

**BEFORE THE HONOURABLE NATIONAL GREEN TRIBUNAL  
SOUTHERN ZONE, CHENNAI**

**IN**

**O.A. No. 156 OF 2020 (SZ)**

**IN THE MATTER OF**

**AvilalaCheruvuParirakshanaSamiti  
and another**

**... Applicant(s)**

**Versus**

**The State of Andhra Pradesh Rep.  
by the Chief Secretary andOthers**

**... Respondents(s)**

**Submission of Detailed Project Report (DPR) to the Hon'ble NGT (SZ)**



**(Dr. C.Palpandi)**  
Scientist 'C'  
Integrated Regional Office  
Ministry of Environment, Forest & Climate Change, Chennai

GOVERNMENT OF ANDHRA PRADESH  
WATER RESOURCES DEPARTMENT



**National Green Tribunal**

N.W: D.P.R FOR RESTORATION OF  
AVILALA CHERUVU NEAR  
AVILALA (V) IN TIRUPATHI  
RURAL MANDAL OF CHITTOOR  
DISTRICT

Est. Rs. 9920.00 Lakhs.

IRRIGATION CIRCLE  
CHITTOOR.

IRRIGATION DIVISION  
TIRUPATHI.

IRRIGATION SUB-DIVISION,  
TIRUPATHI.

IRRIGATION SECTION,  
TIRUPATHI RURAL.

**Report accompanying the DPR for the work of "Restoration of Avilala cheruvu near Avilala (V) in Tirupathi rural mandal of Chittoor District".**

Est. Rs: 9920.00 Lakhs

The Avilala Cheruvu (hereinafter also referred as Avilala tank) is a water body located at about 1.20 Km Southwest of Avilala Village, Tirupathi Rural Mandal, Chittoor District, Andhra Pradesh. It is spread in survey Nos. 17/4, 18/1, 18/2 and 19 of Avilala village. The Hydraulic particulars of the water body were as follows:

FTL	:	+508.19'
MWL	:	+510.69'
TBL	:	+515.69'
Top Width of bund	:	6', 5' and 4'
Side slopes	:	1 <sup>1/2</sup> to 1 and 2 to 1
Height of revetment above FTL	:	2 <sup>1/2</sup> ft.
Area of water spread at FTL	:	201.60 Acres
Capacity of the tank at FTL	:	43.80 mcft.
Ayacut	:	279.00 Acres
Length of Bund	:	2720 mtrs.
Combined catchment area	:	5.38 sq. miles

In the year 1994 Avilala Tank was alienated to Tirupathi Urban Development Authority (TUDA) and Andhra Pradesh, Housing Board vide G.O.Ms.No.84 (Revenue), dated: 28.01.1994. Challenging the said Govt. orders a writ petition No.8650 of 1994 was preferred in Hon'ble High Court, Hyderabad by a registered society called "The Intellectual Form". Upon dismissal of the said writ petition Special Leave Petition was preferred against the orders the Hon'ble High Court. Subsequently, Civil Appeal no. 1251 of 2006 (Arising out of SLP (Civil) Nos. 7196-7197 of 2001) was decided on 23.02.2006, wherein the Hon'ble Apex court was pleased to dispose the appeal with directions as given below.

- 1) *No further construction to be allowed in the area.*
- 2) *Each house already constructed by the APHB/TUDA may provide for roof top rain water harvesting. All the storm water in the already built colonies to be recharged to ground water. Structures for such purposes to be designed in consultation with CGWB.*
- 3) *No bore well/tube well for any purpose to be allowed in the area.*

4) *An area of 40 acres presently reserved for the Government should not be developed in any way that may lead to concretization of the ground surface. Recharge structures to be constructed for rain water harvesting.*

5) *Piezometers to be set up at selected locations in consultation with the CGWB to observe the impact of rain water harvesting in the area ground water regime.*

From 2006 to 2015 no activity was taken up in the Avilala tank and it remained as a Tank only.

On 26.12.2015 during discussions held on the developmental activities of Tirupathi Town, the Tirumala Tirupathi Devasthanams (TTD) authorities have shown interest for development and beautification of Avilala Tank as part of keeping Tirupathi town greenery and ecological balance.

The then Superintending Engineer, Irrigation Circle, Chittoor vide Lr.No. DB/SO.2/W-25, 506 M, dated 26.12.2015 had given permission to TTD for development and beautification of Avilala Cheruvu (tank), duly keeping in view the supreme court orders, by not changing the morphology of the tank.

The TTD vide Lr.No. LOC No.2287/D12/CEM/TTD/TPT/2017, dt.30.05.2017 and Dt. 21.07.2017 requested the Government of Andhra Pradesh to accord permission for the work of "Development of Avilala tank at Tirupathi" with a cost of Rs.18.50 crores and to include the same in the revised budget of 2017-18. The TTD proposed to develop Spiritual Park, Aesthetic Park, walking park, develop eco-system and percolation tank etc. to improve ground water availability to improve pilgrims' amenities etc. The Government of Andhra Pradesh also accorded permission to TTD to take up the proposed works of development for the above mentioned amenities for pilgrims and public, vide G.O.Rt.No.947, dated 11.09.2017 and included the same in the revised budget of 2017-18.

The then Executive Engineer, Irrigation Division, Tirupathi vide Letter No. DB/JTO.IV/TPT/ 128 M Dt. 03-03-2018 has intimated the Chief Engineer, T.T.D., Tirupathi about the Hon'ble Supreme court orders, and requested not to take up any construction in the foreshore area of tank and also requested to stop the laying of road in the foreshore area of the tank. Further, the then Executive Engineer, Irrigation Division, Tirupathi vide Lr.No.603 SE, dated 27.10.2018 has reported to the Superintending Engineer, Irrigation circle, Chittoor that the foreshore area of Avilala tank was excavated by deploying six (6) excavators, eight (8) tippers and about thirty (30) tractors for forming hillock type structures on western side of the tank.

foreshore of the tank by changing the morphology of the tank and instructed the Executive Engineer, Irrigation Division, Tirupathi to submit a detailed status report.

