

KOIPURAMBLOCK – IWMP -IV (PATHANAMTHITTA District)

Pathanamthitta IWMP- IV /2014-15project is located in the Koipuram and PulikeezhBlock Panchayaths of Pathanamthitta District. It is made up of six micro-watersheds, namely Vennikkulam, Vallamkulam East, Othara, Manvettom, Kuravankuzhi, and Nedumprayar. These micro watersheds are distributed among five grama panchayaths, namely Ezhumattoor, Eraviperoor, Puramattom, Koipuram and Thottappurzhassery. The project area is located between 9^o19' 45" N & 9^o25' 15" N latitudes and between 76^o35' 25" & 76^o42' 15" E longitudes. The area is bordered in the north by Manimalaar, in the west by Thiruvalla Municipality, in the east by Nedumprayar gramapanchayat, and in the south by Pamba river.

Table 1. Details of micro watersheds

Sl No	Name of Watershed	Watershed code	Gram Panchayaths covered	Area (in Ha)
1	Kuravankuzhi	10P14a1	Ezhumattoor, Koipuram and Thottappurzhassery	735.1
2	Nedumprayar	10P14a2	Koipuram and Thottappurzhassery	687.3
3	Vennikkulam	11M52c	Puramattom and Ezhumattoor	240.2
4	Vallamkulam East	11M54a1	Koipuram, Puramattom and Eraviperoor	875.2
5	Manvettom	11M54a2	Eraviperoor, Koipuram and Kuttoor	1061.2
6	Othara	10P12a1	Kuttoor	291
Total				3890

The evaluation team from CWRDM visited the watershed area on 07/07/2022. The team had an interaction with the Block level officers, and it was learned that no work has been carried out in the Othara watershed, as it is considered dead. The Assistant Engineer (A.E.) left the project soon after the IWMP starts and another A.E. was made in charge of this project, due to which the work in this watershed is not accomplished as per the plan. In addition to this, the shortage of funds also hinders the process of accomplishment of IWMP activities. The funds received prior to 2019-20 were used for EPA activities and later period the fund was available

for IWMP works. The financial overview of the project cost is depicted in the following bar chart (Fig 2).

