

BEFORE THE NATIONAL GREEN TRIBUNAL PRINCIPAL

BENCH, NEW DELHI

Original Application No. 62/2020/EZ

(I.A. No. 54/2020 & I.A. No. 91/2020)

Geeta Devi Applicant

Versus

Union of India & Ors.Respondent(s)

I N D E X

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555

Ref. No.:- 4898

Patna, dated:- 18/12/2020

From,

S. Chandrasekar,
Member-Secretary,

To,

The Registrar,
Hon'ble National Green Tribunal,
Eastern Zone, Kolkata
West Bengal

Sub: Submission of Report of the committee as directed by the Hon'ble Tribunal vide its order dated 28.09.2020.

Respected Sir,

In compliance with the directions dated 28.09.2020 passed by the Hon'ble Tribunal in the O.As No. 62/2020/EZ, 66/2020/EZ, 71/2020/EZ, 72/2020/EZ & 73/2020/EZ, the State Board conveyed to all the concerns about the date, time and venue of discussion as well as field verification of the sand ghats.

Accordingly, the discussions were held on 7th, 9th & 10th October, 2020 at the State Board's office and sand ghats of the all five districts were inspected by the Committee on 08th, 12th & 13th October, 2020.

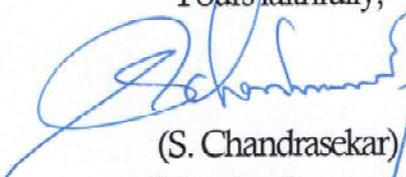
In all discussion and field visit, the officers from the Department of Mines & Geology, Government of Bihar; Mining Officers of the concerned districts; officer of SEIAA; the Member-Secretary of the BSPCB; and the Chairman, SEIAA, Bihar personally remained present during the discussion and field verification, respectively.

On the basis of the observations made and findings arrived at in the course of inspection, the Committee, constituted by the Hon'ble NGT, has prepared the Report as directed by the Hon'ble Tribunal (enclosed).

It is humbly requested to accept the report of the said Committee.

Encl.: As above

Yours faithfully,


(S. Chandrasekar)
Member Secretary

18/12/20

Report of the Committee constituted by Hon'ble NGT for verification of the facts as alleged by the applicants in OA nos. 62,66,71,72 & 73 (I.A No. 54, 68, 65, 66 & 67) all of year 2020/EZ.

Hon'ble NGT in its order dated 28th Sept. 2020 in the OAs detailed in heading above has constituted a committee comprising of (i) CPCB, (ii) The Chairman, SEIAA, Bihar (iii) The Chairman/Member Secretary, State Pollution Control Board, Bihar & (iv) The District Magistrates of the respective Districts (Rohtas, Arwal, Bhojpur, Aurangabad & Patna). In its para 6 and 7 (part) of the said order Hon'ble NGT has set scope (or terms of reference) for the committee and has directed to submit a report within three weeks. For the sake of convenience said paras are reproduced down below—

- 1. The committee shall visit each of the sites, verify on the actual aspects set out in the application and submit the report. While doing so, they are at liberty to take the views of the concerned District Magistrates.**
- 2. In the event any infractions as alleged are found to be correct, appropriate recommendations be made to remedy those (Part Para)."**

From the perusal of the complaints, it is found that identical questions have been raised in all the complaints regarding various infirmities/deficiencies in "District Survey Report" (further to be said DSR for brevity) prepared by the Department of Mines and Geology in the year 2017-2018 for all the five (5) Districts; namely Arwal, Aurangabad, Bhojpur, Patna and Rohtas.

Here the questions raised in all the applications are more or less identical. Same issues have also been raised in more than one paragraph. Only difference being differently expressed in different paras.

The river concerned is only river 'Sone' which passes through all the five districts. For each District there is one application, filed before Hon'ble NGT(EZ) by different applicant. One major and common issue raised in all applications is :-

"The Department of Mines & Geology , Bihar" (in short DMG-Bihar) while preparing DSRs has overlooked various provisions of Sustainable Sand Mining Guidelines - 2016 (of MOEF&CC, GoI) and Enforcement & Monitoring Guidelines for Sand Mining, January 2020 (in short SSMG-16 & EMGSM-2020 for Sand Mining); thereby new sand ghats added for recent auction in respective DSRs on the basis of deficient DSRs (of Year 2017-18) as well all new sand ghats prepared in unconformity with SSMG-2016 & EMGSM- 2020 are technically unsound and opposed to environmental sustainability/concerns and river stability.

