VELLANGALLUR BLOCK (THRISSUR DISTRICT)

Project No: IWMP-5Thrissur batch 5

Vellangallur block of Thrissur district consists of Vellangallur,Pooman, galam, Padiyur, Velookkara, Puthanchiraand Padiyur Grama panchayats. Physiographically the area falls underlowland region. The lowest elevation is 3 m MSL and is at Koottalachira and the highest elevation is20m at Vilayanadu. The relief is flat to normal. The total proposed area under IWMP is 5998 ha with a proposed budget of Rs. 411.24 lakhs.

Sl No	Watershed code	Name of Watershed	Village Panchayath	Area (in Ha)
1	14P8a	Kakathuruthy	Padiyur	309.48
2	14P9a	Mazhuvanchery	Padiyur	116.18
3	14P10a	Pookkottupuzha	Padiyur, Poomangalam,Velukkara, Vellangallur	3977.61
4	14P11a	Amarippadam	Vellangallur	724.22
5	14P14a	Karumaathra	Vellangallur	1104.9
6	14P15a	Puthenchira	Puthenchira	987.56

Table 1. Details of the Watershed

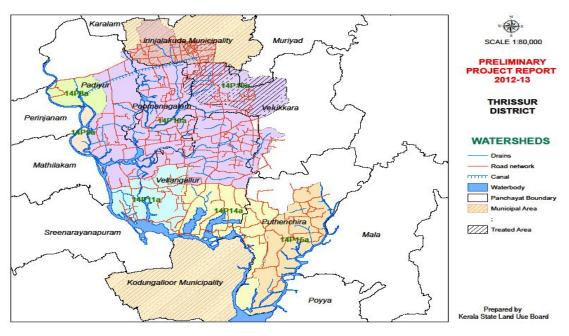


Fig 1: Map of the watershed area



The project evaluation team from CWRDM, Kozhikode visited the IWMP watershed areas of the Vellangallurblock of Thrissur district on 18.06.2022. Initially, the team discussed with the block development officer, Black panchayat president and Village Extension officer to know about the perception of the project and implementation. After discussion, the team visited the sites.

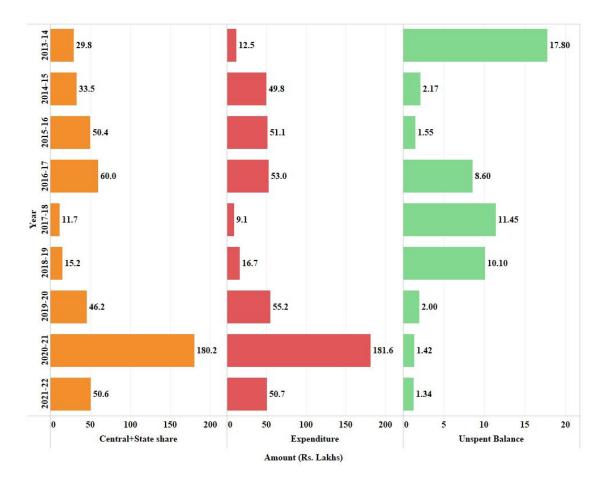


Fig 2: Financial overview of the project

From the above figure, it is revealed that the funds received was more in the FY 2020-21 followed by 216-17. All the other FYs received funds in this watershed project. However, the funds received were not at regular intervals. This resulted in incomplete intervention activities in the watershed area.

1. Rainshed at BDO office premises

Rain shed maintained by Block Development Office at Vellangallur block for the benefit of agro-service center. It comes under the Pookottupuzha watershed. This Rainshed is mainly used as a nursery for raising seedlings of vegetable crops, plantations like Pepper etc. The Actual cost of a Rain shed was Rs. 0.98 Lakhsconstructed in an area of 100 sq ft.

This activity provides an opportunity for income generation to the agro-service center, besides improving the agricultural area through the supply of saplings.

