

*Revised Action plan for
restoration of polluted river
stretches-*

CHUNNAMBAR RIVER



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



ACTION PLAN FOR RESTORATION OF CHUNNAMBAR RIVER, U.T. OF PUDUCHERRY

Preamble:

In pursuance of the Hon'ble National Green Tribunal (Principal Bench), New Delhi, orders dt. 20.09.2018 and 19.12.2018 in original application No. 673/2018 in the matter on News item published in "The Hindu" Titled *more river stretches are now critically polluted* - Central Pollution Control Board, an action plan has been evolved with the objective of restoration of Chunnambar, Puducherry to meet the bathing standards of Dissolved Oxygen (DO), Biological Oxygen Demand (BOD) and fecal coliforms within 6 months period.

River Rejuvenation committee has been constituted vide OM No. 4739/PPCC/RRC /SCI-I/2018 dt. 13.11.2018 to prepare and execute the action plan.

A meeting was held on 28.01.2019 under the Chairmanship of Hon'ble Chief Minister on preparation of revised Action plan to restore polluted river stretches.



Chunnambar River:

Chunnambar is the tail end portion of the Sankaraparani river. It originates from Gingee in Tamil Nadu, hence it is also called Gingee river. It enters Puducherry at Suthukeney and flows into Puduherri for 34 Kms before reaching Bay of Bengal. It is a seasonal river and its flow depends on the rainfall of Gingee region.

Based on the value of BOD, Chunnambar river has been categorized as Priority V (BOD: 6 mg/l) by Central Pollution Control Board.

Ariyankuppam and Villiyanur are the major town located nearer to the river. No any industrial Estate is present .Map depicting location of major town , distributaries and drains is enclosed.

The Action Plan consists of the following ten components:

- i. Assessment of pollution level in the river.
- ii. Inventorisation of industries located on the bank of the river and closing down of unauthorized industrial operations if any .
- 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. Provision of STP in the habituated area of river bank.
- vii. Eradication of open defecation on the River Bank
- viii. Development of Green belt on the bank and improving biodiversity.
- ix. Arresting sand mining.
- x. Developing Information Education and Communication programmes (IEC).

1. Assessment of pollution level in the rivers.

The study will involve collection of water samples from the Chunnambar river, Puducherry Region and it will throw light on pollution dynamics of the river, identification of major factors for pollution, dilution requirement etc. The details of latest river water quality monitoring is given in Table.1.

Table. 1 Details of latest River monitoring

Parameters	CHUNNAMBAR RIVER
	Jan - 2019
Dt. Of Sampling	07-01-2019
Time	10:55 AM
DO (mg/l)	6.6
BOD (mg/l)	2.3
Fecal Coliform (MPN/100ml)	220
Inference	All the parameters are within the standard limit

(Action: PPCC, cost: Zero, Period of Completion: 4 months)

2. Inventorisation of industries located on the bank of river and Closing down of unauthorized industrial operations if any.

Sankaraparani river flows through Mannadipet Commune Panchayat, Villianur Commune Panchayat and Ariyankuppam Commune Panchayat. Inventorisation of industries located along the bank of the river Many industries are located on the bank of the river will be useful in identification of unauthorized units, adequacy of existing STP/ETP in the units and compliance of consent conditions. The list of industries, capacity of STP and ETP and gap analysis is given below:

Table.2 Gap analysis in waste water /sewage treatment

Sl. No.	Name of the Industry	Water Requirement (KLD)	Waste water	Sewage generation	ETP	STP capacity	Gap analysis
1	M/s. Deedi Resort	33	-	26		40	Treatment capacity is sufficient
2	M/s.Wind Flower	10	-	7		10	Treatment capacity is sufficient
3.	M/s.Pondicherry Distilleries Ltd. (Blending Unit)	150	55	8	70	-	STP of capacity 10 KLD need to be provided .
4.	M/s.Indian Oil Corporation	26	Nil	8	Nil		STP of capacity 10 KLD need to be provi
5	M/s.Jothy Laboratory	52	5	7	5	20	
6	M/s.Caplin Point	30	15	5	40		

All the industries which are located on the river side and operating without obtaining CTE/CTO from PPCC if any will be closed.

(Action: PPCC, Cost: Zero, Period of Completion: 2 months)

3. Identification of polluted streams which contaminates the river

Based on the pollution level assessment report, the hotspots will be identified and the polluted streams which causes deterioration of river quality could be nabbed out.

4. Identification and Prevention of Municipal Solid Waste, Hazardous Waste and Bio-medical Waste dumping sites

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. Inspection team consisting of Commissioners of respective Commune Panchayat and Officer of PPCC will make periodical inspection and identify such dumping and take action on the offender to remove the waste immediately. Signboard will be erected in all areas depicting not to dump the waste and imposing fine by the Municipality/Commune Panchayats. Details of Solid waste and Bio-Medical waste generation

2. Details of Solid Waste and Bio-medical Waste generation

Sl. No	Name of Commune Panchayats	Solid Waste Generation (TPD)	Bio-medical Waste Generation (kg/day)
1	Ariyankuppam Commune Panchayat	26	16.05
2	Mannadipet Commune Panchayat	26	181.9
3	Villianur Commune Panchayat	10	41.0

(Action: PPCC, Cost: Zero, Period of Completion: 4 months)

Solid waste generated from Ariyankuppam and Villiyanur Commune Panchyath are collected and disposed at Kurumbapet disposal site. Solid waste generated from Mannadipet Commune Panchyath is disposed in Government land.

All the above quantity of Biomedical waste is collected, treated and disposed at Common Biomedical Waste Treatment Facility (10 TPD capacity) located at Thuthipet.

