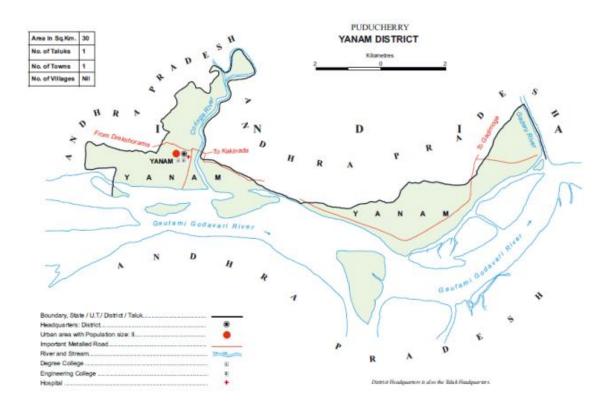
# Action plan for Restoration of Gautami Godavari and Coringa River





Puducherry Pollution Control Committee Department of Science, Technology & Environment Government of Puducherry



July - 2024

# ACTION PLAN FOR RESTORATION OF GAUTAMI-GODAVARI AND CORINGA RIVER, YANAM, U.T. OF PUDUCHERRY

# **Preamble**

The Union Territory of Puducherry consists of two Districts and two regions namely Puducherry District, Karaikal District, Mahe Region and Yanam Region respectively. The Mahe and Yanam Regions are under the administration of Puducherry District. All the two districts and the two regions are at different locations and geographically separated from each other.

Yanam is one of the regions in the Union Territory of Puducherry, which is 813 Km away from Puducherry. It is situated on the East Coast of the Indian Peninsula at 16° 42′ Northern latitude, and between 82° 11′ Eastern longitudes bounded on all sides by the East Godavari District of Andhra Pradesh State.

Yanam is located on the spot where the River Coringa branches off from Gauthami into two parts. Yanam Planning Area consists of Yanam town, Mettacur, Kanakalapeta, France tipa, Farampeta, Adavipolem, Isikitippah, Gureampeta, Savitri nagar, Dariyalatippa and other five islands where Yanam town is the central area. The region, which covers an area of 30.0 Sq.KM, has a population of 55,626 according to the 2011 census. The region is bounded on the east and south by river Gauthami Godavari River which discharges itself into Bay of Bengal after flowing almost 14 Kms towards east of Yanam. Coringa River flowing almost 2 Ksms reaches the Gauthami Godavari River.

# **Introduction**

Central Pollution Control Board (CPCB) executes National Water Quality Monitoring Programme (NWMP) for assessment of water quality of aquatic resources in the country through State Pollution Control Boards & Pollution Control Committees (SPCBs/PCCs). Water quality data for river monitoring locations are generated by SPCBs/PCCs by collecting and analysing the water samples for various field observations, physico-chemical, bacteriological, Metals and Pesticide parameters on monthly basis as per 'The Guidelines for Water Quality Monitoring, 2017' issued by Ministry of Environment, Forest & Climate Change (MoEF & CC). The water quality data generated is submitted by SPCBs/ PCCs through online data entry portal namely Environmental Water Quality Data Entry System - EWQDES and stored centrally at CPCB server.

For identification of polluted river stretches, the water quality data of river monitoring locations is reviewed and periodic assessment is carried out by CPCB and the monitoring locations non-compliant with the desired criteria for Bio-Chemical Oxygen Demand (BOD) i.e. < 3.0 mg/L are identified as polluted river stretches.

The water quality data for years 2019 and 2021 was analyzed by CPCB. Water quality data for the year 2020 has not been considered in the exercise as data generated in year 2020 may not reflect the actual water quality as most commercial and industrial activities were restricted due to lockdown in the country in light of COVID 19 pandemic. Based on the assessment, CPCB has identified the following 3 polluted rivers

Sl. No.	RIVER NAME	POLLUTED RIVER STRETCH/ LOCATION	MAX BOD OBSERVED	PRIORITY CLASS
1.	CHUNNAMBAR	ALONG NONANKUPPAM	7.5	IV
2.	CORINGA	ALONG GEORGEPETA	20.0	III
3.	GAUTAMI-GODAVARI	ALONG ADAVIPOLAM	25.0	II

Action plan for Chunnambar River has already been prepared and submitted to CPCB and necessary action has been initiated. An action plan has been evolved with the objective of restoration of Gauthami, Godavari and Coringa River, Yanam, U.T of Puducherry to meet the bathing standards of Dissolved Oxygen (DO), Biological Oxygen Demand (BOD) and Faecal Coliforms.

# The Action Plan consists of the following eight components:

- i. Assessment of pollution level in the river.
- ii. Inventorisation of industries located on the bank of the river.
- iii. Identification of polluted streams which contaminates the river.
- iv. Identification and prevention of Municipal Solid Waste, Hazardous Waste and Bio-Medical Waste dumping.
- v. Installation / upgradation of ETP/STP in the industries.
- vi. Installation of STP in the habituated area.
- vii. Eradication of open defecation on the River Bank

# 1. Assessment of pollution level in the rivers.

Quality of river water based on the sampling conducted in the year 2022 & 2023 is given in the table below. Water quality provides information on pollution dynamics of the river, identification of major sources for pollution etc.