The then Executive Engineer, Irrigation Division, Tirupathi along with Deputy Executive Engineer, Irrigation Sub-Division, Tirupathi and Assistant Engineer, Tirupathi Rural have inspected the Avilala tank on 04.09.2019 and found that the following structures were constructed by the TTD.

- 1) Compound wall: 90% of compound wall, all along the tank, was completed by demolishing the tank bund.
- 2) WMM Road: Metal layers were laid without blacktopping.
- 3) CM&CD works: Two culverts with pipes were constructed.
- 4) Shed: 5 Nos of iron pillars with trusses without roof covering are erected.
- 5) Buildings: Columns up to plinth level was constructed.
- 6) Earthen mounds and bund: Earthen mounds and bund are formed in the foreshore area.
- 7) Temporary shed: one temporary shed was constructed.

The TTD authorities had changed the morphology of the tank in violation of the conditions stipulated by the Irrigation department while permitting the development works as mentioned above. The same was intimated to the Superintending Engineer, Irrigation Circle, Chittoor vide Lr.No. DB/JTO.IV/Avilala/513 SE, Dt.18.09.2019.

The Executive Engineer further submitted that the southern side of Avilala tank is being used by the AFCONS Company for fabrication and storage of materials required for construction of Garuda Varadhi fly over in Tirupathi city, a project taken up by TUDA, Tirupathi. On enquiry, the M/s AFCONS have furnished records of permission accorded to them vide the proceedings of the Vice Chairman, TUDA, Tirupathi, which in turn have given reference of the G.O.Ms.No. 408, Municipal Administration and urban development (UBS) Department Dt. 18-12-2018, in pursuance of which the said proceedings were issued. The above GOMs. No.408 reads as under:

*"The land falling in alignment and belonging to TTD/TUDA/MCT/APSRTC and any other Government properties shall be handed over to TSCCL for project execution".*

In accordance with the above Govt. Orders, the TUDA has permitted M/s AFCON to utilize the land in Sy.No. 19 of Avilala village on a nominal rent of Rs. 2.00 Lakhs (Rupees two lakhs only) per month for setting up of casting yard of Garuda Varadhi project with a condition to the effect that they should vacate the land after Garuda

not be  
surface.

The Joint Executive Officer, Tirumala Tirupathi Devasthanams, Tirupathi, vide Lr.No. ROC No.2287/D12/CG/TTD/TPT/2017, dt.01.08.2018, has stated that as per the orders of Govt., in G.O.Rt.No. 947 Dt. 11-09-2017, the APUG & BCL (Andhra Pradesh Urban Greenery and Beautification Corporation Ltd.) has entered into an MOU with the TTD and have furnished the proposals for development of Avilala Ecological Park with an DPR cost of Rs.181.13 crores (**Phase-1 for 80.14 crores and Phase-II for Rs100.99 crores**). Further, as per the minutes communicated by the Managing Director, APUG & BCL, the Chief Minister, Govt. of Andhra Pradesh has conducted a review meeting on 04.07.2018 and gave his consent to proceed with the proposals of Phase-1. Accordingly, the Government also accorded permission to take up the development of Avilala Tank at Tirupathi with a revised project cost of Rs.80.14 crores under Phase-1, vide G.O.Rt.No.1775, dated 13.12.2018, duly stipulating compliance to the directions of Hon'ble Supreme Court of India given on 23.02.2006 in SLP (civil)/1251 of 2006 (Arising out of 7196-7197 of 2001).

As the matter stood thus, the petitioners, Sri Akula Sathish Kumar and Sri B. Mohan Krishna, Tirupathi jointly submitted their representation vide letter dated 22.7.2019 to the following authorities.

- (i) The Chief Secretary to Govt., A.P. Secretariat, Vijayawada
- (ii) The Executive Officer, TTD, Tirupathi
- (iii) The District Collector, Chittoor
- (iv) Superintending Engineer, Irrigation Circle, Chittoor

In their representation the petitioners have stated that the developmental works are being taken up by the TTD in Avilala Cheruvu, i.e., construction works of Sri Venkateswara Spiritual theme park, by flouting the orders of the Hon'ble Supreme Court and requested the authorities to ensure that the activities are in conformity with the Judgment of Hon'ble Supreme court of India(Supra). Otherwise, they cautioned that, they will have no alternative except to file an application before the Hon'ble National Green Tribunal against the authorities.

The Superintending Engineer, Irrigation Circle, Chittoor vide Lr.No.SE/IC/CTR/DB/T4/ATO/W.25/739 M, dated 07.08.2019 requested the TTD authorities not to take up any permanent structure in the Avilala Tank and restore the tank to its original morphology. Violation of the condition/ changing the morphology of the tank leads to legal complications to be faced by all the concerned departments. The Superintending Engineer, Irrigation Circle, Chittoor also addressed the District Collector, Chittoor with a request to address the TTD authorities not to take up any permanent structure in the

The Executive Engineer, Irrigation division, Tirupathi vide Lr. No. DB/JTO-4/ Encroachments/ 603 M Dt. 31-08-2020, has requested the Vice Chairman, TUDA, Tirupathi for cancellation of permission given to the M/s AFCONS Company by the TUDA authorities for utilizing the part of Avilala tank bed. The Executive Engineer, Irrigation division, Tirupathi vide, Lr.No. DB/JTO-4/ Encroachments/ 604 M Dt. 31-08-2020, has also requested the Executive Officer, T.T.D, Tirupathi for regaining the morphology of Avilala tank and restoring the bunds of the Avilala tank to comply with the said orders of the Hon'ble Supreme court of India.

On 23.09.2020 the Executive Engineer, Irrigation Division, Tirupathi SriJ. Venkata Siva Reddy, S/oJ. Reddeppa Reddy has submitted counter affidavit to the Hon'ble National Green Tribunal, Chennai.

**Joint Committee – O.A. No. 156 of 2020 dated 05.11.2020**

The Hon'ble NGT, Chennai in its order dated 05.11.2020, considering the prevailing circumstances and submissions made by both the parties and also considering the allegations made, appointed a Joint Committee comprising of the following members, to inspect and ascertain the present status of the area i.e. the Avilala Tank.

