

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

Original Application No. 248/2022

In re: News item published in The Hindu dated 27.03.2022 titled
“Digging up the Chambal”

Date of completion of hearing and reserving of order: 20.07.2023

Date of uploading of order on the website: 25.07.2023

**CORAM: HON’BLE MR. JUSTICE SHEO KUMAR SINGH, CHAIRPERSON
HON’BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER
HON’BLE DR. A. SENTHIL VEL, EXPERT MEMBER**

ORDER

1. In *Deepak Kumar vs. State of Haryana & Ors.*, (2012) 4 SCC 629, the Hon’ble Supreme Court of India has settled that mining can be allowed only after requisite Environmental Clearance (EC) for which pre-requisites prescribed are need of District Survey Report (DSR) and Replenishment Study to be prepared and appraisal conducted.

2. The grievance in this application is illegal mining, taking place in periphery of Keoladeo National Park in Rajasthan near Dholpur, close to National Chambal Sanctuary (NCS) which is a habitat of rare species of animals particularly Gharial, roofed turtles and also river dolphins.

3. Sand mining is a well-documented issue in the NCS. Sand mining poses a severe threat to the basking and nesting sites of gharials and other species which require sand for nesting. Continued presence of human activity at the mining sites prevents animals from utilizing the sites for their needs. Animals are thus denied access to necessary basking and nesting habitats.

4. Sand mining has increased exponentially within the sanctuary. Several locations, previously untouched are now being incessantly mined for sand. Along with new locations, increase in activity at the existing locations have completely damaged those sites. The Rithora sand bank has been completely levelled. Until 2019, there used to be at least 35 gharial nests at the Rithora sand bank. However, the nesting site does not exist anymore due to illegal mining. Illegal mining is a direct threat to the immediate future of all aquatic reptiles and fauna utilizing sand for basking and nesting.

5. Fishing in the NCS has been banned under the Wildlife Protection Act of 1972. Fishing, however, still persists in the sanctuary more prevalent in the upper section of the NCS. Main fishing gears used are gill nets, however hook lines and dynamite fishing is also practiced. Fishing and nets are a severe threat to most of the aquatic fauna in the Chambal river. Obligate piscivores like the Gharial, Gangetic Dolphin, Indian Skimmer and other species of diving water birds, etc. are all susceptible to entanglement in the fishing nets. Over the years, several cases of gharials and muggers dying due to entanglement in fishing nets have been recorded. In 2008 and 2009, dead gharials were reported which were completely entangled in fishing nets. A mugger, similarly entangled in a fishing net was found dead in 2012, followed by two hard shell turtles entangled in fishing nets. In 2017, an adult gharial male was found dead with a fishing net around its snout at Rijetha ghat.

6. Populations of species such as gharial, mugger and the Indian Skimmer appear to be increasing based on evidence (increase in the number of yearly nest counts). However, direct threats to the habitats of the above-mentioned species also seem to be increasing. There has been an apparent increase in the extent and intensity of illegal sand mining,

fishing and river bank agriculture. All these activities pose a direct threat to the existing habitat of aquatic species. Illegal sand mining is a serious issue present in the sanctuary and had proven to be extremely difficult to control. Sand mining also reduces the available nesting habitat for gharials, Indian Skimmer and other sandbank/sandbar nesting species. Stopping or reducing illegal mining and the associated anthropogenic presence will help in providing inviolate spaces for species that utilize sand banks/sandbars for basking and nesting. Low water levels have provided with increased access to sandbars along the river. Major mining sites such as Rithora, Barwastn, Gadhora have shown an increase in activity as well as the use of heavy machinery such as JCB machines. Over 30 gharial nests and several turtle nests of Batagur species used to be recorded at the sand bank at Rithora.

7. A report was called from the joint Committee and the Collector, Dholpur and while hearing the petition on 6.2.2023, this Tribunal observed as follows:

“xxxxxx.....xxx
7. Report of the Collector, Dholpur shows that on 13.1.2023, ACS Mining, Rajasthan visited the site with other officers and noted that 40 – 50 tractors were coming from Morena, District of Madhya Pradesh, towards Chambal river, full of mined material. They were moving freely transporting illegally mined material without any fear of law. They tried to jam the road by hitting an empty tractor trolley, seeing the visiting party. Since law and order situation appeared to be unsatisfactory in MP, the Rajasthan team returned back. The incident mentioned may not be isolated but routine. While law violations are rampant, action taken reported is 12 persons arrested in Rajasthan and 4 in MP in the last one year. In MP, 40 vehicles were seized and fine of Rs. 97 lacs recovered from the violators. It is well known that number of such offending vehicles may be in the range of thousands per day and few lakhs in year. The value of illegally mined material may be running into crores. It is difficult to understand how State can allow such lawlessness. There is dire need to control illegal and unscientific mining which is to the detriment of environment and wildlife. Endangered species - particularly crocodile, turtles, gharials, dolphins are affected. According to annual survey/census of NCS area, the population of mugger, dolphins, gharials and Indian skimmers count observed a shortfall in year 2022 as compared to year 2021. There is no meaningful action taken in pursuance of joint Committee report and

order of this Tribunal dated 21.9.2022. There is no credible inter-state coordination mechanism. Instead of the matter being taken casually, as is happening, there has to be strong monitoring mechanism with monitoring at suitably higher level such as DMs/SSPs on daily basis. Further monitoring is required at the State level by Chief Secretaries and DGPs. There has also to be inter-departmental and inter-state coordination. In the course of continuous unchecked mining and transportation of illegally mined material, large number of JCBs and other machines are engaged resulting in damage to environment and wildlife.”