Main infirmities pointed against DSRs repeatedly by the applicants in all the applications are again identical which can be enumerated as below –

- 1)
 - i) *Geo-coordinates of adjacent sand ghats overlap with each other;*
 - ii) *A "Buffer Distance"/un-mined block of 50 meter (wrongly quoted as 150 mt by applicants) after every block of 1000 meter has not been left;*
 - iii) *Details of extraction of sand for last 3 years have not been disclosed in the DSRs;*
 - iv) *DSRs not containing Annual Replenishment Report which is sine-qua-non for calculating mineral potential (Sand) for instant removal.*
 - v) *Almost entire stretch of river district-wise has been auctioned for sand extraction/ predominantly for Revenue Generation neglecting provisions contained in guidelines relating sustainability/environment and safe behavior of river.*
 - vi) *Provision of having "Benchmark" below which no mining is allowed is non-existent at the sand ghats.*
 - vii) *Avoidance of concavity of river from mineral extraction has not been taken care off;*
 - viii) *Restriction of mining within 3/4th width of the river only and leaving 1/4th river width for river safety has not been followed while creating sand ghats for recent auction as provided in EMGSM Guidelines- 2020.*
 - ix) *While DSRs were prepared in the year 2017-18 for much lesser number of ghats and district wise area previously, the same DSR is now being treated the very basis for newly added of sand ghats and their very large areas for auctions held in recent past.*
- 2) *DSRs have not taken consideration of traffic snarls, damage to infrastructure on account of increased transportation and probable congestion due to no gaps between ghats provided.*

Limitations Faced in Site Verifications:

With the assistance of the officers of DMG-Bihar, Committee members have tried to visit the stretches of sand ghats in all the said 5 districts, however it has been found that visiting all sand ghats are neither possible within limited time period provided nor it is useful as the Ghats are still partially or fully submerged due to rains and floods and many channels which get dried later on are presently in the flow; many ghats were still unapproachable due to mud and flowing streams. Absence of haul tracks or other approaches are yet to come and these would actually be constructed after the famous local festival of "CHATTH".

The stretches of aggradation/deposition presently are homogenous field of sand having no demarcation of boundaries of individual leases, presently bench marks or any other mark

showing 1/4th river width which shall remain un-minable. Demarcation of lease boundaries or other if any shall be erected by the lessee after signing the lease agreement with the government which is executed after the grant of Environmental Clearance by the SEIAA. Due to Covid-19 making oneself exposed every now and then for site visits, staying in hotels (as government guest houses are requisitioned for election process/machinery) is quite unsafe & not advisable presently.

The committee under above said constraints has tried its best to visit several stretches of river in all the districts where cluster of sand ghats have been prepared on map though they shall come into existence on ground and mining shall take place after obtaining ECs.

A list of river stretches seen, their location, name and number of ghats are as follows:-

Table showing stretches/ sand ghats in the Sone river visited in all the 5 districts by the committee.

District & other locational Details	Date of visit	Stretch/ghats visited	Locational detail of visited site with Geo-position	Remarks
Patna Mauza- Masauda P.S.+Circle- Paliganj	08.10.2020	Stretch having ghat no. 23 to 40 18 ghats	Near G.P.S. Location N-25°21'50.3" E- 84° 44'18.1"	Main river course un-approachable due to submergence of ghat partially.
Patna Mauza- Birdhaur P.S.- Rani Talab	08.10.2020	Stretch having ghat no. 16 to 22	Near G.P.S. Location N-25°19'15.1"	
Patna Village- Chourasi Mauza- Shuarmarwa, Maner	08.10.2020	Stretch having ghat no. 1-13	Spot between ghat no. 2 & 3 G.P.S. Ref.: N-25°37'55"	Big sand bar forming large island in the river channel is prominent.



Arwal Mauza- Koriam/Sonebarsa	12.10.2020	Stretch having ghat no.33-36, 23 to 31 & 22 to 24	N-25°17'39.50" E- 84°41'2.92"	Ghats mostly submerged
Arwal BabuKunwar Singh road bridge over Sone also called SaharPul	12.10.2020	No ghats made close to bridge.	N- 25°14'34.25" E-84°38'25.93"	Advisable to mark safety zone of river in the river bed.
Bhojpur Rev. Circle-Sahar	12.10.2020	Site: Stretch having sand ghat no. 45 to 61. Ghat no. 61, Corner -B.	N-25°15'24.7" E-84°38'12.2"	Partially submerged ghats.
Bhojpur Mauza-Karwasin	12.10.2020	Near ghat no. 62	-	Ghats almost submerged, however sandbars scattered in the river channel are visible.
Bhojpur Mauza- Kirkiri Rev. Circle-Agiaon	12.10.2020	Stretch having ghat no. 34 to 44 Site: of ghat 41 & 40	-	
Aurangabad Mauza-Kera Circle- Dawoodnagar	12.10.2020	Stretch having ghat no. 37 to 40 near border of Arwal & Aurangabad	-	Large & high sand bars made from past years seen prominently.
Aurangabad District Mauza- Naur	13.10.2020	Ghat no. 1 to 3	N-24°40'5.14" E-84°02'24.64"	Large sand bars, about 2-3 mt. high in the course of river spread over

				large stretch.
Rohtas	13.10.2020	Stretch having ghat no. 25 to 29: all larger than 100ha (under cluster-I)		Application for E.C – sent to MoEF&CC.
Rohtas Mauza- Hurka	13.10.2020	Stretch having cluster 04 with ghat nos. 17 to 24. Visited corner point of ghat 23& 24.	N-24°55'36.82" E-84°12'42.98"	Ghats mostly submerged.
Rohtas Mauza- Mahadeva	13.10.2020	Stretch having ghat no. 3 to 8	N-25°4'12.9" E-84°23'31.5"	Ghats partially submerged.

