

AZHUTHA BLOCK – IWMP -VIII (IDUKKI District)

Azhutha(IWMP batch VIII) project is located at Azhuthablock panchayat in Peermedu Taluk of Idukki district in Kerala. The project area lies between the longitudes of 76 °56'58.06"E to 77 °6'26.58"E and latitudes of 9 °35'22.93"N to 9 °40'43.01"N. The total sanctioned project area is 4964 ha.

Table 1. Details of micro watersheds

Sl No	Name of Watershed	Watershed code	GPs covered	Area (in Ha)
1	Anavilasam	14P54d	Kumali, Vandiperiyar, Chakkupallam, Ayyappan coil and Vandanmedu	967
2	Mlamala	14P108a	Elappara and Vandiperiyar	720
3	Koduvakaranam	14P106c	Peermade and Elappara	626
4	Glenmary	14P106b	Peermade	907
5	Kaverimala	14P110a	Elappara	1744
Total				4964

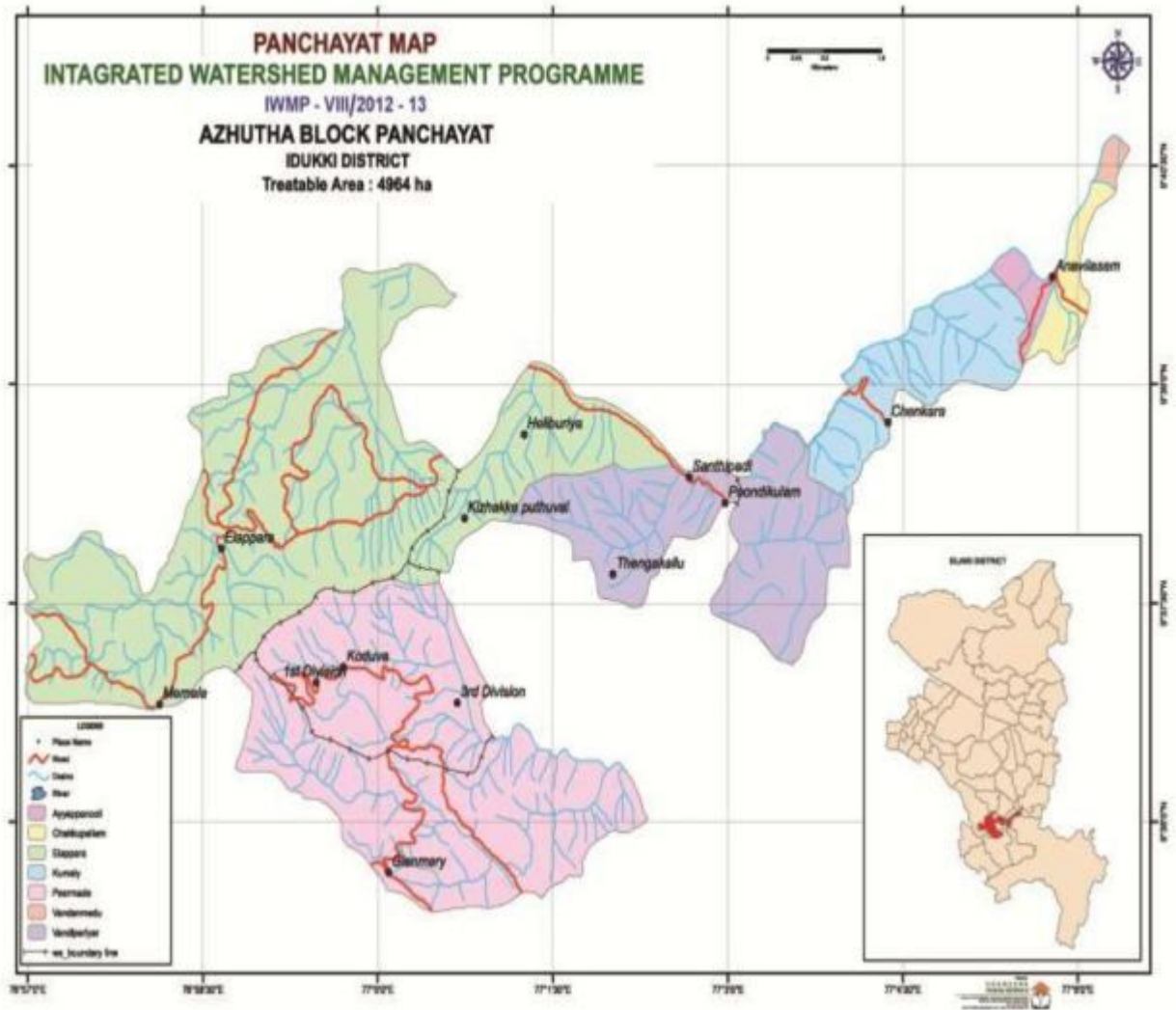


Fig 1: Map of the Watershed area

The evaluation team from CWRDM first visited the IWMP 8 project on 29/06/2022 and later held discussions with the project implementation team. BDO, Technical expert and VEOs were present at the meeting. The team has been to the project area with the assistance of technical experts and the appropriate VEOs. During the field visit, the investigative team interacted with a variety of beneficiaries and stakeholders to learn their perspectives on the project's impact.

