



# KOLLAM DISTRICT





## Endline Evaluation of PMKSY-WDC Watershed Projects

### REPORT: ITHIKKARA BLOCK (Kollam District)

A cluster of seven micro watersheds comprised in parts of Ithikkara, Kottarakkara and Mukhathala blocks in Kollam District, Kerala has been included under IWMP Batch II. The Programme covers portions of nine Gram Panchayaths. The Gram Panchayaths are Poothakulam, Chathannor, Adichanalloor, Chirakkara, Kareepra, Pooyyapalli, Thrikkovilvattam, Mayyanad and Nedumpana. Total geographical area of the watershed is 4917 ha. The area belongs to an earlier prominent agricultural tract of the district, especially, with reference to food crops. The entire area drains into the Ithikkara River.

Table 1 Details of micro watersheds in the project area

Sl. No.	Name	Code	Gram Panchayaths covered	Area (Ha)
1.	Uppukadavu	6124a	Adichanalloor, Chathannoor, Chirakkara, Mayyanadu	260.4
2.	Mylakkadu	611b	Thrikkovilvattom, Mayyanadu, Adhichanalloor	807.7
3.	Meenadu 1	6123a	Adichanalloor, Chathannoor, Chirakkara	674.8
4.	Meenadu 2	6123c	Adichanalloor, Chathannoor, Poothakkulam, Chirakkara	472.8
5.	Plakkadu	612a	Adhichanalloor, Nedumpana, Thrikkovilvattom	935.0
6.	Kakkathoppu	612k	Nedumpana, Kareepra, Pooyappally, Adhichanalloor	858.7
7.	Neelamthazham	612c	Nedumpana, Kareepra	907.6
<b>Total</b>				<b>4917.0</b>

