

# **'Is Sand Mining Killing Our Rivers?'**

*a series of virtual dialogues*

## **THE SAND ECONOMY OF INDIA**

**Nov 28, 2020**

**India Rivers Week 2020**

## River Sand in Ramayana!

- विचित्रवालुकजलाम् हससारसनादिताम् / रेमे जनकराजस्य तदा प्रेक्ष्य सुता नदीम् । । । २-५५-३२
- Then Seeta the daughter of King Janaka was pleased to see **the River Yamuna with wonderful, sparkling sands and waters re-echoing to the cry of swans and cranes.**
- देवसम्घाप्लुतजलाम् निर्मलोत्पलशोभिताम् । / क्वचिदाभोगपुलिनाम् क्वचिन्नर्मलवालुकाम् । । २-५०-१८
- Hosts of gods took a dip into its water .It was adorned by **white lotuses. It was hemmed in, with expanse of small islands and at some places, lined with white sands.**
- व्यपेत पंकजासु स वालुकासु/ प्रसन्न तोयासु स गो कुलासु/ स सारसा राव विनादितासु/ नदिषु हंसा निपतन्ति हृष्टाः ४-३०-४२
- "De-silted is the silt of rivers and they are now shimmering with **sand-dunes** and serene waters, and cow-stock is gathering on these **sand islands**, besides, they are resonant with clucking of Saarasa birds, in such rivers swans are delightedly taking deep dives.
- हंस सारस चक्राह्वैः कुररैः च समंततः । / पुलिनानि अवकीर्णानि नदीनाम् पश्य लक्ष्मण । । ४-३०-६३
- "On the **sand-dunes** of rivers Swans, Saarasa-s, Cakravaka-s, also Kraunca birds are fully overspreading from all over, see Lakshmana. [4-30-63]
- दर्शयन्ति शरन् नद्यः पुलिनानि शनैः शनैः । / नव संगम सव्रीडा जघनानि इव योषितः । । ४-३०-५८
- "The autumnal rivers are showing their sparkling **sand dunes** slowly and slowly, as with shying brides showing their curves and hips in their new trysts, slowly and slowly.



## **The IRW 2020 Process Regional dialogues, reports, panels, attendees**

- Long process, planning and discussions for which started more than two months back.
- Four Zonal Dialogues were held starting from North Zone on Oct 31, and ending in East Zone on Nov 21 and now this national dialogue.
- Zonal sand mining reports have been put together and presented at respective zonal dialogues.
- Each Zonal dialogues involved panel that included governance, legal, media, expert, civil society and community perspectives. We also tried our best to get industry perspective, but did not succeed much.
- Several hundred people participated and many more watched & continue to watch the video proceedings available on FB live and Youtube.



## INDIA RIVERS WEEK 2020

### 'Is Sand Mining Killing our Rivers?'

NORTH REGIONAL DIALOGUE  
4pm to 6pm IST  
31st October 2020

#### PANELISTS



**DURGA SHAKTI NAGPAL**  
IAS Officer



**ATHAR PARVAIZ**  
Journalist



**KIRANPAL RANA**  
Affected Farmer



**PARUL GUPTA**  
Lawyer



**SYED AINUL HUSSAIN**  
Scientist - WII

North Region Sand Mining Report Presentation by SANDRP

#### MODERATORS



**PARINEETA DANDEKAR**  
SANDRP



**MANOJ MISRA**  
Yamuna Jiye Abhiyan

To join the dialogue, register at:  
[www.indiariversforum.org/IRW2020registration](http://www.indiariversforum.org/IRW2020registration)



## INDIA RIVERS WEEK 2020

### 'Is Sand Mining Killing our Rivers?'

SOUTH REGIONAL DIALOGUE  
4pm to 6pm IST  
7th November 2020

#### PANELISTS



**PROF. BRIJ GOPAL**  
Freshwater Ecologist



**SIBI ARASU**  
Journalist



**MUNMUN DHALARIA**  
Documentary Filmmaker



**YOGESHWARAN**  
Lawyer



**NISARG**  
Wildlife Biologist



**BOLISETTY S**  
Conservationist

South Region Sand Mining Report Presentation by Dr. Jagdish Krishnaswamy (ATREE)

#### MODERATORS



**VISHWANATH S**  
Biome Environmental Trust



**DIPTI HUMRASKAR**  
Independent  
Nature Educator

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## INDIA RIVERS WEEK 2020

### 'Is Sand Mining Killing our Rivers?'

WEST REGIONAL DIALOGUE  
4pm to 6pm IST  
12th November 2020

#### PANELISTS



**LARA JESANI**  
Advocate  
Bombay HC & NGT



**TARUN NAIR**  
Conservation Biologist  
ATREE



**KHETARAMJI PATEL**  
Farmer & Activist  
Meval Lok Manch



**VILAS GORE**  
SOPPECOM &  
Geoscience Services



**TUKARAM MUNDE**  
IAS Officer



**YEMUNA SUNNY**  
Writer  
People's Research Society

West Region Sand Mining Report Presentation by K J Joy (SOPPECOM)