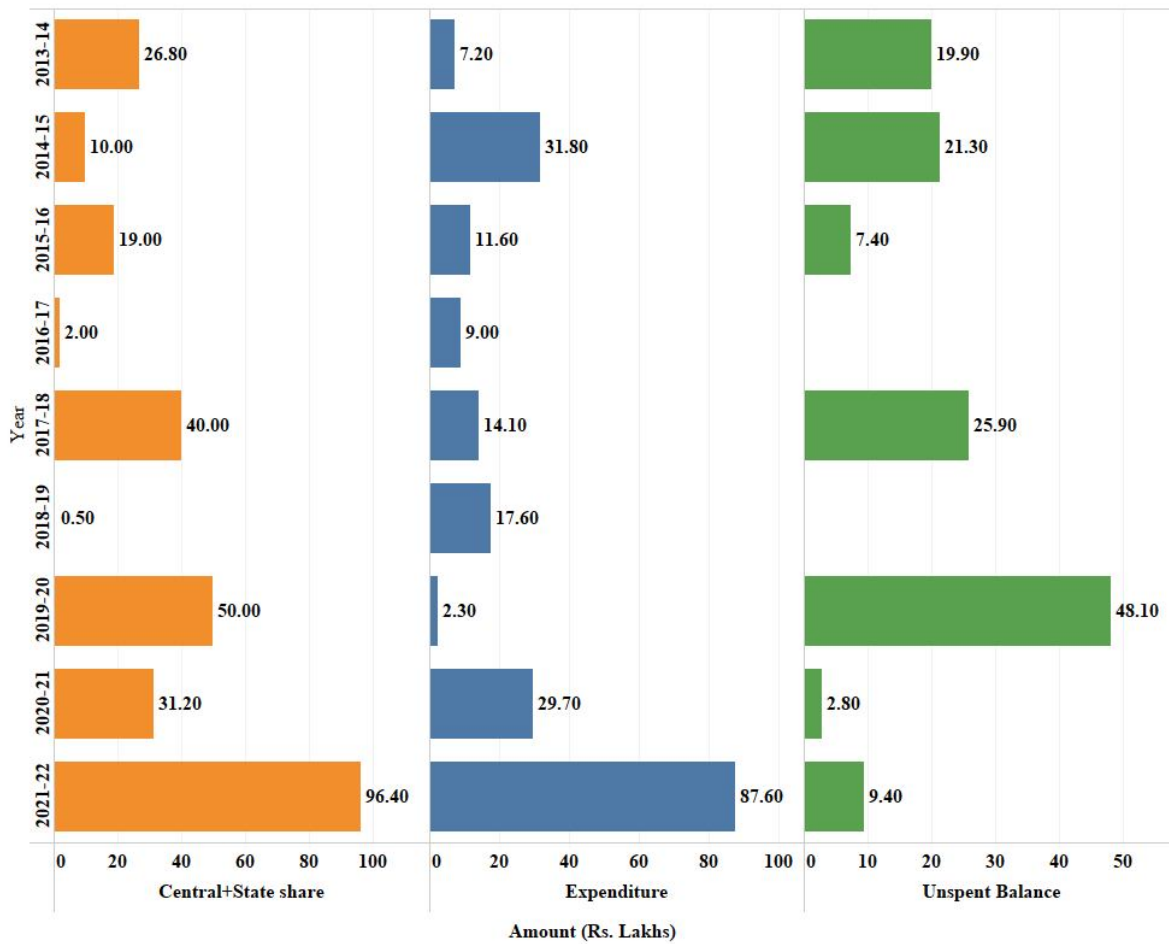


Fig 2: Financial Statement of Azutha Block

The financial records of Azutha Block indicate that the amount received was more during the FY 2021-20 followed by 2019-20. During the FY 2018-19 and 2016-17 it was noticed that a very less amount was received. This irregular transfer of amount affects the work in the watershed area.

The works which the team visited are:

1. Aryana drinking water project at Glenmerry watershed in Peermade Panchayath. This project was carried out in 2021-2022 with a cost of Rs. 9.49 Lakhs. It has a capacity of 75,000 litres. This water is supplied to the nearby ST colony in the region. The lack of drinking water in these places was solved by this effort. Due to the increased accessibility

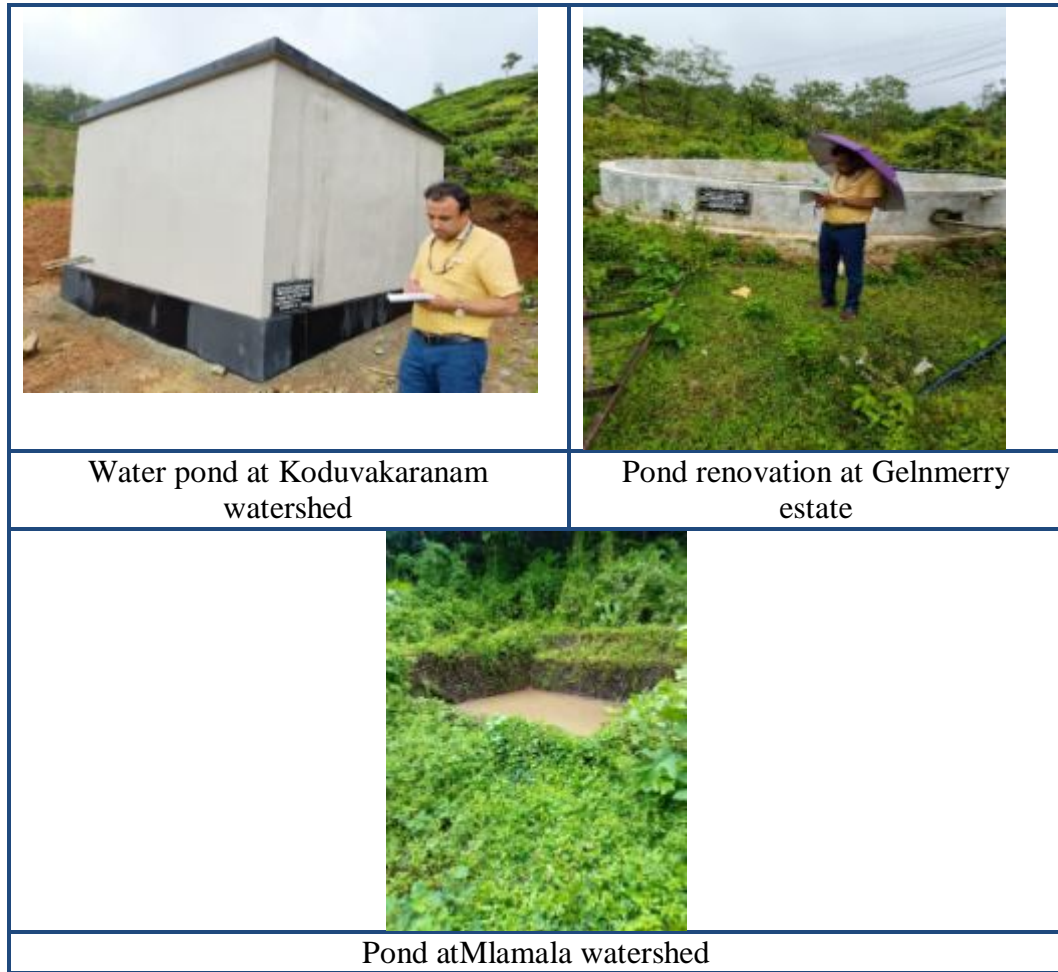
of drinking water, the drudgery of the colony women is reduced and enhanced the health and welfare of the people.



