

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

(By Video Conferencing)

M.A. No. 152/2019  
In  
Original Application No. 516/2015  
(With report dated 01.03.2021)

RELA & Anr.

Appellant(s)

Versus

State of Andhra Pradesh & Ors.

Respondent(s)

Date of hearing: 16.06.2021

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER  
HON'BLE MR. JUSTICE M. SATHYANARAYANAN, JUDICIAL MEMBER  
HON'BLE MR. JUSTICE BRIJESH SETHI, JUDICIAL MEMBER  
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

Appellant(s): Mr. Sravan Kumar, Advocate

Respondent(s): Mr. Raj Kumar, Advocate for CPCB  
Mr. A. Sanjeev Kumar, Advocate for State of Telangana  
Mr. Kumar Rajesh Singh, Advocate for MoEF&CC  
Mr. Dhananjay Baijal, Advocate for TSPCB

**ORDER**

1. The issue for consideration is whether what is termed as 'dredging' in Godavari -Krishna river beds and its tributaries in the State of Telangana by the State Authorities is illegal mining, as alleged by the applicant.

2. According to the applicant, the main application was disposed of on 20.12.2018 granting liberty to approach the Tribunal for consideration with connected matters in *Original Application No. 173/2018, Sudarsan Das v. State of West Bengal & Ors.* and *Original Application No. 44/2016, Mushtakeem v. MoEF& CC &Ors.* The said connected matters stand disposed of separately.

3. Main surviving grievance of the applicant is that in the name of de-siltation, sand mining is being done without mandatory environmental clearance, to provide free sand to the construction companies. Sand mining is said to be taking place at various places including in District Guntur, Andhra Pradesh, as reported in the Deccan Chronicle newspaper dated 18.02.2017. In the State of Telangana, sand is being mined illegally from Godavari and Krishna Rivers. The same is booked online at the rate of Rs. 9000/- per truck. In Hyderabad, it is sold at the rate of Rs. 45000/- per truck. The State of Telangana is allotting such sand to private contractors for diverting the same to black *mafia*. Transportation results in accidents and air pollution.

4. Vide order dated 23.05.2019 a factual and action taken report was sought about the current status of the ground situation by a joint Committee comprising of the CPCB, Telangana State PCB and SEIAA, Telangana.

5. The matter was then considered on 14.02.2020 in the light of earlier proceedings and joint inspection report filed by the CPCB. The Tribunal observed:-

*“7. The above reports need to be independently evaluated and validated in view of conflicting versions. For this purpose, **we constitute an Expert Committee comprising Members of Expert Appraisal Committee (EAC) on the subject of the MoEF&CC, nominees of the CPCB, IIT Roorkee, and the Indian School of Mines, Dhanbad. The nodal agency will be the CPCB for coordination and compliance.** The Committee will be entitled to seek assistance from any other expert or agency. The State PCB may also render such assistance as may be sought. The applicants will be free to give their view point/submissions to the CPCB within two weeks. The CPCB will provide all documents to the members of the Committee.*

8. *A copy of this order be sent to MoEF&CC, CPCB, IIT Roorkee, the Indian School of Mines, Dhanbad and the State PCB by e-mail*

*for compliance. The report may be furnished within two months by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in)”*

6. The matter was last considered on 24.08.2020 in the light of the status report filed by the CPCB seeking more time. The matter was accordingly deferred. In pursuance of above, status report dated 01.03.2021 has been filed by the CPCB. The Committee held a meeting with Telangana State Mineral Development Corporation (TSMDC) and the State PCB. The TSMDC submitted report dated 05.01.2021 which is the main basis of this report. The said report quoted in the CPCB report is as follows:-

“

1. *Kaleswaram Lift Irrigation Project (KLIP)” is one of the biggest irrigation scheme having three barrages across River Godavari- 1<sup>st</sup> barrage at Medigadda, 2<sup>nd</sup> barrage at Annaram barrage and 3<sup>rd</sup> barrage at Sundilla. The source point for water lifting is near Medigadda village below the confluence of Pranhita and Godavari rivers and 20-KM downstream of Kaleswaram.*

2. *TSMDC has undertaken de-siltation of the reservoirs with an aim to provide designed water storage capacity for the said reservoirs and make out proper shape of the reservoir bed depending on the depth of sedimentation / silt available.*

3. *Through sediment flow model and by empirical equations, the studies have estimated that a total deposition of the sediment/silt were, 2,19,64,494.0 m<sup>3</sup> in Medigadda Reservoir and 1, 20,56,241.5 m<sup>3</sup> in Annaram reservoir, confirmed the need for the de-siltation in order to achieve the designed water storage capacity of these two reservoirs and to maintain the life of reservoirs. Out of this, so far TSMDC has so far desilted 1,93,03,594.94 m<sup>3</sup> from Medigadda and 58,49,019.04 m<sup>3</sup> from Annaram reservoirs.*