2. Pond renovations:

- a) Pond renovation at Andanikulam of Pookottupuzha watershed, Velukkara Gramapanchayath was renovated with a budget of Rs. 14.3 Lakhs. The design specification of the renovated pond is 65 x 49 x 2m. The stored water in the pond is used for irrigation and domestic purpose. Around 15 acres of paddy, arecanut, and vegetables are cultivated using this pond water.
- b) Pond renovated at Koomankulam of Pookottupuzha watershed, Vellangallur Gram Panchayath with a budget of Rs. 7.35 Lakhs. The stored water in the pond is used for irrigation and domestic purpose. Tapioca, banana, and paddy crops are cultivated in the benefitted area. The design specification of the renovated pond is 24.4x 14.7 x 1.49m.
- c) Neelenkulam Pond renovated at Pookottupuzha watershed, Poomangalam Gram Panchayath. The design specification of the pond is 42.3 x 16 x 1.65m. The stored water from the pond is used to irrigate more than 15 acres of land.

The pond renovations help in bringing more area under agriculture and also improving the cropping intensity in the project area. It is better to identify the defunct ponds in the region and renovate them so that more area can be brought under agriculture.

3. Rainwaterharvesting structures

- a) This project has been implemented at S.N. Nagar in Gangadhar house which is located at Pookottupuzha watershed, Poomangalam Gram Panchayath. The Unit cost to install the structure was Rs. 8000/- with a 10 % beneficiary contribution. After installing the rainwater harvesting structure the water scarcity was reduced and the water is available during the summer months as well.
- b) Rainwater harvesting tank constructed at SNGSUP school, Kakkathuruthy watershed, Padiyur Panchayath. The budget required to construct the tank was 0.97 Lakhs. A ferrocement tank was constructed in 2020 with a capacity of 10,000 liters. The

harvested water is used mainly during the summer months by the school students (143 in number) and staff.

c) Rainwater harvesting tank constructed GUPS school, Velivattom, Amaripadam watershed, Vellangallur Panchayath. The budget required to construct the tank was 0.97 Lakhs. A ferrocement tank was constructed during 2020 with a capacity of 10000 liters for harvesting rainwater. The harvested water is used mainly during the summer months by the school students (121) and staff.

The installation of rainwater harvesting structures helps in reducing the scarcity of water in the project area. This initiative helps in increasing the groundwater table in the region by approximately 2 m. Hence, this kind of activity may be promoted on a larger scale to reduce the water scarcity issues faced by the residents residing in the watershed area.

4. Sluice construction:

- a) A Sluice was constructed at Padiyur panchayath, Kakkathuruthy watershed mainly to regulate flood control near to Canoli canal. Side protection of about 62m and 4.5m on both sides was also constructed.
- b) Kanjirapullam thodu Sluice at Kombsthu Kadavu at Puthenchira watershed, Puthenchira GP was constructed with a budget of Rs. 3.86 Lakhs, the length of work is 26 m on both sides. The primary purpose of this construction is flood control. Side protection work was also undertaken on both sides (13 m + 13 m) of this sluice.

5. Livelihood -LSS

- i. Malabari cross breed of 2 Goats was distributed 6 years back to Usha'inThavalakulam ofPadiyur panchayath using the revolving fund of Rs. 25,000/-.This activity adds marginal income to the household.
- ii. SHG's 'Lafif' (5 member group) at Karumathra watershed, Vellanur panchayath used revolving fund of Rs. 25000/- for vegetable cultivation.

The livelihoodsystem helps to promote employment and provides additional income to the households. It was observed that the revolving fund was not sufficient to scale up the operations, hence, it is suggested to increase the revolving fund amount.

6. Production system:

Distributed 8 egg laying chickens 2 years back to 'ChinjuKelikettu' (house name) at Mazhuvanchery watershedunder PMS with a unit cost of Rs. 10,000/-. This activity fetches additional income through the sale of eggs and chicken apart from adding a source of protein to the family members.

7. Silpaulin tank:

A Silpaulin tank of size 5X5 m was provided to 'Abdul Salam' of Karumathra watershed inVellangallur panchayath. The farmer used to take up tilapia fishes in that tank. This work was carried out in convergence with MGNREGS, they remove the waste from the pond. This activity helps to provide additional income to the household.