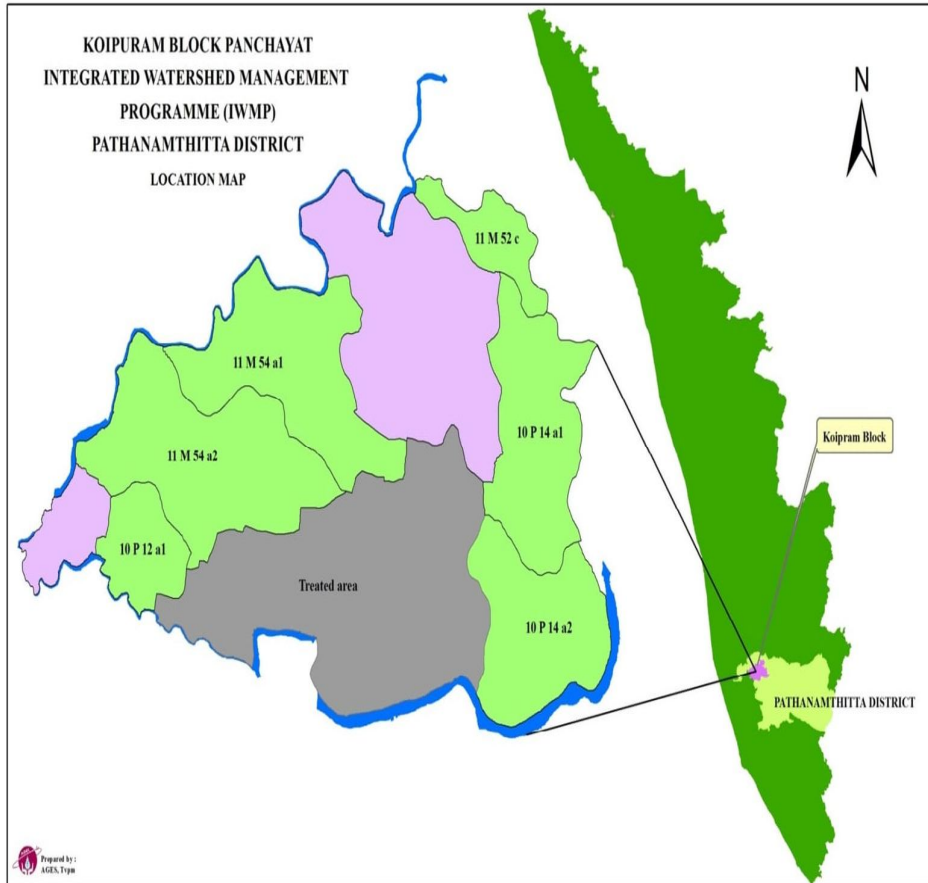


Fig 1: Map of the Watershed area

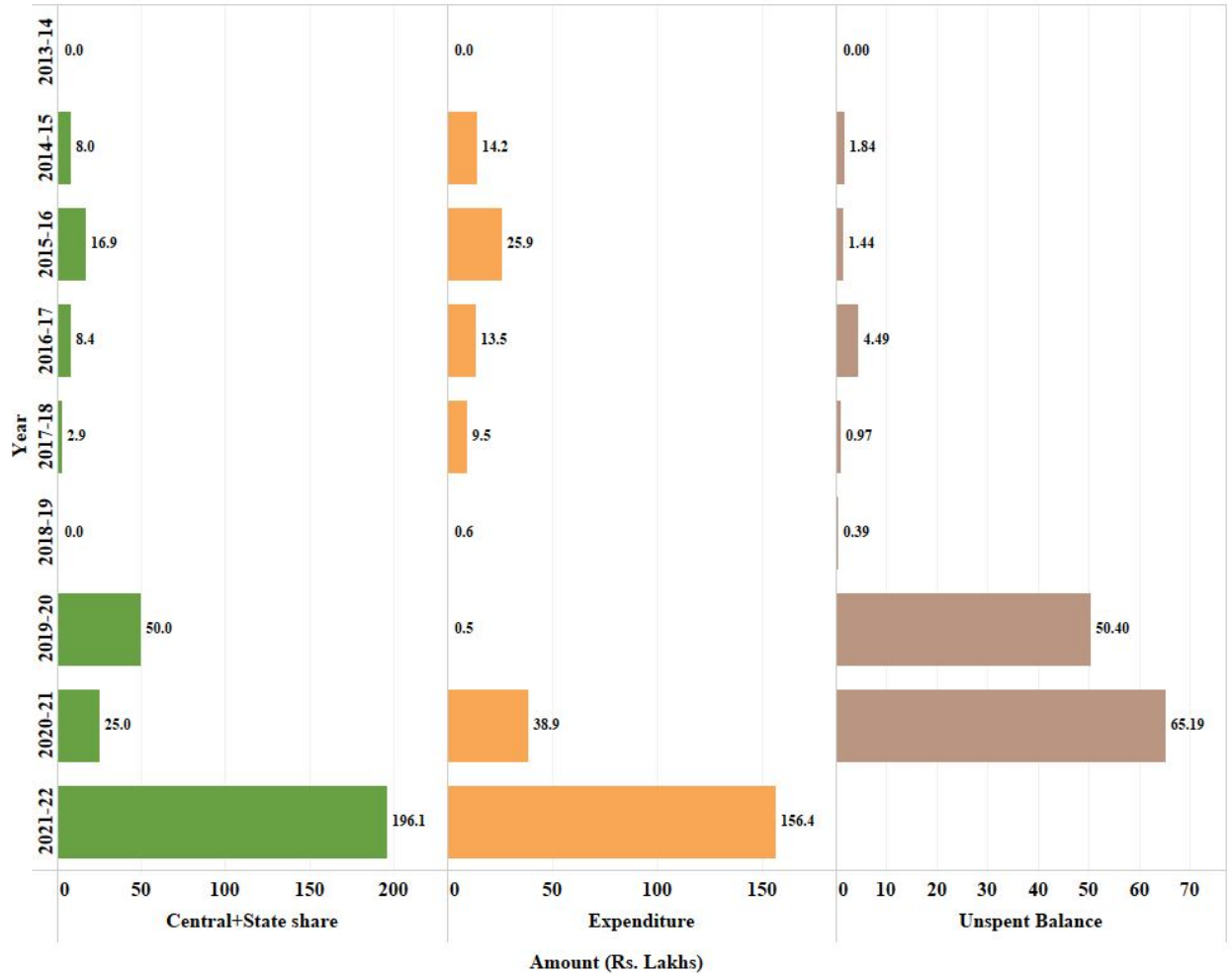


Fig 2: Financial overview of the Project

When compared to other watershed projects in the district, this watershed received very less amount, and that too in some years no share was received (2013-14 and 2018-19) either from the Centre or from the State Government. The increase in expenditure was observed only in the 2021-22 Financial year. In the initial six years of the project, an amount of less than Rs. 40 lakhs was received and this shortage of funds has a drastic impact on the nature of work carried out here.

The works visited by the team are:

1. Production system:

- a) A Jersey cow purchased under production system management was maintained by a resident ‘Omana Chandra Sekharan’, Darshana Bhavan at Vallamkulam East

watershed of Eraviperoor panchayath. The cow provides approximately 13 litres of milk a day and it got sold for Rs. 50/litre for the neighbour households. This provides an additional income to the family.

- b) A Jersey cow purchased under production system management by 'Usha Raju Kunnumpattu' at Vallamkulam East watershed in Eraviperoor panchayath. A subsidy component of Rs. 24000/- is provided under the scheme.

The production system offered unemployed people a better option for self-employment. For farmers and agricultural workers, it has become a significant source of supplementary income. For dairy farmers, the project was very beneficial. Under the IWMP project, 91 cow rearing units were distributed and it was observed that there was a considerable increase in milk production due to this intervention. The annual mean household income was increased to the tune of Rs. 3000/-.

2. Side Protections

- a) Side Protection wall at Manneettithodu in the Vallamkulam East watershed of Eraviperoor panchayath. The side protection is 38m long with a height of 1.5m. Initially, coconut piling was also done to protect the sides. The work was completed at a cost of Rs. 0.59 lakhs. As most of the land is near to mean sea level, construction of side walls in these areas helps in reducing inundation and flood control.