1. Senior Officer from Ministry of Environmental, Forests and Climate change, Integrated Regional Office (IRO), Chennai.
2. The District Collector, Chittoor District.
3. Superintending Engineer, Irrigation Department.
4. An officer from the office of the principal Chief Conservator of Forests & Head of Forest Force (HOFF) not below the rank of Chief Conservator of Forests to be deputed by the Principal Chief Conservator of Forest & Head of Forest Force (HOFF).

The committee was directed to ascertain the extent of water body as per the revenue records, the present extent available, number and nature of encroachment and what is the proposed action to be taken to restore the water body to its original position in tune with the directions given by the Hon'ble Apex Court and any damage has been caused to environment, what is the nature of damage caused and assess environmental compensation and submit a factual as well as action taken report to the Tribunal on or before 12.01.2021.

As per the above directions of the Hon'ble NGT, Chennai, a Joint Committee was

(Rupees two lakhs only) per month for setting up of casting yard of Garuda Varadhi project with a condition to the effect that they should vacate the land after Garuda Varadhi project work is over or as and when this authority requires the land whichever is earlier. Further, the agency should adhere to the following conditions.

- The company is permitted to utilize the land purely for casting/storage of materials relating to the Garuda Varadhi project and should not cause any damages or obstruct natural watercourse.
- They should not raise any permanent constructions.
- They should not change any physical features of the land.

The then Executive Engineer, Irrigation Division, Tirupathi has requested the Superintending Engineer, Irrigation Circle, Chittoor to address the TUDA authority seeking the grounds based on which it issued the above proceedings, permitting M/s AFCONS to utilize the Avilala tank bed for the purpose of casting yard.

The Superintending Engineer, Irrigation Division, Chittoor vide Lr.No.SE/IC/CTR/DB/T4/ATO/W.25/921 M, dated 09.10.2019 has once again requested the TTD authorities not to take up any permanent structures in the foreshore area of the Avilala tank and regain the tank to its original morphology as per the aforementioned judgment of the Hon'ble Supreme Court of India. The Superintending Engineer, Irrigation Circle, Chittoor submitted the copy to the District Collector, Chittoor with a request to address the TTD authorities not to take up any permanent structures in the tank thereby changing the morphology of the tank. The Superintending Engineer, Irrigation Circle, Chittoor also instructed the Executive Engineer, Irrigation Division, Tirupathi to address the TUDA, Tirupathi regarding allotment of land to M/s AFCONS company for setting up the casting yard for Garuda Varadhi Project and evict the encroachment immediately with the support of revenue authorities.

On 24.06.2020, Avilala Cheruvu Parirakshana Samiti represented by its convener Sri.Akula Satish Kumar, Tirupathi and Swarnamukhi Bachavo Andolan Samiti represented by its president Sri B. Mohan Krishna have approached the Hon'ble National Green Tribunal, (SZ), at Chennai and filed an application No.156 of 2020 (SZ), challenging the permission given by Irrigation Department for taking up development and beautification works in the Avilala Cheruvu and requested the Hon'ble Tribunal to inter alia direct the concerned authorities to refrain from taking up any development works in the catchment area of the Avilala Cheruvu and restore the its water body to its original position, without reducing the capacity of the tank, besides awarding cost to the respondents.

	<u>Sy. No.</u>	<u>Extent (Acres)</u>
Tank	18/1	187.03
	18/2	0.19
	17/4	<u>0.53</u>
	<b>Total</b>	<b><u>187.75</u></b>

Cheruvu Thottu  
(Area reserved for excavation of earth to meet the requirement of bund in emergency conditions)

19	<u>13.87</u>
<b>Total</b>	<b><u>13.87</u></b>
<b>GrandTotal :</b>	<b><u>201.62</u></b>

Thus total extent of water body of the Avilala Tank as per revenue records is 201.62 Acres.

## 2. Present extent available:

The area of the utilized for various purposes is as under:

Part	Description of land	Extent (Acres)	Status	Remarks
Part-I	On Northern side of NH 205	144.48	Available	
Part-II	On Southern side of NH-205	21.19	Available	
Part-III	Land available in Survey number 17/4	0.53	Available	Available after Hon'ble Supreme Court of India Judgment.
Part-IV	Extent available in Survey no.19 Cheruvu thottu	<u>13.87</u>	Available	Available after Hon'ble Supreme Court of India Judgment.
	<b>Available Extent</b>	<b><u>= 180.07</u></b>		

formed duly comprising of the following officers:

1. Dr. C. Palpandi, Scientist-C from Ministry of Environmental, Forests and climate change will act as a Nodal Officer.
2. Dr. N. Bharat Gupta, IAS, The District Collector, Chittoor
3. Sri. M. Surendra Reddy, Superintending Engineer, Irrigation Circle, Chittoor.
4. Sri. R.K. Suman, IFS, Additional Principal Chief Conservator of Forests, Government of Andhra Pradesh, Guntur.(PCCF & Ho FFRc. No. 7864/2020/Admn.1/20/11/2020)

The exhaustive mandate of the committee is as under:

1. To ascertain the extent of water body as per the revenue records,
2. To ascertain present extent of the Avilala Tank available,
3. To ascertain the number and nature of encroachments
4. To propose the action to be taken to restore the water body to its original position in tune with the directions given by the Hon'ble Apex Court.
5. To ascertain the extent of damage, if any, caused to the environment,
6. To ascertain the nature of damage caused to the environment.
7. To assess environmental compensation and
8. To submit a factual as well as action taken report to the Tribunal
9. To submit the report on or before 12.01.2021.

The Joint Committee has inspected the Avilala tank on 18.12.2020 along with the designated representatives of various stake holder departments such as Tirumala Tirupathi Devasthanams, Tirupathi, Tirupathi Urban Development Authority, Tirupathi, Revenue Department, Tirupathi, M/s AFCONS representatives etc.