Centre for Water Resources Development and Management

Endline Evaluation of PMKSY-WDC watershed projects



Neelenkulam at Pookottupuzha watershed, Poomangalam Gram Panchayath



Rainwater harvesting tank at SNGSUP school, Kakkathuruthy watershed



Rainwater harvesting at S.N. Nagar in Gangadhar house



Rainwater harvestingtank, GUPS school, Velivattom



Sluice at Padiyur panchayath, Kakkathuruthy watershed



Centre for Water Resources Development and Management

Endline Evaluation of PMKSY-WDC watershed projects



Summary of the Evaluation of Outcomes of PMSKY-WDC Projects

District: Thrissur.

Date of Visit: 18.06.2022

1. Project Details:

Project No. IV

Name of Block – Vellangallur

Sanctioned Area (ha) -5998

Sanctioned Cost (Rs in lakh: 899.7

Name of Villages included in the project: Thekumkara, Vadakkumkara, Karumathra,

Vallivattom, Poomangalam, Manavalassery, Padiyur, Edathirinji, Velukara,

Kottanellur, Puthenchira



2. Impact Details

SI. No.	Items	Unit	Pre- project status	project	Remarks
1	Average depth of water table in dug wells	m	7.85	5.725	2.125 m increase in water table.
2	Average depth of water table in tube wells	m	-	-	Data not available.Tube wells/bore wells are less
3	Number of ground water structures (dug wells + tube wells + hand pumps) rejuvenated	nos.	-	1127	Open wells were recharged using rain water harvesting
4	Increase in Irrigation potential	ha	5762	5982	220 ha increased. Irrigation potential increased due to sluice construction, VCB repair and pond renovation
5	Area of Wasteland brought under productive use (like agriculture, plantation, fodder, etc.)	ha	155.9	108.7	47 ha area brought under productive use. Thekorthkole land, Edakkulamkole , Devasamkole, AripalamShan mughamkole, Ayyenkerikole were treated
6	 Change in cropping / land use pattern (i) Area under Agriculture Crop (ii) Area under plantation / forest cover (iii) Area Under Wastelands 	ha	1408 4354 155.9	1599 3882 108.7	An increase in the agriculture area was noticed.
7	 Area Under Agriculture Crop (i) Area under Kharif crop (ii) Area under rabi crop (iii) Area under double crop 	ha	471 37.25	642 42.65	The yield of paddy showed an increase of 20% due to increased water availability and



					bund construction
8	Cropping intensity	%	120	122	2 % increase
9	Increase in Yield /ha of crops (i) rabi crop (ii) Kharif crop	qt/ha	6-8 in kole land 4-5 in paddy land	8-12 in Kole land 5-7 in Paddy land	An increase of more than 15% in yield was recorded in all crops
10	Area of horticulture crop	ha	651	768	An increase of 117 ha area. Banana(8563 Nendras),Coco nut, Jackfruit(Ayur) , Mango , Rambuttan, Sapota, Kiloppera, Mangosteen, Njaval grafted were planted.
11	Employment in agriculture related activities among beneficiaries	Man days	32000	33750	37296 mandays of employment
12	Employment in non- agricultural sectors	Man days	-	-	generated under the project
13	Fodder production	ha	30	40	30 % growth in area under fodder
14	Fuelwood production	qt	-	-	No data
15	Number of milch cattle	nos	1800	2100	16 % growth
16	Milk production	Kl/yr	540	614	14 % increasein milk production
17	Duration of flow of water in streams (upto November/December/January/FebruaryMay)		Jan	Mar	Chelakara, Palakattupada m, Pulliyilakunnu maniyyankavu, Maniyankavup arekode, Adapathazham,



18	Improvement of drinking water facility		Feb	Apr	PalakkaAnakka l,vattolipadam, thode were treated Increased for two more months. 1127 wells recharged
19	No. of persons engaged in ancillary activities like fishery, poultry, rural craftsmanship	nos	-	612	612 beneficiaries engaged in Poultry. Each beneficiary had 8 birds per unit.
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	-	-	Migration has been reduced by providing 37296 days of employment under the project.
22	Annual mean household income	Rs	33000 per Family	55000 per family	
23	 Any other measurable indicator of impact assessment i) 26634 farmers benefitted from the project ii) SHGs assisted: 123 iii) Poultry units started -612, Goat rearing unit started for 29 beneficiaries v) Rainwater harvesting tanks created 18 and 1127 rejuvenated vi) Silpaulin tank- 64 				