

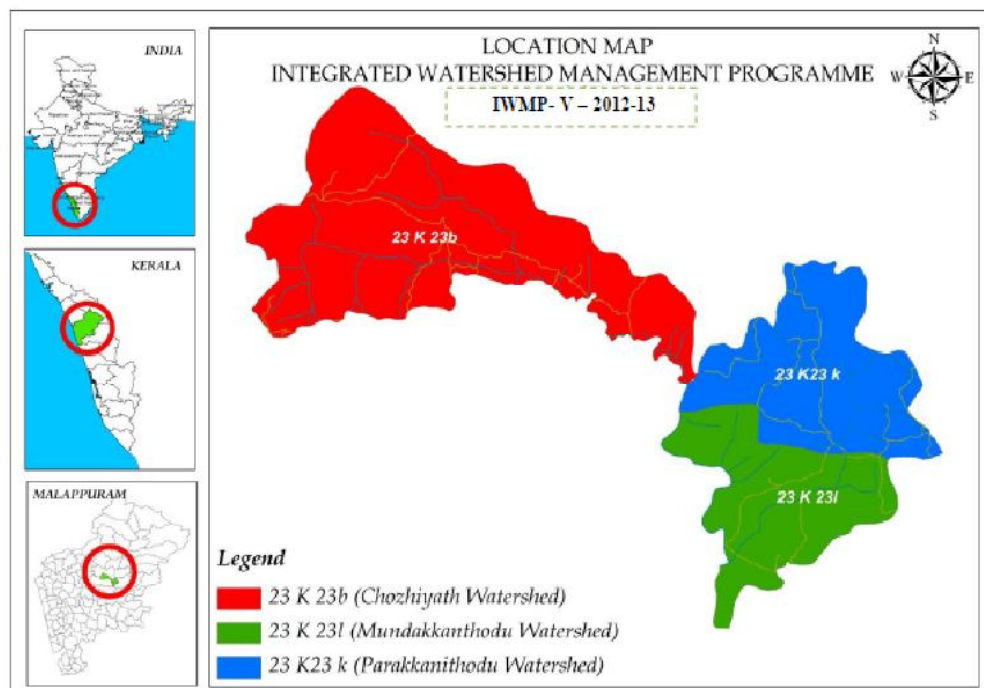
**WANDOOR BLOCK V (MALAPPURAM DISTRICT)**

**Project No: IWMP 5/2012-13**

The Project area is situated in the Southern part of the Wandoor Block and it is laid in the central portion of the Malappuram district. The Cluster area is situated between 11° 9' 30" and 11° 5' 30" North latitude and between 76° 8' 0" and 76° 13' 0" East longitude. The total extent of the cluster is 1979 hectares. The cluster area is bounded by the North Thrikkalangod Gram panchayath and Porur Gram Panchayath in Malappuram district, South Manjeri Municipality and Pandikkad Gram Panchayath, in West Thrikkalangod Gram Panchayath and Manjeri Municipality, in the East Pandikkad Gram Panchayat.

**Table 1: Basic information about the area**

Name of the micro watershed	Code	Grama panchayat	Villages	Area (Ha)
Chozhiyath	23K23b	Trikkalangode	Elankur, Trikkalangode	967
Parakkannithodu	23K23k	Pandikkad	Vettikattiri	537
Mundakkanthodu	23K23l	Pandikkad	Vettikattiri	475
Total				1979