2. Pond Renovations

- a) The water pond is located in the Koduvakaranam watershed of the Peermade Panchayath. This work was completed for Rs. 5.7 lakhs.
- b) Pond renovation at Gelnmerry estate of Glenmerry watershed in Peermade Panchayath. Around 80-100 houses are using this pond for their daily activities. The renovation work was finished for Rs. 7.15 Lakhs. This water is supplied to the nearby SC colony (80 houses).
- c) Pond at Mlamala watershed of Elappara panchayath. More than 50 families use this pond during the summer period.

Pond renovation activities in these high terrain regions help restore defunct ponds and improve the pond's water holding capacity. It was observed during the field visits that these ponds are located very far from the main city and the cost of construction of these structures may go up due to the lack of access to a proper road in some of the ponds. Hence, the allocation of more funds in these regions is necessary by considering the remoteness of the sites and lack of road facilities. Under this project, seven farm ponds were renovated and supplied water to more than 500 families.



- Sidewall protection** at Kaverimala watershed of Elappara Panchayath. A one-side sidewall protection is constructed with a length of 100m. This work was completed for Rs. 14.78 Lakhs. Unprotected natural or built-up earthen slopes are a significant point source of erosion that can cause considerable sediment flows to lower catchment sites, contamination of rivers and streams, a decline in water quality, slope failure, and slippage that frequently results in landslides, financial loss to property, and fatalities. Therefore, side protection plays a crucial role in protecting the fragile environment of this region.



4. Production System Management

- a) PSME activity of 'Mr.V.S. Salim' in Anavilasam watershed of Elappara panchayath. They were given 10 chicks in the ratio of 8:2 (female:male) at Rs.120 per chick. The unit cost of this activity is Rs.1200/- with a 10 % beneficiary contribution.
- b) PSME intervention of 'Mr. C.J. Joseph' at Shankerakeri in Anavilasam watershed of Kumali Panchayath. They were also given 10 chicks at the rate of Rs. 120/- per chick in the ratio of 8:2.

These activities help in providing a source of nutrients (egg/meat) to the family members and also increase the marginal income of the household. Production system management is one of the important aspects of the watershed development initiatives covered by the IWMP. It is planned to spend 10% of the total project budget on supporting the production system and small businesses for land-owning households. This component seeks to boost the productivity of the agricultural system and broaden its sources of supply.

Under this project distributed one biogas plant, 3240 poultry units, 1.1 ha pepper cultivation and 1.21 ha cardamom cultivation. As a result, households within the watershed area have seen an increase in income and improved their standard of living to some extent.



5. Rain Water harvesting tank

- a) Rain Water harvesting tank located at Govt. Ayurveda Hospital in Mlamala watershed of Elapparapanchayath. This concrete structure costs Rs. 3.0 lakhs and has a capacity of 30,000 litres. It was observed that no connection from the roof to the tank was seen at the time of the visit.
- b) Water collection tank located at Shankerakeri Anganwadi premises in Anvilasam watershed of Kumali Panchayath. This tank was built for Rs. 4.16 Lakhs. The water is mainly used for Anganwadi children and staff.

The scarcity of drinking water was a significant issue they experienced in this area mostly in the summer months. It was possible for the project to address the drinking water scarcity as a result of these interventions. A total of 21 rainwater harvesting systems were built as part of this project. This will contribute to enhanced health and welfare of the community through improved access to drinking water. It considerably lessened the effects of drought in areas with limited water resources.