8. Separate compliance report from States of Rajasthan, Madhya Pradesh and Uttar Pradesh was called which is filed and is on record. During the course of hearing today, we have heard the officers who attended the proceedings through video conference.

9. The version of State of Rajasthan based on their submissions dated 05.04.2023 are as follows:

“1. The issue of illicit sand mining in the Dholpur district is mostly brought to light by the fact that most of the mining used to occur on the Madhya Pradesh side of the region, which could be seen frequently from the bridge on the Agra-Gwalior Highway. The Agra-Gwalior Highway is then used to transfer some of the illegally mined sand from the Madhya Pradesh side to Rajasthan. The vehicles used to transport sand illegally typically lack Vehicle Identification Numbers for which transport and police department in district Dholpur is ensuring for the previous 5-6 months that every vehicle which discovered to be without a number had that number immediately added, along with the trolley's three sides, as part of a district-wide initiative by the transport department to allow action to be done if the vehicle was engaged in illegal mining. According to the district transport officer's report for the years 2022–2023, the Registration Numbers on 947 vehicles—of which 389 are tractor trolleys—have been added. Also, 128 cases involving errant vehicles have been registered, and a fine of Rs 24.43 lakhs has been imposed during the past four years. (Annexure-1).

The Dholpur Police have pursued harsh measures against those who are engaged in illicit mining. In 2022, the police have registered 137 cases against the vehicles used in illegal mining; 310 people have been detained; 11712 tonnes of illegal sand have been seized; 118 vehicles have been seized; and in 117 of these cases, chargesheets have been filed in court;

2. ... the platoon of the 14th RAC (Rajasthan Armed Constabulary) was provided on January 30, 2023, by ADG Law and Order which is stationed at Sagarpada on the Rajasthan-Madhya Pradesh Border. Additionally, ADG Law and Order has given special permission for the deployment of an anti-dacoit force to halt illegal sand mining on need basis in special circumstances.

3. The District Collectors, District Superintendents of Police and officials from Forest Department, Transport Department and Mining Department of Dholpur (Rajasthan), Agra (Uttar Pradesh), and Muraina (Madhya Pradesh) held a meeting on March 17, 2023, in accordance with instructions from the Honorable NGT regarding the formation of the interstate special task force with members from all stakeholders departments. Also, on March 20, 2023, a video conference meeting of the Chief secretaries and DGPs of the States of Rajasthan, Madhya Pradesh, and Uttar Pradesh was also held to discuss interstate coordination. The sharing of information and action regarding unauthorized sand mining in the NCS region now frequently involves communication between the Districts of Muraina, Agra, and Dholpur.

4. The district administration has established four interdepartmental Check Posts at the susceptible transit areas, including Sagarpada, Barentha, Housing Board, and Panchgaon, staffed round-the-clock by personnel from the mining, forest, police, and transport department. Other district police checkpoints, such as Bijoli, Sakhawara, Jatoli, Andua Purani, Gadhi Jafar, Jaraga, Aangai, Aanth Meal, Basai Nawab, Jasupura, Town Chowki, Sewar Pali, etc., in addition to these interdepartmental checkpoints, also regularly take enforcement action against unlawful Chambal Sand. (Annexure-6). All of the aforementioned four interdepartmental Chowkies are thought to require CCTV cameras in order to track and monitor the movement of people and vehicles engaged in illegal mining. In addition, long-distance cameras in the NCS area need to be installed at Jhiri and Sone ka Gurja, for which the NCS deputy conservator has sent a request to the chief conservator of forests Ranthambhore Tiger Reserve Sawai Madhopur Rajasthan. The use of wireless radio communication devices can be an effective way to improve communication and information access. The advanced features and benefits of these devices can help enhance the efficiency and effectiveness of operations, while also ensuring the safety and well-being of staff. The proposal for base station, repeaters and hand sets has also been sent to the higher authorities by the Deputy Conservator of Forest National Chambal Sanctuary Rajasthan and a budget for the same is expected very soon. (Annexure -7).

5. After receiving suggestions at an interstate meeting on March 17, 2023 based on Uttar Pradesh's experience on the Agra-Gwalior Highway, the Dholpur Transport Officer has written to the Transport Commissioner Rajasthan Jaipur requesting the establishment of two AI-enabled Check posts in the Dholpur District, one at Sagarpada and the other at Bairetha. Automatic Number Plate Recognition (ANPR) is a technology that uses AI to identify and read vehicle number plates. ANPR systems use cameras and AI algorithms to capture images of number plates, which are then processed to extract the registration number. This can be used to check if the vehicle is registered and licensed to be on the road, as well as to detect any violations such as speeding or running red lights or looking at the previous record of the vehicle. Similarly, AI can be used to detect overloading of vehicles. This can be done using weighbridges that are equipped with sensors and cameras to collect data on the weight and size of vehicles. The data is then

analyzed using AI algorithms to determine if the vehicle is carrying more weight than is allowed by law.

6. In the Dholpur district, the Chambal River originates in Jhiri and empties into Samona Ghat. All the areas in between the routes that are susceptible to unlawful mining and where there is a plentiful supply of sand were surveyed by the drones. With drones, all interior illegal passages were found, and numerous such paths were demolished with the aid of machinery. (Annexure-9) Every day, drone surveys were conducted at all such locations, and two drone survey crews were stationed along this section of the river. During the drone survey, the team was instantly notified if any indication of unlawful mining or any vehicles used in mining activities were discovered. All of the susceptible points' photos and videos were carefully stored on a pen drive and watched over by the monitoring team. (Annexure-10) Within the district administration, all departments, including Police, Forest, Mines, and Transport, closely cooperated and coordinated. Moreover, three boats were stationed in the Rajghat region, one of which protected the downstream side while the others covered the upstream side.

