



Endline Evaluation of PMKSY-WDC Watershed Projects

REPORT: KALPETTA BLOCK - IWMP II F I (Wayanad District)

IWMP II F I is located in the south-central part of Kalpetta Block Panchayath which covers the areas of Moopainad (14,15), Meppadi (4,5,7,13,15,16,20,21,22,17,18,19), Vythtiri (2) and Kalpetta Municipality (17,18,19,25,26) of Wayanad District, Kerala and it spreads over 5661 Ha. However, the treatable area is only 3663 ha. The main drainage lines are the Nellimunda Puzha, Kunnambetta-Chuzhali Puzha, Erumakolly Thodu and Kottavayal-Mangavayal Thodu.

General Description

Project name	:	IWMP II (Kalpetta F I)
State	:	Kerala
District	:	Wayanad
Block	:	Kalpetta
Taluk	:	Vythiri
Grama Panchayats Covered	:	Moopainad, Meppadi, Vythtiri and Kalpetta Municipality
Wards Included	:	Moopainad-14, 15 Meppadi- 4,5,7,13,15,16,20,21,22,17,18,19 Vythtiri -2 Kalpetta Municipality-17, 18,19,25,26
Total Treatable Area	:	3663 Ha
Latitude	:	11 ⁰ 32' 20" N - 11 ⁰ 36' 08" N
Longitude	:	76 ⁰ 04' 11" E - 76 ⁰ 10' 07" E
Soil	:	Clay loam to Forest loam soil
Total Households	:	3623
Total Population	:	14500
Major Catchment	:	Kabani and Chaliar Rivers
Highest Elevation	:	1750 m
Lowest Elevation Point	:	752 m
Number of Micro Watersheds	:	Seven

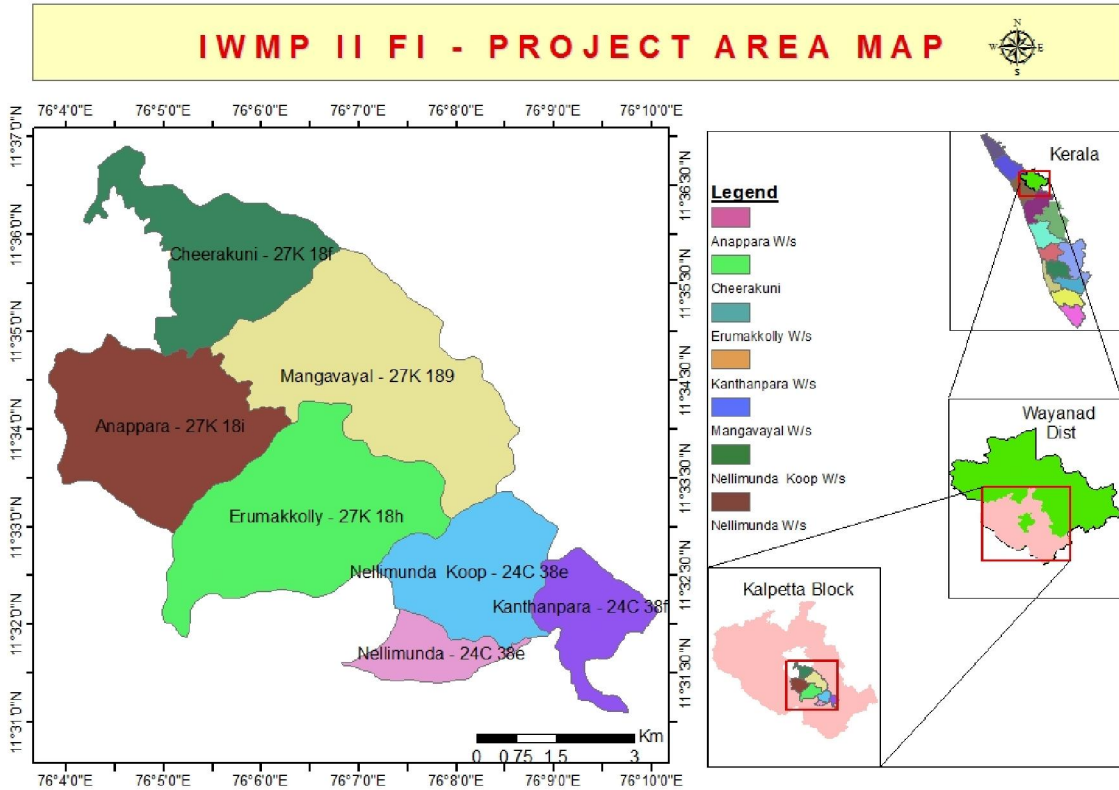


Figure 1 Location map of the project

Table 1 Micro watersheds included in the project

Sl No	Name of Watershed	Code	Total area (ha)	Treatable area (ha)
1	Kanthanpara	24C38f	388	350
2	Nellimunda Koop	24C38e	630	355
3	Nellimunda	24C38c	246	52
4	Erumakkolly	27K18h	1300	620
5	Anappara	27K18i	1046	670
6	Mangavayal	27K18g	1407	1066
7	Cheerakuni	27K18f	644	560
Total			5661	3663