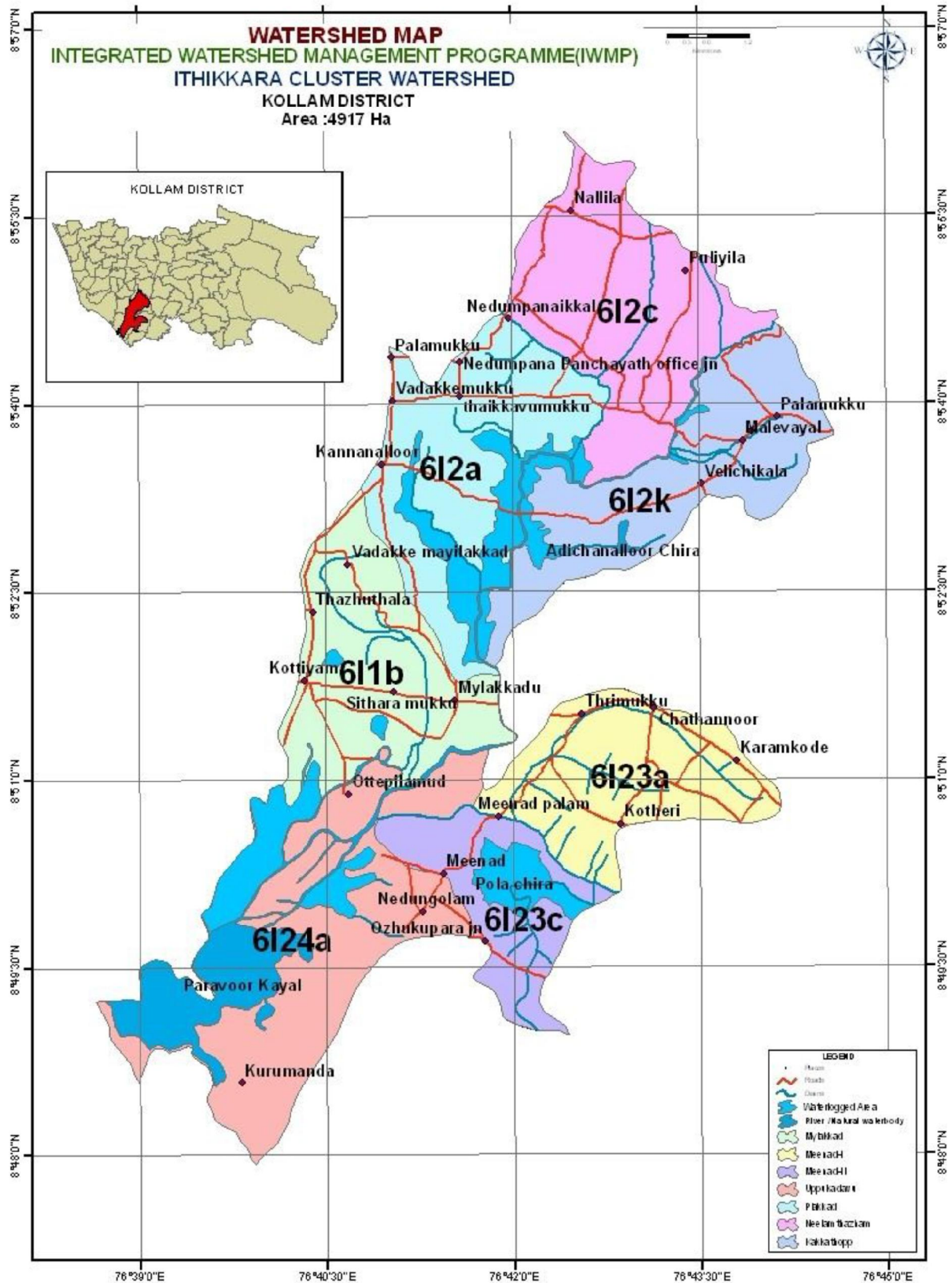


Figure 1 Watershed map of the project area



The evaluation team from CWRDM visited the project area on 27/03/2019. The team had a discussion with the BDO and Extension Officer in charge of the IWMP project at the Ithikkara Block Office. The BDO had the opinion that the DPR preparation should have been based on a more detailed study of the project area. The implementation of the project in Ithikkara Block of Kollam District was very successful even though there was problem in disbursing the funds during the transition stage from IWMP to PMKSY-WDC.

The works visited by the team are:

1. Moozhiyil Thodu side protection

This work is located in the Mylakkadu watershed of Adhichanalloor Gram Panchayath. Two sides of the stream has been lined with rubble masonry for a length of 110m. The work was included in the DPR following request from watershed gramasabha.

2. Nenmani Chira pond renovation

This pond is situated in the Mylakkadu watershed of Adhichanalloor Gram Panchayath. The pond suffers from infestation of African algae. There is an outlet installed on one of the sides of the pond for the purpose of overflow, but the local public complained that waste water gets into the pond from the other side during rainy season.

3. Anjaam Poyka spring protection

This work is located in the Meenad 2 watershed of Chirakkara Gram Panchayath. The spring is perennial and nearly 50 families draw water from the spring for their daily needs.

### **Summary of the Evaluation of Outcomes of PMKSY-WDC Project**

District: Kollam

Date of Visit 27.03.2019

#### **1. Project Details**

Project No: IWMP Batch II

Name of Block: **Ithikkara**

Sanctioned Area (ha) - 4917

Sanctioned Cost (₹ lakh) – 700. 652

Actual Expenditure (Rs. in lakh): 243.52 (34.75%)

Number of Villages included in the project – 9

**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	15	14.1	An average increase of 1 m
2	Average depth of water table in tube wells	m	--	--	Very less number of tube wells/bore wells
3	Number of ground water structures (dug wells + tube wells + hand pumps) rejuvenated	nos.	--	68	68 rain water harvesting structures created or renovated. 64 percolation tanks created. 4 farm ponds rejuvenated.
4	Increase in Irrigation potential	ha	--	284.5	
5	Area of Wasteland brought under productive use (like agriculture, plantation ,fodder ,etc)	ha	500	450	planting of tree saplings and distributing of seedlings
6	Change in cropping / land use pattern (i) Area under Agriculture Crop (ii) Area under plantation / forest cover (iii) Area Under Wastelands	Ha			Not much change in the agriculture area 97 Ha under afforestation
7	Area Under Agriculture Crop (i) Area under Kharif crop (ii) Area under rabi crop (iii) Area under double crop	ha	--	--	More area under vegetables
8	Cropping intensity	%	60	70	10 % increase
9	Increase in Yield /ha of crops (i) rabi crop (ii) Kharif crop	qt/ha	--	--	2 qt/ha on an average
10	Area of horticulture crop	ha	--	250	Horticulture crops in homesteads
11	Employment in agriculture related activities among beneficiaries	Man days	15000	40000	Created 25000 man-days
12	Employment in non- agricultural sectors	Man days	10000	24000	An increase of 14000 man-days
13	Fodder production	qt	--	--	Around 10 % increase in fodder production. Exact data is not available
14	Fuelwood production	qt	--	--	No data