7. A directive prohibiting the sale of petrol and diesel to vehicles used in illegal sand mining was issued by the District Collector of Dholpur on January 13, 2023 and again on March 2, 2023 in response to the Honorable NGT's order not to sell Petrol/Diesel to vehicles involved in illegal sand mining. On 10.03.2023, a meeting with Petrol Pump Owners and Oil Marketing Companies (OMCs) was also organized, and representatives from the OMCs and Petrol Pump Owners stated that because fuel in Rajasthan is more expensive than in the nearby districts of Uttar Pradesh and Madhya Pradesh, such vehicles involved in illegal mining typically purchase fuel from these districts Agra and Muraina respectively rather than from Rajasthan. Additionally, they pointed out that while a single petrol station in the neighboring state of Uttar Pradesh sells 2000–3000 kiloliters of petrol or diesel per day, the average consumption in the entire Dholpur district along the Agra–Gwalior Highway is 700–800 kiloliters per day, which is an obvious sign that the majority of the vehicles used in illegal sand purchases their petrol/diesel from the nearby districts. (Annexure 12). On March 24, 2023, a prohibitory order was issued by District Collector Dholpur under section 144 of the CRPC, instructing all parties not to furnish petrol or diesel in excess of the permissible container limit, to unnumbered tractors, or to vehicles used in illegal sand mining.”

10. State of Madhya Pradesh through its submission dated 13.04.2023 has reported on following actions being taken:

“i. The sale of illegal sand should be prevented and prohibited further the use and utilization of the sand will be carried out from the sanctioned/valid sand mines.

ii. The sand contractors may be allowed to establish stockyard to overcome the possible shortage of sand due to the closure of illegal excavation of sand.

iii. *The Forest Department should ensure that the confiscation proceedings of vehicles should be completed and orders are passed within a period of 1 month and if the confiscation proceedings are not completed in that case the court proceedings should be concluded within time limit. Further the confiscated vehicles should be auctioned and handed over to the other departments for various uses.*

iv. *A joint meeting should be convened with the border districts of Rajasthan adjoining with Sheopur, Morena Districts for discussion on the subject of revenue, Police and Forest Department.*

v. *Forest Department should monitor the timeline of pending cases of confiscation and should also monitor the duration of the proceedings and ensure that the order of confiscation of vehicles be passed at the earliest.*

vi. *The process of installation of CCTV Cameras in the Districts should be ensured and if required the hidden camera should also be installed so that immediate action should be initiated on the basis of records received and to establish effective control over illegal activities.*

vii. *In the leadership of District Task Force incognito raids were carried out and during the raid it is ensured that the vehicles transporting illicit sand are seized and the Forest Department has also initiated the confiscation proceedings against such vehicles. During the last 1 year the Forest Department has seized 69 vehicles wherein the confiscation proceeding is pending and during the last 1 year 42 vehicles have already been confiscated by the forest Department.*

viii. *The Director General of Police directed that the Police, Revenue and Forest Department should take joint action, the process of videography should also be carried out and the co-operation of Public Relations Department should be taken for its broadcast.*

ix. *The commissioner Chambal Division directed that an immediate action should be initiated against the vehicles without display of registration number upon the number plates and the registration number should be displayed, empty tractors should be stopped and number should be printed upon the vehicles without having number plates and the number printing charges should be deposited immediately to the concerned agency.*

x. *Action against illegal activities should be published prominently in newspapers.”*

11. In addition to above actions, the check posts have been established at the relevant places and process has been initiated for cancellation of all the licenses of offenders and the persons who are involved in the illegal sand mining activities and cancellation of leases. First Investigation Report has also been registered against violators.

12. State of Uttar Pradesh (vide its report dated 13.04.2023) has taken following actions:

1. *Effective informer system has been developed.*
2. *Sanctuary area has been divided into 33 beats for effective patrolling. Regular patrolling is done by patrolling team armed with firearms in accordance with roster.*
3. *The sanctuary area is also monitored by drones and binoculars from 02 watch towers and 04 monitoring stations.*
4. *Effective patrolling is also done by motor boats deployed at 04 places in Chambal river.*
5. *In the year 2021 about 130 monitoring /awareness committees have been formed with the help of Gram Pradhan in the villages located in Sanctuary. Regular meetings are held by the regional staff after visiting the villages to make the villagers aware. In the meetings, along with human-wildlife conflict, villagers are also made aware to discourage sand mining in Chambal river, importance of wildlife in the river to protect their habitat and for using M-sand (manufactured sand) etc. as an alternative.*
6. *Awareness program is held every year in the Centre of Nandgawa (Agra) under Sanctuary by Forest Department N.G.O.-T.S.A. (Turtle Survival Alliance) Madras Crocodile Bank Trust and B.N.H.S. for about 5000 villagers, students, wrists etc. from time to time.*
7. *For having effective control over illegal mining and transportation of Sand of Chambal in sanctuary on Link Road and by establishing co-ordination with the Police Department at the main roads, the police personnel as well as the staff of the Forest Department are deployed at the check-posts of the Police Department in shifts as per the requirement.*
8. *Co-operation of working Madras Crocodile Bank Trust, T.S.A., W.I.I. and B.N.H.S., which are functional in the sanctuary is also sought for the protection of the ghariyals, crocodiles, turtles and dolphins etc and their habitats also.*
9. *Fishing of fish is strictly prohibited in Chambal Sanctuary. No fishing lease is provided. Effective containment has been imposed through patrolling on regular basis.*
10. *There is no regular and organized illegal mining of Sand of Chambal anywhere in the Chambal river within the jurisdiction of Uttar Pradesh. Effective preventive and legal action is being taken immediately as per the rules in connection with the incidents of sporadic illegal mining committed by the villagers of the village situated on the banks of river Chambal. The details of the actions taken in connection with the sporadic illegal sand mining in the last 03 years are as follows-*