#### MODERATORS



**SHAILAJA DESHPANDE**  
Jeevitnadi -  
Living River Foundation



**SHRIPAD DHARMADHIKARY**  
Manthan Adhyayan Kendra

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## INDIA RIVERS WEEK 2020

### 'Is Sand Mining Killing our Rivers?'

EAST REGIONAL DIALOGUE  
4pm to 6pm IST  
21st November 2020

#### PANELISTS



**SUDARSAN DAS**  
Convenor  
Mahadai Bachao Andolan



**JHARNA ACHARYA**  
Assistant Secretary  
Dakshinbanga Matsyajibi Forum



**PROF. RAJIV SINHA**  
Dept. of Earth Sciences  
IIT Kanpur



**ANUPAM CHAKRAVARTY**  
Independent Journalist  
Assam



**DR. GOPAL KRISHNA**  
Advocate  
Patna High Court



**DR. R B LAL**  
Scientist  
MoEFCC, Gol



**NACHIKET KELKAR**  
Ecologist  
ATREE

East Region Sand Mining Report Presentation by Dr. Ravi Chopra (PSI)

#### MODERATORS



**DR. MALAVIKA CHAUHAN**  
Tata Trusts



**DR. DEBASHISH SEN**  
People's Science Institute

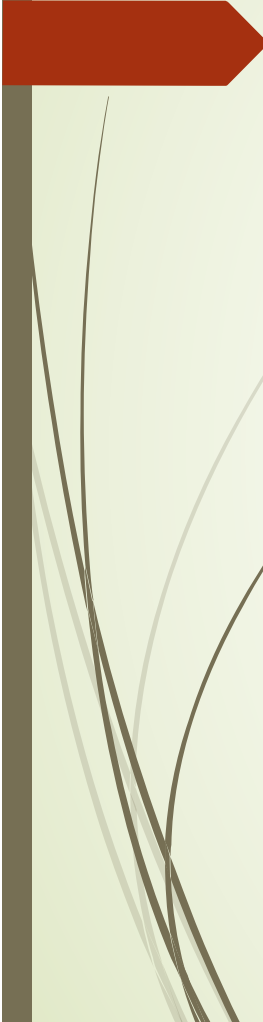
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# THE SAND ECONOMY OF INDIA

- ▶ As per Sand Mining Framework from Ministry of Mines (2018) we could be using about 850 MT sand in 2020 with 6-7% annual growth rate. Could be very conservative figure.
- ▶ Even if we assume sand price of Rs 1500 per T, 850 MT of sand would translate to Rs 127 500 Cr turn over from sale of sand.
- ▶ Having seen so much illegal mining, one question that arises is how much of this is ILLEGAL sand? No answers were forthcoming.
- ▶ “As long as there is demand for sand, there will be supply, legal or illegal. And this is one industry that is never in recession.” (Tukaram Munde, IAS at WZ Dialogue)
- ▶ However, one statistic that struck in this process is that government is user of majority of the sand mined. Does it mean the govt is using a lot of illegally mined sand? Can Govt work to ensure with a confidence inspiring certification process that ensures that government does not use illegal sand? There are lot of problems in this, since the sand looks, testes the same, legal or illegal.

# THE SAND ECOLOGY OF INDIA

- 
- A grain of sand is a habitat for us and so many other lives. (Munmun Dhalaria)
  - Why should IRW bother about River sand mining and sand economy of India?
  - Sand is an integral part of the River, River flow, river beds, river banks, from mountains to Deltas.
  - Sand in the river performs many functions.
  - The environmental impacts of River Sand Mining (RSM) are huge, as has been noted by judiciary, NGT, the environment groups, local communities, MoEF and state environment department and even Ministry of Mines in its Sand Mining Framework of March 2018.
  - But there are other dimensions of the impacts that are not so well understood or appreciated. These include the impacts on water security, livelihood security, food and nutrition security, structural security of river banks and structures built across rivers and near river banks and even that of our deltas.

