

Thematic Study Report

Need Based Qualitative NRM Works Brings Real Changes in IWMP-3, Salekasa Block, Dist-Gondia



Submitted By- AFC India Ltd. Mumbai

EXECUTIVE SUMMARY

Integrated Watershed Management Program (IWMP) aims to restore the ecological balance by harnessing, conserving and developing degraded natural resources such as soil, vegetative cover and water. The outcomes are prevention of soil run-off, regeneration of natural vegetation, rain water harvesting and recharging of the ground water table. This enables multi-cropping and the introduction of diverse agro-based activities, which help to provide sustainable and alternative livelihood to watershed communities.

Watershed management works are basically runoff management of watershed, therefore watershed programme must follow the ridge-to valley principle since the ridge is the catchment of streams and water bodies in the lower reaches. If we do not treat these catchments, the capacities of dams in the valley are likely to be impaired. However, it is also to be recognized that this is a participatory programme that needs buy-in from the community. Hence, some work may initially be done in the lower reaches nearer the village settlements so that the people can understand the benefits of the programme and feel a sense of ownership over it. However, in each case, it must be ensured that the ridges/catchments of each water body are fully treated soon thereafter.

This thematic study of Natural Resource Management are under taken in IWMP 3 project cluster of Batch II (2010-11) in Salekasa Block of Gondia District. In IWMP 56% project fund has been earmarked for NRM activities, in the watershed total 6187.94 ha. areas are to be treated by various activities like Farm Bund, Fodder Development and drainage line treatment by Cement Nala Bund, Mati Nala Bund, and Farm Pond & Diversion Bund.

The present study broadly aims at an overall assessment of the watershed development activities implemented during 2013-14 and 2014-15. The study also makes an attempt to assess the impact on rehabilitating the natural resource base of the project area and increasing the availability of food and fodder, income and employment to the inhabitants of the project area, especially the poorer tribal and disadvantaged groups.

Study revealed that NRM activities like CNB, Farm Ponds, Paddy Bunds, Repair of Paddy Bunds and MNB are implemented in the watershed area have significantly improved the soil moisture conservation and thereby improving the crop yield in all watersheds villages. In the sample watersheds villages due to increase in cultivated area practice of open grazing is decreasing and peoples are more and more adopting stall feeding to their animals. The watershed development programme has a significant positive impact on creation of employment opportunities for the villagers, both landless as well as landowners.

The sample beneficiaries were asked about what they feels about the main impacts of the watershed programme in their villages. The villagers listed out priorities of watershed impact, given top priority to employment generation followed by increased in ground water level and soil and moisture conservation which resulted in increased in area production and productivity in agriculture. Watershed Development Fund (WDF) has been created in sampled villages to meet the future maintenance expenditure.

BACKGROUND

IWMP – 3 project clusters of Salekasa Block is 40 km away from Gondia District, It comprises geographical area of 17791.67 ha and treatable of 6187.94 covering 37 villages in 17 Grampanchayats. The area affected from Naxalite activities and most of the people belongs to SC/ST categories. Maximum populations in the project area are living in below poverty line. Agriculture is one of the prime economic activities of the villagers mainly aimed to meet their needs and few people sale their surplus in local market .The major crop in the project area is paddy.

The major problems of the project area are acuteness of drinking water scarcity, extent of over exploitation of ground water resources, lack of assured irrigation facilities. Agricultural land have very good potential for production of crops etc.

The background of this thematic study is to assess the status of IWMP interventions implemented during 2013-14 to March 2015.against the approved year wise target budget. The study attempts to assess the impact of implemented NRM activities on increasing production and productivity of selected project cluster and its overall impact, on stakeholder in the watershed area.

STUDY AREA

In batch II (2010-11 to 2015-16) of IWMP 8 project cluster has been undertaken in Gondia district, spread in Gondia, Tirora, Goregaon and Salekasa Block. IWMP -3 project clusters in Salekasa, is being implemented by **NGO SHRI GANESH GRAMIN VIKAS SHIKSHAN SANSTHA, GONDIA**. The details of project cluster are given below.

DETAILS OF THE PROJECT

:

Geographical area (ha.)	Treatment area (ha.)	Sanctioned amount (Rs. in Lacs)	Number of		
			Gram Panchayats/WCs	Villages	Micro- Watersheds
17791.67	6187.94	928.19	17	37	44

For this thematic study 2 WCs i.e. Zalia and Toyagondi covering 4 villages were selected where highest, midway and lowest physical and financial progress of various NRM activities implemented during the financial year 2013-14 and 2014-15.