- b) Side protection wall in Vennikulam Kochuthodu is situated at the Vennikulam watershed in Ezhumattoor panchayath. The side protection is carried out only on one side and is about 40m long with a height of 2.5m. The work was completed at a cost of Rs. 5.8 lakhs.
- c) Side wall protection of Treasury padi – Kurunthottipadi is located in Eraviperoor panchayath's Manvettom watershed. The work was carried out at a length of 75m with an approximate height of 1m and Rs. 4.28 lakhs had spent on this activity.
- d) Side Protection at Erappan Thodu was undertaken in the year 2021 at the Almavu junction in the Kuravankuzhi watershed of Koipuram Panchayath. Around 168m of side protection was constructed using stones on both sides at a height of 2.5 m

with a cost of Rs. 14.84 Lakhs. This side protection helps in reducing flood incidents in the area.

- e) Deepening and Maintenance of Nedumprayar- Panchavachalthoduis situated at the Nedumprayar watershed of Thottappurzhassery panchayath. It has 1km long with 56m side protection on both sides with an expenditure of Rs.10.97 Lakhs.

The side protection not only safeguards the stream but also stops pollution, development, and improves the aesthetics of the banks. The side protections are very effective PMKSY Scheme interventions. Flooding and water logging issues in the area were resolved by this work. Desiltation and sidewall protection were carried out as part of the PMKSY programme to restore the natural drain. The water level in the neighbouring wells increased because of the steady flow of drain, ensuring the availability of drinking water to the residents. The agricultural field has benefited from this effort as well.

The irrigation potential increased and more than 100 acres of protective irrigation were noticed. Water flow in streams has improved, and it has increased by one more month compared to before the intervention. Additionally, the area's infrastructure for providing drinking water was enhanced, and the supply of drinking water was extended by two more months. Along with MGNREGS, 17 acres of pastureland were also restored.

3. Pond renovations

- a) Vallathok Pond renovation lies at the Vennikulam watershed of Ezhumattoor panchayath. The pond has a length of 22m, 19m width with a depth of 2m. Water is mainly used for agricultural purposes on more than 5 acres of land. Around 15 families use this water during the summer months.