# Impacts



## Environmental

Flow disruption, Groundwater depletion, Change in flood pattern, Riverbank erosion, River morphology changes, water pollution & scarcity, adverse impacts on Aquatic flora, fauna, avifauna, noise pollution, dust pollution

## Socio-Economical

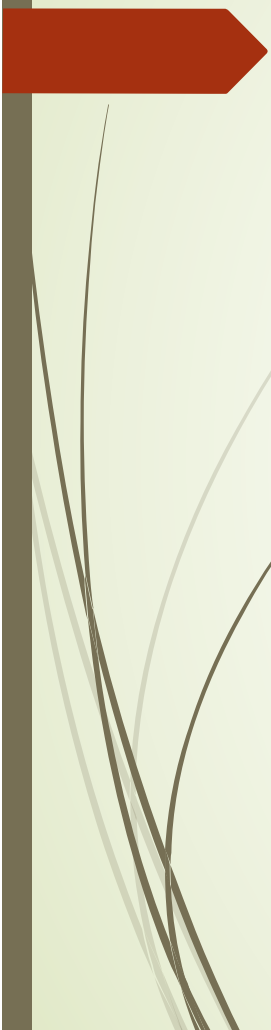
Adversely affects Riverbed/ bank farming, fishing, boating community, rural roads, River based rituals, common community lands, River becomes a safety hazard for every user of river, river side structures becomes unsafe, Even Roads become hazardous due to continuous traffic of heavily loaded trucks.

## Infrastructural

Damages to river banks, bridges, power poles, water supply structures, embankments, barrages, hydro projects, roads

**HOWEVER, there is a near total lack of scientific, systematic investigations on the adverse impacts of river sediment abstraction in most of the developing countries, and especially in India. (Koehnken et al. 2020).**

# Fisheries

- 
- Biodiversity: Aquatic, Terrestrial
  - Livelihoods: “The intricate relationships between the fishers, the small scale sand miners, the sand farmers, the birds and the trees, pertains not only to possibilities of developing sustainable ways of human life in an economic sense, but also the sustaining of all life forms and their relationships in nature.” (Yamuna Sunny at WZ Dialogue)
  - Fish in the river face many stressors, including dams, hydro projects, pollution, encroachment, waste dumping, RFD, catchment degradation and climate change, unsustainable SM is additional major stressor.
  - Indiscriminate sand mining since the 1990s has led to dwindling numbers of Otters from the banks of the Cauvery river, which otherwise used to be found on sand dunes in large numbers. Including from the 110 km stretch of the river that is declared as a Wildlife Sanctuary along Cauvery before the river enters TN. This has in turn led to the avoidable conflict between fisherfolks and Otters and then fisherfolks and sand miners. Fishermen occupy the lowermost strata in the society and have no capacity to confront the sand mafia.

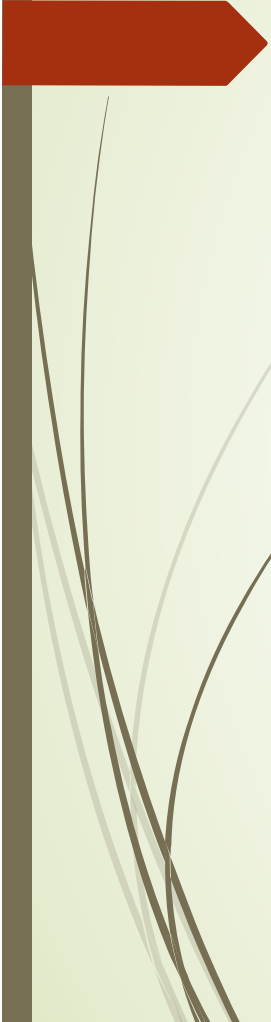
## SOCIO ECONOMIC IMPACTS

- *Rivers:* “Mining has altered the landscape, the river flow, water availability and sand deposit patterns. Streams are drying up from January onwards, for example Shed and Shakkar in Narsimngpur district, which used to hold water the year round. Tributaries of Narmada like Dhudi have dried up.” (Yamuna Sunny at WZ Dialogue)
- “But capital operates in ways that side-line sustainability, making ordinary people poorer, many of whom may be forced to migrate. Landless people lose not only common lands, but also a sense of belonging to any place on the earth.”
- “The indiscriminate sand mining in this area has led to impoverishment of large sections of people. There is NGT ban on SM, but it goes on due to mis-governance by the administration.” (Khetaram Dangi, a farmer activist from Udaipur, Rajasthan)

## Water Storage and recharge capacity lost

- Sand on the banks, beds and islands of the rivers stores large quantity of water, about 15-20% of its volume and that water then becomes available in drier seasons. The Billions of Cubic Meters of sand that has been extracted over the years has also thus destroyed natural water storage capacity of hundreds of millions of cubic meters.
- The bed level of the Cauvery river has dropped by over 2 mts at a number of places due to sand mining. How much natural water storage we have lost over the years and what would be its cost?
- The Sand also recharges groundwater at a large number of places. What would be the contribution of SM in depletion of our Groundwater and what would be its cost? What would be the cost of water storage capacity lost?
- The groundwater surface water dynamics in a river crucially depends on the river sand, particularly sand bars. The strip of sand is an aquifer which stores water and recharges groundwater. E.g., 1 m thick sand in a 100 m wide river, over one km would be storing 1500 cubic meters of water. The annual sand loss in western India thus would come to (conservative estimates) about 17 Million Cubic Meters of water storage and water recharge capacity equal to at least 2% of base flow or 35% of industrial water use. (WZ Dialogue)