Household information in the Study Area

Sr. No.	Name of Village	Total Households	BPL Households	%of BPL Households	Total Landless Households	% of Landless Households	Total Population
1	Sakaritola	116	74	63.79	27	23.28	581
2	Gonditola	131	83	63.36	32	24.43	632
3	Zaliya	346	238	68.79	66	19.08	1649
4	Kopalgad	165	133	80.61	50	30.30	763
	Total	758	528	69.13	175	24.27	3625

OBJECTIVE

The proposed study aims to find out the present status and an overall assessment of the NRM activities with specific emphasis on its impact on NRM and poverty alleviation. The specific objectives of the study are:

1. To find out the present status of NRM activities.
2. To assess the impact of the project on rehabilitating the natural resource base and the availability of food, fodder and income to the inhabitants of the project area, especially the poor.
3. To find out how the direct and tangible benefits distributed among various user groups.
4. To examine whether the villagers can sustain the project on their own without outside help in future.
5. To suggest remedial measures for improving the project effectiveness.

METHODOLOGY

The methodology of this thematic study is primary and secondary data collection. Four villages from 2 WCs are selected based on the MPR and list of NRM activities implemented received from the PIA. Data has been collected from field visit and direct interaction with beneficiaries and other stakeholder in the project area.

A set of questionnaires with descriptive analysis are prepared for assessing the NRM works and its impact in study area. These questionnaires are framed suitably by studying the existing project documents.



Descriptive analyses

The following questions are framed to study the impact of NRM activities in the study area on the different indicators which are as given below.

SN	Questions
1.	On livestock
2.	Employment generation
3.	Land use pattern
4.	Production and productivity
5.	Crop diversification
6.	Employment opportunities and migration
7.	Increase area under irrigation and ground water level
8.	WDF funds for project sustainability

The focus group discussion was conducted for observations and the users groups were interviewed with pre-tested questionnaires framed for the required information. The data were collected individually by administering the scheduled to the respondents and the objectives of the study clearly explained to the users group before conducting FGD. To some extent, the secondary data were also taken into consideration to support present study. To measure impact assessment of investment on NRM activities, the actual expenditure incurred and their additional benefit accrued were directly collected from the project.

Project documents were reviewed including the common guidelines, project plan, internal monitoring system, capacity building initiatives, concurrent process monitoring, progress monitoring, preparatory phase evaluation and community based monitoring etc. to understand planned and implemented approach and strategies to achieve the project goals.

This thematic study consisted of various aspects viz. study and review of project documents, GR, MPR, DPR, study framework analysis, secondary information collection, interaction with WCDC, PIA and WDT members, information compilation & analysis, drawing conclusions and recommendations, etc.

In each of the selected NRM activities, beneficiaries and other stake holder of the project area representing various socio-economic and user groups are covered for descriptive questions. The quantitative and qualitative information collected from these sample beneficiaries and non-beneficiaries and the PIAs are analysed and presented in this report.

STUDY FINDINGS

Activities proposed under Watershed Development Works (NRM)

Table- 1 : Depicts activities related to area and drainage line treatment are proposed under watershed development work for project period of 4 years..

Table - 1 – details of activities proposed under area and drainage line treatment

SN	Activity/ Component	Unit	Physical Target	Total Amount (Rs. In Lacs)	
A	Area Treatment				
1	Paddy Bunding	ha.	269.51	111.52	
2	Repairs of Paddy Old Bund	ha.	2668.00	320.16	
3	Farm Pond	30*30*3	No	71	76.49
		25*25*3	No	27	19.35
	Total	No	98	95.84	
4	Others (Body Renovation)	No/ha	24/240	11.96	
A	Total of Area Treatment			539.48	

B	Drainage Line Treatment			
1	Cement Nala Bund	No	30	157.76
2	Earthen Nala Bund	No	6	25.62
3	Others (Diversion Bund)	No/Ha.	15/340.41	40.37
B	Total of Drainage Line Treatment			223.75

A+ B	Area Treat. + Drainage Line Treat.			763.23
-------------	-------------------------------------------	--	--	---------------

Table – 1 it is observed that for area treatment works total of Rs. 539.48 lacs are proposed covering Paddy bunding repair of Paddy bunding, Farm Ponds and Body repair and Rs. 223.75 lacs are proposed for drainage line treatment works covering CNBs, ENBs and diversion bunds work under NRM for project period.

Total Rs. 763.23 lacs for area and drainage line treatment under NRM works are proposed for whole project period.