(Action: Local Administration Department, and PPCC, Cost: Rs. 5,000, Period of Completion: 2 Months).

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

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

(Action: Puducherry Pollution Control Committee, Cost: Zero, Period of Completion: 1 Month)

6. Provision of STP in the habituated area of river banks

Villiyannur is one of the urban agglomerations located on the bank of Sankaraparani river. Approximately 15,000 households and commercial establishments are located. It is estimated that around 0.6 MLD of sewage being is generated.

Human settlement and commercial establishments are present on the bank of Arasalar river. Public Works Department and LAD will prepare DPR for provision of STP in Villiyannur and Karaikal.

(Action: Public Works Department and Local administration Department, Period of completion 3 months)

Chunnambar is one of the active tourist spot in Puducherry. Boat House is attractive tourist destination. Around 5000 person per week are visiting the place. It is proposed to establish 10 KLD STP to treat the sewage water.

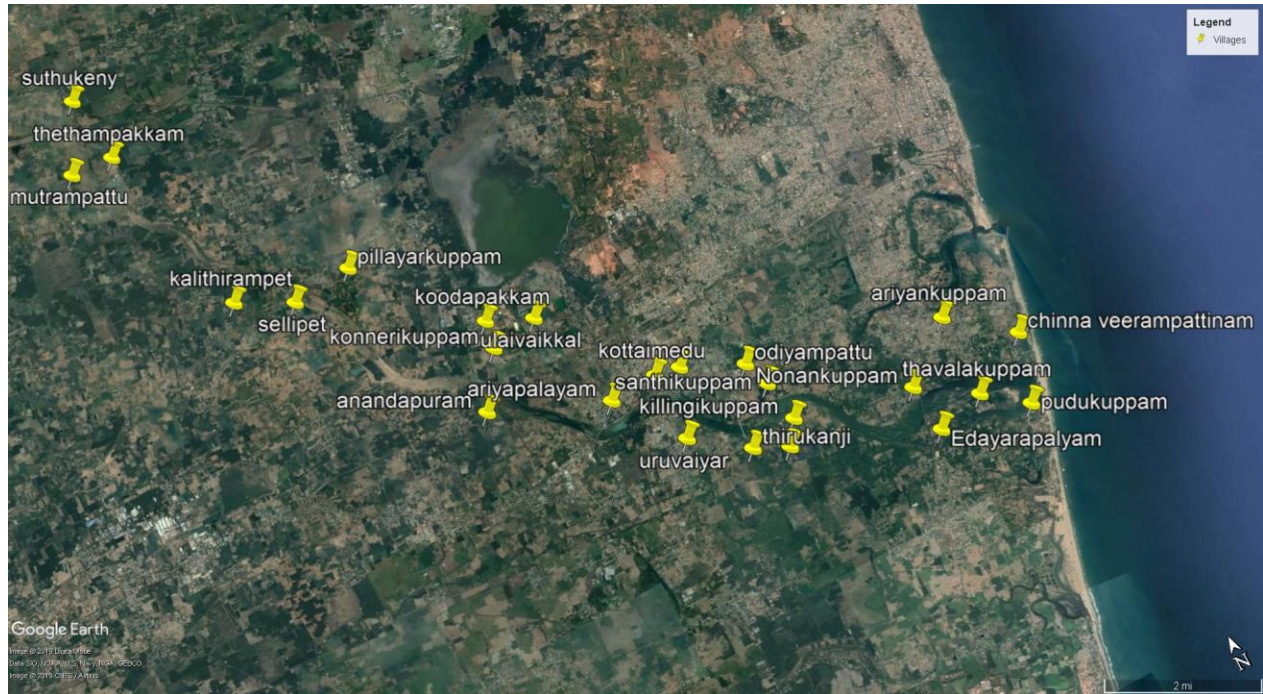
(Action: Tourism Department, Cost: 20 Lakhs, Period of Completion: 6 months)

7. Eradication of open defecation on the River Bank

There are 23 Revenue villages (Fig.1) are present on the bank of Sankaraparani River

Identification of Households are not having toilet facility and Construction of toilet under Swachh Bharat Mission-Gramin. Creating awareness on the ill effect of open defecation.

Fig.1 Villages on the bank of Sankaraparani river



(Action : DRDA, Period of completion : 6 months)

8. Development of Green belt on the bank and improving biodiversity

As Chunnambar is influenced by tidal action, it is suitable for development of salinity resistance plantation on both the banks upto the check dam followed by indigenous plantation. It will attract lot of avian fauna and butterflies besides enhancing aesthetic values of the river.

(Action: Forest Department, Cost: 5 Lakhs, Period of Completion: 6 months).

9. Arresting illegal sand mining

River bed is known for illegal sand mining. It affects flow of the river. In collaboration with Revenue and Police Department, it will be arrested.

(Action: District Collector, SP, Cost: Zero, Period of Completion: 6 months).

10. Information, Education and Communication Programme. (IEC)

Creating awareness among the public about the necessity of restoration of the river is necessary. Whatsapp group “*Save Chunnambar*” will be formed and connected with line departments viz, Local Administration Departments, Forest Department, Department of Science Technology & Environment, Revenue, Police Department, Public Works Department, and NGO. Any act of affecting purity of the river will be posted in the group and remedial action will be immediately initiated.

(Action: DSTE, Cost: Zero, Period of Completion: 30 days)

Documentation of fauna and flora of Chunnambar River will be prepared in association with Academic institute.

(Action: DSTE, Cost: Rs. 2 Lakhs, Period of Completion: 6 months).