Regarding Views of the respective District Magistrates:

Due to ensuing Assembly Election in the State, respective Districts Magistrates are awfully busy with the election process and it has not been possible to take their views however their subordinate Mines Officer in the district have represented them and they have expressed their views. In all the discussions held on 3 days in Patna with Field Mining Officers, the Director, Mines with his team of Officers at Departmental Headquarter of DMG-Bihar have expressed their views on issues raised in respective applications and committee has taken note of their views. All the concerned District Magistrates of all the five districts were asked to make available their views separately, if any, in case they are unable to meet the committee.

Brief Account of River Sone

River Sone (actually SHONE in old literature) originates from the plateau area of Amarkantaka Hill Ranges (a part of larger Vindhya Ranges) of Madhya Pradesh and passing through the States of Uttar Pradesh and Jharkhand, it enters Kaimur Hill Ranges and finally enters Bihar in Rohtas district (earlier Sahabad district) (at the junction of Palamu in Jharkhand and Mirzapur (UP) Kaimur and Rohtas) thereafter it passes through Aurangabad, Arwal, Bhojpur and Patna district in Bihar but not in sequence rather forming eastern boundary of Aurangabad, Arwal and Patna as well as western boundary of Rohtas, and Bhojpur. It finally meets the Ganges at Patna after traversing 784 Kms. near a small suburban area called sherpur, therefore the river Sone passes in between Rohtas & Aurangabad, Arwal and Bhojpur and again Patna and Bhojpur in Bihar.

Sone is a perennial river, generally shallow but very wide, at places its two banks are 2-3 km apart and the flood plain receives deposition of sand in plenty especially during the monsoon months. At many places its main channel get bifurcated-trifurcated (braided) during rainy season but in lean period the water recedes to main and lower course of main channel. There is a Barrage, constructed over the river Sone called by the name "Indrapuri Barrage" near the township of "Dehri-on-Sone" in Rohtas district. Sone sand is considered superior for all type of constructions, people are crazy for Sone sand and every miner has a dream to mine Sone-sand as its is most sought after not only in Bihar rather in all the neighboring states due to its superior quality. So, there is a cut throat competition to obtain mining lease for the extraction of sand from the Sone river.

Report on Proper Exercises undertaken by the committee.

After receipt of order of the Hon'ble NGT dated-28.09.2020 the Nodal officer (Bihar State Pollution Control Board, Patna - BSPCB), conveyed all the concerned about the date, time and venue of discussions as well as field verifications of sand ghats. Accordingly discussions were held on 7th, 9th & 10th October at B.S.P.C.B. headquarter and field inspection were undertaken on 08th, 12th and 13th October of all the 5 districts concerned. In all the discussions as well as field visits, officers from Department of Mines and Geology Bihar, (Special Secretary & Director, Department of Mines & Geology), Mining officer of the concerned district, subordinate officer of SEIAA participated and they gave their views verbally. Member Secretary, B.S.P.C.B. and Chairman, SEIAA personally remained present in all the discussions and field visits. Representative of CPCB, Eastern Zonal Office, Kolkata (Mr. Sandeep Roy, Scientist - D) remained present in field inspection of 12th and 13th October, 2020.

Scrutiny of DSRs of all concerned 5 districts have again been undertaken by officers of SEIAA, as well as other committee members for preparation of report and providing suggestions for remedy of deficiencies to the Hon'ble NGT as directed.

Views of the District Magistrates:

The views of the concerned District Magistrates were received by the committee. All the District Magistrates of Patna, Arwal, Rohtas, Bhojpur and Aurangabad districts have expressed similar views in terms of Sand Mining Leases auctioned for Sone River. The similar views so submitted, are reproduced as follows:

- 1) **Previously for the different districts, DSR prepared in the year 2017-18 for much lesser number of sand ghats and less area, now area being treated as the basis for newly added sand ghats and their enhanced areas for auctions held in recent past.**

The new sand mining leases in the different districts have been earmarked and auctioned as per the New Bihar Sand Policy- 2019, while the earlier leases were given as per the old Sand Policy. Earlier, the whole district with all its rivers was settled with a single bidder, who then submitted a mining plan and applied for EC for various sand ghats. Majority of the ghats were B2 ghats whose EC was given by DEIAA.

The State of Bihar rectified these issues in its New Sand Policy-2019 and restricted the area that could be settled with one settlee to a maximum of 200 Ha. Further sand ghats were earmarked based on a survey of the rivers in the concerned district by a committee. The Committee identified areas of aggradations or deposition where mining can be allowed and proximity to infrastructural structures and installations where mining should be prohibited based on the annual rate of replenishment of the rivers. Details of the new sand ghats, their area and their total mineable reserves of sand were appended with the DSR of 2018 and also uploaded on the district website for 21 days for public comments. The same is still available in the website of the Department of Mines and Geology, Government of Bihar.

The New Bihar Sand Policy - 2019 was challenged before the Hon'ble NGT in O.A. No. 62/19 and the *Hon'ble NGT in Their order dated 02.12.2019 has held that "We find that the 2019 policy is in conformity with the directions of the Hon'ble Supreme Court and the Sustainable Sand Mining Management Guidelines 2016. The reliance on the decision to the case of Deepak Kumar (supra) by the applicants appear to be misplaced as it only barred the states from splitting homogenous areas into small plots of less than 5 ha avoid the rigors of the ELA procedure under the EIA notification, 2016. In the 2019 policy this requirement is found to have been complied with as the minimum size of the leases is 5ha"*.