Year wise Phasing and their fund requirement for NRM work

The year wise Physical and financial phasing of NRM works along with fund requirement from IWMP project and from convergence through existing schemes are presented in **Table -2**

Table -2: Details of year wise physical and financial phasing of NRM works along with fund requirement

Sr. No.	Name of treatment/activity	Unit		2012-13		2013-14		2014-15		2015-16		2016-17		Total		Amount to be Utilized from	
		No./ ha.	No / ha	Co st	No./ha	Cost	No./ha	Cost	No./ha	Cost	No./ ha	Cost	No./ha	Cost	I W MP	Convergence with other Scheme	
																Name of Scheme	Amount
1	Paddy Bunding	Ha			53.90	22.30	53.90	22.30	107.81	44.62	53.90	22.30	269.51	111.52	111.52		
2	Repairs of paddy old bund	Ha			533.60	64.03	533.6	64.03	1067.2	128.07	533.6	64.03	2668	320.16	76.72	MREGS	243.43
3	Farm pond	No			20	19.56	20	19.56	38	37.16	20	19.56	98	95.84	95.84		
4	Bodi Renn.	No			6	2.99	6	2.99	6	2.99	6	2.99	24	11.96	11.96		
5	Cement Nala Bund	No			6	31.55	6	31.55	12	63.11	6	31.55	30	157.76	157.76		
6	Earthen Nala Bund	No			1	4.27	2	8.54	2	8.54	1	4.27	6	25.62	25.62		
7	Diversion Bund	No			3	8.07	3	8.07	6	16.16	3	8.07	15	40.37	40.37		
	Total					152.17		157.04		300.65		152.77		763.23	519.79		

Table – 2 it is observed that total Rs. 763.23 lacs for area and drainage line treatment under NRM works are proposed for whole project period. Out of the total cost, highest 39% of cost proposed during 2015-16, likewise 21% in year 2014-15 and 20% of cost proposed during 2013-14 and 2016-17. Of the total cost, 68% and 32% cost is proposed from IWMP project fund and convergence of existing govt. schemes respectively.

In the project cluster total 6187.94 ha. area will be treated by various activities like Farm Bunding & Repairing, Farm Pond ,Cement Nala Bund, Mati Nala Bund & Diversion Bund etc.

ACTIVITIES UNDERTAKEN

NRM activities are undertaken and got completed during 2013-14 and 2014-15. The details of activities carried out and expenditure incurred in each of the Villages / WCs are described in **Table-3**.

Table-3-Details of activities undertaken under NRM work

SN	Name of Activity	Village / WC	Name of beneficiary	Gat No.	Ha / No (s) / TCM	Cost in Rs. Lacs
1	CNB	Sakharitola/Zalia	--	1/2	9.40 TCM	8.35
2	Farm Pond	Sakharitola/Zalia	Shri. Dulichand L. Lilhare	1/1	30X30X3	1.07
3	Farm Pond	Zalia /Zalia	Shri. Pritam Nagade	1/2	30X30X3	1.07
4	Paddy Bund	Kopalgadh/Toyagondi	Shri. Pandhare Mulchand	1/1	5.08 ha	1.84
5	Body Repair	Kopalgadh/Toyagondi	Shri. Premchand Bahiram Kurache	1/2/79/1	2 ha	0.64
6	ENB	Kopalgadh/Toyagondi	--	½	10 ha	4.08
7	Farm Pond	Gonditola/Zalia	Smt. Sulochanabai N. Navgode	1/1	30X30X3	1.07
8	Farm Pond	Gonditola/Zalia	Shri. Lalsingh Salekar	1/2	30X30X3	1.07
9	CNB	Gonditola/Zalia	-	1/1	5.10 TCM	4.01

Table-3 shows that Farm Pond and CNB activities were carried out in Sakharitola and Gondiatola in Zalia WC with cost of Rs. 4.28 and Rs. 12.36 lacs respectively, whereas Paddy bund, body repair and ENB were carried out in Kopalgadh of Toyagondi WC with cost of Rs. 1.84, 0.64 and Rs. 4.08 lacs respectively. Paddy bund and body repair under soil and water conservation measures were taken up to prevent the soil erosion and *in-situ* conservation of rainwater covering an area of about 7.08 ha..

The economics of these structures reveal that the CNBs were constructed with a unit cost of Rs. 8.35 and Rs. 4.01 per 9.40 and 5.10 TCM water stored, while the unit cost of the check dam was about Rs 46.70 per m³ and the repair of *nala* bund worked out at Rs 10.80 per m³ water stored. The unit cost of the Farm Pond structures is Rs. 1.07 lacs per 2700m³ and covering 10 ha of land under irrigation ENB constructed with the cost of Rs. 4.08 lacs.