4. *The length of water spread at full reservoir level is 39-km for Medigadda Barrage and 31-km for Annaram Barrage. The width of Godavari at these barrages ranges between 0.75 km to 1.4 km. Annaram barrage is located at 50-km distance on the upstream of Medigadda barrage. The crest level of the barrage bay is fixed at 1m above the river bed level and hence there will be de-siltation in the upstream of the barrage.*

5. *The thickness of the sand as estimated from the bore hole data from the region had ranged between 7.5 and 9.5 m. At some places sand dunes have formed. To make proper shape of the reservoir bed, TSMDC has taken sand extraction upto a maximum 3 m from the surface depending on the depth of the sand available from the bed level, so as to maintain the water storage capacity of the reservoir.*

6. In case of Medigadda barrage, out of 39 km length of the back water spread area the desiltation was taken upto 28.66 km length of the back water spread area, limiting the operations to the required level-with an average width of 700 m. and a maximum depth of 3 m as per the need of the locality to maintain the shape and to restore the storage capacity of the reservoir.

7. Annual sediment load at Manherial station for the year 2014 to 2019 is obtained from the Water Year Book (Vol. II) Suspended Sediment Year Book, Godavari Circle, Hyderabad and given in Table 1, which indicates that the total sediment load at Manherial station in last five year = 18,56,770 m<sup>3</sup>.

**Table: Sediment Load and inflow at Manherial H.O station of CWC**

<b>Sl. No</b>	<b>Year</b>	<b>Sediment, MT</b>	<b>Inflow, MCM</b>
1	2014-15	90,676	1,107
2	2015-16	64,964	1,124
3	2016-17	21,31,879	8,081
4	2017-18	10,307	231
5	2018-19	8,02,981	2,071
<b>Total</b>		<b>31,00,807 MT or 1856,770 m<sup>3</sup></b>	<b>12,524</b>
<b>Total per year</b>		<b>3,71,354.1 m<sup>3</sup>/ year</b>	<b>2,504.8MCM/ year</b>

8. Protection of river bunds have been done by providing revetment upto 1.5 km upstream of the barrages and flood banks have been constructed from 1.5 km to 8.85 km on right side and 11 km on left side of Annaram Barrage. For Medigadda Barrage flood banks have been constructed from 1.5 km to 6.3 km/

9. The Ground water conditions in the Mandals of Mahadevpur, Kataram and Manthani, where the de-silting locations are existing are reported to be under safe extraction conditions as per the Central Ground water Board observations and no major variations or adversaries were reported in the ground water levels and remained normal during the post de-siltation period. The quality of water in both River Godavari and ground water nearer to de-siltation sites were found to be meeting the drinking water standards of IS 10500.

10. Based on the information from the Directorate of Economics and Statistics, the crop yields are observed to be increasing from 2014-15 to 2019-20 which indicates that there are no adverse impacts of either from the stock yards and their transportation routes or due to the desiltation activities on the agriculture or crop yields of the region. Similarly the fishery yields have steadily increased from 2011-12 to 2018-19 in the area. No fish kill incident was reported from both the reservoirs due to de-silting as it has been done only when the river beds were totally dry and without water.

11. TSMDC has plotted elevation area curve for both Medigadda and Annaram barrages.

12. No adverse impacts were reported on flora and Fauna of the areas near to the de-siltation locations and stockyards. Further TSMDC has taken up development of green belt with 200 saplings at each stock yard periphery and along the road side, as part of Harithaharam Programme of the Government of Telangana.

13. TSMDC has used the existing R&B and Irrigation Roads for transportation of de-silted materials, and as per the studies, the additional traffic volume from the desiltation activity is well within the capacities of the roads as prescribed by IRC guidelines. Further, this additionality is temporary to the periods until the desiltation stocks are cleared, as was observed and noticed by the committee also.

14. The ambient air quality reports are not showing any major negative impacts, and the concentrations of the PM10 and PM2.5 were within the standards. TSMDC has taken safety measures like wetting of roads, stabilizing the internal stockyard roads through gravel, covering the lorries through tarpaulin and maintain traffic regulating mechanisms like division of trucks plying in different routes and times, using mostly existing Irrigation roads and maintaining no entry timings.

15. TSMDC has carried out ambient air quality monitoring at 12 reaches for parameters PM10, PM2.5, SO<sub>2</sub>, NO<sub>x</sub> and CO during November & December, 2020. The monitoring results are compared with National Ambient Air Quality Standards (NAAQS) and it is observed that the monitoring results are complying with NAAQS.