With reference to the mandate given by Hon'ble National Green Tribunal, the Joint Committee submits the following for favour of information and kind consideration of the Tribunal.

**1. The extent of the water body as per the revenue records:**

As per the Resurvey and Resettlement register of 49, Avilala village in the Chandragiri Taluka of Chittoor District, the extent of the Avilala tank is as follows.

Out of this tank bed area, an extent of 10.20 acres of land was given for formation of NH 205 road (National Highway) which is running east-west and passing through the foreshore/tank bed area of Avilala tank thereby dividing the tank into two parts of areas 144.38 acres on the north and 21.19 acres on the south of it, which are both interconnected by an RCC Bridge. Further, an area of 1.1 acres of land was allotted for sub-station vide a Govt. order which predates the Instant orders of Hon'ble Supreme Court. Besides, an area of 9.90 acres of tank bed was utilized for construction of a metal road from NH 205 to Vaikuthapuram of Tirupathi town passing through the western side of foreshore of tank. This metal road was constructed without any supporting Govt. Order. Further, another area of 0.33 acres of land was utilized as part of road from Tirupathi to Pachikapalem which is also doesn't have any Govt. orders. Thus different parts of the Avilala tank at present are as under:

- |   |                       |
|---|-----------------------|
| 1. Extent of land given for various purposes                                  | : 21.55 acres.        |
| 2. A).Extent of the tank bed area available                                   | : 165.67 acres        |
| B).Cheruvu thottu area available  | : 13.87 acres.        |
| C).Land in Survey no.17/4   | : 0.53 acres          |
| TOTAL area available (2.A+B+C)  | : <u>180.07 acres</u> |
| 3. Total extent of the tank (1 (21.55 acres) +2 (180.07 acres) =201.62 acres. |                       |
- Thus total extent of the tank Avilala Cheruvu clearly available at present is 165.67 acres.

### 3. Number and Nature of the encroachments:

There are no encroachments either in the form of buildings or in the form of land other than the ones mentioned above in point No. 2 "Present Extent Available". However T.T.D. (Tirumala Tirupathi Devasthanams) in coordination with the TUDA (Tirupathi Urban Development Authority) has planned for taking up certain developmental and beautification works in the Avilala Cheruvu tank bed area. A copy of the plan was presented before the committee by TUDA representatives during the inspection.

Part-V	Land given for sub-station (permanent structure)	1.12	Not Available	Vide G.O.Ms.No. 84 Dt. 28-01-1994
Part- VI	Land given for NH 205 (Permanent structure)	10.20	Not Available	As enquired in the office of Revenue divisional officer, Tirupathi it is found that the land was given to NH in the year 2003 the records or not traced out.
Part-VII	Metal road is passing on western side of foreshore of tank from NH 205 to Vaikuthapuram of Tirupathi town (Permanent structure)	9.90	Not Available	Permission was not given by Government for this road On enquiry with local people it is found that the road was formed after the Judgement of the Hon'ble Supreme Court in SLP(Civil) Nos. 7196-7197 of 2001)
Part-VIII	Land given for road from Tirupathi to Pachikapallam (Permanent Structure)  Not Available Extent	<u>0.33</u>  <u>= 21.55</u>	Not Available	Permission was not given by Government for this road On enquiry with local people it is found that the road was formed before the Judgement of the Hon'ble Supreme Court in SLP(Civil) Nos. 7196-7197 of 2001)
<b>Total tank bed area (Part I to Part VIII) =</b>		<b>201.62 Acres</b>		

The total extent of the erstwhile tank is 201.62 acres, out of which the extent of tank bed is 187.75 acres and Cheruvu Thottu (Area reserved for excavation of earth to meet the requirement of bund in emergency conditions) is 13.87 acres.

**2. On South Side of NH-205:**

Sl No	Name of the segment	Extent /area	Purpose	Remarks
1	Afcon's Casting yard	18 Ac	Casting yard	
2	Sand dumping area	3.19 Ac	Sand dumping	
3	Cheruvu thottu	13.87 Ac	Untackled area	
	<b>TOTAL AREA</b>	<b>35.06 Ac</b>		

**3. Encroachments in Cheruvu:**

Sl No	Name of the segment	Extent/ area	Purpose	Remarks
1	Sub Station	1.12 Ac	Construction of Sub Station	
2	Land for NH-205	10.2 Ac	Formation of NH-205 road.	
3	Metal road	9.90 Ac	Road is formed on Western side of Foreshore of tank from NH-205 to Vaikuntapuram of Tirupathi town.	
4	Land for road from Tirupathi to Pachikapallam	0.33 Ac		
	<b>TOTAL AREA</b>	<b>21.55 Ac</b>		

The proposed works for developments as per the above plan are as under:

**1. On North Side of NH-205:**

Sl No	Name of the segment	Extent /area	Purpose	Remarks
1	Formation of Mounds	27.97 Ac	For planting of all the indigenous species of Seshachalam forest	
2	Formation of walkway/ carriage way, pathway, cycle way	10.64 Ac	For movement of vehicles	
3	05 nos of Sheds	0.1 Ac	For amenities	
4	Internal pathways	10.60 Ac	For movement of vehicles.	
5	Formation of Lake	10.82 Ac	Acts as a major water body in the proposed Ecological Park	
6	Formation of Internal swale	5.27 Ac	Acts as secondary water body. It stores excess water from the garden area.	
7	Formation of ponds	1.17 Ac	To maintain water constantly round the year for percolation.	
8	Development of different types of theme gardens	65.00 Ac	For enhancing urban environment, promoting eco-tourism,	
9	Untackled area	12.91 Ac		
10	In Survey no.17/4	0.53 Ac		
	<b>TOTAL AREA</b>	<b>145.01 Ac</b>		

- j) Seven mounds/hills of varying heights ranging from 4.00 Mts. to 5.00 Mts. have been formed on south - western and western part of the tank bed to represent the seven hills of Sheshachalam hill ranges. The total area of the mounds/hills is about 28.00 Ac. The mounds/hills were formed by excavating the earth from the bed of the tank. Water has impounded at certain places in the excavated portions of the bed.
- k) Five (5) steel framed structures are erected on concrete blocks for creating basic amenities for facilitating the future visitors of the proposed theme park. Each structure is about 100 to 200 Sq.Mts plinth area. **The proposed amenities include cafeteria, shelters from sun and rains, toilets etc**
- l) Protective barbed wire fencing over the compound wall is provided.
- m) On South side, out of available extent of 21.19 acres, 3.19 acres is used as Sand dump area.
- n) On South side of NH-205, 13.87 acres of Cheruvu thottu land is available on the South west corner of the tank bed area in Survey no.19.
- o) On North side, 53 cents of land is available in Survey no.17/4 on Western boundary of the area.