The supply of water and the management of floodwater in the surrounding areas are both aided by this intervention. The pond collects rainwater naturally, stores it, and uses it to recharge the groundwater while also acting as a gauge for the water table in the neighbourhood. Agriculture, cattle, and others can all access the water it offers. Additionally, it serves as a natural, freshwater ecosystem.

Seven farm ponds were built as part of this project, which resulted in visible changes in the locality. Water is now easily accessible for drinking and irrigation. As a result of these actions, the average depth of the water column increased by 1 m in this location. The influence



was noticeable in the agricultural sector also. Land used for agriculture has increased, while wasteland has decreased.

Summary of the Evaluation of Outcomes of PMSKY-WDC Projects

District	Pathanamthitta	Date of Visit	07/07/2022
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1. Project Details:

Project No	IV
Name of Block	Koipuram Block Development Office
Sanctioned Area (ha)	3890
Sanctioned Cost (Rs in lakh)	466.80
Name of Villages included in the project	Koipuram, Thottappurzhassery, Eraviperoor, Thelliyoor, Puramattom

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	5.28	4.23	Water column increase of 1 m
2	Average depth of water table in tube wells	m	8.5	7.9	Noticed marginal increase
3	Number of ground water structures (dug wells + tube wells + hand pumps) rejuvenated	nos.	4932	4941	9 structures rejuvenated
4	Increase in Irrigation potential	ha	792.56	899	More than 100 ha of protective irrigation
5	Area of Wasteland brought under productive use (like agriculture, plantation, fodder, etc.)	ha	89	193	More than 100 ha of wasteland brought under productive use



6	Change in cropping / land use pattern (i) Area under Agriculture Crop (ii) Area under plantation / forest cover (iii) Area Under Wastelands	ha	187 2291 253	252.9 2329 149.1	Area under agriculture, 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	187	252.9	Area under Kharif increased considerably
8	Cropping intensity	%	111	113	2% increase
9	Increase in Yield /ha of crops (i) rabi crop (ii) Kharif crop	qt/ha	56	62	
10	Area of horticulture crop	ha	2291	2329	38 ha increase in horticulture crop area
11	Employment in agriculture related activities among beneficiaries	Man days	--	19473	Addition of 19473 mandays generated under the project
12	Employment in non- agricultural sectors	Man days	15685	19473	
13	Fodder production	Ha	36	77	
14	Fuelwood production	qt	--	--	Data not available
15	Number of milch cattle	nos	3589	5128	91 cow rearing units were distributed
16	Milk production	Kl/yr	1415	2021	Considerable increase in milk production
17	Duration of flow of water in streams (upto November/December/January/February....May)		Up to April	Up to May	Flow in streams increased by one month.
18	Improvement of drinking water facility	nos	Up to March	Up to May	Drinking water availability also increased by two months
19	No. of persons engaged in ancillary activities like fishery, poultry, rural craftsmanship	nos	542	605	An increase in ancillary activities has



					been noticed
20	Number of children enrolled in schools in the project area	nos	3265	3321	All children enrolled in schools
21	Reduction in migration from rural to urban area in the project area	nos	0	0	19473 mandays generated under the project
22	Annual mean household income	Rs	65000/-	68,000/-	Rs. 3000 increase
23	Any other measurable indicator of impact assessment i) 91 cow rearing units were distributed. ii) 46 rainwater harvesting structures were created and 9 rejuvenated iii) 17 ha of pasture land was restored in convergence with MGNREGS				

Some of the works visited in the project are



Cow rearing by Omana Chandra Sekharan



Production system by Usha Raju



Side Protection wall at Manneettithodu



Vallathok Pond renovation



Side protection wall in Vennikulam Kochuthodu



Side Protection wall Treasury padi-Kurunthottipadi


കോയിപ്രം ബ്ലോക്ക്
പഞ്ചായത്ത്
പുനാമുക്ക് കുടിനൂൽപ്പാലം
PMKSY
ഭക്ഷിപ്പി കൃഷി സമരം
യുവ നവീകരണം
അക്കൗണ്ട് 428000
ബാങ്ക് 2015-2022
അക്ഷരം 9° 22' 52" N
അക്ഷരം 76° 38' 53" E



Side protection wall Erappanthodu



Deepening and Maintenance of Nedumprayar-Punchavachalthodu