The EMGSM-2020 also stipulates that the "final area selected for mining should be then divided into mining lease as per the requirements of the State Government. It is suggested that the mining lease area should be so selected as to cover the entire

deposition area Dividing a large area of deposition/aggradations into smaller mining leases should be avoided as it leads to loss of mineral and promotes illegal mining”.

The DSR – 2018 of different district was updated in 2019 and all the details regarding the new sand ghats were uploaded on the district website. The notice for auction of sand ghats was published on the district website and in leading newspapers and 30 days time was given. The area and geo-coordinates of concerned sand ghat were also uploaded. Further, all persons interested in the auctions held electronically were advised to visit the sand ghats and assess themselves.

Hence, the contention of the petitioners is baseless and is reflection of his lack of knowledge about the topography of rivers in the state. In lieu of the above the area of old sand ghats and new sand ghats is bound to be different.

2) New Sand Ghats are not environmentally sustainable.

The SSMMG-2016 guidelines, says that “Sustainable Development is built on three pillars-environmental, social and economic. Sustainable development cannot be achieved if the environment is protected but poverty is prevalent in a significant part of the population. Similarly, sustainable development cannot be achieved through inappropriate economic growth, if it undermines the environment in which people and businesses exists. The magnitude of the impact basically depends on the magnitudes of the extraction relative to bed load sediment supply and transport through the reach”.

According to the Expert Appraisal Committee of the MoEF&CC, replenishment of sand is natural process in the perennial river. The quantum of deposition varies from stream to stream depending upon factors like catchment lithology, discharge, river profile and geomorphology of the river course.

Son is Perennial River with high rate of deposition of sediments. Bihar also being a flood prone area, it is necessary to remove large depositions of sand on an annual basis to ensure safety from floods. Rivers and mining is essential to ensure that flooding is reduced as bed elevations and flood heights decrease, reducing hazard for human occupancy of flood plains and the possibility of damage to engineering works. The rate of excavation of sand and the sustainability of river has to be decided in accordance with the rate of replenishment which is the rate at which sand/gravel is deposited on the river flood plain by the river during monsoon season.

The rate of replenishment in these perennial rivers like Ganga and Son, according to the replenishment studies conducted in 2017 to 2019 ranges between 104 to 143%. Hence,

the allegation that the increase in sand ghats would result in non sustainable sand mining in the state is not based on facts.

3) **Alleged 'infirmities' in the alleged 'interim' DSR with regard to the provisions of EMGSM-2020.**

First and foremost it has to be understood that the new sand ghats in Bihar were identified as per the New State Sand Policy in 2019 before the issuance of the EMGSM-2020. Therefore, provisions of EmGSM-2020 cannot be applied to sand ghats identified in 2019 with retrospective effect.

Prior to EMGSM-2020 guidelines, DSR made was to be updated once in 5 years as indicated in MoEF&CC notification S.O. 141(E) dated 15.01.2016 and notification no. S.O. 3611(E) dated 25.07.2018. Accordingly in different district, the DSR made in 2018 and was updated in 2019. Therefore, to state that the different district has not followed the SSMMG-2016 is not factually correct.

With regard to the point, why a new DSR was not made, it has to be noted that Hon'ble NGT, in the case of *Satendra Pandey vs. MoEF&Anr. in O.A. No.186/2016, vide order dated 13.09.2018*, quashed the notification dated 15.01.2016 thereby quashing the constitution and the functioning of the DEIAA and held that the notification dated 15.01.2016 is not consistent with the decision of the Hon'ble Supreme Court in the case of *Deepak Kumar vs. State of Haryana &Ors.* The Court further directed the MoEF& CC to take appropriate steps to revise the procedure laid down in the impugned notification dated 15.01.2016 in terms of the directions passed by the Hon'ble Tribunal in the said judgment.

The Hon'ble National Green Tribunal, vide order dated 11.12.2018, in the case of *Vikrant Tongad vs. Union of India, Execution Application No.55 of 2018*, was further pleased to clarify that any action taken pursuant to the notification dated 15.02.2016 is clearly illegal and in violation of the judgment dated 13.09.2018 passed by the Hon'ble NGT. The Hon'ble NGT was pleased to further reiterate that the notification dated 15.01.2016 will stand suspended till a fresh notification is issued by the MoEF& CC in that regard. The notification in this regard was issued by MoEF&CC only in January, 2020.

It may also be noted that **the DSR made in 2018 was sent to SEIAA, Bihar** immediately after the constitution of DEIAA/DEAC was quashed by the Hon'ble NGT, of all districts for further necessary action. But SEIAA, Bihar took no action on it, nor raise any objection on it. It has also given environmental clearance based on the alleged interim DSR till April, 2020.

4) Geo-coordinates of adjacent sand ghats overlap with each other:-

It is clear that the auctioned adjacent sand ghats of district have a common boundary between them, hence one of their geo-coordinates overlap but their area does not overlap and they are distinct and different. Neither SSMMG-2016 or EMGSM-2020 or any other guidelines of MoEF& CC provides any provision for not having common boundaries for two or more ghats.

