Endline Evaluation of PMKSY-WDC Batch II Watershed projects

REPORT: ALATHUR BLOCK(Palakkad District)

The IWMP II Alathur D1 project area is spread across Alathur and Nenmara Block Panchayaths of Palakkad District of Kerala State. It has a total treatable area of 6428 Ha which is built up from 7 micro watersheds namely Puliakalathodu, Thippilikkayam, Vattapparathodu, Padangattathodu, Mangalamdam, Odamthodu and Ayyappanmudi.

Sl No	Name of Watershed	Code	Total Area (Ha)	Treatable area (Ha)
1	Puliakalathodu Watershed	16C22c	365	266
2	Thippilikkayam Watershed	20B39ax	2485	2269
3	Vattapparathodu Watershed	20B39ay	1086	928
4	Padangattathodu Watershed	20B39az	432	381
5	Mangalamdam Watershed	20B39aw	775	764
6	Odamthodu Watershed	20B39ba	614	481
7	Ayyappanmudi Watershed	20B39bb	1424	1339
			Total	6428

Table 1 Details of micro watersheds in the project area



Figure 1 Watershed map of the project area

The evaluation team from CWRDM visited the IWMP Alathur D1 project on 13/02/2019. Basic details were collected from Block office and discussions were held with Block Officials and Project Team. The Technical Expert and respective VEOs accompanied the investigation team in field visit. The works visited by the team were:

1. Open well rejuvenation - OduvoorCheruchaal

This work is located in the Mangalam Dam watershed of VandazhiGramapanchayath. The well was lined with rubble masonry. A total of 19 such wells were renovated in the watershed at an average cost of Rs. 55,000 per well.

2. Cheriyachal pond renovation

This work is located in the Mangalam Dam watershed of VandazhiGramapanchayath. The pond lies in 1 acre of government land. The total cost of renovation was Rs. 13,50,000.

3. Check dams with side protection

This work lies in the Odamthode watershed of KizhakkancheriGramapanchayath. There are 3 checks installed in the stream. Also, the sides of the stream were lined to reduce erosion. The total cost of construction was Rs. 10,82,871.

4. Well renovation and land conservation

A well was renovated and the upper catchment of the well was conserved with stone pitched terraces in the land of Shri Jose Skariah in KizhakkencheryPanchayath which is

typical of an upper midland terrain. The soil erosion was arrested and the water table in the well was improved during summer because of these measures.

Summary of the Evaluation of Outcomes of PMKSY-WDC Project

District Palakkad	Date of visit	13/02/2019
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1. Project Details

Project No	IWMP 2 – Alathur D I		
Name of Block	Alathur		
Date of project initiation	03/02/2011		
Date of project completion	31/03/2018		
Sanctioned Area (ha)	7181 (Treatable 6428)		
Sanctioned Cost (lakh)	964.20		
Actual Cost (lakh)	268.17 (27.8 %)		
Name of Villages included in the project	Kizhakkenchery, Mangalam Dam		

2. Impact Details

Sl. No.	Items	Unit	Pre- project status	Status at the end of project	Remarks
1	Average depth of water table in dug wells	m	8.1	7.2	An average of 1 m increase is noticed
2	Average depth of water table in tube wells	m			Not monitored
3	Number of ground water structures (dug wells + tube wells + hand pumps) rejuvenated	nos.		91	Created Check dams 2, 2 farm pond renovation and well renovations
4	Increase in Irrigation potential	ha		400	400 ha of additional area brought under protective irrigation
5	Area of Wasteland brought under productive use (like agriculture, plantation,fodder,etc)	ha		3	Nominal area only

6	Change in cropping / land use pattern	ha			Above 18000 tree
-	(i) Area under Agriculture Crop		18	25	seedlings
	(ii) Area under plantation / forest cover		25	38	distributed and
	(iii) Area Under Wastelands			3	nlanted
7		1		5	
/	Area Under Agriculture Crop	na	10	25	Marginal increase
	(1) Area under Kharif crop		19	25	in the area of
	(ii) Area under Rabi crop		14	20	agriculture
	(iii) Area under double crop		21	25	
8	Cropping intensity	0/2	62	75	Increase of 13 %
0	cropping intensity	70	02	15	increase of 13 70
9	Increase in Yield /ha of crons	at/ha			Marginal increase
1	(i) Rabi crop	qt/na	17 50	22.00	in vield of
	(i) Kabi Clop		21.00	22.00	
	(ii) Kharii crop		21.00	20.00	agriculture crops
10	Area of horticulture crop	ha	42	50	Increase of 8 ha
10	Area of norticulture crop	na	42	50	area
					alea
11	Employment in agriculture related	Man		15,000	A total of 34100
	activities among beneficiaries	davs		,	mandays were
		5			created out of the
12	Employment in non- agricultural sectors	Man		19100	project as direct
		days			employment
					employment
13	Fodder production	qt	40	50	25 % increase
14	Fuelwood production	at			No data available
17		90			
15	Number of milch cattle	nos	275	400	45 % increase
16	Milk production	Kl/y	300	400	33% increase
		r			
17	Duration of flow of water in streams (upto		January	Februar	One month
	November/December/January/February			y	prolonged
	May)			5	1 0
18	Improvement of drinking water facility				91 water harvesting
10	improvement of drinking water facility				structures created
					or rejuversted
10	No. of parsons apgraged in appillary	nos	175	250	The project also
19	No. of persons engaged in anomal y	nos	175	230	halma in anastina
	activities like listiery, poulity, tutai				increating
	craftsmanship				micro-enterprise
					activities.30 UGs,
					60 SHGs and 101
					JLGs formed
20	Number of children enrolled in schools in	nos			All children
	the project area				enrolled in schools
21	Reduction in migration from rural to urban	nos			34100 man-days
	area in the project area				created
22	Annual maan haveshald in sever	Da	45000	50000	Da 5000 in arrest
	Annual mean nousenoid income	KS	43000	30000	Ks. 5000 increase

Any other measureable indicator of impact assessment
i) 60 SHGs formed as part of the project and nearly 51 SHGs were assisted
ii) As much as 91 rain water harvesting structures were created or rejuvenated
iii) Nearly 400 ha of additional area brought under protective irrigation
v) 34100 man-days were generated in this project and 1849farmers were benefitted
vi) Construction of soil and water conservation structures like contour bunds, gully plugging etc. contributed in reducing soil erosion and retaining soil moisture content.



Figure 4 One of the open wells rejuvenated in Oduvoor

Figure 3One of the check dams in Odamthode



Figure 5Stone bund constructed under IWMP

Figure 2 Renovated Cheriyachal pond