| SER. NO. | YEARS | REGISTERED FIR NO. IN FOREST | DESCRIPTION OF PROCEEDINGS |
|----------|-------|------------------------------|----------------------------|
| | | | |

| | | | |
|---|---------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 2019-20 | 27 (FIR also in 03) | Compensation of Rs. 5,86,000.00 was received in 16 forest offence cases. In 11 cases, charge sheet was filed in the Court. The cases have been pending in Hon'ble Court. |
| 2 | 2020-21 | 32 (FIR also in 03) | Compensation of Rs. 5,98,700.00 was received in 26 forest crime cases. In 06 cases, chargesheet was filed in the Court. The cases have been pending in Hon'ble Court. |
| 3 | 2021-22 | 10 | In 08 forest crime cases, compensation of Rs 1,08,500.00 was received. In 02 cases, chargesheet was filed in the Court. The cases have been pending in Hon'ble Court. |
| 4 | 2022-23 | 04 | Chargesheet have been filed in the Hon'ble Court. |

D- Details related to protection of alligators, crocodiles, turtles and Dolphins

1. Ghariyals are mainly found in Chambal river and Gerua river (Katarniaghat) in Uttar Pradesh.
2. Captive breeding program was started by U.P. Forest Department in the year 1976 for the safety and breeding of the Ghariyal, which had reached on the verge of extinction.
3. Under Captive Breeding Programme, 02 Rearing Stations were established at Kukrel, Lucknow and Katarniaghat, where rearing of eggs of Ghariyals collected from Chambal and Gerua rivers was done. The Ghariyals born out of the eggs were released again in Chambal, Gerua and other rivers. Till the year 2008, Ghariyals babies were released in the Chambal river under Captive Breeding Program. After the year 2008, the ghariyal babies from Kukral were not released in Chambal river. At that time, 642 Ghariyals, 107 Crocodiles and 52 Dolphins were found in Chambal river. After the year 2008, regeneration of Ghariyals and other aquatic animals is taking place only through natural regeneration in the Chambal river on its sandy banks. Due to continuous effective protection of the sandy banks of Chambal river, number of these aquatic creatures has increased.
4. For the past years, the nest of ghariyals, crocodiles, turtles on sand banks and the nest of rare Indian skimmer bird species on the sandy islands between the water stream of the Chambal river is protected during regular patrolling, due to which large number of their babies/hatchlings enter Chambal river every year. The following are the details of the protected nests and their hatchlings during last 03 years

| YEARS | GHARIYALS | | CROCODILE S | | TORTOISE | | INDIAN SKIMMERS | |
|-------|-----------|---------|-------------|---------|----------|---------|-----------------|---------|
| | NEST S | BABI ES | NEST S | BABI ES | NEST S | BABI ES | NEST S | BABI ES |
| 2020 | 109 | 3170 | 22 | 880 | 946 | 20812 | 104 | 337 |
| 2021 | 135 | 4062 | 23 | 903 | 958 | 21076 | 106 | 348 |
| 2022 | 137 | 4372 | 22 | 889 | 963 | 21186 | 109 | 360 |

Along with the above, 640 Ghariyals eggs were provided to Kukrel Ghariyals Rehabilitation Center in the year 2019 and 700 Ghariyals eggs were made available in the year 2021 from the banks of Chambal, from which the hatchlings will be released in other rivers of the State.

5. Due to natural reasons, the survival percentage of hatchlings/babies of ghariyals, crocodiles and turtles is extremely low. According to experts working in this field, the survival rate of ghariyals and crocodiles has been estimated at 2 to 5 percent and that of turtles at 6 to 7 percent.

6. As a result of effective prevention of illegal mining of sand from Chambal river and hunting of fishes, the number of ghariyals, crocodiles and dolphins found in Chambal river has increased during past years. The census is done every year by the Forest Department. The details of the last three years are as follows:

| YEARS | GHARIYALS | CROCODILES | DOLPHINS |
|-------|-----------|------------|----------|
| 2020 | 1860 | 586 | 129 |
| 2021 | 1872 | 594 | 146 |
| 2022 | 1887 | 608 | 151 |

Sand of Chambal excavated from Madhya Pradesh and Rajasthan is not transported through the border/ jurisdiction of Chambal Sanctuary, Uttar Pradesh. Action to restrain transportation of excavated sand from Madhya Pradesh and Rajasthan to Uttar Pradesh is done jointly by Mining Department, Police Department and Revenue Department, the details of which are as follows-

ACTION TAKEN BY MINING DEPARTMENT

Brief details of the action taken by Director, Directorate of Mineral and Mining, U.P. Lucknow was informed through the letter No. 1972 /M.-Vad- N.G.T.-Vad/2023 dated 29-03-2023 (Annexure-1), of which details in brief are as follows-

1. No mining lease/clearance has been approved by Mining Department in Chambal Sanctuary.
2. For effecting continuous monitoring of illegal mining/transportation in Agra and Etawah, a special task force has been formed under the chairmanship of

Additional District Magistrate, in which Forest Department, Mining Department, Officers of Revenue Department, Transport Department and Police Department are included.