5) Annual replenishment report is not part of the DSR 2018 :-

In district sand leases were given in 2015 but actual Mining started in the year 2016 when the lessees were given Environmental Clearances for the same. As per the summary record of 11th meeting of the reconstituted Committee for Environmental Appraisal of Mining Projects constituted under EIA notification, 2006 dated 24.10.2016 clearly records that the sand mining proposal from the States like Bihar, wherein there area perennial rivers and are therefore replenished during monsoon and such annual replenishments raises the river bed at certain places along the river and need to be mined to avoid threats of flood during subsequent monsoon season.

The Expert Appraisal Committee was of the view that in the States like Bihar, replenishment study is not required at the time of EC application and PP shall submit the replenishment study only after 02 years of grant of EC. Accordingly, the annual replenishment study for the sand mines were conducted by the concerned lessees and sand ghat wise replenishment studies of the concerned districts for the year 2017, 2018 and 2019 have been already uploaded on the website of DMG, GoB.

A brief examination of the various replenishment studies uploaded on the website conclusively demonstrates that the rate of replenishment of Sone river sand in Patna, Bhojpur, Arwal, Aurangabad and Rohtas districts is more than 100% and ranges between 104-143 percent.

6) Provision of having "Bench Mark" below which no mining is allowed is non-existent at the sand ghats:-

Bihar is a state of perennial rivers and the sand ghats in the question are of the river Ganga and the river Son which both experience a very heavy flow of water during the rainy season. In such topography the Bench Mark pillars duly marked by the district mining authorities area likely to get displaced during the flood season.

The Committee, in its inspection of sand ghats, found large deposits of sand everywhere in the Sone river. The Committee did not find any sign of mining below the bench mark during visit of the sand ghats.

- 7) **A Buffer Distance/Un-mined block of 50 meter (Wrongly quoted as 150 Mtr. by the applicants) after every block of 1000 meter has not been left:-**

The Ministry of Environment, Forest & Climate Change formulated the Enforcement & Monitoring Guidelines for Sand Mining "(EMGSM-2020) which is supplemental to the "Sustainable Sand Mining Management Guideline-2016" (SSMMG-2016). These two guidelines viz. "Enforcement & Monitoring Guidelines for Sand Mining"(EMGSM-2020) and SSMMG-2016 shall be read and implemented in sync with each other. In case any ambiguity or variation between the provision of both these document arises, the provision made in "Enforcement & Monitoring Guidelines for Sand Mining-2020" shall prevail.

Both the SSMMG-2016 (p-14) and the EMGSM-2020 (p-21) categorically states that "The distance between sites for sand and gravel mining shall depend on the replenishment rate of the river. EMGSM-2020 further states that

- i) "Sand and gravel may be extracted across the entire active channel during the dry season" and
- ii) "Layers of sand and gravel which could be removed from the river bed shall depend on the width of the river and replenishment rate of the river".
- iii) "The flood discharge capacity of the river could be maintained in areas where there is a significant flood hazard to existing structures or infrastructure. Sand and gravel mining may be allowed to maintain the natural flow capacity based on surveyed cross-section history. Alternatively, off-channel or floodplain extraction is recommended to allow rivers to replenish the quantity taken out during mining".
- iv) "A buffer distance/Un-mined block of 50 meters after every block of 1000 meters over which mining is undertaken or at such distance as may be the directed/prescribed by the regulatory authority shall be maintained".
- v) "The final area selected for the mining should be then divided into mining lease as per the requirement of State Government. It is suggested the mining lease

area should be so selected as to cover the entire deposition area. Dividing a large area of 'deposition/ aggradations' into smaller mining leases should be avoided as it leads to loss of mineral and indirectly promote illegal mining". (Page17)

Given the nature of rivers in the state, their rate of replenishment and large areas of deposition, the State has thought it fit in line with the above guidelines not to leave any distance between two mining leases to curb illegal mining.

8) Almost entire stretch of river in district has been auctioned for sand extraction, predominantly for Revenue generation neglecting provisions contained in guidelines relating to sustainability/environment protection and safe behavior of river.

As per the SSMMG-2016 guidelines, "Sustainable Development is built on three pillars – environmental, social and economic. Sustainable development cannot be achieved if the environment is protected but poverty is prevalent in a significant part of the population. Similarly, sustainable development cannot be achieved through inappropriate economic growth, if it undermines the environment in which people and businesses exists. The magnitude of the impact basically depends on the magnitudes of the extraction relative to bed loads sediments supply and transport through thereach".

The main objectives of the New Bihar Sand Policy- 2019 are threefold: (i) to ensure that sand mining is done in an environmentally sustainable manner, (ii) to ensure availability of adequate quantity of sand for construction at a reasonable price, and (iii) to increase the number of settles to ensure generation of employment. The settlement of sand is proposed to be done in following manner:

- (i) Every river in district, shall be considered as a different reach and major sand reaches like Son, Kiul, Falgu, Morhar and Chanan shall be divided into sustainable contiguous blocks, wherever possible, keeping in mind the topography of the river for settlement.
- (ii) Similarly, other reaches within a district shall be divided as per requirement for the purpose of settlement.

The NGT Principal Bench, in O.A. No. 62/2019 (EZ), has, with regard to this issue, stated in its judgement dated 12.12.2019 Para 18 that "We do not find any infraction having been committed by the State in publishing the impugned policy which would enable division of sand reaches in a district into sustainable contiguous blocks so long

as the minimum size of such blocks is 5ha”.