The evaluation team from CWRDM visited the IWMP II F I project in Kalpetta Block on 16/01/2019. The interventions carried out in watershed include earthen bunds, agro-horti plants, farm ponds, stream embankment, farmland protection, check dams etc. The works that the team visited are:

1. Mandokkuni Check dam

The structure is located in the Mangavayal watershed of Meppadi Gram panchayat. It was constructed at a cost of ₹ 3,00,000. The stream in which the check dam is constructed is a perennial one and nearly 25 families benefit from this structure due to the improvement in the groundwater table. But the structure faces sediment deposit problem.

2. Mandokkuni Side Protection

The structure is located in the Mangavayal watershed of Meppadi Gram panchayat. The site is to the downstream of the check dam mentioned above.

3. Kottavayalthodu Side Protection

This structure is also located in the Mangavayal watershed of Meppadi Gram panchayat. The structure has suffered damage from the unprecedented flood during the month of August of 2018.

Summary of the Evaluation of Outcomes of PMSKY- WDC Project

District	Wayanad	Date of visit	16.01.2019
----------	---------	---------------	------------

1. Project Details

Project No	IWMP II F I
Name of Block	Kalpetta
Sanctioned Area (ha)	3663
Sanctioned Cost (Rs in lakh)	549.45
Expenditure as on 31.03.2018	217.65 lakh (39.61 %)
Name of Villages included in the project	Moopainad, Kottapadi, Kalpetta, Trikaipetta



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	3.43	--	No post data recorded. Survey revealed that up to 1m rise of water in wells
2	Average depth of water table in tube wells	m	9.67	-	Post data not available
3	Number of ground water structures (dug wells + tube wells + hand pumps) rejuvenated	nos.		14	6 new ponds, 2 new check dams and 6 others rejuvenated /created.
4	Increase in Irrigation potential	ha		115	Area brought under protective irrigation
5	Area of Wasteland brought under productive use (like agriculture, plantation, fodder, etc)	ha		258	Area brought under agri plants and fodder.
6	Change in cropping / land use pattern (i) Area under Agriculture Crop (ii) Area under plantation / forest cover (iii) Area Under Wastelands	ha		109	109 ha under horticulture. Area under plantation increased and wasteland reduced.
7	Area Under Agriculture Crop (i) Area under Kharif crop (ii) Area under Rabi crop (iii) Area under double crop	ha	--	--	Paddy cultivation is very less in the watershed
8	Cropping intensity	%			Approx. 3% increase
9	Increase in Yield /ha of crops (i) Rabi crop (ii) Kharif crop	qt/ha	22	26.4	20% increase. Only one crop paddy. HYV increased by 37 ha.
10	Area of horticulture crop	ha		109	Horticultural crops planted in 109 ha



11	Employment in agriculture related activities among beneficiaries	Man days			A total of 2452 man days
12	Employment in non- agricultural sectors	Man days		2452	
13	Fodder production	qt	120	140	140 qt of fodder produced. 20 qt increase
14	Fuelwood production	qt			No data available
15	Number of milch cattle	nos		140	Approx. Artificial insemination services increased.
16	Milk production	Kl/yr	--	26	Slight increase in milk production
17	Duration of flow of water in streams (upto November/December/January/February....May)		February	March	Duration of flow increased one month. Soil moisture increased.
18	Improvement of drinking water facility		March	April	Groundwater level raised due to earthen bunds and check dams
19	No. of persons engaged in ancillary activities like fishery, poultry, rural craftsmanship	nos		75	JLG/SHG/UG 75 newly formed. Area under fish cultivation increased by 40 %
20	Number of children enrolled in schools in the project area	nos			All are school going
21	Reduction in migration from rural to urban area in the project area	nos			Reduced during project period
22	Annual mean household income	Rs	45000	48000	Increased by Rs 3000
23	<p>Any other measureable indicator of impact assessment</p> <ul style="list-style-type: none"> i) Committee and stakeholders have undergone 31 trainings and 2 exposure visits ii) General increase in soil moisture content and improved greenery and biodiversity changes iii) Soil erosion and sediment load decreased after project implementation iv) Area under micro irrigation increased to 6ha. v) Increase of pepper 35%, banana 20% and fruit plants 50% vi) Total farmers benefitted : 1158 				



Mandokkuni check dam constructed in Mangavayal watershed



Side protection work in Mangavayal watershed



Side protection work in Mangavayal watershed that was partially damaged during the flood of August 2018