Location	DO		BOD	
Location	2022	2023	2022	2023
Date of Sampling	29.11.2022	21.11.2023	29.11.2022	21.11.2023
Gautami Godaveri River (Near Adavipolam)	7.3	7.1	BDL (DL:1.0)	2.3
Gautami Godaveri River (Near Balayogi)	8.5	7.9	BDL (DL:1.0)	1.8
Coringa River (Tidal Lock)	7.0	3.8	BDL (DL:1.0)	4.7

The reported BOD value of 4.7mg/l in Coringa River revealed that untreated sewage is getting mixed in the river.

(Action: Puducherry Pollution Control Committee (PPCC))

#### 2. Inventorisation of industries located on the bank of river

PPCC- List of industries along Coringa and Godavari Rivers in Yanam Region

I. List of industries along Coringa River:

Sl.No	Name of the Industry	Size/ Category
1.	M/s High Tech Engineering	Small/Green
2.	M/s Lord Venky Pharma Pvt.Ltd.	Small/Orange
3.	M/s Precision Engineering	Small/Green
4.	M/s SriLakshmi ganeshModern Raw & boiled Rice Mill	Small/ Orange
5.	M/s Sri Sai Ganesh Tyres retreading Company	Micro/Orange
6.	M/s Sri Bagya Lakshmi Wood Industry	Small/ Orange
7.	M/s VKA Alloys	Small/ Orange

II. List of industries along Godavari River:

Sl.No	Name of the industry	Size/Category
1.	M/s AVR Zinc products Pvt. Ltd. unit-I	Small/ Orange
2.	M/s Dharani Silicates	Small/ Orange
3.	M/s Greeen Park Bio- Sciences Pvt. Ltd.	Small/ Orange
4.	M/s Image Feeds	Small/ Orange
5.	M/s Rungta Irrigation Ltd	Small/Green
6.	M/s Venky Parentals	Small/ Orange
7.	M/s Sree Yanam Steels Pvt. Ltd.	Small/ Orange
8.	M/s Sri Gayathri Modern Raw & Boiled Rice Mill	Small/Orange
9.	M/s Sri Sarada Rice Processing Unit	Small/ Green
10.	M/s Sri Vaishnuvi Agro Industries	Small/ Green
11.	M/s Sri Vasavi Compounding	Small/ Green
12.	M/s Seldom Pharma Pvt. Ltd.	Small/ Orange
13.	M/s Sai Sri compounding	Small/ Green
14.	M/s Scientific Labs	Small/ Orange
15.	M/s Reliance Industries Ltd.*	Large/Green

No industry in Yanam Region is permitted by the PPCC for letting the effluent/ waste water generation into the Coringa and Godavari Rivers and as such no industry is discharging the effluent/ waste water into these rivers.

(Action: Puducherry Pollution Control Committee)

<sup>\*</sup> M/s Reliance Industries Ltd is having the operations of Natural gas transportation Pipeline and Block Valve Station in Yanam Limits. The effluent/ waste water generated from their On Shore Terminal located in Andhra Pradesh Limits and 10 Km away from Goadavari River is being discharged into the Sea at a distance of 12 KMs from Godavari River shore through Marine Disposal Pipeline Syst

# 3. Identification of polluted streams which contaminates the river

Yanam has a mix of underground and open drainage system. All the storm water along with waste water goes into the drains. Most of the drains are crossing the densely populated areas of the city. Therefore, carrying all the generated grey water and storm water to the river. The areas that have the open drainage system are prone to unhygienic conditions. Some of the smaller drains discharge into the water bodies directly.

Desilting of the drain is carried out by Yanam Municipality for major drains. Most of the time drains remain clogged due to less frequency of drain cleaning.

Details of Drainage Network of Yanam

Drains (Length in Km)		
Open surface drains	23	
Storm Water Drains	15.46	

Source: Yanam Municipality

(Action: Commissioner, Yanam Municipality, PPCC)

# 4. Identification and Prevention of Waste on the river bank

River bank is one of the places for illegal dumping of Solid Waste, Hazardous Waste and Bio-Medical Waste. These practices would contaminate the river water. Signboard will be erected depicting not to dump the waste neither on the river bank nor in the river.

(Action: Commissioner, Yanam Municipality, PPCC)

# 5. Installation / Upgradation of ETP/STP in the Industries

It will be ensured that installation and upgradation of suitable STP/ETP in the industries and its proper operation, separate energy meter installed and the readings are recorded in separate register.

(Action: Puducherry Pollution Control Committee)

6. Provision of STP

Currently 6 MLD of sewerage is generated per day in Yanam and there is no formal

sewerage system in Yanam. Every house has a Septic tank and the Households has a

systematic and organized method to collect septage from household having septic tanks. The

households inform the Private Organization when their septic tank is full. The Private

Organization then lends its severed suction machine on chargeable basis which cleans septic

tanks. Overflow of septic tanks is collected into soak pit; it does go to drains or open fields.

The total sewerage generated in Yanam is not treated due to absence of Sewerage Treatment

Plant (STP) facility.

In Kurasampet where free pattas were issued along Coringa river bed side, Septic tanks

are not constructed, and the waste water is directly discharged into the Coringa River.

It is proposed to install 6 MLD of Sewerage Treatment Plant with estimated budget of

Rs.15 Crore.

(Action: RA, Yanam, PWD)

7. Eradication of open defecation on the River Bank

Though Yanam is declared as open defecation free, occasionally open defecation is reported

in fishermen hamlet. Information, Education and Communication Programme (IEC) will be

carried out to educate people on open defecation.

(Action: Commissioner, Yanam Municipality, PPCC)