## Illegal, Unsustainable sand mining

- 
- Non-adherence to rules, Non-compliance to processes
  - Non-Formation of DEIAA, SEIAA, DSRs, DMF, Replenishment study
  - Excavation of more than permitted minerals
  - Mining in additional/ beyond approved areas
  - Overloading of trucks/ tractors
  - In-stream mining, Creation of cross sectional bunds
  - Mechanised mining
  - Blocking, diversion of active river channel
  - Mining beyond permissible depth, time limit
  - Building roads, bridges in riverbed without permission

## Some Issues in Governance

**Inadequate Monitoring:** CCTVs, GPS Bar Code, RFIDs, Drones, Computerized inventory

**Non-transparency:** in Selection, Allocation, Monitoring, Compliance of norms

**Websites lack information:** Numbers of mines, Minerals extracted, Revenue earned, ATRs etc.

**No Information:** DMF formation, Collection & Utilization of fund

**Lack of HR, co-ordination, rules** PCBs, Mining departments short-staffed, Infighting

**No real EMP:** No clear rules to address adverse impact on rivers, environment

**Unsustainable Mining:** Deep, In-stream, Highly Mechanized, Creation of cross-sectional bunds, during nights

**No adherence to orders/guidelines:** No credible replenishment study, DSR, DEIAA, SEIAA

**Corruption:** Politician-officials-mafia nexus

**Period of mining leases/ No initiative to reduce demand/ use of alternatives**

**No role for the local communities**

## KEY INSTITUTIONS INVOLVED IN SAND GOVERNANCE

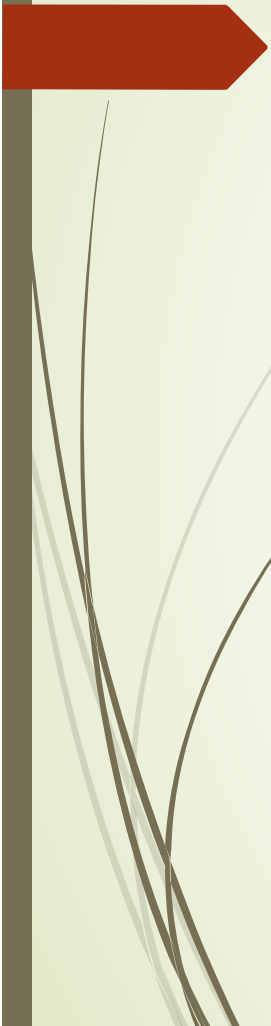
### States/UTs

- Mines & Geology Department
- Revenue Department: District Administration
- State Pollution Control Boards
- Police Department
- Road Transport Department
- Forest Department: Mining in Forests
- Urban Development Boards, Water Resources, Irrigation Depts, PWD, Highways & Road departments: Consumer of sand

### Centre

- Ministry of Environment, Forests & Climate Change
- Expert Appraisal Committee on Non Coal Mining
- Central Pollution Control Board
- Ministry of Mines
- National Mission for Clean Ganga-MoWR
- Ministry of Urban Development, CPWD, NHAI, others: Consumer of sand


## Pillars of Governance

- 
- MoEF
  - Union Ministry of Mines
  - State Mines and Geology Departments
  - District Magistrate
  - Communities
  - NEXUS: TN has a notorious legacy in SM. SM is a major source of cash for the politicians at all levels in TN, describing them as infamous entrepreneurs and that lines between miners and politicians is now blurred. Palar used to be a perennial river, but now all the rain water just flows down like from a PVC pipe. (Sibi Arasu, at SZ Dialogue)

## MoEF's Sustainable Sand Mining GLs

- 2016, 2020: Both came under pressure from Judiciary.
- Neither has been properly implemented. They do not show the serious intent and credible stipulations to ensure implementation.
- MoEF cannot just get away saying sorry it is state government responsibility and sorry we cannot do anything if these are not implemented.
- They treat all rivers similarly, Himalayan or Peninsular. Among Himalayan, Northern and Southern Tributaries. Small rivers or large rivers.
- However, when convenient, they treat them differently in terms of EIA-EMP or PH requirements.
- Can there be uniform sand mining norms for all rivers? The amount of sediments generated & transported by different rivers varies greatly; depending upon the geology, channel slope, flow regime and 'stream power', geomorphology, climate, riparian vegetation, floodplain, river pool sequence or any other feature and hence would vary for different rivers, locations and seasons. But the sand mining guidelines of MoEF or Ministry of Mines do not take note of these. Leases are given just based on area, not taking all this into account. As Prof Brij Gopal said in SZ Dialogue, this is clearly prescription for disasters.

