

**ATTAPADY BLOCK (PALAKKAD DISTRICT)****Project No: IWMP-9 PALAKKAD BATCH 6**

Attappady is a tribal block in Kerala state covering an area of 735 km<sup>2</sup>. It is carved out from Mannarkkad taluk in Palakkad district in 2021. Attappady Reserve Forest is a protected area comprising 249 km<sup>2</sup> of land area in the western parts of Attappady. It is one among the reserved forests and protected forests of India. Attappady valley in Palakkad district along with the neighbouring Chaliyar valley of the Nilambur region (Eastern Eranad region) in Malappuram district, is known for natural Goldfields, which are also seen in the other regions of Nilgiri Biosphere Reserve. Attappady taluk comprises 6 revenue villages like Agali, Kallamala, Kottathara, Padavayal, Pudur and Sholayur. As of the 2011 census report, Attappady Block had a total population of 64,318 where 32,035 are males and 32,283 are females. The total numbers of households were 16,865.

**Table .1 Watershed details**

<b>S.No</b>	<b>Watershed Name</b>	<b>Code</b>
1	Moola Kombu	22B30I
2	Jalimeduthodu	22B31a
3	Melechavadiyur	22B32a
4	Chalayur	22B33a
5	Karathur	22B34a
6	ChathannurKonna	22B35a
7	ThazheMulli	22B36a
8	Mele Mulli	22B36b
9	KukaraPallam	22B36c