The EMGSM-2020 guidelines states that “The final area selected for the mining should be then divided into mining lease as per the requirement of State Government. It is suggested that the mining lease area should be so selected as to cover the entire deposition area. Dividing a large area of deposition/aggradations into smaller leases should be avoided as it leads to loss of mineral and indirectly promote illegal mining”.(Page no.17).

Infractions and infirmities raised about the DSRs by applicants and Findings of the Committee:

(1) *Details of extraction of sand for last 3 years have not been disclosed in the DSRs.*

Findings: From the reports submitted by the DMs, it is clear that all details of extraction of sand for the last three years has now been uploaded on the website of DMG, GoB.

(2) *Geo-co-ordinates of adjacent sand ghats overlap.*

Findings: This question has been raised in all the applications citing example of few sand ghats related with concerned district. It is true that adjacent sand ghats have common boundaries between them- hence their coordinates overlap however their areas do not overlap and they are distinct and different.

Neither SSMG-2016 or any Office Memorandum of MoEF&CC provides any provision for not having common boundaries for two or more sand ghats.

(3) *DSRs not containing Annual Replenishment Report which is sine-qua-non for calculating mineral potential (sand) for instant removal.*

Findings: Mining Department Officers informed in the discussions that Annual Replenishment Report which was missing earlier has subsequently been uploaded by the Districts. The rate of replenishment of Son river sand in Patna, Bhojpur, Arwal, Aurangabad and Rohtas districts ranges between 104-143 percent.

(4) *Provision of having “Bench Mark” below which no mining is allowed is non-existent at the sand ghats.*

Findings:- As per SSMG-2016, bench mark (BM) with respect to mean sea level (MSL) is essential in mining channel reaches (MCR), below which no mining shall be allowed. This provision has been followed and forms part of the EC conditions.

(5) *A Buffer Distance/un-mined block of 50 meter (Wrongly quoted as 150 Mtr. by the applicants) after every block of 1000 meter has not been left.*

Findings:- This is a new provision included in EMGSM-2020 in its chapter 4.3, Para p & q at page no. 24. It was not there in SSMG-2016 guidelines. It states that a buffer distance of 50 Meters after every block of 1000 m or at such distance as may be directed/prescribed by the regulatory authority.

The Mining officers stated during discussions that this provision has been made in January, 2020 and sand ghats were finalized in 2019. The applications of Environmental Clearance of 181 new settlees after following the due process are at the last stage of grant of Environmental Clearance. It is for the regulatory authority (SEIAA/ MoEF&CC) to decide on this issue .

- (6) **Almost entire stretch of river district-wise has been auctioned for sand extraction, predominantly for Revenue generation neglecting provisions contained in guidelines relating to sustainability/ environment protection and safe behavior of river.**
- (7) **While DSRs were prepared in the year 2017-18 for much lesser number of ghats and less area district wise previously, the same DSR is now being treated as the basis for newly added sand ghats and their enhanced areas for auctions held in recent past.**

Question raised in point Sl. 6 & 7 above are connected, as both talk about increased area and no. of ghats compared to earlier years. Therefore they have been clubbed together.

Findings : The EMGSM-2020 categorically states that purpose of mining in the river bed is for channelization of rivers so as to avoid the possibility of flooding and to maintain the flow of the rivers (P-16). It further states that the final area selected for mining should then be divided into mining lease as per the requirements of the State Government. It also suggests that the mining lease area should be so selected as to cover the entire deposition area. Dividing a large area of deposition/aggradations into smaller mining leases should be avoided as it leads to loss of mineral and indirectly promote illegal mining (P-18).

The State has followed these guidelines and demarcated mining leases accordingly. The sand ghats were earmarked based on a survey of the rivers in the district by a committee constituted by the District Collector. The Committee identified areas of aggradations or deposition where mining can be allowed; and areas of erosion and proximity to infrastructural structures and installations where mining should be prohibited. Details of the new sand ghats, their area and their GPS coordinates were appended with the DSR, 2018 and uploaded on the district website. The notice for auction of sand ghats was published by the Collectors on their website and in leading newspapers and 30 days time was given. The

area, geo-coordinates and minimum reserve price of every sand ghats/ sand blocks were also uploaded in the respective district websites.

This issue was raised earlier before the Hon'ble NGT in OA No 62/19 and the Hon'ble NGT in its order dated 02.12.2019 held that" *We find that the 2019 policy is in conformity with the directions of the Hon'ble Supreme Court and the Sustainable Sand Mining Management Guidelines 2016. The reliance on the decision to the case of Deepak Kumar (supra) by the applicants appear to be misplaced as it only barred the states from splitting homogenous areas into small plots of less than 5 ha to avoid the rigors of the EIA procedure under the EIA notification, 2016. In the 2019 policy this requirement is found to have been complied with as the minimum size of the leases is 5 ha"*

Earlier the whole district area with all its rivers was settled with a single bidder, who then submitted a mining plan and applied for EC for various ghats. Majority of the ghats were B2 ghats whose EC was given by DIEAA. The settlement of one district (and at times 3 major districts) with one person/ company led to monopolization of the sand business by a few and gave rise to criminal activities on account of amassing of huge wealth in few hands. These leaseholders took EC for small plots but indulged in mining in area outside these plots thereby violating environmental safeguards and negating the EC regime. The State of Bihar rectified these issues in its new sand policy 2019 and restricted the area that could be settled with one settlee to a maximum of 200 ha.