2. *From the point of view of mining and transportation in the above mentioned districts, the sensitive areas and routes are continuously monitored by the task force.”*

13. It is further submitted that the Police Authorities of Districts Agra, Etawah and Jhansi have been directed to take necessary actions against the persons who are involved in the illegal mining and the constituted task force is keeping a constant vigil on illegal mining, transportation while action being taken for checking.

14. We find that predominant mining is reported in MP and UP reported that no mining is taking place in their State. In case of Rajasthan, alternate mining location down of Parvati River has been identified. Order of the Tribunal dated 05.04.2022 had emphasized on preparation of an action plan for remedial action for protecting aquatic habitats, demarcating and notifying areas for sand mining operations in conformity with ESMG 2016 and SSMG 2020, replenishment potential without conflicting with the national parks/ sanctuaries or any ecological habitat area, whether notified or not. We also find that Govt. of MP has issued notification on 31.01.2023 de-notifying 207 hectare of area of District Morena and Sheopur from the sanctuary area and intended that the auction process of legally valid sand mining should be completed at the earliest. This needs to be examined by MoEF&CC in context of sanctuary in question and its acceptability/ permissibility of such act on the part of MP.

15. Illegal sand mining was considered by the Hon'ble Supreme Court in Interlocutory Application No.29984 of 2021 in SLP (Civil) No. 10587 of 2019, *Bajri Lease LoI Holders Welfare Society Through its President vs.*

The State of Rajasthan & Ors. and vide order dated 11.11.2021 and held as follows:

“xxxxxx.....xxx

13. In spite of the order passed by this Court on 16.11.2017 that no river sand shall be permitted unless a scientific replenishment study is completed and EC is granted, 194 mining leases of Khatedari lands have been granted in the State of Rajasthan, with most of these lands being in close proximity of the river banks of the State. 114 Khatedari leases are within a distance of 100 metres or less from the river bank and only 23 Khatedari leases have been granted beyond a distance of 5 km from the river bank. The CEC has stated in its report that the agricultural lands do not have deposits of quality sand suitable for construction, being a mixture of sand, silt and clay. The Khatedars have been exploiting the locational proximity to the river banks by excavating sand from the river bed, instead of restricting the mining to their leasehold areas, completely in violation of the mining plan. The quantity of sand is in excess of the permissible limit which is transported by being shown as having been mined in the Khatedari lands. The CEC has commented upon the involvement of sand mafia in the trade of sand illegally mined by the Khatedars as well as the involvement of authorities in the State of Rajasthan. Therefore, the CEC has recommended the cancellation of all Khatedari leases located within 5 km from the river banks as well as those leases where violation of lease conditions including misuse of e-ravannas are detected. The CEC further recommended that no fresh Khatedari leases shall be granted, except for Palaeo deposits, without the approval of this Court.

14. Section 23C of the MMDR Act empowers the State Governments to make rules for preventing illegal mining, transportation and storage of minerals. This Court in Deepak Kumar (supra) directed the State Governments / Union Territories to formulate rules in accordance with the Model Guidelines. Pursuant to the directions issued by this Court and the National Green Tribunal (“NGT”), the Sustainable Sand Mining Management Guidelines, 2016 were issued (“2016 Sand Mining Guidelines”). The responsibility for implementation of the said Guidelines was placed on the State Governments which had to create a mechanism to measure the mined-out mineral and its transportation and also to ensure that the amount of mineral mined does not exceed the quantity permitted in the EC. The 2016 Sand Mining Guidelines recommended use of Transport Permits with bar codes, for generation of reports showing the daily lifting of sand and user performance reports. Transport Permits with bar codes would also enable vehicles carrying sand to be tracked from source to destination. Dissatisfied with the ineffective monitoring mechanism, failure of the Mines Surveillance System as well as lack of an effective institutional monitoring mechanism not only at the stage of the grant of EC but at subsequent stages with respect to illegal sand mining, the NGT, in an order dated 05.04.2019 in National Green Tribunal Bar Association v. Virender Singh in OA No. 360 of 2015 and connected matters, directed the MoEFCC and the State Governments to review extant monitoring mechanisms and consider revision of the 2016 Sand

Mining Guidelines. Consequently, the MoEFCC issued the 2020 Sand Mining Guidelines.

15. *The damage caused to the environment due to rampant unscientific illegal mining needs no reiteration. Unabated illegal mining has resulted in the emergence of sand mafia who have been conducting illegal mining in the manner of organized criminal activities and have been involved in brutal attacks against members of local communities, enforcement officials, reporters and social activists for objecting to unlawful sand excavation. The statistics provided by the State Government highlights the magnitude of the problem as about 2411 FIRs have been registered in relation to illegal mining in the State of Rajasthan, between 16.11.2017 and 30.01.2020. When this Court has restrained 82 mining lease / quarry holders from carrying on mining of sand and bajri unless a scientific replenishment study is completed and EC is issued by the MoEFCC, the State of Rajasthan ought not to have issued mining leases in favour of the Khatedars. It is clear from the report of the CEC that the majority of the Khatedari leases are within 100 metres from the river bed. The 2020 Sand Mining Guidelines prescribe that mining plan for mining leases on Khatedari lands shall only be approved if there is a possibility of replenishment of the mineral or when there is no possibility of river bed mining within 5 km of the patta land / Khatedari land. Agreeing with the CEC's conclusions on the issue of mining leases in Khatedari lands facilitating legalisation of transportation and sale of illegally extracted sand, we approve the recommendation of the CEC that all Khatedari leases which are located within 5 km from the river bed and those leases where lease conditions have been violated have to be terminated forthwith and that Khatedari leases shall be granted only with the permission of this Court.*

