

THODUPUZHA– IWMP -IX (IDUKKI District)

Thodupuzha block panchayat is located in the Thodupuzha Taluk of the Idukki district. Thodupuzha is one of the major towns in the district of Idukki and is also characterised by abundant vegetation. Then, Elasmprathi Narayana Varma gave the area the name Thodupuzha by combining the words thodu (stream) and puzha (river). The town on the banks of the river became known as Thodupuzha, and it is said that the stream turned into a river. The sanctioned project area covering this block panchayath is 4522 ha. The project area is located between 9°48'21"N and 9°55'16"N latitude and 76°38'48"E to 76°45'52"E longitude.

Table 1. Details of micro watersheds

Sl No	Name of watershed	Watershed code	GPs covered	Area (in Ha)
1	Thudanganadu	13M51a	Muttom and Karimkunnam	2088
2	Vadakkumuri Thodu	13m52b	Purapuzhaand Karimkunnam	1003
3	Mundiyadi	13M52c	Manakkad and Purapuzha	234
4	Manathancheri-Periyampara	13M53a	Manakkad	1197
Total				4522

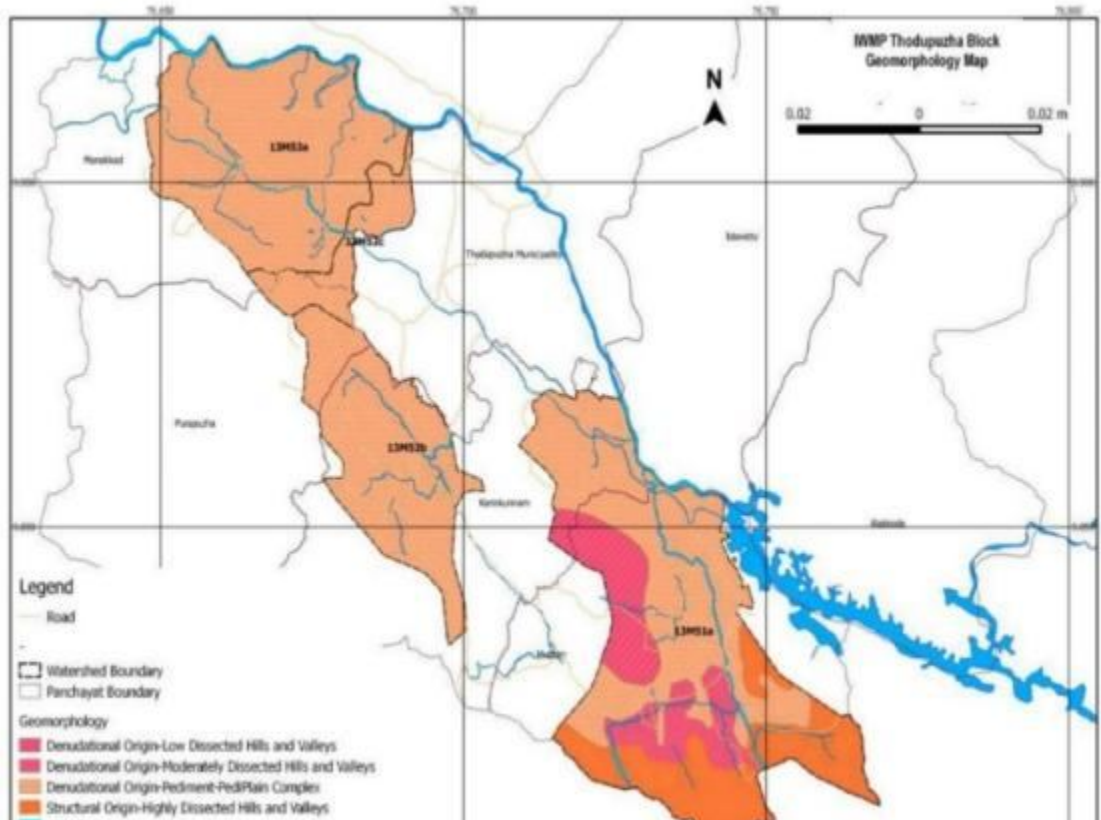


Fig 1: Map of the Watershed area

The evaluation team from CWRDM visited the project area of IWMP -IX in Thodupuzha Block on 28/06/2022 and later held discussions with the project implementation team. BDO, Technical expert and VEOs were present at the meeting. Technical Experts and respective VEOs have accompanied the team for field visits in the project area. The investigating team also held discussions with the various beneficiaries and stakeholders during the field visit, to know their perceptions regarding the impact of the project.