The Committee wherever it went in its site verification found large contiguous stretches of fresh aggradations/ deposition of sand that have been demarcated into mining leases. Given more than 100% replenishment rate of rivers like Sone and Ganga and their wide span of 1-3 kms along with the fact that both the rivers experience a large discharge of water during the rainy season and are prone to flooding, it is imperative to remove the vast depositions of sand to maintain the flood discharge capacity of the river. The EMGSM - 2020 guidelines also states that "Layers of sand and gravel which could be removed from the river bed shall depend on the width of the river and replenishment rate of the river. Flood discharge capacity of the river could be maintained in areas where there are significant flood hazard to existing structures or infrastructure".

The Committee in its verifications found that sand ghats have been made mostly on aggradations where plenty of sand is available, however at certain stretches plenty of water within the proposed sand ghats were also flowing with shallow depth and they were also partly under submergence .At these places mining should only be done when the channels get dried, probably in the lean season or no mining be allowed if they do not get dried. The Committee otherwise do not find the inclusion of more and more areas of

aggradations defying sustainable sand mining practices. However Committee feels it proper rather essential, to raise a caution here to have very strict, close and regular monitoring regime due to increased number of ghats/ area of sand ghats, all together in each district.

(8) Avoidance of concavity from mineral extraction has not been taken care off.

Findings: The committee has been able to verify some stretches of the river passing through all the five districts. The meanders/ concavities of other side of river bank were invisible from one side due to very large width of the river. At none of the sites, which this committee could reach such fragile concavities were observed requiring their exclusion from ghats. But we agree that no mining should take place at any bank concavities to avoid bank erosion and river stability.

(9) Restricting mining within 3/4th width of the river only and leaving 1/4th river width for river safety has not been followed while creating sand ghats for recent auctions as provided in EMGSM-2020 guidelines.

Findings:- This provision is a part of EMGSM-2020 (at page 16) in its para 4.1.1 (e). The guidelines provide that only central 3/4th part of the river be identified on map and remaining 1/4th part of area needs to be kept as no mining zone for river bank protection. But quantity of material available requires to be calculated for mining as well as for no mining zone. The Committee found that the new sand ghats were demarcated and auctioned in 2019, as per the SSMG, 2016. The EMGSM, 2020 came later and shall be followed while demarcating new sand ghats in future.

(10) DSRs have not taken consideration of traffic congestion and damage to the infrastructure on account of transportation of Sand and probable congestion due to no gaps between sand ghats provided.

Findings:- This new provision is a part of EMGSM-2020. In SSMG-16, there is no provision made about traffic concern of mineral transportation in the chapter of "Structure of DSR" or under chapter "Management Plan". Inclusion of "Traffic Management" for all the ghats of a district in DSRs shall make them cumbersome, therefore, this has to be controlled on case to case basis or sand ghat-wise basis based on general principle provided in the guidelines prior to actual mining. This is presently being done through Environmental Management Plan (EMP), however on the ground/ at congestion points, the respective District administration may take care of the plan once approved.

The prescriptions of the above mentioned guidelines of the MoEF&CC, GoI related to traffic congestion and safety to road infrastructures should be taken care off

while initiating the sand mining activity. As far as possible the access / approach road should avoid the habitation.

Review of facts and Summing up the issues involved:-

- The DSR of all districts including five districts (Patna, Rohtas, Aurangabad, Arwal & Bhojpur) was sent to SEIAA, Bihar in 2018 itself. On the basis of same DSR, Environmental Clearance has been given by SEIAA, Bihar to new ghats in 2019 and 2020.
- The DSRs -2018 (District Survey Reports) of all the five districts have been appended with Annual Replenishment Data, Annual Production for three years and the list of newly created sand ghats as per the New Bihar Sand Policy - 2019 as per provisions of Appendix - X of EIA - 2006. All the above said reports have been uploaded in the website of DMG, GoB.
- DSRs were prepared in the year 2017-2018 and were updated in late 2019 and early 2020. Successful bidders in the e-auctions held in 2019 have been issued Letter of Intent (LoI) by the concerned DMs, who have applied before SEIAA, Bihar for obtaining Environmental Clearance (EC) for next five years (2020-2024) for the fresh leases. Few applicants have got automatically system-generated standard online ToRs as envisaged by the MoEF&CC, GoI. In the case of 111 fresh lease holders, public hearing has been held and grant of EC is at the final stage. In the case of 70 more fresh lease applicants, public hearing dates were issued but later stayed on the orders of the Hon'ble NGT.
- On account of the case filed before the Hon'ble NGT, the Department of Mines and Geology, Govt. of Bihar (DMG-GoB in short) had to extend the existing leases of sand mining last year till October, 2020.
- Then on account of delay in grant of EC by SEIAA, Bihar the Government had to again extend their lease for 2 months till 31.12.2020. Therefore, present extended period of existing leases for river sand mining in the whole State of Bihar shall expire on 31.12.2020.
- In addition, as EC is yet to be issued to the fresh (new) applicants, before 31.12.2020 (even after 1 year) by SEIAA, Bihar, sand mining shall come to a halt in Bihar including in all the 5 districts under consideration over the River 'SONE'.
- This situation may lead to rampant illicit and uncontrolled removal of sand from the Sone river.
- As the DSRs of 2018 are under question before the Hon'ble Tribunal, 3rd extension of present lease period of the old leasees, which old leasees might be awaiting to avail the grand opportunity especially for SONE-Sand, as it is most sought after construction material in the market, not only in Bihar but also in the neighbouring States, may also not be possible.
- The EMGSM - 2020 stipulates that the final area selected for mining should be then divided into mining lease as per the requirements of the State Government. Given in the nature of river in the State, particularly in river Sone, the rate of replenishment and the large areas of deposition, the State has thought it fit in line with the EMGSM- 2020