Thus it was observed that the following types and extent of encroachments and damages have been done to the erstwhile Avilala Cheruvu tank:

S no.	Structure name	Extent	Prior to SC order (y/n)	Type (permanent/non-permanent)	Agency/department responsible	Remarks
1.	Sub Station	1.12 Ac	Yes	Permanent		
2.	NH 205	10.20 Ac	Yes	Permanent		
3.	Land for road from Tirupathi to Pachikapallam	0.33 Ac	No	Permanent		
4.	Metal road on western side of Foreshore of tank from NH-205 to	9.90 Ac	No	Non-Permanent		

**Total Area of the Tank**

**(1. On North Side of NH-205 (145.01 acres)**  
**+ 2. On South Side of NH-205 (35.06 acres)** = **201.62 Acres**  
**+ Encroachments in Cheruvu (21.55 acres)**

Further, as per the above plan the following developmental activities were taken up in the tank bed area.

- a) A compound wall for a length of about 3.00 Kms was constructed all along the periphery of the tank bed by removing the bund of tank.
- b) Whereas on two sides i.e., North and East, the compound wall is constructed, along the boundary of the tank, on southern side the compound wall is constructed on Northern side of the existing NH 205 road which is not on the periphery of the tank. On western side, the compound wall is constructed within the foreshore area of the tank. A road for a length of about 800 Mts and with a width of about 5.00 Mts was laid on western side of tank from NH 205 to Vaikunthapuram of Tirupathi town.
- c) As regards the tank bed area on Southern side of the NH 205 there is no fencing/boundary wall.
- d) The tank bed area of about 18.00Ac, located on the southern side of NH 205, is being used as casting yard for fabrication of concrete beams, girders etc., by M/s AFCONS Company for use in Garuda Varadhi fly over project.
- e) There is a sand dumping yard on the south west corner of the tank bed area on the north of the NH 205.
- f) Formation of internal roads/pathways with metal layers, over laid with a gravel top layer has been done within the tank bed area. These pathways are about 7.50 Mts., 6 Mts. and 3 Mts. wide in different stretches, covering a total area of about 10.60 Acre of tank bed.
- g) **26** nos. of pipe culverts are constructed across the above internal roads/path ways.
- h) An area of about 5.00 acres on the southern portion of the tank bed adjacent to the northern side of the NH 205 has been levelled and a spacious vehicle parking space for about 1000 nos. of vehicles has been created/developed.
- i) Peripheral road of width about 6.0 Mts around the tank bed area of about 2.80 Km length has been completed. The said road lies within the tank bed area.

etc. within the tank bed, which if allowed would not only lead to gross tampering with the morphology of the tank it would amount to killing the very tank itself as a water body, which in turn goes against the very spirit of the orders of the Hon'ble Supreme court (supra). It is pertinent to mention that TUDA had earlier taken up the work of development and beautification of Tiruchanur tank, where in the components of works included strengthening of tank bund, desilting of tank bed, landscaping of tank bunds and plantation on the tank bund. However, the components of works proposed in the same name of "development and beautification" of Avilala tank was at stark variance with the ones proposed for Tiruchanur tank. Thus the development and beautification of Avilala Cheruvu (Tank) was construed as developing it as an urban park for the growing township with all amenities, which the petitioners have all along been objecting in courts of law.

In view of the above and keeping in view the orders of Hon'ble Supreme Court in this regard and also for maintaining the water body with adequate water storage in the low rainfall water scarce area like Tirupathi, restoration of Avilala tank is essential. Since a part of the Avilala tank has already lost to certain permanent structures, at least the remaining area of 180.07 acres of tank area may be restored as a water body.

Restoration of Avilala Tank to its original position consists of the key components of works as follows.

1. Stopping of any further development works in any portion of the area of the erstwhile Avilala tank immediately.
2. Restoration and formation of earthen bunds to its original position.
3. Removal of all the structures from the tank bed area except Substation and NH road - 205 which were constructed prior to the orders of the Hon'ble Supreme Court.
4. Restoration of inflow channels to their original position.
5. Restoration of surplus course channels to drain the designed discharge.
6. Deepening/desilting of the tank bed area to restore the full bed area to regain the full storage capacity of the tank.
7. Construction of surplus weir to discharge flood water.

The Hon'ble NGT may direct Government to get a detailed Project Report (DPR) prepared through an independent agency preferably WAPCOS, CWC or any other independent agency and submit the same to the Government of Andhra Pradesh for approval. Further Govt. of Andhra Pradesh may be directed to examine the DPR and accord its approval and budgetary support. A time frame of a maximum of twelve months may be fixed for the Government for the above work. Further the entire work of

	Vaikuntapuram					
	Total	21.55 Acres.				
5	Tank Bed area (Total Tank bed area 201.62 Ac – Constructions 21.55 Ac)	180.07 Ac				
	<b>TOTAL area (1+2+3+4+ 5)</b>	<b>201.62 Acres</b>				