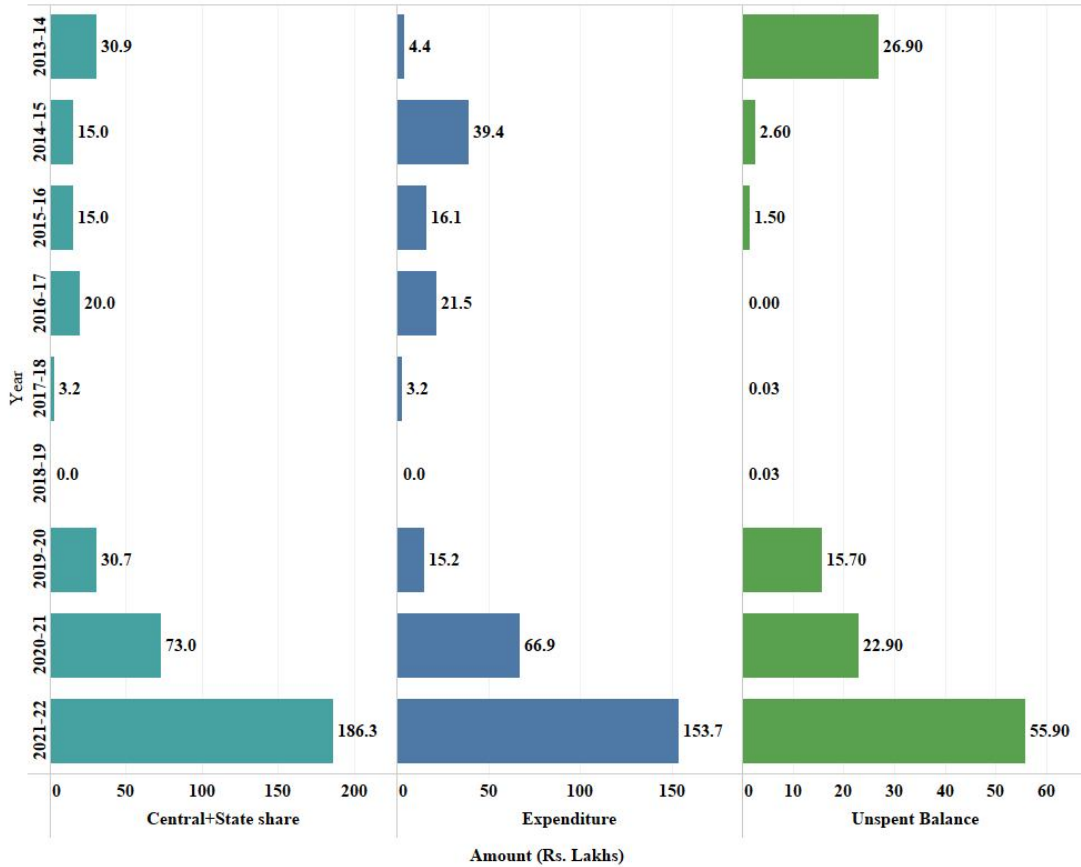


Fig 2: Financial Statement of Thodupuzha Block

It was noted here that there was no financial contribution in the FY 2018-19 and received only 3.2 lakhs in 2017-18. The amount received was more in FY 2021-22 followed by 2020-21. Similarly, the expenditure was also more in these years. It was pinpointed that the amount received was generally 3-4 months before to closure of the FY. This obstructs the flow of work planned earlier and results in poor quality work.

The works visited by the team are:

1. Sidewall protections

- a) Sidewall protection at Manathancheri- Periyampara watershed of Manakkad Panchayath. The one side was completed with a cost of Rs. 6 Lakhs and other side with Rs. 6.23 Lakhs.

- b) Sidewall protection at Valyanilam Padam Thodu in Vadakkumuri Thodu watershed, Karimkunnam Panchayath. This side protection was done in two places in Valyanilam Padam Thodu. One costs Rs. 3.35 lakhs, while the other costs Rs. 1 lakh.
- c) Sidewall protection at Anjapra thodu in Vadakkumuri Thodu watershed, Karimkunnam Panchayath. Side protection is one-sided and it was completed in March 2022 at a cost of Rs. 5.5 Lakhs.
- d) Sidewall protection with intermittent checks at Kochupuraickal thodu in the Thudanganadu watershed. This was constructed in 2020-21 at Elampuram Panchayath Padi, having a length of 40m and a height of 2m, with actual expenditure of Rs. 5.98 lakhs.