During interaction with WC members it was informed that no involvement of WC members in decision making process and financial transactions. In this situation there is need to adhere transparency in execution of project activities.

TARGET AND PROGRESS OF WATERSHED ACTIVITIES

Table -4 portrays the Physical and financial progress of NRM works during year 2013-14 and 2014-15 against the yearly target.

Table -4: Details of NRM work with physical and financial progress during 2013-14 and 2014-15 against the yearly target in same period.

Type of Watershed Work	Target DPR				Progress during Fin. Year				Progress since beginning	
	Year 2013-14 (upto April 2014)		Year 2014-15 (upto March 2015)		Year 2013-14 (upto April 2014)		Year 2014-15 (upto March 2015)		Year 2014-15 (upto March 2015)	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Terracing	0	0	0	0	11	10.57	52.48	22.57	63.48	33.14
Repair Old Paddy Bund	533.6	64.03	533.6	64.03	27.65	8.26	15.79	5.07	48.79	14.93
Body Repair	6	2.99	6	2.99	1	0.36	2	0.82	3	1.18
Earthen Structure	0	0	0	0	1	1.6	0	0	1	1.6
Farm Ponds	20	19.56	20	19.56	27	27.98	17	16.54	44	44.52
CNB	6	31.55	6	31.55	0	0	7	0	7	0
ENB	1	4.27	2	8.54	0	0	4	6.25	4	6.25
Total		122.4		126.67		48.77		51.25		101.62
% Total						40%		40%		
Source-MPR (April 2014/ March-2015)										

Table-4 shows there is satisfactory progress was observed. i.e financial progress of Rs. 48.77 (40%) lacs against the target of Rs. 122.4 lacs during 2013-14 and Rs. 51.25 lacs (40%) against the target of Rs.126.67 lacs during 2014-15.

Progressive achievement since beginning at the end of March 2015 of Rs. 101.62 lacs was observed, it can be seen that there is satisfactory progress during the both the financial years.

Findings at WC Level

Village Sakharitola of WC-Zalia:

Activities proposed under Watershed Development Works (NRM)

Table- 5: Depicts activities related to area and drainage line treatment are proposed in WC Sakharitola under watershed development work for project period of 4 years..

Table - 5 – details of activities proposed in Village Sakharitola of WC Zalia under area and drainage line treatment

SN.	Activity/ Component	Unit	Physical Target	Total Amount (Rs. In Lacs)
	Area Treatment			
1	Paddy Bunding	ha.	-	
2	Repairs of Paddy Old Bund	ha.	39.08	4.69
3	Farm Pond	No	2	2.15
A	Total of Area Treatment			6.84
B	Drainage Line Treatment			
1	Cement Nala Bund	No	1	3.82
B	Total of Drainage Line Treatment			3.82
A+ B	Area Treat. + Drainage Line Treat.			10.66

Table – 5 it is observed that total Rs. 6.84 lacs of NRM work under treatment area was proposed covering Paddy bunding, Farm Ponds and Body repair and Rs. 3.82 lacs of drainage line treatment work was proposed covering CNB under NRM for project period. In all Rs. 10.66 lacs of NRM work under area and drainage line treatment was proposed in Sakharitola village of Zalia WC for whole project period.

TARGET AND PROGRESS OF WATERSHED ACTIVITIES

Table - 6 portrays the physical and financial progress of NRM works in village Sakharitola of Zalia WC during year 2013-14 and 2014-15 against the target of yearly and Annual Action Plan.

Table -6: Details of NRM work with physical and financial progress against the target of yearly and Annual Action Plan.

NRM activity	DPR Target		Financial year 2013-14						Financial year 2014-15					
			Yearly Target (DPR)		Target Annual Action Plan		Progress During fin yr		Yearly Target (DPR)		Target as per Annual Action Plan		Progress During fin yr	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Farm Ponds		2.15	2	2.15	2	2.15	1	1.07	0	0	1	1.08	0	0
CNB		3.82	0	0	0	0	0	0	1	3.82	1	3.82	1	7.56
Total		5.97	2	2.15	2	2.15	1	1.07	1	3.82	2	4.9	1	7.56
Progress against target (%)								49%						154%

Table-6 shows satisfactory progress of 49% during financial year 2013-14 and 154% progress against the target of Annual Action plan during 2014-15 due to extreme over expenditure in CNB

As per interaction with PIA, he stated that in DPR the cost of CNB was proposed to Rs. 3.82 lacs , but actually at the time of implementation and need of said activity in the village the cost of estimate was increased to Rs. 7.56 lacs due to present rates of material, it is included in revised DPR which is yet to be submitted to VWDA for final approval. There are 97% extra increase in the expenditure of CNB, detailed analysis and justification need to be checked prior to approval.