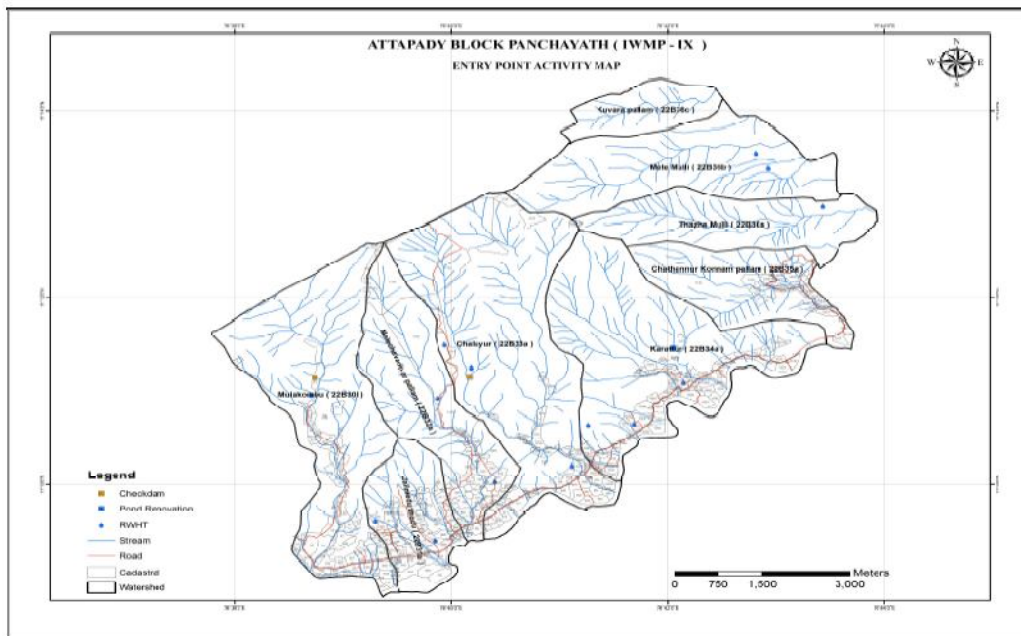
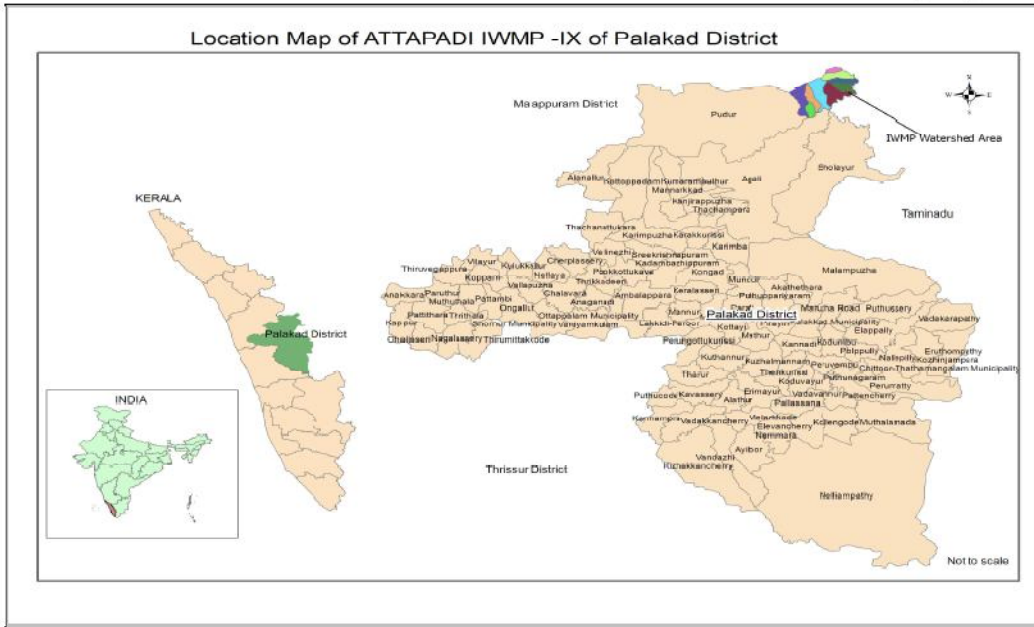
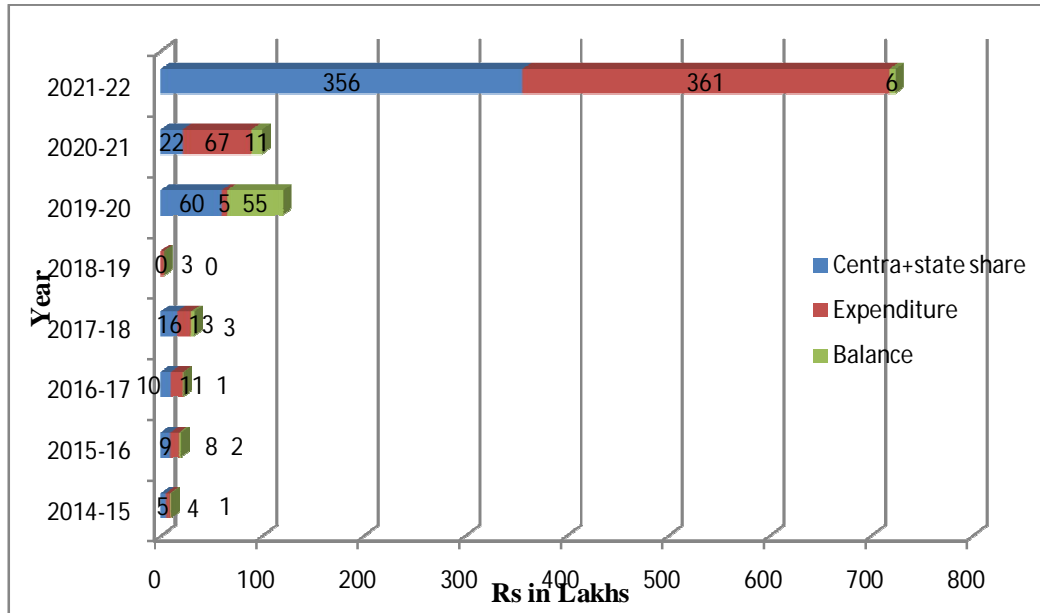


Fig 1: Map of the Watershed area



**Fig2: Financial overview of the Project**

It was clear from the above figure that the amount received from the Government is not regular and received maximum funds in the last FY. There were no funds received in FY 2018-19. The maximum expenditure spent in the last FY of the project.

The project evaluation team from CWRDM visited IWMP Batch IX watershed areas of Attappady Block on 01-07-2022. After the initial discussion with the Block Development Officer and other staff who have associated with the project implementation, a field visit was planned and the following sites were visited by the team to see the interventions implemented. The team also held discussions with the local beneficiaries in the respective areas.

### 1. Konamkuthipallam gabion structure

Three Gabionstructures at 100m intervals were constructed to control soil erosion as well as flood protection. Konamkuthipallam gabion structure was constructed in a first-order stream of Melechavadiyur watershed at Pudhurvillage. The total budget of the structure is Rs 4,99,984/-.

Under this IWMP project, 22gabion structures were created. These structureshelp instabilising slopes and limit the speed of concentrated runoff.The major purpose of gabion walls is to reduce land sliding on roadsides, erosion and scouring on the banks of rivers during flood and high-velocity river streams, as well as to stop the waterlogged areas from



further being damaged. In steep places, they also serve as shield walls to sustain the moment of the soil and rock laterally.