The side protections are a highly successful PMKSY Scheme intervention. Protection of the stream and water and soil conservation is the main aim of this work. This work resolved flooding and water logging issues in the region. As part of the PMKSY program, sidewall protection is done to help the natural drain return. Due to the constant drain flow, the water level in the nearby wells raised, ensuring the supply of drinking water. These efforts have also benefited the agricultural sector.

Altogether 31 stream bank protection works were finished as part of this project. This had a good impact here. The wasteland that measured more than 13 ha was converted into usable area. More than 176 hectares of irrigation were seen as the irrigation potential has improved, and stream water flow has increased. The infrastructure for supplying drinking water in the area was also improved, and the supply was increased.





2. PSME activities

- a) PSME activity of 'Shaimi Sali' is located at Angabatti, Chittur in Manathancheri-Periyampara of Manakkad Panchayath. They have one goat and eight chicks. It has a unit cost of Rs.3000/-with a beneficiary contribution of Rs.1500/-per unit. They got Rs. 3150/-as a subsidy. They sold eggs to neighbours at Rs. 7 per egg.
- b) Beekeeping by 'Mathew George' of Periyambra at Manathancheri- Periyampara watershed in Manakkad Panchayath. They have 150 bee-keeping boxes and sell 1 liter of honey at Rs. 350/-. They harvest around 1000–1500 kg during the season. They received Rs. 30,000/-as a subsidy for the 150 boxes with a 10 % beneficiary contribution.
- c) PSM activity by 'Thangamma Ayyappan' located at Vadakkumuri Thodu watershed of Karimkunnam Panchayath. 10 chicks were distributed 3 months back at Rs. 120/- per chick, including shed the unit cost is Rs. 3000/-.
- d) PSM activity by 'Jobin Vellamattathil' in Vadakkumuri Thodu watershed of Karimkunnam Panchayath. 3 goats of Jamunapari cross breed were distributed under this scheme. It has a unit cost of Rs. 3500/- with a 10 % beneficiary contribution.
- e) Bee keeping of 'Sumesh Choriyamakal' at Kukumba. He has 90 bee rearing boxes and selling honey for Rs. 350/- per litre. They harvest approximately 600 kg of honey per season. Unit cost is Rs. 30,000/- and the beneficiary contribution is 10 %.
- f) PSM activity of 'Joy Joseph' at Kakomba. They cultivating Tilapia and Gowra fish species, and selling at an approximate rate of Rs. 250/kg. The unit cost is Rs. 30,000/- and the beneficiary contribution is 10 %.

- g) Mushroom cultivation of 'Merlin Shaji' under PSME. They cultivate Oyster mushrooms, harvested and sold at a rate of Rs. 70 per 100-gram packet. It has a unit cost of Rs. 30,000/- with a beneficiary contribution of 10 %. They harvested 0.75kg of mushrooms per bag of mushroom cultivation.

Smallholders can take advantage of new agricultural prospects by managing and marketing their farm production more efficiently with the aid of integrated agricultural and enterprise training. Enterprise training can assist farmers in accepting and managing the risks associated with implementing progressive technologies. Expanding into non-farm industries can also assist farmers in diversifying their productive activities, which is a key strategy in lowering crisis susceptibility and creating a more consistent annual income.

Under the IWMP project, 216 poultry farming, 20 fish farming, 21 beekeeping, 118 goat rearing, 50 grow bag vegetations, 50 ha of barren land cultivation, 1 mushroom unit, and 1 vermicompost were contributed.

	
PSME activity of Shaimi Sali	Beekeeping by Mathew George
	
PSM activity by Thangamma Ayyappan	PSM activity by Jobin Vellmattathil



3. Well renovation

- i. Well renovation situated at Kudukamattam, Mundiyadi Watershed of Manakkad panchayath. This water is mainly used for drinking and domestic consumption. More than 10 houses depend on this well during the summer season. The renovation was completed for Rs. 1.08 lakhs.
- ii. Well renovation at Kooplackal colony in Vadakkumuri Thodu watershed of Karimkunnam Panchayath. This work was completed for Rs. 0.55 Lakhs. The water is used for domestic purposes by the colony residents.
- iii. Well renovation at Plantation Laksham vedu colony in Thudanganadu watershed of Muttom panchayath. More than 30 families use water for drinking and domestic purpose.