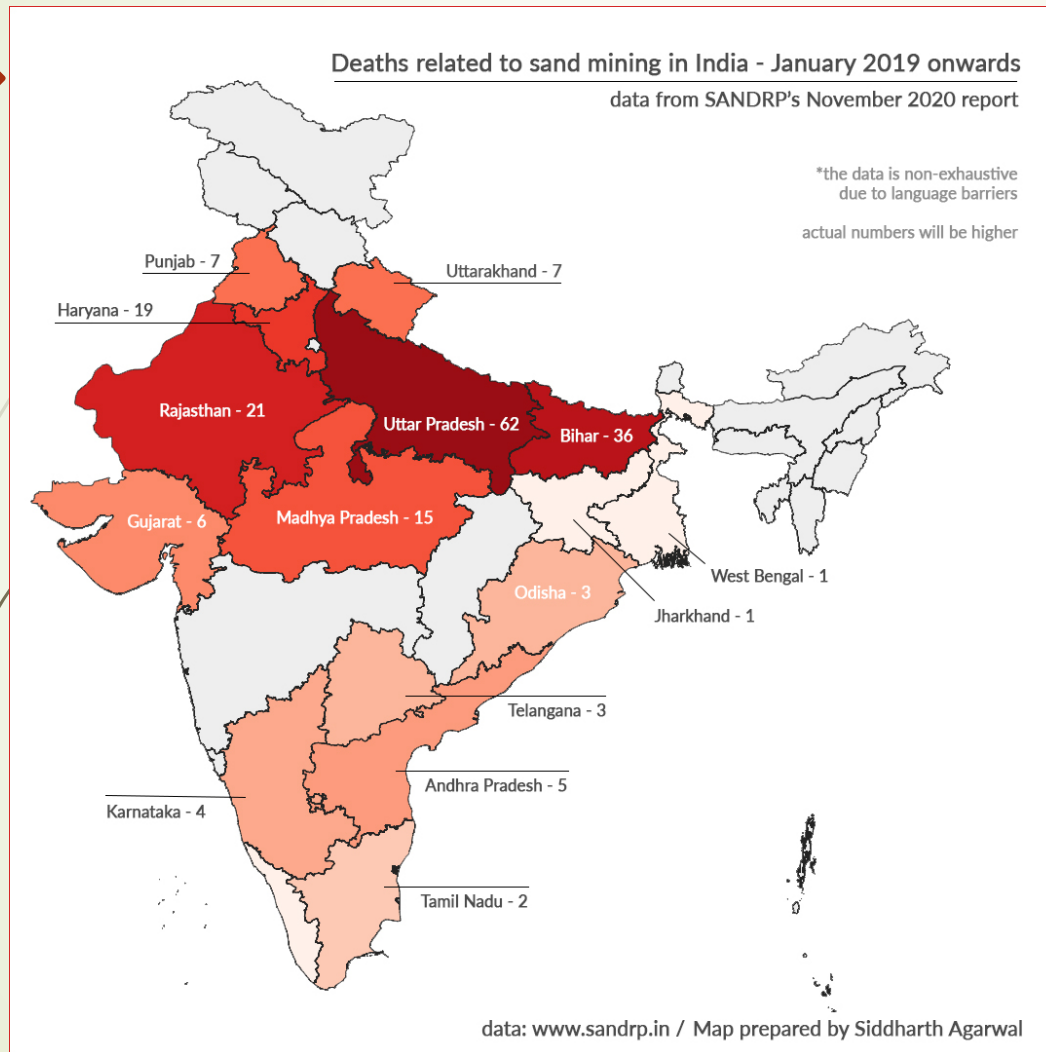
## Ministry of Mines Guidelines

- 
- 2018
  - Example of District Survey Report of Nammakal district of Tamil Nadu showed, how the reports are doctored to establish big sand mining potential in all the rivers.
  - Where is the confidence inspiring process that involves independent assessment of claims in the DSR?
  - Prof Brij Gopal has highlighted that the mining process and method is as important as the quantum of sand mined.