#### 4. Proposed action taken to restore the water body to its Original Position.

It is observed that though the Avilala Tank was traditionally a designated tank with defined hydrological parameters, the proposals consequent to the above mentioned discussion on taking up development and beautification work of the Avilala tank, were not specifically intended to maintain it as a water body, by way of strengthening the tank bed and desilting& deepening of the tank bed and other related activities. It is amply clear that the proposed development and beautification of the erstwhile Avilala tank, which was subjected to heavy siltation, the tank area bulldozed and bund is damaged to become almost non-existent over the years, was never intended to restore the tank to its original glory. Instead it was proposed to be developed as a city park area with variety of landscapes and public amenities within the tank bed area viz. earthen mounds, arterial/internal roads, peripheral roads, plantations, vehicle parking, cafe etc. A small area of about 12.00 Acres only was proposed to be retained as a water body. Thus instead of developing and restoring it as a water tank to its original position, the development of the area took a turn towards development of green city park from echo-tourism point of view. It is pertinent to mention that the permission granted to TTD was accompanied with a pre- condition to scrupulously follow the orders of Hon'ble Supreme court and not to alter the morphology of the tank. This essentially implies taking up works of greening and beautification on the tank bunds only and ensuring water impounding within the tank bed area, even if it has dried up and silted over the years. By any stretch of imagination it cannot imply permitting creation of earthen mounds/hillocks, internal roads, culverts, peripheral roads, vehicle parking area, public conveniences facility, transformer, pedestals, pre-stressed concrete structure fabrication yard, plantations and greening, spiritual park, walking park,

formation of roads, culverts etc., have affected the morphology of the tank against the precondition imposed by the irrigation department.

The Joint committee further opined that the NH-205 may be reformed by raising up to Top bund level (TBL) of tank on the Concrete pillars such that the tank will be restored as one water body as the restoration of the tank to its full capacity will submerge the existing NH-205 road in an extent of 10.20 acres. Hence it is proposed to issue directions to NH authorities to construct elevated fly over to cross the Avilala tank. The TTD/TUDA may be instructed to restore the tank to its original position by removing all tank bed constructions except the compound wall.

The Joint Committee constituted by the Hon'ble NGT, Chennai finally recommends for restoration of all the components of the erstwhile Avilala tank to its original morphology, to its original storage capacity in an area 180.07 Acres.

The District Collector, Chittoor and Member in the Joint committee formed by the honorable NGT, on avilala tank differed from the opinion of the other members of the committee on the following items and suggest the modifications as listed below:

It is essential to include in the scope of the agency going to be appointed (such as WAPCO S or CWC) to prepare the DPR for restoration of the Avilala tank.

1. To examine the possibility of including the theme of formation of biological theme park while restoring the Avilala tank.
2. It is essential to examine the scope of retaining the NH205 road (with minor modifications) while preparing the DPR for restoration of the tank.
3. It is to be noted that NH205 is one of the crucial connectivity links in states of Andhra Pradesh and Karnataka. Replacement of the existing embankment formation of the road by flyovers should be the last choice while preparing the DPR. This road is formed prior to the Honorable Supreme Court judgment on this tank.
4. It is advisable to recommend for designing the DPR in such a way, to retain most of the features existing on the area and then provide way for restoration of the water pondage in the Avilala tank.
5. Various departments have worked on this project with a view of beautification and to the glory of the temple city considering the fact that the tank had already abandoned and it was not getting sufficient inflows for the last several decades.
6. It is essential to examine by a committee well versed in the issues of hydrology, irrigation as to whether there is any scope to get adequate water inflow into the

restoration of tank as a water body may be completed within a period of three years. Further, since the development of the Avilala tank was given a wrong direction against the orders of the Hon'ble Court, primarily by TTD and TUDA, they should jointly bear the cost of restoration of the tank to its original position.

**5. Extent of damage caused to the Environment.**

**(To be completely redrafted with correct data)**

Due to the lack of proper guidelines, the Joint committee was not able to ascertain the exact magnitude of damage caused to the Environment. However, the committee observed that out of an area of **201.62 acres** of the tank bed area, an area of 21.55 Acres (10.69%) have been lost to permanent structures and hence not available for restoration as water holding area. Thus whereas an area of 180.07 acres will be proposed the aforesaid DPR, the lost area of 21.55 acres cannot be retrieved. Hence, the committee is of the opinion that a proportion amount of 10.69% ( $21.55 / 201.62 * 100$ ) of the DPR cost may be imposed as environmental compensation to be charged from the TTD and TUDA. This amount may be deposited with the Hon'ble NGT which may be at liberty to use it suitably for furthering the cause of environment. This environmental compensation shall be in addition to the work of restoration of the Avilala tank that they have to fund as per DPR.

**6. Factual as well as Action Taken Report by the Joint Committee (to be completely redrafted)**

In the opinion of the Joint Committee it is clearly given in the SLP 7196 - 7197 in appeal (Civil) No.1251 of 2006 that no further construction is allowed in the Avilala tank. But as per observations of the committee on 18.12.2020 there are gross violations of the Judgment of Hon'ble Supreme Court by the TTD/TUDA, who have taken up construction of various items as mentioned in point (3) above (Number and nature of the encroachments). There was no record to show that TTD/TUDA had the prior approval of the Apex court for taking up the aforementioned constructions. The permission given by the Irrigation Department to TTD is only for beautification of the tank bund without affecting the morphology of the tank. All the constructions made in the tank bed area affect the morphology of the tank. The compound wall constructed all along the three sides of the tank will confine the people from occupying the tank bed area and prevent encroachments. But the works which were taken place in the tank bed viz. construction of Earthen mounds, Iron pillars,

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tank in full capacity before undertaking any restoration of the tank keeping in view the modified inhabitation patterns in the catchment area.

The Superintending Engineer, Irrigation Circle, Chittoor vide Memo No. DB/T.4/NGT/OA.No.156 of 2020/13TPT, Dt: 18-01-2021 has instructed to prepare the Detailed project report with current SSR for restoration of the Avilala Tank duly following the Joint Committee report submitted to the National Green Tribunal.