guidelines not to leave any distance between two mining leases to curb illegal mining. Moreover, there is a prescribed provision under Rule 26(1) of the Bihar Minerals (Concession, Prevention of Illegal Mining, Transportation & Storage) Rules, 2019 that the adjoining lease holders have to allow the transportation of minerals of other lease holders through their leasehold area. This provision provides flexibility of movement of minerals over the leasehold area of others and thereby gives flexibility to the DMG to demarcate mining lease areas.

- Regarding overlapping of areas of lease areas of existing with that of the newly demarcated sand mining leasers, the officials of DMG and the representatives of the concerned DMs have clarified that when new mining lease holders start the mining operation, obviously the lapsed lease holder will not be doing the mining in any area. The existing old lessee will work only till the validity of the lease period. There cannot be two independent mining lessee for the given sand ghats, at the same period of time. Therefore, the statement of the petitioner regarding overlapping of the existing and propose new lease areas is misplaced and misleading
- Other major implications of such a situation shall be:-
 - Crisis in sand availability for different developmental construction activities in the State of Bihar,
 - Uncontrolled price and violation of environmental norms.
 - Much reduced employment opportunity to the villagers/transporters,
 - Unemployment of labourers engaged in the construction sector and all others engaged in the process,
 - Affecting all ongoing construction activities of government and general public as well.
 - Rampant illegal mining and vested interests will extract the river sand as much as possible, which will again lead to environmental degradation.
 - Unrest among the New lease holders may lead to a clash between old and new leases.
 - These factors may lead to a chaotic/crisis situation till everything settles down.

Recommendations of the Committee towards infirmities/infractions alleged/ observed and their suggested remedies.

The Committee, after holding discussions and scrutiny of DSRs and visiting the sand ghats, have found that the DSRs -2018 (District Survey Reports) of all the five districts have been appended with Annual Replenishment Data, Annual Production for three years and the list of newly created sand ghats as per the New Bihar Sand Policy - 2019 as per provisions of Appendix - X of EIA - 2006. All the above said reports have been uploaded in the website of DMG, GoB and uncertainty in continuation of sand mining due to expiry of validity period of leases on 31.12.2020 and delay in grant of ECs shall bear heavy cost to both the general public and the State Government. At the same time, due to rampant illicit mining, the environment at large shall also have to bear the brunt and bruises.

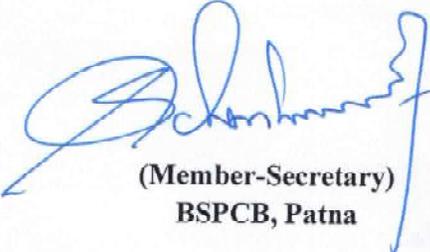
Hence the committee finds itself in a difficult situation, but the committee would like to respond to this situation with the following remedies/ recommendations as directed by the Hon'ble NGT (EZ), which are as follows:

Recommendations:

1.
 - As the authorities have appended the DSR-2018 with Annual Replenishment Data, Annual Production for three years and the list of newly created sand ghats as per the New Bihar Sand Policy - 2019 as per the old guidelines, the Hon'ble NGT (EZ) may vacate the stay on grant of EC to the new leases and direct the Department of Mines and Geology, Government of Bihar to prepare new DSRs as per the EMGSM-2020 in one year's time and submit it to SEIAA, Bihar for approval.
2.
 - Department of Mines and Geology, Government of Bihar to revise or to make addendum in its L.O.I. for incorporating following basic information which are required for regulated mining in terms of area & quantity :-
3. Details about quantity of sand extracted from overlapped area should be furnished duly certified by the concerned District Mining Officer.
4. Fixation of Bench mark with respect to MSL in Mining Channel Reaches (MCR) below which no mining shall be allowed, has to be ensured.
5. Hereafter, replenishment study should be conducted only by Department of Mines & Geology or its authorized Agency, but not by the Lessee in any case.
6. New sand ghats where no mining has taken place in last 3 years, replenishment study may not be made necessary for 1st year of fresh mining.
7. For concerns relating to traffic & transportation route, provision made in Para 4.1.(n) in EMGSM-2020, should be followed and a map endorsed by the Department of Mines be appended with the Environmental Management Plan (EMP) showing the route.

Note: This above Report has been prepared based on the consensus arrived among the committee members. However, one of the members Shri B.N. Jha, Chairman, SEIAA, Bihar has given independent views on few issues and is enclosed separately with this report.

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18/12/20

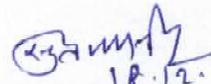
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