15	Number of milch cattle	nos	--	--	Animal husbandry activities were promoted by distributing fodder seeds
16	Milk production	Kl/yr	--	--	10% increase
17	Duration of flow of water in streams (upto Nov/Dec/Jan/Feb....May)		Jan-Feb	Mar-Aprl	Prolonged flow for two months
18	Improvement of drinking water facility		Feb	April	Availability of water up to April end. Two months.
19	No. of persons engaged in ancillary activities like fishery , poultry ,rural craftsmanship	nos	80	120	Marginal increase is noticed
20	Number of children enrolled in schools in the project area	nos	--	--	All children are enrolled in schools
21	Reduction in migration from rural to urban area in the project area	nos	--	--	Nearly 40,000 man-days created
22	Annual mean household income	₹	36000	48000	An increase of ₹ 12000/-.
23	<p>Any other measureable indicator of impact assessment</p> <ul style="list-style-type: none"> <li>i) Soil erosion status reduced by 10%, Soil moisture content increased by 5% - 10%.</li> <li>ii) Water spread area increase to 100 ha</li> <li>iii) 15 production systems and micro enterprises started as part of the project.</li> <li>v) 89 SHGs are formed</li> <li>vi) 97.14 ha of forest area is added through Afforestation activities.</li> <li>vii) Families benefitted out of project: 3279</li> </ul>				



Interaction with BDO, Ithikkara and staff



Side protection work of Moozhiyil Thodu in Mylakkadu watershed



Renovated Nenmani Chira pond



Perennial spring protection at Anjaam Poyka



## CONCLUDING REMARKS - KOLLAM DISTRICT

- An in depth and thorough discussion on the implementation of the PMKSY-WDC project was held with the BDO and Extension Officer in charge of the project before field visit.
- The DPR preparation was done in a birds-eye point of view. More in-depth studies should be conducted, to incorporate the peoples' felt needs and requirements. Proper awareness creation among the beneficiaries on the importance of watershed based conservation and management also should be done.
- In all the watersheds in Ithikkara Block, it has been observed that there was significant improvement in the ground water table of the area due to the implementation of recharge structures like ponds, check dams, percolation tanks, rooftop rainwater recharge units etc.
- The irrigation potential was also found to increase in certain watersheds due to the construction of above structures.
- Soil erosion from stream banks was brought under check by the side protection work of several streams in the watersheds and erosion from other plots also reduced because of the conservation measures. Soil moisture content also was increased in many patches.
- Drinking water shortage was fixed to a great extent by the installation of rainwater harvesting tanks and well-recharge units.
- Planting of trees and forestry species was done which has contributed to the greenery and biodiversity of the watershed.
- Employment was generated both in agricultural and non-agricultural sectors during the implementation of the PMKSY project. Also, the annual mean household income was improved.
- Activities like organic farming, backyard vegetable cultivation, animal husbandry activities etc. were promoted under the project.
- Fifteen production systems/ micro enterprises and 89 SHGs started as part of the project.
- Delay in the availability of funds has adversely affected the successful implementation and fruitful completion of the project. Actual expenditure is only 35% of the original sanctioned budget.

### Success Story

#### **Anjaam Poyka Thoombu- spring mouth protection**

This work is located in the Mayyanad 2 watershed of Chirakkara Gram Panchayath. The spring is perennial which has been developed into a tank shape and nearly 50 families draw water from the spring for their daily needs. Every day 200-250 persons are coming to this spring mouth for washing and bathing. The water quality is also good that it can be used for drinking/cooking.