Accordingly, the levels for the formation of the bund were taken and DPR is prepared as per the M.I Guidelines. But top width of the bund is proposed as 14 meters keeping in view beautification of bund in the urban areas. The length of the Surplus weir is proposed as per the memoirs. The cut off trench is proposed upto the FRL depth based on the soil conditions in the nearby bore wells. Further grouting at 3.0 meter interval is proposed to avoid seepage to the downstream as there is residential area on downstream of the tank. The FRL of the tank is taken as +100.000 m. As per the DPR, the salient features of the tank are as follows:

FTL	:	+100.000 M
MWL	:	+100.600 M
TBL	:	+102.100 M
Top Width of bund	:	14.00 M
Side slopes	:	2 to 1 and 2 to 1
Capacity of the tank at FTL	:	42.00 mcft.
Length of Bund	:	2500 mtrs.

The Surplus Course was encroached and unauthorized constructions have taken place along the Surplus course. To discharge the Surplus water, it is proposed to excavate the Surplus channel with a width of 3 meters from Avilala tank to Oteru tank on the Southern edge of the right of way of NH-205. From Oteru tank there is a Surplus channel which discharges the water into Swarnamukhi River. The bottom and sides of the channel from Avilala tank to Oteru tank is designed as a trough. As per the information of the officials of Revenue department, the total width acquired for NH-205 is 60 meters. Utilization of 3 meters for the channel from the land acquired for the NH-205 duly taking the permission may not affect the purpose of NH-205. If the land is acquired beyond the right of way, the extent of the land required for Surplus channel is 8600 Sq.yards. The cost of the land is taken as per the Registration value available in the website of Registration department. The

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top of the Road level is 101.00 i.e., 1.0 meters above the FRL of the tank. But 1.1 meter below the TBL of the tank. The NH road should have been laid above the TBL of the tank. Hence the road should be raised above the TBL of the tank. The cost of rising is worked out by taking the cost from the concessioner who is dealing with road from Puthalapattu to Chandragiri and the cost is Rs. 27,000 per Sq. meter. Further there is a proposal to convert the existing four lane to six lane. At the time of conversion, the existing road will be removed and fresh road will be formed. At the time of new formation, the road will be raised above the TBL.

The inlet channels for the Avilala tank are by way of Kasam channels namely Cheruvu kasam, Gundlavani kasam and Kandevari kasam. Kandevari kasam was vacant to some extent in the head reach but houses were constructed in the tail reach. Gundlavani kasam was not encroached but it was flattened on the ground. Houses were constructed in the head reach along the Cheruvu kasam and the kasam is vacant and flattened in the tail reach. Further there is a possibility to bring water from the Avilala tank in the right of way of NH-205.

The capacity of the tank is worked out to be about 36 Mcft and the capacity will be increased by about 6 Mcft by usage of soil for formation of the bund from the foreshore area of the tank. Thus the total capacity of the tank will be about 42 Mcft as against 43.80 Mcft as per the memoirs of the tank. By restoration of the tank 96% of the tank capacity will be restored.

The DPR is prepared with the following provisions:

1. Earth work in excavation in all kinds of soils of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material. Depth upto 3 m.
2. Providing and laying insitu vibrated M-10 (28 days cube compressive strength not less than 10 N / sq mm) grade cement concrete using 40 mm down size approved, clean, hard, graded aggregates for foundation filling including cost of all materials, machinery, labour, formwork, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with initial lead upto 50 m and all lifts. (Cement content: 220 kg / cum with use of super plasticiser(0.4% by wt. of cement), CA : 0.90cum, Blending Ratio of CA--50:30:20, FA : 0.40 cum)
3. Providing and laying insitu vibrated M-15 (28 days cube compressive strength

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not less than 15 N / sq mm) grade cement concrete using 80 mm down size approved, clean, hard, graded aggregates for piers and abutments including cost of all materials, labour, machinery, formwork, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with initial lead upto 50 m and all lifts.

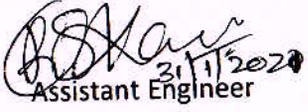
4. Providing and laying insitu M- 20 (28 days cube compressive strength not less than 20 N /sqmm) grade cement concrete using 20 mm down size approved, clean, hard, graded aggregates for wearing coat including cost of all materials, machinery, labour, formwork, cleaning, batching, mixing, placing in position in alternate panels, levelling, compacting, finishing, curing, packing joints with asphalt mortar etc., complete with initial lead upto 50 m and all lifts.
5. Providing cut-off trench filling using selected impervious soil from approved borrow areas in layers of 25 to 30 cm before compaction including cost of all materials, machinery, labour, all operations such as excavation, sorting out, transportation, spreading soil to specified thickness, breaking clods, sectioning, watering, compacting to density control of not less than 95 percent using Sheep foot roller / Vibratory roller/ 8 to 10 tonne power roller as stipulated etc., complete with initial lead upto 1 km and all lifts. (IRR-DAW-5-2)
6. Providing casing embankment using semi-pervious soil available from excavation in layers of 25 to 30 cm before compaction including cost of all materials, machinery, labour, all other operations such as re-excavation, sorting out, transportation, spreading in layers of specified thickness, breaking clods, sectioning, watering, compacting to specified density control of not less than 95 percent using Sheep foot roller / Vibratory roller/ 8 to 10 tonne power roller as stipulated etc., complete with initial lead upto 1 km and all lifts.
7. Providing homogeneous embankment using soil from approved borrow area in layers of 25 to 30 cm before compaction including cost of all materials, machinery, labour, all operations such as excavation, sorting out, transportation, spreading soil in layer of specified thickness, breaking clods, sectioning, watering, compacting to density control of not less than 95 percent or as stipulated using Sheep foot roller / Vibratory roller/ 8 to 10 tonne power roller etc., complete with initial lead upto 1 km and all lifts.
8. Providing and Constructing 30 cm thick dry rubble stone pitching including cost of all materials, labour, hand packing, finishing etc., complete ( rubble stones : 0.33 cum/sqm)