## Reality of Environmental Governance of RSM

- Sustainable sand mining. Parul Gupta, a lawyer said: "There are so many loopholes in policy and laws, the question of implementation is secondary. The letter and spirit of the Supreme Court's 2012 Deepak Kumar judgment stands violated by the Ministry of Environment and Forests. For example, the Supreme Court asked for need for environment clearance for ALL mining leases including for those leases for less than 5 ha. What is the meaning of EC without EIA-EMP and Public hearings? This needs to be challenged in SC."
- Chennai lawyer dealing with SM cases: "The Tamil Nadu State Environment Impact Assessment Authority acts more like a project proponent rather than a regulator." He highlighted that lives and livelihoods of very large number of people are dependent on rivers under SM. But law is not helpful in holding the culprits accountable. Unless we change these laws, people can do very little. NGT is at the most imposing costs, but imposing costs doesn't deter violations. NGT's time limit for appealing puts such a huge burden on the illiterate farmers.
- "Lack of environmental impact assessment, (sector) is poorly regulated, plagued by corruption, control of sand mafia, violent reprisals, complete disregard for law, rampant violation, with monitoring, compliance and enforcement close to NIL." (Lawyer Lara Jesani at WZ Dialogue)
- "No regulation = No deterrence = No accountability."

# VIOLENCE



- Durga Shakti Nagpal, an IAS officer felt she may not survive that day when attacked by sand mafia while on raid on illegal sand mining in Gr NOIDA in UP in 2013. (NZ Dialogue)
- Tukaram Munde, an IAS officer had to face “life threatening situation... since the economics and returns are so high” in his own words while clamping down illegal sand mining in Solapur, Maharashtra. (WZ Dialogue)
- The figures are gross underestimates, there are other kind of violence including threats, false cases, beating up, among many others.

## Violence



Journalists attacked in Jalalabad in Punjab on July 30, 2018 while reporting on the illegal sand mining.



Himachal forest official attacked by sand mafia in Poanta, May 19, 2020



Parents of kids who died in deep mine pit in Yamuna Nagar, Haryana July 08, 2019

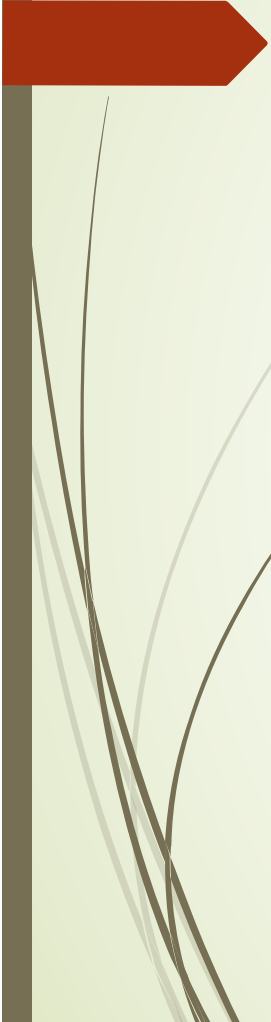


Shubham Tripathi shot dead in Unnao, UP on June 19, 2020

## Laws and Judiciary

- Sand mining laws are neither environment friendly nor people friendly. They can be environment friendly only if they are people friendly. (Yogeshwaran, a Lawyer in Chennai)
- The Landmark Deepak Kumar Vs State of Haryana and others order of the Supreme Court remains unimplemented till date. It essentially required that impact assessment and public consultation has to precede any environment clearance to RSM. That is still not happening for most RSM approvals as most of them are still for under 5 ha leases which does not require EIA-EMP or PH. The approvals come at district level, which is least properly regulated level.
- This is also true of a number of NGT, HC and SC orders.
- Higher Courts and NGT has been giving numerous orders and judgments, but the state is happily getting away with non implementation in most cases. How can we ensure that court orders get implemented? Why is the judiciary not concerned about non implementation of its orders?

## Role of Media

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- ▶ There are many examples where local media has courageously covered the issue and many have suffered attacks, false cases, threats and harassments.
  - ▶ However, in general, national media has not covered the issue with any depth, consistency or seriousness. There are exceptions, but in general there is almost no interest in this issue, except routine coverage of judicial orders or government actions.
  - ▶ This is in spite of the fact that journalists covering this issue have faced more attacks than those covering any other sector, as a senior journalist told us.