Village Gonditola of WC-Zalia:**Activities proposed under Watershed Development Works (NRM)**

Table-7: Depicts activities related to area and drainage line treatment are proposed in village Gonditola in WC Zalia under watershed development work for project period of 4 years.

Table - 7 – details of activities proposed in Village Gonditola of WC Zalia under area and drainage line treatment of NRM work.

Sr. no.	Activity/ Component	Unit	Physical Target	Total Amount (Rs. In Lacs)
	Area Treatment			
1	Repairs of Paddy Old Bund	ha.	54.41	6.53
3	Farm Pond	No	2	2.15
A	Total of Area Treatment			8.68
B	Drainage Line Treatment			
1	Cement Nala Bund	No	1	4.01
B	Total of Drainage Line Treatment			4.01
A+ B	Area Treat. + Drainage Line Treat.			12.69

Table – 7 it is observed that total Rs. 8.68 lacs of NRM work under treatment area was proposed covering repair of Paddy bund and Farm Ponds and Rs. 4.01 lacs of drainage line treatment work was proposed covering CNB under NRM for project period. In all Rs. 12.69 lacs of NRM work under area and drainage line treatment was proposed in Gonditola village of Zalia WC for whole project period.

TARGET AND PROGRESS OF WATERSHED ACTIVITIES

Table - 8 portrays the physical and financial progress of NRM works in village Gonditola of Zalia WC during year 2013-14 and 2014-15 against the target of yearly and Annual Action Plan.

Table -8: Details of NRM work with physical and financial progress against the target of yearly and Annual Action Plan.

NRM activity	DPR Target		Financial year 2013-14						Financial year 2014-15					
			Yearly Target (DPR)		Target as per Annual Action Plan		Progress During fin yr		Yearly Target (DPR)		Target as per Annual Action Plan		Progress During fin yr	
			Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Repair Paddy Bunds		0.95	7.91	0.95	7.91	0.95	0	0	0	0	0	0	0	0
Farm Ponds		2.15	2	2.15	2	2.15	1	1.07	0	0	1	1.08	0	0
CNB		4.01	0	0	0	0	0	0	1	4.01	1	4.01	1	8.43
Total		7.11	9.91	3.1	9.91	3.1	1	1.07	1	4.01	1	5.09	1	8.43
Progress against target (%)								34.52%						165%

Table-8 shows poor progress of 34.52% during financial year 2013-14. Financial progress against the target of Annual Action plan during 2014-15 is observed as 165% due to extreme over expenditure of CNB.

As per interaction with PIA, he stated that in DPR the cost of CNB was proposed to Rs. 4.01 lacs, but actually at the time of implementation and the need of said activity in the village the cost of estimate was increased to Rs. 8.43 lacs due to present rates of material, it is included in revised DPR which is yet to be submitted to VWDA for final approval. There are 110% extra increase in the expenditure of CNB, detailed analysis and justification need to be checked prior to approval.

Village Zalia of WC-Zalia:**Activities proposed under Watershed Development Works (NRM)**

Table-9: Depicts activities related to area and drainage line treatment are proposed in village Zalia in WC Zalia under watershed development work for project period of 4 years.

Table - 9 – details of activities proposed in Village Zalia of WC Zalia under area and drainage line treatment

SN	Activity/ Component	Unit	Physical Target	Total Amount (Rs. In Lacs)
Area Treatment				
1	Repairs of Paddy Old Bund	ha.	74.41	8.93
2	Farm Pond	No	2	2.15
A	Total of Area Treatment			11.08
Drainage Line Treatment				
1	Cement Nala Bund	No	1	7.17
2	Others (Diversion Bund)	No/Ha.	1/24.78	2.94
B	Total of Drainage Line Treatment			10.11
A+ B	Area Treat. + Drainage Line Treat.			21.19
C	Horticulture Plantation	Ha	1.86	0.70
	TOTAL NRM COST (A + B + C)			21.89

Table – 9 it is observed that total Rs. 11.08 lacs of NRM work under treatment area was proposed covering repair of Paddy bund and Farm Ponds and Rs. 10.11 lacs of drainage line treatment work was proposed covering CNB and Diversion bunds under NRM for project period. In all Rs. 21.89 lacs of NRM work under area, drainage line treatment and horticulture plantation was proposed in Zalia village of Zalia WC for whole project period.

TARGET AND PROGRESS OF WATERSHED ACTIVITIES

Table -10 portrays the physical and financial progress of NRM works in village Zalia of Zalia WC during year 2013-14 and 2014-15 against the target of yearly and Annual Action Plan.