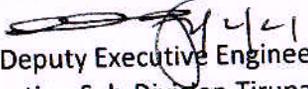
9. Providing and laying of 45 cm thick gravel backing below pitching including cost of all materials, labour, finishing etc., complete ( If 15 cm of murrum bed provided below pitching 0.18 cum/sqm of gravel)
10. Providing and constructing 225 mm thick dry rubble stone pitching including cost of all materials, labour, hand packing, finishing etc., complete (rubble stones : 0.2475 cum/sqm) (For Maintenance Works)
11. Providing and constructing dry rubble rock-toe using rubble and stone chips from approved source including cost of all materials, machinery, labour, hand packing rubble and stone chips, finishing top and sides to required slopes etc., complete with initial lead upto 50 m and all lifts.
12. Providing and filling murrum / gravelly soil ( CNS soil ) for foundation or around pipes including breaking clods, spreading in layers of 10 to 15 cm, watering, compaction by earth masters to achieve density control of not less than 95 percent etc., complete with lead upto 50 m and all lifts.
13. Providing and laying sand blanket below embankment including cost of all materials, machinery, labour, spreading to specified thickness etc., complete with initial lead upto 50 m and all lifts.
14. Providing and laying Hariyala or other approved quality turfing sods for the slopes of earthen embankments over 20 mm thick sand backing including cost of all materials, machinery, labour including preparing surface, spreading sand, watering for 15 days etc., complete with initial lead upto 1 km and all lifts.
15. Providing, fabricating and placing in position reinforcement steel bars for RCC works including cleaning, straightening, cutting, bending, hooking, lapping, welding wherever required, tying with 1.25 mm dia soft annealed steel wire, including cost of all materials, machinery, labour etc., complete with initial lead upto 50 and all lifts.
16. Providing and forming 35 mm wide and 10 mm thick construction / contraction joints for concrete lining by mastic filler including cost of all materials, labour etc., complete all leads and lifts
17. Providing and constructing longitudinal and cross graded filter drains using sand and 80-20 mm and 20 mm downgraded aggregates satisfying specified

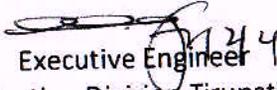
filter criteria in layers as per specifications including cost of all materials, machinery, labour, laying to required slopes, compaction etc. complete with initial lead upto 50 m and all lifts. (IRR-DAW-6-2)

18. Drilling 32 mm diameter grout holes in concrete / rock by percussion drilling using jack hammer or steeper drills as directed to specified depth for consolidation / contact grouting including cost of all materials, machinery, labour, cleaning holes, ventilation, lighting, drainage and all other ancillary operations etc., complete.
19. Curtain grouting with neat cement grout mix of suitable consistency under specified pressure as directed in drilled holes by stage grouting method including cost of all materials, machinery, labour, redrilling if necessary etc., complete with initial lead upto 1 km and all lifts. (IRR-DAW-1-12 (b)).
20. Rising of NH-205 above TBL by way of piers.
21. Provision for Land Acquisition.
22. Provision for GST @ 12% on work.
23. Provision for NAC @ 0.1% on work
24. Provision for Labour Cess @ 1.00% on work
25. Provision for Seigniorage Charges.
26. Provision for Soil exploration, drilling of bore holes and preparation of detailed estimate.
27. Provision for preparation & publication of Tenders
28. Provision for Documentation, Photography, Stationery, Xerox and other accessories and rounding of the estimate.

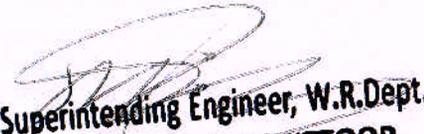
The DPR is prepared with the SSR for the year 2020-21 and the cost of the DPR is worked out to be Rs. 9920.00 Lakhs.

  
Assistant Engineer  
Irrigation Section, Tirupati Rural.

  
Deputy Executive Engineer  
Irrigation Sub-Division, Tirupati.

  
Executive Engineer  
Irrigation Division, Tirupati.

  
Deputy Chief Engineer-I  
O/o. The Chief Engineer  
Minor & Medium Irrigation  
Water Resources Department  
Vijayawada-520 003.

  
Superintending Engineer, W.R.Dept.  
Irrigation Circle, CHITTOOR.  
3/2/2021

SD/-XXXX Dated 16-02-2021  
Chief Engineer  
Minor & Medium Irrigation  
Water Resources Department  
Vijayawada-520.003.

**GENERAL ABSTRACT**

**N.W: Restoration of Avilala cheruvu near Avilala (V) in Tirupathi rural mandal of Chittoor District**

S.no	Description	Amount (Rs Lakhs)
<b>A.</b>	<b>Works: Tender Component:</b>	
1	Formation of Bund	1339.80 ✓
2	Construction of Surplus weir	31.00 ✓
3	Restoration of Surplus course	2910.50 ✓
4	Rising of NH-205	4309.20 ✓
	<b>Sub Total Works</b>	<b>8590.50 ✓</b>
<b>B.</b>	<b>Miscellaneous items:</b>	
1	Provision for GST @ 12% on work	1030.86 ✓
2	Provision for NAC @ 0.1% on work	8.59 ✓
3	Provision for Labour Cess@1.00% on work	85.91 ✓
4	Seigniorage Charges	140.90 140.82
5	Provision for Soil exploration, drilling of bore holes and preparation of detailed estimate	55.00 ✓
6	Provision for preparation & publication of Tenders	3.75 ✓
7	LS for Documentation , Photography, Stationery,xerox and other accessories and rounding of the estimate.	4.49 4.57
	<b>Total Miscellaneous items</b>	<b>1329.50 ✓</b>
	<b>Grand Total</b>	<b>9920.00 ✓ Lakhs</b>

*[Signature]*  
31/1/2024  
Assistant Engineer,  
Irrigation Section,  
Tirupati Rural.

*[Signature]*  
**Deputy Chief Engineer-I**  
O/o. The Chief Engineer  
Minor & Medium Irrigation  
Water Resources Department  
Vijayawada-520 003.  
Deputy Executive Engineer,  
Irrigation Sub-Division, Tirupathi.

99.20 Crores.  
~~SD/XXXX Dated: 16/02/2024~~  
**Chief Engineer**  
Minor & Medium Irrigation  
Water Resources Department  
Vijayawada-520 003.  
Executive Engineer,  
Irrigation Division, Tirupati.

**Superintending Engineer, W.R.Dept.**  
Irrigation Circle, CHITTOOR