16. Ground water quality and ground water levels are monitored. The ground water table data has shown rising trend owing to increase in no. of crops, which necessitated the drawl of ground water due to less than normal rainfall in the years 2015 to 2019. The ground water withdrawal has been supported by increased consumption due to increased crop production since 2014-15 to 2019 – 20. However, all the mandals in Jayashankar Bhupalapally district falls in safe category.

17. The data of flora and faunal species before de-siltation process started along with the construction of barrages of Medigadda and Annaram and after the construction of barrages are comparable and no damage is observed. The de-siltation occurred in the river bed of Godavari, where large sand and silt is exposed and with a varying depths of 8 meters and above. Except few shrubs, no major strata was disturbed. The stock yard areas of desilted material are nearer to de-siltation reaches and are primarily agricultural lands. Total extent of 168.06 acres and 863.113 acres of patta lands were taken for stock yards in Annaram area and Medigadda area respectively from farmers on lease basis with an agreement to handover the land with improved conditions for cultivation of crops.

18. The tree density estimated in the area is 10 trees per hectare, which is commonly observed in the area. Desilted material is stocked in the stock yard lands without cutting any existing trees. Since already laid roads are being used, no tree was cut for laying the roads. Within the 28 stockyards, no specific road was laid. TSMDC has planted nearly 200 saplings along the periphery of each stock yard.

19. Jayashankar Bhupalapally District is having 524 Fish rearing tanks with water spread of 16,115 Hectares. There are 103 fishermen co-operative societies and 7711 Fishermen are members of these societies. With construction of Medigadda and Annaram Barrages, the fishery resources improved substantially. Government of Telangana has accorded top priority for development of inland fisheries with implementation of Kaleswaram Project with large impounding of water in Godavari River stretches. The following table was placed in support of the claim, while the information is not conclusive as per the committee's opinion.

**Table: Fish & prawn production of Jayashankar Bhupalapally from 2011-2019 in tons**

Year	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Production in Tons	4,410	4,503	6,002	7,699	6,415	7,143	7,465	7,890

20. Rs. 70,45,01,000.00 is the amount earned by locals in surrounding 40 villages during April 2016-Sep 2020 in the process of de-siltation and transportation activities of TSMDC. For Dust Suppression, 10 tractors mounted water sprinklers are engaged by TSMDC. Each of the tractor is being paid Rs. 52,000/- per month. This has helped in improving the socio economic conditions of the people of the region.

21. All the stack yards for storing the desilted material are patta lands taken by TSMDC on lease basis. After desiltation, the stock yard land will be handed over to farmers to use for agricultural purposes. In order to make the stockyard fit for the agriculture, the plan suggested that at least 6-inches sandy soil on the surface be removed before handing it over to the landowner. Further, before soil reconditioning works need to be carried by TSMDC in consultation with the Agriculture Dept. after conducting necessary soil tests.”

The CPCB report has given its own observations on the report of TSMDC and made recommendations which are reproduced below:-

***“VII Observations of the committee on the reports submitted by TSMDC and field visit***

- 1. Government of Telangana/ TSMDC undertook sand extraction activity for creation of storage space essentially required to impound water in Medigadda and Annaram barrages. Part of the sand extracted was used for construction of barrages itself (captive consumption). Construction of Medigadda and Annaram barrages are part of the Kaleshwaram project. Government of Telangana has obtained Environmental Clearance from MoEFCC for Kaleshwaram project which envisages the construction of Medigadda and Annaram barrages. Copy of EC is obtained as Annexure-VI.*
- 2. During inspection, it was observed that the barrages are filled with water. The banks of the river are well protected by boulder pitching. Embankment protection of bunds provided to river after stopping the sand extraction.*
- 3. Through model runs the NABET accredited consultants have estimated that the sand extraction was carried out in areas where sand was accumulated to a depth of 8m to 10m. The committee observed that the sand reaches are established on right side of the river and sand accumulation is more on the right side due to curvature in the river.*
- 4. The district level sand committee (DLSC) has inspected the sand reaches during 2015-2017 and ascertained the sand availability in each reach based on which TSMDC carried out sand extraction. Though the present District survey report is prepared post-project (post desiltation activity) submission, it is prepared based on DLSC reports. The DSR indicates both the sand extracted previously and also the sand available in the reaches for future.*
- 5. The impact assessment was conducted by NABET accredited consultants, however, their assessment mostly related to the post project impacts/ damages by comparing the baseline data generated for the Kaleshwaram project. The studies were conducted during December 2019 to February, 2020 while all the reaches were stopped desilting operations during December 2019 to March 2020. The study period was very short and due to monsoon and submergence in the area complete assessment of impacts is not carried out. TSMDC may regularly monitor and assess the impacts post desiltation.*
- 6. The reservoir capacity of Medigadda barrage at FRL of 100m is estimated as 16.17 TMC. The desilted volume of sand in medigadda 1,93,03.594.94 CBM.*
- 7. The reservoir capacity of Annaram barrage at FRL level of 119m is estimated as 10.87 TMC. The desilted volume of sand in Annaram is 58,49,019.04 CBM.*