Table -10- Details of NRM work with physical and financial progress against the target of yearly and Annual Action Plan.

NRM activity	DPR Target		Financial year 2013-14							Financial year 2014-15					
			Yearly Target (DPR)		Target Annual Action Plan		Progress During fin yr			Yearly Target (DPR)		Target Annual Action Plan		Progress During fin yr	
			Phy	Fin	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Farm Ponds		2.15	0	2	2.15	2	2.15	0	0	0	0	2	2.15	0	0
CNB		7.17	0	0	0	0	0	0	0	1	7.17	1	7.17	1	8.5
Diversion Bund		2.94	0	0	0	0	0	0	0	1	2.94	1	2.94	0	0
Total		12.26		2	2.15	2	2.15	0	0	2	10.11	4	12.26	1	8.5
Progress against target (%)									0						69.33%

Table-10 shows there is no progress was observed. during financial year 2013-14. Financial progress against the target of Annual Action plan during 2014-15 is observed as 69.33% as satisfactory.

As per interaction with PIA, he stated that in DPR the cost of CNB was proposed to Rs. 7.17 lacs, but actually at the time of implementation and the need of said activity in the village the cost of estimate was increased to Rs. 8.50 lacs due to present rates of material, it is included in revised DPR which is yet to be submitted to VWDA for final approval. There was no progress observed in Farm Ponds and Diversion Bund during the financial years. There are 18 % extra increase in the expenditure of CNB, detailed analysis and justification need to be checked prior to approval. As CNB in above 2 villages has extra increase in expenditure of 97% and 110% respectively. While all the CNB has been constructed in 20014-15



Village Kopalgad of WC-Toyagonda:**Activities proposed under Watershed Development Works (NRM)**

Table- 11: Depicts activities related to area and drainage line treatment are proposed in village Kopalgad of WC-Toyagonda under watershed development work for project period of 4 years.

Table - 11 – details of activities proposed in Village Kopalgad of WC-Toyagonda under area and drainage line treatment

SN	Activity/ Component	Unit	Physical Target	Total Amount Rs. In Lacs)
	Area Treatment			
1	Paddy Bunding	ha.	52.09	21.55
2	Repairs of Paddy Old Bund	ha.	166.78	20.01
3	Farm Pond	No	10	07.20
A	Total of Area Treatment			48.76
	B Drainage Line Treatment			
1	Cement Nala Bund	No	2	7.45
2	Earthen Nala Bund	No	2	8.00
B	Total of Drainage Line Treatment			15.45
A+ B	Area Treat. + Drainage Line Treat.			64.21
	Drainage line treatment			
1	Pasture Development	ha.	108.40	16.27
2	Horticulture Plantation	ha.	4.23	20.39
3	Afforestation		10.00	01.93
4	Naurseary Raising		90000	07.88
C	Total of Plantation			46.47
	TOTAL NRM COST (A + B + C)			110.68

Table – 11 it is observed that total Rs. 48.768 lacs of NRM work under area treatment was proposed covering Paddy bunding, repair of Paddy bund and Farm Ponds and Rs. 15.45 lacs of drainage line treatment work was proposed covering CNB and ENB under NRM for project period. In all Rs.110.68 lacs of NRM work under area, drainage line treatment and total plantation activities were proposed in Kopalgad village of Toyagonda WC for whole project period.

TARGET AND PROGRESS OF WATERSHED ACTIVITIES

Table - 12 portrays the physical and financial progress of NRM works in village Kopalgad of WC-Toyagonda during year 2013-14 and 2014-15 against the target of yearly and Annual Action Plan.

Table -12: Details of NRM work with physical and financial progress against the target of yearly and Annual Action Plan.

NRM activity	DPR Target		Financial year 2013-14						Financial year up to Dec 2014					
			Yearly Target		Target Annual Action Plan		Progress During fin yr		Yearly Target		Target Annual Action Plan		Progress During fin yr	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
New Paddy Bunds		21.55	52.09	21.55	52.09	21.55	19	6.5	0	0	0	0	0	0
Repair Paddy Bunds		17.47	145.6	17.47	145.6	17.47	0	0	0	0	0	0	0	0
Farm Ponds		7.2	10	7.2	10	7.2	1	1.07	0	0	0	0	0	0
CNB		7.45	0	0	0	0	0	0	1	7.45	1	7.45	1	8.7
ENB		8	2	8	2	8	2	8	0	0	0	0	0	0
Bodi Renovation		0.7	0	0	0	0	0	0	2	0.7	2	0.7	0	0
Total		62.37	209.7	54.22	209.7	54.22	22	15.57	3	8.15	3	8.15	1	8.7
Progress against target (%)								28.72						106.7

Table-12 shows poor progress during the financial year 2013-14. Financial progress against the target of Annual Action plan during 2014-15 is observed as 106.7% as excellent.