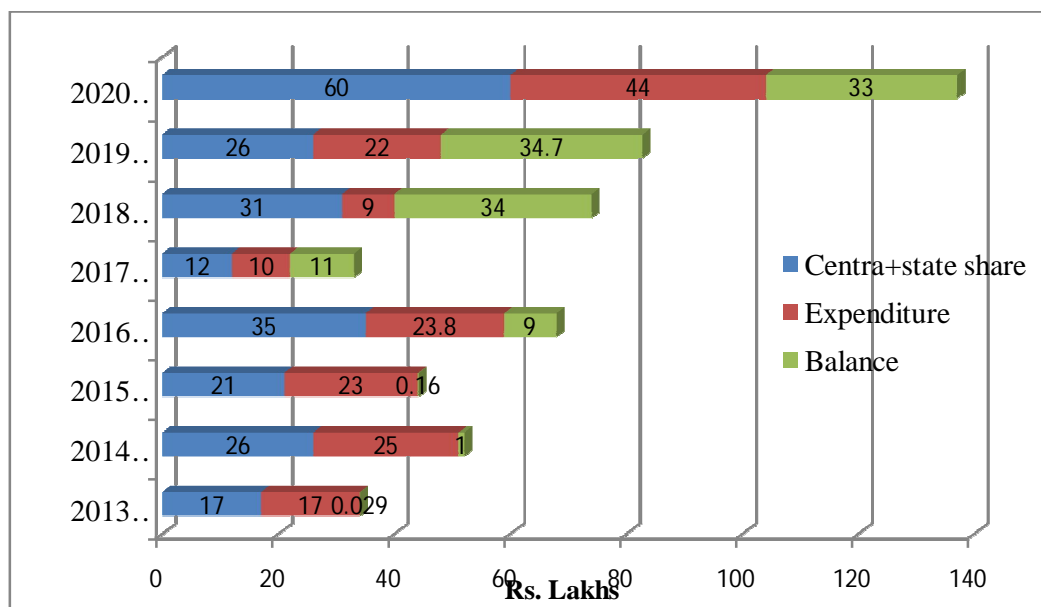


**Fig.1 Details of micro watersheds in the project area**

The project evaluation team from CWRDM visited IWMP watershed areas of Wandoor block (IWMP 5) of Malappuram district on 16.06.2022. The team held a discussion with the block development officer and Village extension officers and later visited the different intervention sites in the project area.



**Fig.2 CWRDM team at BDO office, Wandoor, Malappuram.**



**Fig.3 Financial overview of the Project**

The financial records were received from the block development office during the discussion. The project was started in 2013-14 and it was observed that there was a regular fund flow in all the FYs. The FY 2020-21 received more funds when compared to the other FYs. Similarly, the expenditure was also more in the last FY.

After the discussion with the Block level officers, the team visited the project implemented areas in Wandoor IWMP 5.

### **1. Miyawaki**

According to the Miyawaki theory, 162 plants can be cultivated in 1 cent of land and these plants will shoot straight up instead of towards the side for sunlight. In three years, these trees will grow 30 feet, and in 20 years the trees have the tone and tenor of a 100-year-old forest.

A visit was made to Miyawaki forest established by ‘Pullur Mannan’ in Elankur village of Chozhiyath watershed in Trikkalangode Panchayath. The total area of the plot is 2.5 cents with a budget of Rs 1.5 lakhs.

Different tree saplings were planted on his land, this provides an additional income from fruit bearing plants and also improves the greenery of the area. This kind of afforestation is the need of an hour specially in the present context of changing climate to reduce carbon emissions, as trees act as a sink of carbon. Hence, activities like Miyawaki can be taken up in all the public lands, school premises, etc. to increase the green cover and reduce the carbon source from the watershed area.

### **2. Chathankulam well construction**

- a) A new well was constructed near the stream in order to facilitate water for drinking and irrigation purposes. The total budget for constructing the well was Rs 4.7 Lakhs. The well was located at the Chozhiyath watershed of Trikkalangode Panchayath.
- b) Another well was constructed on the private land of ‘Mr. Moidheen Pilakiyal’ during 2022 at Pandikkad village in the Mundakkanthodu watershed. This provides a source of water for domestic as well as irrigation purposes. An area of 15 acres of agricultural land is getting from this pond. The crops cultivated in the benefitted area include banana, coconut, yam etc.

The well construction activities mainly help in reducing the wasteland as more area can be brought under agriculture and also the cropping intensity can be increased. Thereby increasing the annual income of the farmers in the project area.

### **3. Livelihood Support System**

The activities proposed under the livelihood action plan are meant for improving the livelihood of the poor and marginalized people in the project area. A Joint Liability group 'Uruma' consists of five members, who received a subsidy of Rs 35,000/- under LSS for animal husbandry activity (Jersey cow). This increased the income of the group marginally. The beneficiaries gave positive feedback about the subsidy component of the project.

### **4. Production System Management**

The major interventions suggested under production system management in Wandoor block of Malappuram district were beekeeping, mushroom cultivation, goat rearing, etc. Around 4 goats were given with 20% beneficiary contribution under the project in Parakkannithodu watershed of Wandoor block during 2018-19.

### **5. Well recharge**

Recharging of rainwater will help in increasing the ground water table which is an essential component for mitigation of drought in the watershed area. Hence, several well recharge structures were installed in the project area. The observed recharge structure at Pandikkad village increased the water table level in wells which are the main source of water for domestic as well as agriculture. The unit cost of this structure was Rs. 8000/- with a 10 % beneficiary contribution.

### **6. Stream bank side protection**

Due to heavy rain and floods, the side banks of the streams getting collapsed in the project area. Hence, constructed the side wall protection along with the flow regulating structure at Manachithodu, Pandikkad village under the project. The total length of the work was 190 m on both sides with a width of 3.5m. The structure was constructed for flood protection in 2022. The check measures were provided along the streamline in order to avoid the deposition of sediments and increase the stream flow.