## **2. KulamNirmananmGangatharenteSthalathinaduthu**

A new pond was constructed at Chalayur Watershed for agriculture and domestic purposes. Around 10 acres of land getting benefitted under this pond. A pump is installed in the pond to irrigate the entire field. An existing gabion structure at first order stream was observed around the pond. This will enhance the availability of water in the pond so that more area can be irrigated. The total capacity of the pond is 56 m<sup>3</sup>. The total budget of the pond was Rs. 5,82,155/-.

This intervention has enhanced agricultural activities by converting barren land into agricultural land, which benefited the farmers. The possibility for irrigation has increased by 16 hectares. Additionally, a 50% decrease in the wasteland was observed.

## **3. Livelihood supporting system**

Mr.Rangan from Panganaipallamof Pudhurvillage received a subsidy for poultry. The amount received as subsidy was Rs. 600/- with a 10 % beneficiary contribution.

The basic right to equal opportunity for tribal people is the main justification for promoting livelihoods. But lack of chances and life choices are problems for the poor. With the help of the IWMP project, marginalised and oppressed members of the village communityincluding women, small and marginal farmers, and landless people can profit the most from the project.The project provided chances for households to generate revenue through employment, priority access to resources on common property, and non-land-based activities.

## **4. Production system**

Around 21 families in the Pudhurvillage of Chalaiyurwatershed received a subsidy for flower cultivation. Mr.Batharn in Pudhur village planted jasmine on 0.5 acre of land. Saplings are also provided under PMKSY.

Around 160 beneficiaries were promoted with floriculture activities, 150with fodder cultivation and 6100 number of old layer chicks were contributed through this scheme.PSME has been shown to be an effective strategy for increasing small, thriving businesses, which in

turn increases household income and savings and eases the burden of poverty. PSME are essential to the local growth of every region. PSME will aid in fostering entrepreneurship skills among the population and act as a model for the villagers to create similar projects on their own. The average income of the population will rise as a result.

### **5. Kurumbamutham Thodu Side Protection**

A loose boulder check dam along with side protection was constructed at Melechavadiyur Watershed. The structure was located in a second-order stream. The length of work is 30m with a budget of Rs 3,28,000/-.

The major environmental benefit of this construction is the replenishment of nearby groundwater reserves and wells. This initiative has made some progress toward resolving the flooding issue. This project also made it possible for agriculture in the neighbouring areas by providing irrigation facilities. Additionally, a 2% rise in cropping intensity was observed.

### **6. Water storage tank**

A new water storage tank was constructed at Nattukalchundappetty in Oorinaduthu Chathanurkonawatershed. The total budget of work is Rs.1,97,953/- this facilitates irrigating the area through gravity. The stored water is used for cultivating banana, vegetables and flower crops. After the construction of this pond, the area of cultivation increased.



**Konamkuthipallam Gabion structure**



**KulamNirmanamGangatharenteSthalathinaduthu**



**Water storage tank atnattukalchundappetty**



**Kurumbamutham Thodu Side Protection**



**Livelihood supporting system**



**Production system (flower cultivation)**

### **Summary of the Evaluation of Outcomes of PMSKY-WDC Project**

District:Palakkad

Date of visit : 01.07.2022

#### **1. Project Details**

Project No: IWMP-9 Palakkad Batch 6

Name of Block: Attappady

Sanctioned Area:5879Ha

Sanctioned Cost (Rs in lakhs) :881

Name of Villages included in the project: Pudur



## 2. Impact Details

Sl. No	Items	Unit	Pre-project status	Status at the end of project	Remarks
1	Average depth of watertable in dug wells	m	12 6	10.25 5.0	Water level increased by 1.75 m and 1 m during pre and post monsoon season
2	Average depth of watertable in tube wells	m	80	60	Min max
3	Number of groundwater structures (dug wells + tube wells + hand pumps) rejuvenated	nos.	0	650	Pre-project data not available
4	Increase in Irrigation potential	ha	24	40.7	Increase of 16 ha
5	Area of Wasteland brought under productive use (like agriculture, plantation, fodder, etc.)	ha	18.37	9	50 % reduction in the wasteland
6	Change in cropping/land use pattern <ul style="list-style-type: none"> <li>•Area under Agriculture Crop</li> <li>•Area under plantation/forest cover</li> <li>•Area Under Wastelands</li> </ul>	ha		3861	A modest increase in agriculture area was noticed
7	Area Under Agriculture Crop <ul style="list-style-type: none"> <li>•Area under Kharif crop</li> <li>•Area under rabi crop</li> <li>•Area under double crop</li> </ul>	ha		3752.14 1821.8 108.9	Pre-project data not available
8	Cropping intensity	%	105	107	2 % increase
9	Increase in Yield /ha of crops <ul style="list-style-type: none"> <li>•Rabi crop</li> <li>•Kharif crop</li> </ul>	qt/ha		13 5	Increase of 2.5 qt/ha of paddy
10	Area of horticulture crop	ha	3	17.96	Marginal increase in horticulture area was observed
11	Employment in agriculture-related activities among beneficiaries	Man days	3262	11236	3262 mandays of employment generated under the
12	Employment in non-agricultural sectors	Man days	1070	13337	