As per interaction with PIA, he stated that in DPR the cost of CNB was proposed to Rs. 7.45lacs, but actually at the time of implementation and the need of said activity in the village the cost of estimate was increased to Rs. 8.70 lacs due to present rates of material, it is included in revised DPR which is yet to be submitted to VWDA for final approval. There is 16% extra increase expenditure of CNB, prior to approval extra increase in other CNB and there construction period should be analyzed and justified





Watershed Development Works (NRM) proposed under Convergence

Table- 13: Depicts activities related to area and drainage line treatment of watershed are proposed under convergence from different existing government schemes for project period of 4 years..

Table - 13 – details of watershed activities of area, drainage line treatment and plantation proposed under convergence.

Details of convergence of NRM activities**(RS. In Lacs)**

SN.	Activity/ Component	Unit	Activities to be converged with other Schemes		
			Physical	Financial	Schemes
Area Treatment					
1	Repairs of Paddy Old Bund	ha.	2028.61	243.43	MREGS
A	Total of Area Treatment(1+2+3+4)			243.43	

Table – 13 it is observed that total Rs. 443.43 of area treatment of NRM work was proposed for whole project period. But there was no progress under convergence of repair of paddy bunds is found at the end of March 2015 since from inception of project.

Project Impact

The soil and water management activities included farm bunding, repair of bunds, farm ponds, CNBs, ENB which were carried out in the study area to improve the soil and water conservation in the watershed areas.

As per findings based on description analysis framework there was a significant impact on, land use pattern, production and productivity, crop diversification, livestock, employment opportunities and migration, increase area under irrigation and ground water level as the response of beneficiary farmers in the project area.

Impact on livestock holding and grazing practices

During interaction villagers informed that due to increased in cultivated area practice of open grazing is decreasing and peoples are more and more adopting stall feeding to their animals.

Impact on employment generation

The watershed development programme has a positive impact on creation of employment opportunities for the villagers, both landless as well as landowners as the local villagers were involved in the implementation of different activities.

The households across watersheds, not only got employment in times of their need in drought years, they even got higher wage rates compared to what was offered to them in other government programmes.

Changing of land use pattern in the village

The availability of groundwater had led to a significant increase in the area under irrigation. Increase in seasonally irrigated area during post-intervention period compared to pre-intervention period. There was also considerable increase in the area of pasture/ grazing land.

Area production and productivity

As discussed with beneficiaries and other stakeholders of area an attempt was made to estimate the trend in area, production and productivity of important crops has been increased in the respective villages.

Crop diversification

Watershed development programs provided an opportunity to farmers to generate farm income within short period through crop diversification. One of the major objectives of watershed development programs was to diversify crop in order to generate high income and employment opportunities within short period from limited land. Therefore, the diversification examined the temporal shifts in the area and production and their sources. As per discussions, during project period significant changes are observed in study area.

Employment opportunities and migration

To create additional employment opportunities for rural youth and landless farmers in the village, the watershed development program study revealed that satisfactory changes were observed in employment scenario of different type of works during the project periods in the village.

Status of migration in the village

Rural to urban migration of labour is one of the major problems in the project area, at present the watershed program upto the some extent solved the problem of migration of labour by providing them employment opportunities in their own villages. After watershed development program, the seasonal migration was reduced as stated by interacted villagers.

Farmers Perceptions

The sample beneficiaries were asked about what they feels about the main impacts of the watershed programme in their villages. The villagers listed out priorities of watershed impact, given top priority to employment generation followed by increased in ground water level and soil and moisture conservation which resulted in increased in area production and productivity in agriculture..

Maintenance of project areas

For maintenance of NRM activities UGs should be made aware with their roles and responsibilities. PIA should take initiative to organise meetings in WCs for sensitising beneficiaries for regular maintenance of assets created in the project area. WDF fund has been deposited as per norms and it should be utilised as per rule for the maintenance of assets.

Suggestions

- a. Transparency and accountability in financial dealings and watershed activities.
- b. As the project covers mostly ST and SC beneficiaries, speedy implementation of balance activities with more focus on convergence with online government schemes will help them on long term basis.
- c. LAP activities should be implemented as early as possible with convergence for sustainability to poor and assetless beneficiaries of the project.
- d. In CNB revised estimates shows extra increase in expenditure in the range of 16% to 110% prior to approval comprehensive analysis and justification need to be checked.