# International dimensions

- Trans-boundary rivers
- UNDP report: 2019
- WWF Report: 2018
- Global Trade
- Useful research
- Best practices. E.g. US:
- Steve Nelle on Riparian restoration and sediments:  
<https://www.youtube.com/watch?v=QdjMvZVRvVs>
- Lanes sediment balance:  
<https://www.youtube.com/watch?v=Js7wDZE4I7o>

# Alternatives

- ▶ M Sand: Karnataka has highest production capacity at 20 MTPA. Telangana and TN has 7.2 and 3.24 MTPA M-Sand production. No environment governance seems to be in place for M Sand units.
- ▶ Import: Imported sand is expensive at Rs 2300 /T in Kerala at the port.
- ▶ However, both the above options essentially shift the problem, not solve it. Since M Sand production has its own impacts and imported sand would also be having impacts at place of mining.
- ▶ Sand from Mined overburden (as per SM Framework): 20% overburden can be used for sand production. WCL has proposed to set up a unit near Nagpur, so this does not seem to have been used so far. MoM says out of 100 MTPA sand demand in Guj+Mah, 45% can be supplied from this source. MoM says Coal India can produce 283 MTPA of sand in this way. But this will have its own impacts
- ▶ Reservoir sediments
- ▶ Construction waste
- ▶ Fly Ash, Urban Solid Waste
- ▶ Alternative materials like Bamboo
- ▶ Alternative construction methods
- ▶ Can we reduce our demands?

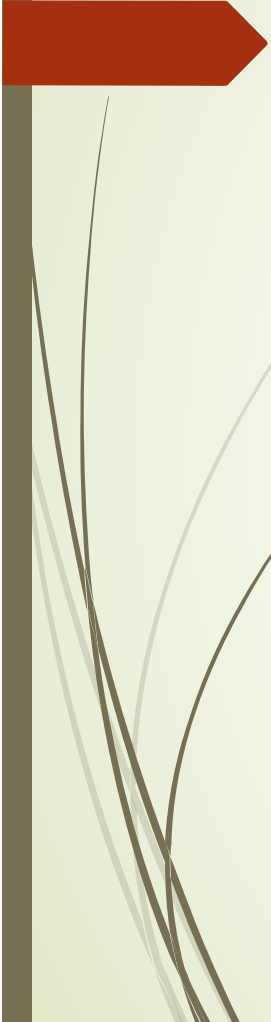
## Huge potential to reduce use of Sand

- It is possible to optimize sand consumption by 20-30%. Of the sand used in a typical building, only about 20% is used in main RCC frame. The rest is used in walls and plaster, which can mostly be replaced by alternative materials. Examples of buildings where alternative materials like engineered and treated bamboo have been used in the building construction were illustrated. (Vilas Gore at WZ Dialogue)
- Sand use in road building can be totally eliminated.
- “Standardization of engineering designs & construction practices and user acceptance to the eco-friendly alternatives would play an important role in saving our River eco-system.”

## Why are the alternatives not getting serious attention or traction?

- So why are most of these alternatives not getting the traction or serious attention they deserve?
- IS SAND TOO CHEAP? The fact is the sand is serving a lot of useful objectives when it is on the riverbed. But there is no attempt to quantify or include it in the cost of sand or compensate those who are adversely affected due to removal of sand from the riverbed.
- However, it becomes a costly commodity when it reaches the consumer. So a lot of profit is being made by a few from what is clearly a natural resource serving a lot of public objectives.
- There is no mention of this in MoEF's sand mining GLs of 2016, 2020 or MoM's SM Framework of 2018.
- SZ dialogue highlighted that there is a huge potential of using the sand in the sediment getting trapped in reservoirs behind the dams, either in situ or through draw down flushing of the reservoirs where feasible. One reason why in situ removal of sand/ silt from the reservoir has not found traction is because of the costs involved, in spite of the multiple benefits. If sand were to be valued at a higher cost, would that make it more viable?
- E.g. a 2005 study by Hemalatha AC et al showed how irrigation wells in sand mining areas along the Uttara Pinakini in Gauribidanur area in Karnataka suffered negative externality in terms of lower yields and failures, thus the sand mined in this area should be imposed additional tax of around 13% to compensate the suffering farmers. (from SZ Dialogue)

## MURKY SCENE

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- There are some rare exceptions, but in general this is the situation: A very murky scene with illegal sand mining, corruption, Nexus between politicians-officials-sand miners being rampant, violence and deaths.
  - MoEF officials and everyone else agree their guidelines remain unimplemented. The officials seem to have no clue how to get the GLs implemented.
  - Most Court orders, NGT orders remain unimplemented, the state finds a way out in many cases
  - People living close to the river are the sufferers and they have no role in SM governance. The govt has no faith them.
  - Sand Miners even indulge in brutal violence even against officials if necessary. Most cases they are able to get away.
  - The situation has deteriorated in last couple of decades or even less in most cases.
  - Conservatively, it's at least Rs 127 500 crore (annual turnover) industry with huge margins of profit. Most of the money feeding the politicians and political parties.
  - No political party has shown any interest in dealing with the issue.