Proper maintenance of these structures is lacking and it is very difficult for the Panchayath staff to supervise these activities as the areas are highly remote. Hence, the creation of a local monitoring body from the stakeholders is needed for the sustenance of these structures.



6. Check dam located at Anvilasam watershed of Kumali Panchayath. It was built for Rs.6.08 Lakhs. For the purpose of collecting water, check-dams are minor obstructions placed in the path of rivers and streams that are only a few feet deep. In a small catchment area behind the structure, the little dams store extra water flow during monsoon rains. The impounded water is forced into the ground by the pressure that is created in the catchment area. The replenishment of neighbouring groundwater reserves and wells is the main environmental advantage. The surface and subsurface water held by the dam can be used for home and livestock needs as well as irrigation during the monsoon and later during the dry season. Four check dams were built as part of this scheme, and the impact is seen in the agriculture sector and an increase in water availability to the neighbouring wells.





Summary of the Evaluation of Outcomes of PMSKY-WDC Projects

District	Idukki	Date of Visit	29/06/2022
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1. Project Details

Project No	IWMP/VIII/2012-13
Name of Block	Azutha Block
Sanctioned Area (ha)	4964
Sanctioned Cost (Rs in lakh)	744.6
Name of Villages included in the project	Peermade, Elappara, Vandiperiyar, Anavilasam, Kumily and Manjumala

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	6	4.9	1m increase in well water
2	Average depth of water table in tube wells	m	60	52.4	Increase in water column by 7m
3	Number of groundwater structures (dug wells + tube wells + hand pumps) rejuvenated	nos.	10	17	7 structures rejuvenated
4	Increase in Irrigation potential	ha	0	1391	Pre-project data is not available. A marginal increase in area under



					protective irrigation was observed
5	Area of Wasteland brought under productive use (like agriculture, plantation, fodder, etc.)	ha	0	880	Pre-project data is not available. Due to the construction of check dams, around 10 ha of wasteland 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			280 ha increase in agricultural area. Nearly 450 ha increase in plantation
7	Area Under Agriculture Crop (i) Area under Kharif crop (ii) Area under rabi crop (iii) Area under double crop	ha			
8	Cropping intensity	%	138	145	Increase in cropping intensity was observed
9	Increase in Yield /ha of crops (i) rabi crop	qt/ha			Increase in yield was noticed in



	(ii) Kharif crop		0	0	plantation crops
10	Area of horticulture crop	ha	13	28	Marginal increase
11	Employment in agriculture related activities among beneficiaries	Man days	5002	8250	4246 mandays of employment generated from the project
12	Employment in non- agricultural sectors	Man days	3004	4130	
13	Fodder production	qt	3.3	5.8	Increased fodder production in the project area
14	Fuelwood production	qt	--	--	No data available.
15	Number of milch cattle	nos	760	910	Increase in number of milch cattle by 19 %
16	Milk production	Kl/yr	4830	6110	26 % increase in milk production
17	Duration of flow of water in streams (upto November/December/January/February....May)		Jan	Mar	Increase in flow of water in streams by 2 more months
18	Improvement of drinking water facility		Feb	April	Increase in water availability by 2 more



					months
19	No. of persons engaged in ancillary activities like fishery, poultry, rural craftsmanship	nos	1401	1500	
20	Number of children enrolled in schools in the project area	nos	950	1050	All children enrolled in schools.
21	Reduction in migration from rural to urban areas in the project area	nos	--	--	No change in migration
22	Annual mean household income	Rs	25000	31000	Increase by Rs. 6000/-
23	Any other measurable indicator of impact assessment <ul style="list-style-type: none">➤ 5860 farmers benefited from this project➤ 76 rainwater harvesting structures were created and 7 rejuvenated➤ The promotion of poultry in the watershed project area for SC colonies helped in improving the additional income of the household. A total of 3240 poultry units were distributed under the project.➤ JLGs assisted: 12				