Conclusion

As the selected budget cluster covers mostly SC and ST population, NRM activities implemented by IWMP as shown positive impact on increase in irrigated area, change in cropping pattern, increase in production and productivity in agriculture, increase in trend shown in ground water, employment generation and less migration of labour. There is need to adhere the time scheduled of the project, the project of 2010-11 till now have expenditure of about 30% of the approved budget. We have to work out and strictly follow the project schedule for providing the benefits of project outcomes within time schedule to the needy stakeholders for which the project stand for.

Annexure

1. Visit Scheduled
2. Study Framework
3. Stakeholders interacted

1. Visit Scheduled of Core Team and Field Monitors

SN	Date	Tentative time	Place of Visit	Project & Batch	Purpose	Need to interact	Remark
1	19.3.15 & 20.3.15	8:00 AM	Salekasa & Gondia,	IWMP-3 (II)	Thematic Study NRM	WCs, WDT, PIA, UGs, Beneficiaries, Village community, WCDC	Docu., Social and Watershed Expert, and FMs

2. Study Framework

Activities proposed under Watershed Development Works (NRM)

SN	Activity/ Component	Unit	Physical Target	Total Amount (Rs. In Lacs)
A	Area Treatment			
B	Drainage Line Treatment			

Year wise Phasing and their fund requirement for NRM work

Sr. No.	Name of treatment/activity	Unit		2011-12		2013-14		2014-15		2015-16		2016-17		Total		Amount to be Utilized from	
		No./ ha.	No / ha	Co st	No./ha	Cost	No./ha	Cost	No./ha	Cost	No./ ha	Cost	No./ha	Cost	I W MP	Convergence with other Scheme	
																Name of Scheme	Amount

ACTIVITIES UNDERTAKEN

SN	Name of Activity	Village / WC	Name of beneficiary	Gat No.	Ha / No (s) / TCM	Cost in Rs. Lacs

TARGET AND PROGRESS OF WATERSHED ACTIVITIES

Type of Watershed Work	Target DPR				Progress during Fin. Year				Progress since beginning	
	Year 2013-14 (up to April 2014)		Year 2014-15 (up to March 2015)		Year 2013-14 (up to April 2014)		Year 2014-15 (up to March 2015)		Year 2014-15 (up to March 2015)	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Total										

Activities proposed under Watershed Development Works (NRM)

SN.	Activity/ Component	Unit	Physical Target	Total Amount (Rs. In Lacs)
A	Area Treatment			
B	Drainage Line Treatment			
A+ B	Area Treat. + Drainage Line Treat.			

TARGET AND PROGRESS OF WATERSHED ACTIVITIES

NRM activity	DPR Target		Financial year 2013-14						Financial year 2014-15					
			Yearly Target (DPR)		Target Annual Action Plan		Progress During fin yr		Yearly Target (DPR)		Target as per Annual Action Plan		Progress During fin yr	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Total														
Progress against target (%)														

Watershed Development Works (NRM) proposed under Convergence

(RS. In Lacs)

SN.	Activity/ Component	Unit	Activities to be converged with other Schemes		
			Physical	Financial	Schemes
Area Treatment					
1		ha.			
A					

Stakeholders interacted**AT PIA Level**

Name of Stakeholders Interacted			
SN	Name of Stakeholders	Dept	Position
1	Shri. A. Kuril	Agril (WCDC)	DSAO
2	Shri. Vijay Behekar	NGO PIA	Secretary
3	Shri. Vinod Chandewar	NGO PIA	Watershed Engineer
4	Shri Kammaya	NGO PIA	Livelihood Expert
5	Shri. Shende	NGO PIA	Agril Expert

AT WATERSHED LEVEL

Name of Stakeholders Interacted			
SN	Name of Stakeholders	Village/WC	Position
1	Shri. Rajesh Rahangade,	Zalia	Secretary
2	Shri. Pritam Nagade	Sakharitola/Zalia	FP beneficiary
3	Shri. Santosh R. Banote	Gondtola/Zalia	Beneficiary
4	Sgro. Lalsingh Salekar	Gonditola	Villager
5	Shri. Tikalchand	Zalia	Villager
6	Shri Sahebadas Banbute	Kopalgad/Toyagondi	WC Secretary
7	Shri Shivaraj Padoti	Kopalgad	Beneficiary



Interaction with villagers



Crop diversification in closed vicinity of Farm



Increased in yield due to Farm Pond Water



Interaction with beneficiaries at MNB



Water availability in MNB during March



Availability of fodder due to watershed activity



Irrigation through MNB water