16. *The CEC has recommended imposition of exemplary penalty of Rs.10 lakh per vehicle and Rs.5 lakh per cubic metre of sand seized, which would be in addition to what has already been ordered / collected by the State agencies as compensation. Compensation / penalty to be paid by those indulging in illegal sand mining cannot be restricted to the value of illegally-mined minerals. The cost of restoration of environment as well as the cost of ecological services should be part of the compensation. The "Polluter Pays" principle as interpreted by this Court means that the absolute liability for harm to the environment extends not only to compensate the victims of pollution but also the cost of restoring the environmental degradation. Remediation of the damaged environment is part of the process of "Sustainable Development" and as such the polluter is liable to pay the cost to the individual sufferers as well as the cost of reversing the damaged ecology¹.*

17. *The scale of compensation by those who are involved in illegal mining has been dealt with by the NGT in National Green Tribunal Bar Association v. Virender Singh (supra). In its order dated 26.02.2021, the NGT considered and approved the Report submitted by the Central Pollution Control Board dated 30.01.2020, in pursuance of its earlier orders, on scale of compensation to be recovered for violation of norms for mining on "Polluter Pays"*

¹ Vellore Citizens' Welfare Forum v. Union of India & Ors. (1996) 5 SCC 647

principle. Additionally, para 9.2 of the 2020 Sand Mining Guidelines provides as follows:

“The environmental damages incurred or resulting due to illegal mining shall be assessed by a committee constituted by District Administration having expertise from relevant fields, and also having independent representation of locals and State Pollution Control Board. Guidelines for assessment of ecological damages prescribed by the State Government or Concerned Pollution Control Boards or any other authority shall be applicable and compensation as fixed shall be paid by the project proponent, in light of Hon’ble National Green Tribunal orders.”

18. Section 21(5) of the MMDR Act empowers the State Government to recover the price of the illegally-mined mineral, in addition to recovery of rent, royalty or tax. The penalty recommended by the CEC for illegal sand mining is in addition to the penalty that can be imposed by the State Government in terms of Section 21(5) of the Act. However, the basis for imposition of exemplary penalty of Rs. 10 lakh per vehicle and Rs. 5 lakh per cubic metre of sand has not been stated by the CEC in its report. The CEC is directed to follow the directions given by the NGT in respect of imposition of penalty / determining scale of compensation for illegal mining and the provisions of the 2020 Sand Mining Guidelines and determine the penalty / compensation afresh and submit a report to this Court within a period of eight weeks from today.”

16. Further, in case of LL 2021 SC 14, Civil Appeal Nos. 5231-32 of 2016, *Himachal Pradesh Bus Stand Management and Development Authority (HPBSM&DA) vs. The Central Empowered Committee Etc. & Ors.*, the Hon’ble Supreme Court of India discussing the environmental issues held as follows:

“xxxxxx.....xxx

46. In a constitutional framework which is intended to create, foster and protect a democracy committed to liberal values, the rule of law provides the cornerstone. The rule of law is to be distinguished from rule by the law. The former comprehends the setting up of a legal regime with clearly defined rules and principles of even application, a regime of law which maintains the fundamental postulates of liberty, equality and due process. The rule of law postulates a law which is answerable to constitutional norms. The law in that sense is accountable as much as it is capable of exacting compliance. Rule by the law on the other hand can mean rule by a despotic law. It is to maintain the just quality of the law and its observance of reason that rule of law precepts in constitutional democracies rest on constitutional foundations. A rule of law framework encompasses rules of law but it does much more than that. It embodies matters of substance and process. It dwells on the institutions which provide the arc of governance. By focussing on the structural norms which guide institutional decision making, rule

of law frameworks recognise the vital role played by institutions and the serious consequences of leaving undefined the norms and processes by which they are constituted, composed and governed. A modern rule of law framework is hence comprehensive in its sweep and ambit. It recognises that liberty and equality are the focal point of a just system of governance and without which human dignity can be subverted by administrative discretion and absolute power. Rule of law then dwells beyond a compendium which sanctifies rules of law. Its elements comprise of substantive principles, processual guarantees and institutional safeguards that are designed to ensure responsive, accountable and sensitive governance.