					project
13	Fodder production	Ha	10	17	7 ha increase in area under fodder
14	Fuelwood production	qt	0	0	No data available
15	Number of milch cattle	nos	0	0	Data not available
16	Milk production	Kl/yr	100	250	Milk production is almost doubled
17	Duration of flow of water in streams (upto November/December/January/February ....May)		Dec	Feb	Two months increase in flow of water in streams
18	Improvement of drinking water facility		Feb	Mar	One month increase in water availability
19	No. of persons engaged in ancillary activities like fishery, poultry, rural craftsmanship	nos	730		
20	Number of children enrolled in schools in the project area	nos	--	--	All children enrolled in schools
21	Reduction in migration from rural to urban areas in the project area	nos	--	--	Reduction in migration during the project period
22	Annual mean household income	Rs	29930/-	34000/-	Rs. 4000/- increase
23	Any Other Measurable indicator of impact assessment <ul style="list-style-type: none"> <li>❖ 160 Beneficiaries from floriculture activity</li> <li>❖ 150 Beneficiaries from fodder production</li> <li>❖ 6100 traditional layer chicks were distributed under the project</li> <li>❖ Number of farmers benefitted: 1791</li> <li>❖ Direct employment created: 3262</li> <li>❖ SHGs assisted: 5</li> <li>❖ Total rainwater harvesting structures created 11 and 7 were rejuvenated.</li> </ul>				

### **Concluding Remarks:**

- PMKSY in Attappady block started in 2015 and was completed in 2022 with a project area of 5879 ha. The NRM activities followed in the project area are Gabion Structures, Streambank side Protection, water storage tanks for domestic as well as irrigation purposes, farm ponds construction and renovation and well recharge renovations.
- Engineering structures like check dams and gabion structures were constructed across the required areas to control soil erosion. At Konamkuthipallam of Melechavadiyur watershed, gabion structures were constructed at 100 m in a first-order stream. Melechavadiyur watershed mainly has a very steep slope which leads to gully erosion in high intensity rainfall periods. Hence, these gabion structures ensure the reduction in the flow of water in the stream so that, gully erosion is reduced.
- Drinking water shortage to a certain extent was taken care of by the installation of rainwater harvesting tanks and water storage tanks. The water from perennial streams is directly stored in the constructed tank. Then later it is used for domestic and irrigation purposes.
- Production system management activities provide funding for livestock management in all watershed areas thereby providing an excellent opportunity for self-employment for unemployed people. Flower cultivation was carried out in many tribal people's villages in the view of income generation. But it was observed that most of the floriculture crops cultivated were not market driven. Hence, market-oriented floriculture crops can be cultivated in the area to increase the income and living standards of the people.
- With these activities employment was generated both in agricultural and non-agricultural sectors and also the annual mean household income was improved.
- Poultry and animal husbandry in the project area was promoted as a part of JLG and PSM. The training and capacity building can be given to the tribal people in convergences with many schemes mainly on value addition of the products so that the livelihood system will be improved.
- It was observed that at the time of DPR preparation, many of the interventions is not clear. Hence, at the time of DPR preparation care should be taken to give priority

based on resource availability and the DPR should be clear in respect of all the interventions.

- There is a scope to improve the livelihood activities of the project area specially the tribal belts through production system management and value addition activities.

### Success story:

#### **KulamNirmananmGangatharenteSthalathinaduthu-Chalayur Watershed**

This construction of the pond plays an important role in supplying water to farmers in Chalayurooru. After the construction of this pondbananas, vegetables, floriculture, fodder crops are cultivated here. Mr. Prakashan S/o Gangadhranfrom Chalayur informed that millet production also will be possible if surplus water is there. A new ecosystem is created by the construction of the pond. This will enrich the biodiversity in that watershed.