8. The reports submitted by TSMDC does not indicate any major long term impacts or damage to environment in terms of change in water quality, loss of flora etc. The committee during inspection and by satellite images observed that there is minor loss of vegetation near to stockyards. The vegetation is likely to grow if no further activities are taken up. TSMDC has undertaken compensatory afforestation of native species near to the reaches. There are no changes in flow pattern or morphology of the river. There is no shoal formation in u/s however degradation of bed was noticed downstream of the barrage.

9. Based on empirical formulas the total silt load deposited in Annaram and Medigadda barrages in last 5 years is 2,40,20,735.5m<sup>3</sup> and quantity desilted (as per empirical calculations) is 2,37,61,239 m<sup>3</sup>.

10. During inspection, the committee did not observe any crop damage in the villages near to the reaches. The data of flora and faunal species before de-siltation process started along with the construction of barrages of Medigadda and Annaram and after the construction of barrages are comparable and no damage is indicated. The tree density estimated in the area is 10 trees per hectares, which is commonly observed in the area.

#### **VIII Conclusions of the Committee**

1. The three reports submitted by Telangana State Mineral Development Corporation namely 1.Environment Impact Assessment of Desiltation of Annaram Barrage Stretch of River Godavari Jayashankar Bhupalpally District, 2.Scientific study report on impacts of desiltation at Medigadda barrage, Jayashankar Bhupalpally district of Telangana and 3.District Survey Report of Jayashankar Bhupalpally Telangana by carrying out the study through NABET accredited consultants M/s Pridhvi Enviro Tech Pvt. Limited,Hyderabad and M/s Sri Sai Manasa Nature Tech Private Limited (SSMNT), Hyderabad read with the supplementary reports submitted (Annexures – II, III, IV, V) are satisfactory, and the project activities were carried out with adequate environmental safeguards.

2. **In future whenever the barrages are taken for desiltation, TSMDC shall re-ascertain the quantity of silt deposits. Bathymetric survey of reservoir at intervals of 500m can be carried out biannually, and update elevation capacity curve of reservoir for quantification of siltation. This will help in quantifying desilting of sediments for restoration of design capacity of reservoir.**

3. **The committee visited the Medigedda sand stockyard which is 100 hectares which as on the date of inspection contained 4 lakh m<sup>3</sup> (as reported by TSMDC officials) in a private land taken on lease. The committee recommends that the TSMDC have to submit closure plans for all the stock yards enabling it for agriculture use again once the stocks are cleared. Reclamation of land for agriculture.”**

7. Learned counsel for the applicant submits that the report of the TSMDC is self-serving. There is no mention of compliance of directions of the Hon'ble Supreme Court in *Deepak Kumar v. State of Haryana & Ors.*,<sup>1</sup> Sustainable Sand Mining Guidelines, 2016, Sustainable Sand Mining Guidelines, 2020 and directions of this Tribunal dated 26.02.2021 in OA No. 360/2015, *National Green Tribunal Bar Association v. Virender Singh (State of Gujarat)* on the subject. It is further submitted that giving sand free to private parties is against norms for distribution of State largess and loss to the revenue of the State.

8. In view of the above, apart from compliance of the recommendations of the Committee by the State of Telangana and its authorities, mandate of law laid down in *Deepak Kumar v. State of Haryana & Ors.* and Sustainable Sand Mining Guidelines issued by the MoEF&CC under the EP Act and safeguards required to be adopted in terms of order of this Tribunal dated 26.02.2021 in OA No. 360/2015, *National Green Tribunal Bar Association v. Virender Singh (State of Gujarat)* may be followed. The issue of free distribution of sand in violation of Article 14 of the Constitution is beyond our jurisdiction and the said issue may be raised at appropriate forum, if so desired.

The application is disposed of.

A copy of this order be forwarded to the CPCB, State PCB and State of Telangana by email to facilitate compliance of the above order.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

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<sup>1</sup> (2012) 4 SCC 629

M. Sathyanarayanan, JM

Brijesh Sethi, JM

Dr. Nagin Nanda, EM

June 16, 2021  
Original Application No. 516/2015  
A