Miyawakki



Well Recharge



Chathankulam well construction



Pandikkad well construction



Livelihood Support System



Storage pond



Stream bank side protection



Production System Management

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

District: Malappuram

Date of Visit: 15.06.2022

**1. Project Details:**

Project No: PMKSY batch IV Project V

Name of Block -Wandoor

Sanctioned Area (ha): 1979

Sanctioned Cost (Rs in lakh): 296.85

Name of Villages included in the project: Trikkalangode, Pandikkad, Vettikettiri,  
Elankur.**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	17.1	15.15	2 m increase in water table.
2	Average depth of water table in tube wells	m	-	-	Data not available
3	Number of groundwater structures (dug wells + tube wells + hand pumps) rejuvenated	nos.	1694	2184	490 structures rejuvenated
4	Increase in Irrigation potential	ha	102	114	12 ha increase
5	Area of Wasteland brought under productive use (like agriculture, plantation, fodder, etc.)	ha	-	6 ha	6 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	54 1917	66 1860	Marginal increase in the agricultural area
7	Area Under Agriculture Crop (i) Area under Kharif crop (ii) Area under rabi crop (iii) Area under double crop	ha	389 21 60	422 24 66	33 ha increase in Kharif area
8	Cropping intensity	%	119	120	An increase of 1 %



9	Increase in Yield /ha of crops (i) rabi crop (ii) Kharif crop	qt/ha	300 6300	4500 7200	An increase of nearly 1qt/ha increase in paddy yield
10	Area of horticulture crop	ha	315	324	Marginal increase in horticulture area
11	Employment in agriculture related activities among beneficiaries	Man days	81900	126000	The project created 25300 mandays of employment
12	Employment in non- agricultural sectors	Man days	43500	87000	
13	Fodder production	Qt/yr	7.5	12	Increase in fodder production
14	Fuelwood production	qt	-	-	Data not available
15	Number of milch cattle	nos	4400	7150	Increase in number of milch cattle
16	Milk production	Kl/yr	315	657	Milk production doubled
17	Duration of flow of water in streams (upto November/December/January/February....May)		Dec	Feb	Two months enhanced flow of water in streams
18	Improvement of drinking water facility		Feb	Mar	Drinking water availability for extra two months
19	No. of persons engaged in ancillary activities like fishery,poultry, rural craftsmanship	nos	2850	4110	Increase of 1260
20	Number of children enrolled in schools in the project area	nos	4092	5430	All children are enrolled in schools
21	Reduction in migration from rural to urban area in the project area	nos	-	-	Migration reduced during the project period
22	Annual mean household income	Rs	66000	72500	Rs. 6,500/- increase
23	Any other measurable indicator of impact assessment i) Total rainwater harvesting structures created-75 ii) Total rainwater harvesting structures rejuvenated-491 iii) Additional area brought under protective agriculture-12 ha iv) No. of farmers benefitted-3200				



## Success story

### Parakannuthodu pond

A new storage pond was constructed in the perennial stream at Parakannuthodu panchayath to facilitate irrigation as well as flood control. The capacity of the pond is 300m<sup>3</sup> with a budget of Rs. 9.0 Lakhs. Around 15 acres of agricultural land getting benefitted under this project. The major crops cultivated in the benefitted area are coconut and banana. Soil erosion from the downstream side was also reduced due to this work. The pisciculture is practiced in this pond as a part of income generation.







## **CONCLUDING REMARKS**

- ❖ The NRM activities carried out in the project area include rainwater harvesting tanks, well recharging, Miyawaki, rejuvenation of ponds, drainage line treatments, soil & moisture conservation activities, etc. Due to these interventions, it was noticed that the average ground water table level has increased approximately by 2 m.
- ❖ Drinking water shortage was reduced to some extent by implementing roof water harvesting combined with groundwater recharge. It was observed that the capacity of the filtration system in RWH is small. When high-intensity rainfall occurs, the major portion of collected runoff will be diverted and wasted. Hence, the facility like joining with subsurface or increasing the capacity of the filter may be included in further implementations.
- ❖ The irrigation potential was also found to increase marginally in certain watersheds due to the renovation of structures like ponds, side protection works along with flow regulating channels, etc.
- ❖ As part of Entry Point Activity (EPA), Poly house construction, organic farming was promoted under the production system management. Totally, 7551 Families were given layer hens, 228 families were given cows and Goat, and 7 Families were given Beekeeping.
- ❖ In convergence with MGNREGS, dairy and goat sheds were constructed. This leads to employment generation. Possibilities of more convergence options may be pinpointed in the future.
- ❖ The farmers in all the watersheds of Wandoor block are involved in the cultivation of paddy, vegetables, banana, etc. Hence, improvement in farmers' yield and income may be possible through convergence with line departments like agriculture and dairy. Appropriate training from these line departments along with exposure visits to new advanced demonstration plots will motivate the farmers and help in increasing their income.
- ❖ Under Livelihood Support System, the subsidy component was given to SHGs /JLGs. Appropriate market avenues may be connected to these groups for the sustainability of these JLG or SHG units.



- ❖ It was observed that some structures were constructed at an inappropriate location. For instance, one public well was constructed just adjacent to the private well. Hence, while preparing DPR these kinds of errors in planning may be avoided.
- ❖ Delay in the timely availability of funds was a problem reported in this Block also like other areas. Even though the fund was made available towards the end of the project, some of the important schemes could not be taken up due to scarcity of funds.
- ❖ Construction of structures and implementation of activities are good in the entire Wandoor block. But appropriate location may be finalized by giving proper weightage so that many people can get benefit from the NRM activities.