47. *The environmental rule of law, at a certain level, is a facet of the concept of the rule of law. But it includes specific features that are unique to environmental governance, features which are sui generis. The environmental rule of law seeks to create essential tools – conceptual, procedural and institutional to bring structure to the discourse on environmental protection. It does so to enhance our understanding of environmental challenges – of how they have been shaped by humanity’s interface with nature in the past, how they continue to be affected by its engagement with nature in the present and the prospects for the future, if we were not to radically alter the course of destruction which humanity’s actions have charted. The environmental rule of law seeks to facilitate a multi- disciplinary analysis of the nature and consequences of carbon footprints and in doing so it brings a shared understanding between science, regulatory decisions and policy perspectives in the field of environmental protection. It recognises that the ‘law’ element in the environmental rule of law does not make the concept peculiarly the preserve of lawyers and judges. On the contrary, it seeks to draw within the fold all stakeholders in formulating strategies to deal with current challenges posed by environmental degradation, climate change and the destruction of habitats. The environmental rule of law seeks a unified understanding of these concepts. There are significant linkages between concepts such as sustainable development, the polluter pays principle and the trust doctrine. The universe of nature is indivisible and integrated. The state of the environment in one part of the earth affects and is fundamentally affected by what occurs in another part. Every element of the environment shares a symbiotic relationship with the others. It is this inseparable bond and connect which the environmental rule of law seeks to explore and understand in order to find solutions to the pressing problems which threaten the existence of humanity. The environmental rule of law is founded on the need to understand the consequences of our actions going beyond local, state and national boundaries. The rise in the oceans threatens not just maritime communities. The rise in temperatures, dilution of glaciers and growing desertification have consequences which go beyond the communities and creatures whose habitats are threatened. They affect the future survival of the entire eco-system. The environmental rule of law attempts to weave an understanding of the connections in the natural environment which make the issue of survival a unified challenge which confronts human societies everywhere. It seeks to build on experiential learnings of the past to formulate principles which must become the building pillars of environmental regulation in the present and future. The environmental rule of law recognises the overlap between and seeks to amalgamate scientific learning, legal principle and policy intervention. Significantly, it brings*

attention to the rules, processes and norms followed by institutions which provide regulatory governance on the environment. In doing so, it fosters a regime of open, accountable and transparent decision making on concerns of the environment. It fosters the importance of participatory governance – of the value in giving a voice to those who are most affected by environmental policies and public projects. The structural design of the environmental rule of law composes of substantive, procedural and institutional elements. The tools of analysis go beyond legal concepts. The result of the framework is more than just the sum total of its parts. Together, the elements which it embodies aspire to safeguard the bounties of nature against existential threats. For it is founded on the universal recognition that the future of human existence depends on how we conserve, protect and regenerate the environment today.

48. *In its decision in Hanuman Laxman Aroskar vs Union of India (supra), this Court, speaking through one of us (DY Chandrachud, J.) recognized the importance of protecting the environmental rule of law. The court observed:*

“142. Fundamental to the outcome of this case is a quest for environmental governance within a rule of law paradigm. Environmental governance is founded on the need to promote environmental sustainability as a crucial enabling factor which ensures the health of our ecosystem.

143. Since the Stockholm Conference, there has been a dramatic expansion in environmental laws and institutions across the globe. In many instances, these laws and institutions have helped to slow down or reverse environmental degradation. However, this progress is also accompanied, by a growing understanding that there is a considerable implementation gap between the requirements of environmental laws and their implementation and enforcement — both in developed and developing countries alike

...

156. The rule of law requires a regime which has effective, accountable and transparent institutions. Responsive, inclusive, participatory and representative decision making are key ingredients to the rule of law. Public access to information is, in similar terms, fundamental to the preservation of the rule of law. In a domestic context, environmental governance that is founded on the rule of law emerges from the values of our Constitution. The health of the environment is key to preserving the right to life as a constitutionally recognised value under Article 21 of the Constitution. Proper structures for environmental decision making find expression in the guarantee against arbitrary action and the affirmative duty of fair treatment under Article 14 of the Constitution.”

49. *In its first global report on environmental rule of law in January 2019, the United Nations Environment Programme (“UNEP”) has presciently stated²:*

² UNEP, ‘Environmental Rule of Law First Global Report’ (January 2019), pgs viii and 223.

“If human society is to stay within the bounds of critical ecological thresholds, it is imperative that environmental laws are widely understood, respected, and enforced and the benefits of environmental protection are enjoyed by people and the planet. Environmental rule of law offers a framework for addressing the gap between environmental laws on the books and in practice and is key to achieving the Sustainable Development Goals.

...

Successful implementation of environmental law depends on the ability to quickly and efficiently resolve environmental disputes and punish environmental violations. Providing environmental adjudicators and enforcers with the tools that allow them to respond to environmental matters flexibly, transparently, and meaningfully is a critical building block of environmental rule of law.”

50. *The need to adjudicate disputes over environmental harm within a rule of law framework is rooted in a principled commitment to ensure fidelity to the legal framework regulating environmental protection in a manner that transcends a case-by-case adjudication. Before this mode of analysis gained acceptance, we faced a situation in which, despite the existence of environmental legislation on the statute books, there was an absence of a set of overarching judicially recognized principles that could inform environmental adjudication in a manner that was stable, certain and predictable. In an article in the Asia-Pacific Journal of Environmental Law (2014), Bruce Pardy describes this conundrum in the following terms³:*

“Environmental regulations and standards typically identify specific limits or prohibitions on detrimental activities or substances. They are created to reflect the principles and prohibitions contained in the statute under which they are promulgated. However, where the contents of the statute are themselves indeterminate, there is no concrete rule or set of criteria to apply to formulate the standards. Their development can therefore be highly political and potentially arbitrary

...

Instead of serving to protect citizens' environmental welfare, an indeterminate environmental law facilitates a utilitarian calculus that allows diffuse interests to be placed aside when they are judged to be less valuable than competing considerations.”

51. *However, even while using the framework of an environmental rule of law, the difficulty we face is this – when adjudicating bodies are called on to adjudicate on environmental infractions, the precise harm that has taken place is often not susceptible to concrete quantification. While the framework provides valuable guidance in relation to the principles to be kept in mind while adjudicating upon environmental disputes, it does not provide clear pathways to determine the harm caused in multifarious factual situations that fall for judicial consideration. The determination of such harm requires*

³ Bruce Pardy, ‘Towards an Environmental Rule of Law’, 17 Asia Pacific Journal of Environmental Law 163 (2014).

access to scientific data which is often times difficult to come by in individual situations.

