00	200	100.00	

The data in Table-2 indicates that, relatively higher proportion i.e. 32.00 per cent of the beneficiaries were educated up to primary school level.

Table-2: Distribution of the respondents according to their education.

SI. No.	Education		ber of aries (N=100)	Number of Non- Beneficiaries(N=200)		Overall (N=100)	
		No.	Per cent	No.	Per cent	No.	Per cent
1.	Illiterate	31	31.00	48	48.00	79	39.50
2.	Primary (1 to 4)	32	32.00	33	33.00	65	32.50
3.	Secondary (5 to 10)	25	25.00	12	12.00	37	18.50
4.	High school (11, 12 and Diploma)	9	9.00	6	6.00	15	7.50
5.	Graduate and above (1 <sup>st</sup> year college above)	3	3.00	1	1.00	4	2.00
	Total	100	100.00	100	100.00	200	100.00

SI. No.	Type of soil		Number of Beneficiaries (N=100)		Number of Non- Beneficiaries(N=200)		erall =100)
		No.	Per cent	No.	Per cent	No.	Per cent
1.	Class I	0	0.00	0	0.00	0	0.00
2.	Class II	8	8.00	0	0.00	8	4.00
3.	Class III	62	62.00	68	68.00	130	65.00
4.	Class IV	30	30.00	32	32.00	62	31.00
	Total	100	100.00	100	100.00	200	100.00

Table-3: Distribution of the respondents according to their type of soil.

It is revealed from Table-3 that, most of the beneficiaries (i.e. 62.00 per cent) possessed class III soil.

## Table-4: Distribution of the respondents according to their source of information.

Sl. No.	Source of information	Ben	nber of eficiaries N=100)	Bene	er of Non- eficiaries ==100)	Overall (N=200)	
		No.	Per cent	No.	Per cent	No.	Per cent
1.	Low (Upto 10)	21	21.00	47	47.00	68	34.00
2.	Medium (11 to 20)	64	64.00	51	51.00	115	57.50
3.	High (21 and above)	15	15.00	2	2.00	17	8.50
	Total	100	100.00	100	100.00	200	100.00

Data presented in Table-4 indicates that, relatively higher proportion of the beneficiaries i.e. 64.00 per cent had

medium access to different sources of information for seeking information.

# Table-5: Distribution of the respondents according to their social participation.

Sl. No.	Social participaiton		nber of aries(N=100)		er of Non- ries (N=100)		Overall (N=200) No. Per cent		
		No.	Per cent	No.	Per cent	No.	Per cent		
1.	Low (upto 2.3)	15	15.00	83	83.00	98	49.00		
2.	Medium (2.4 to 6.5)	74	74.00	17	17.00	91	45.50		
3.	High (6.6 and above)	11	11.00	0	0.00	11	5.50		
	Total	100	100.00	100	100.00	200	100.00		

It is also observed that, relatively higher proportions of the non-beneficiaries (83.00 per cent) were found to be from low category of social participation.

Table-6:	Distribution	of the	respondents	according	to	their	land	holding.
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SI. No.	Land holding (ha.)	Bei	mber of neficiaries N=100)	Ben	ber of Non- neficiaries =100)	Overall (N=200)	
		No.	Per cent	No.	Per cent	No.	Per cent
1.	Marginal (upto 1.00)	48	48.00	62	62.00	110	55.00
2.	Small (1.01 to 2.00)	46	46.00	37	37.00	83	41.50
3.	Medium (2.01 to 4.00)	6	6.00	1	1.00	7	3.50
	Total	100	100.00	100	100.00	200	100.00

It is revealed from Table-6 that, relatively higher per cent of beneficiaries (48.00 per cent) possessed marginal level of land holding. The 46.00 per cent of the beneficiaries possessed small level of land holding.

SI. No.	Annual Income (Rs.)	Number of Beneficiaries (N=100)		Number of Non- Beneficiaries (N=100)		Overall (N=200)	
_		No.	Per cent	No.	Per cent	No.	Per cent
1.	Upto 21,500	6	6.00	40	40.00	46	23.00
2.	21,501 to 50,000	41	41.00	43	43.00	84	42.00
3.	50,001 to 1,00,000	34	34.00	15	15.00	49	24.50
4.	1,00,001 to 1,50,000	10	10.00	2	2.00	12	6.00
5.	1,50,001 and above	9	9.00	0	0.00	9	4.50
	Total	100	100.00	100	100.00	200	100.00

#### Table-7: Distribution of the respondents according to their annual income.

It is revealed from Table-7 that, 41.00 per cent of the beneficiaries had their annual income between Rs. 21,501 to 50,000.

## Table-8: Distribution of the respondents according to their socio-economic status.

Sl. No.	Socio-economic status	Number of Beneficiaries (N=100)		Number of Non- Beneficiaries (N=100)		Overall (N=200)		
		No.	Per cent	No.	Per cent	No.	Per cent	
1.	Low	16	16.00	61	61.00	77	38.50	
2.	Medium	60	60.00	32	32.00	92	46.00	
3.	High	24	24.00	7	7.00	31	15.50	
	Total	100	100.00	100	100.00	200	100.00	

It is revealed from Table-8 that, relatively higher proportion of the beneficiaries' i.e.60.00 per cent was found to be from medium category of socio-economic status, followed by 24.00.

#### Table-9: Distribution of the respondents according to Impact.

SI. No.	Impact	Bene	ber of ficiaries =100)	Bene	er of Non- ficiaries =100)	Overall (N=200)	
		No.	Per cent	No.	Per cent	No.	Per cent
1.	Low (Up to 81)	6	6.00	53	53.00	59	29.50
2.	Medium (82 to 163)	64	64.00	44	44.00	108	54.00
3.	High (164 and above)	30	30.00	3	3.00	33	16.50
	Total	100	100.00	100	100.00	200	100.00

It is revealed from Table-9 that, a majority of the beneficiaries (64.00 per cent) exhibited medium level i.e. 82 to 163 per cent of impact, followed by 30.00 per cent of the beneficiaries reported high level i.e. category 164 and above per-cent of impact. Only 6.00 per cent of the beneficiaries reported low level of impact i.e. upto 81 per cent. The average impact on the beneficiaries during this period was found to be 122.00 per cent.

# CONCLUSION

From the results of the present study the low educational level of the respondents was observed

therefore top priority should, be given to the spreading of education in rural areas for changing the behavior of the respondents. The efforts should also be made to raise their communication media, information seeking behavior and use of sources of information. Horticultural plantation was observed very less so different Government schemes should be implemented with collaboration of NGOs to increase area under horticultural crops. Farmers adopted only those practices which they know from the ancient times. Adoption level of other important recommended practices was found low, it implies that intensive extension education programme like field visits, result and method demonstration should be organized to minimize the technological gap. It was gratifying to not that the crop production and productivity, cropping intensity, employment, annual income, cropping pattern and socio-economic status were found to be changed in positive direction in case of the beneficiary respondents. Hence the other people in the area should be encouraged to undertake similar watershed projects in there area also.

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