The broad aim of the program is to improve the water quality and quantity of wells. This will contribute to enhancing the health and welfare of the community through improved access to drinking water. The well renovations are very successful interventions under the PMKSY

Scheme. The wells, which were in a degraded condition, are renovated under this scheme and made available for public usage. Nine well renovations were done under the IWMP project. The project was successful in ensuring drinking water for many families all year round.



4. Spring protection at Manthalimpara, Mundiyadi Watershed. This was constructed last year for Rs. Rs. 55,000/-. No one is using this water now.



5. New pond construction at Ellumpuram in Thudanganadu watershed of Muttom panchayath. It has a capacity of 6000 liters with actual expenditure of Rs. 5.69 lakhs. The water is used by the nearby families through gravity pipes, mainly during the summer months. This intervention helps with both the water supply and floodwater control in the nearby areas. The pond serves as a natural catchment area for precipitation, stores it, and recharges the groundwater while also serving as a gauge for the water table in the nearby areas. Two renovations and one new pond were carried out as part of this project, which visibly changed the area. For drinking and irrigation, water is now widely accessible.



**Summary of the Evaluation of Outcomes of PMSKY-WDC Projects**

District	Idukki	Date of Visit	28/06/2022
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1. Project Details:

Project No	IWMP -IX/2012-13
Name of Block	Thodupuzha Block Development Office
Sanctioned Area (ha)	4522 ha
Sanctioned Cost (Rs. in lakh)	678.3
Name of Villages included in the project	Muttom, Karimkunnam, Manakkad and Purapuzha

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	2.7	2.5	Marginal increase in water column level
2	Average depth of water table in tube wells	m	0	0	Very fewer borewells in the area
3	Number of groundwater structures (dug wells + tube wells + hand pumps) rejuvenated	nos.	0	0	13 structures rejuvenated under the project
4	Increase in Irrigation potential	ha	0	176.2	
5	Area of Wasteland brought under productive use (like agriculture, plantation, fodder, etc)	ha	--	--	13 ha area was 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	413.2 113.8 10.2	532.2 193.2 15.1	More than 100 ha of agricultural crop area increased
7	Area Under Agriculture Crop (i) Area under Kharif crop (ii) Area under rabi crop (iii) Area under double crop	ha	318.5 0 0	515.6 0 0	Nearly 200 ha of Kharif area increased



8	Cropping intensity	%	116	120	4 % increase
9	Increase in Yield /ha of crops (i) Rabi crop (ii) Kharif crop	qt/ha	0 45	0 65	Increase in Kharif crop yield was observed
10	Area of horticulture crop	ha	1.2	2.3	
11	Employment in agriculture related activities among beneficiaries	Man days	7989	8126	8126 mandays of employment generated
12	Employment in non- agricultural sectors	Man days	--	--	
13	Fodder production	qt	8.1	10.2	Increased
14	Fuelwood production	qt	0	0	No data available
15	Number of milch cattle	nos	1663	1754	Increase in number of milch cattle
16	Milk production	Kl/yr	8315	8770	5 % increase in milk production
17	Duration of flow of water in streams (upto November/December/January/February....May)		Feb	Mar	Increase by one more month
18	Improvement of drinking water facility	Days	Feb	Apr	Increase by two more months
19	No. of persons engaged in ancillary activities like fishery, poultry,rural craftsmanship	nos	1146	2560	Increase in number was observed
20	Number of children enrolled in schools in the project area	nos	4603	5118	All children enrolled in schools
21	Reduction in migration from rural to urban area in the project area	nos	0	0	A reduction in migration was noticed during the project period.
22	Annual mean household income	Rs	64000	72000	Increase of Rs. 8,000/-
23	Any Other measurable indicator of impact assessment: i) Creation of 133 RWH Structures & 13 were rejuvenated. ii) Grow bag distribution in Karimkunnam, Manakadu, Muttom panchayat. iii) Construction of farm ponds, hence water from ponds used for irrigation and other domestic purposes. iv) 7310 farmers benefitted from the project				