52. In an article in the *Georgetown Environmental Law Review* (2020), Arnold Kreilhuber and Angela Kariuki explain the manner in which the environmental rule of law seeks to resolve this imbroglio⁴:

“One of the main distinctions between environmental rule of law and other areas of law is the need to make decisions to protect human health and the environment in the face of uncertainty and data gaps. Instead of being paralyzed into inaction, careful documentation of the state of knowledge and uncertainties allows the regulated community, stakeholders, and other institutions to more fully understand why certain decisions were made.”

The point, therefore, is simply this – the environmental rule of law calls on us, as judges, to marshal the knowledge emerging from the record, limited though it may sometimes be, to respond in a stern and decisive fashion to violations of environmental law. We cannot be stupefied into inaction by not having access to complete details about the manner in which an environmental law violation has occurred or its full implications. Instead, the framework, acknowledging the imperfect world that we inhabit, provides a roadmap to deal with environmental law violations, an absence of clear evidence of consequences notwithstanding.

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54. In a recent decision of this Court in *Bengaluru Development Authority vs Sudhakar Hegde*⁵, this Court, speaking through one of us (DY Chandrachud, J.) held:

“107. The adversarial system is, by its nature, rights based. In the quest for justice, it is not uncommon to postulate a winning side and a losing side. In matters of the environment and development however, there is no trade-off between the two. The protection of the environment is an inherent component of development and growth...”

108. Professor Corker draws attention to the idea that the environmental protection goes beyond lawsuits. Where the state and statutory bodies fail in their duty to comply with the regulatory framework for the protection of the environment, the courts, acting on actions brought by public spirited individuals are called to invalidate such actions...

109. The protection of the environment is premised not only on the active role of courts, but also on robust institutional frameworks within which every stakeholder complies with its duty to ensure sustainable development. A framework of environmental governance committed to the rule of law requires a regime which has effective, accountable and transparent institutions. Equally important is responsive, inclusive, participatory and representative decision making.

⁴ Arnold Kreilhuber and Angela Kariuki, ‘Environmental Rule of Law in the Context of Sustainable Development’, 32 *Georgetown Environmental Law Review* 591 (2020).

⁵ 2020 SCC OnLine SC 328

Environmental governance is founded on the rule of law and emerges from the values of our Constitution. Where the health of the environment is key to preserving the right to life as a constitutionally recognized value under Article 21 of the Constitution, proper structures for environmental decision making find expression in the guarantee against arbitrary action and the affirmative duty of fair treatment under Article 14 of the Constitution. Sustainable development is premised not merely on the redressal of the failure of democratic institutions in the protection of the environment, but ensuring that such failures do not take place.”

17. It has further been held that the precautionary principle has been accepted as a part of law of our land. Articles 21, 47, 48A and 51A(g) of the Constitution of India give a clear mandate to the State to protect and improve the environment and to safeguard the forests and wild life of the country. It is the duty of every citizen of India to protect and improve the natural environment including forests and wild life and to have compassion for living creatures. The Precautionary Principle makes it mandatory for the State Government to anticipate, prevent and attack the causes of environmental degradation. It is an inherent in Section 14 of the NGT Act that in case of any violation of any specific statutory environmental obligation gives rise to a substantial question of law and not just statutory obligation under the enactment specified in Schedule-I.

18. During the course of hearing through video conference, the higher authorities of State had submitted that actions are being taken against the violators according to law, apart from taking action against the drivers of the vehicles used, owners of the vehicles and using boats for patrol. Still there are violations and damage to the wild life, dolphins, turtles, crocodiles and also there are reports of illegal fishing and during the course of illegal fishing, dolphins, turtles and crocodiles are also killed.

19. In view to ensure further follow-up action, we direct:
- (i) District Authorities (Chief Secretaries, DGPs, PCBs of Rajasthan, MP and UP and SSPs and DMs of Bhind, Morena, Gwalior, Agra, Etawah, Jhansi, Dholpur and Bharatpur) to periodically monitor it and ensure compliance of (2016 and 2020) Guidelines and control illegal mining and submit a further action taken report within three months by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF.
 - (ii) Secretary, MoEF&CC need to have monitoring with Chief Secretary of MP to provide clarity on acceptability of Notification dated 31.01.2023 de-notifying 207 hectare from the sanctuary.
 - (iii) Secretary, MoEF&CC need to have a joint meeting with the Chief Secretaries of MP, UP and Rajasthan and the concerned Head of Departments (Forest and Wildlife and those related to NCS) and to ascertain complete protection of NCS with reference to wildlife and no mining or other activities. MoEF&CC need to give independent report on direction nos. (ii) and (iii) above.
20. Personal appearance of officials and officers in future dates are exempted.
21. List the matter on 03.11.2023.
22. Copy of this order be forwarded to the Secretary, MoEF&CC, Chief Secretaries, DGPs of Rajasthan, MP and UP and SSPs, Collectors, Bhind, Morena, Gwalior, Agra, Etawah, Jhansi, Dholpur and Bharatpur and State PCBs of UP, MP and Rajasthan by e-mail for compliance.

Sheo Kumar Singh, CP

Arun Kumar Tyagi, JM

Dr. A. Senthil Vel, EM

July 25, 2023
Original Application No. 248/2022
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