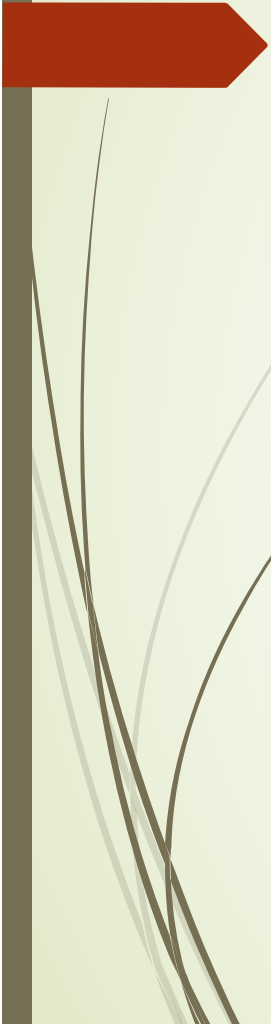
## The few bright spots in murky scenario

- Durga Shakti Nagpal, Tukaram Munde
- Shri Kiran Pal Rana, a farmer of Yamuna Nagar district in Haryana, who is also a petitioner in NGT. In Bundelkhand, women doing Jal Satyagaraha to protest against illegal mining is another bright point.
- Activists like Sumaira Abdulali and Brij Mohan Yadav
- Judiciary
- Lawyers like Ritwick Dutta, Lara Jesani, Parul Gupta, Yogeshwaran, Gopal Krishna
- Local Media: National media rare exceptions like Rajshekhar.
- Alternative advocates like Vilas Gore

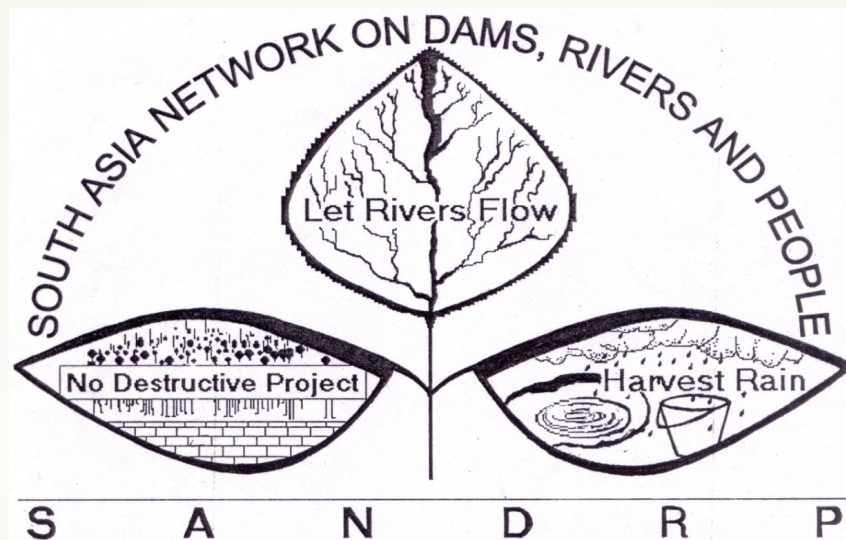
## Some Key Conclusions

- ▶ In SM, non compliance is the norm, compliance is an exception.
- ▶ Rivers killed by SM is like a death by a million cuts, nicks and wounds. (S Vishwanth at SZ Dialogue)
- ▶ What kind of money is involved: Rs 24 000 cr in TN alone. Even if we assume 5 times that at national level, we are talking about Rs 127 500 Cr annual income.
- ▶ Impunity of the miners
- ▶ The clearly visible nexus
- ▶ The abject failure of regulators
- ▶ Govts getting away with non implementation of MOST judicial orders
- ▶ HUGE TRUST DEFICIT in govt, regulator.
- ▶ Trapped in a vicious cycle. Tukaram Munde said we need to convert this to a virtuous cycle. "This conversion can only happen with the involvement of local communities, civil society and the government. What is lacking is RIGHT political will."

## Some Key recommendations

- 
- ▶ Supreme Court's 2012 order in Deepak Kumar case need implementation in letter and spirit. Possibly under SC's supervision.
  - ▶ We also need credible EIAs, PH, EMP and also cumulative impact assessments to arrive at informed decisions.
  - ▶ There is need to protect the defenders of rule of law and rivers in sand mining in the form of a legal measure. Because today nothing stops the sand mafia from getting away with violence. [Lara Jesani at WZ Dialogue]
  - ▶ WHAT IS **THE BEST PLACE FOR THE RIVER SAND**? On the River bed?
  - ▶ Is it possible to get sufficient sand in a sustainable, legal way? What do we need to do to achieve that?
  - ▶ Can the government ensure that it is using only the legally mined sand?
  - ▶ Can we have a quality rating system of buildings where if sand used is legally mined, they will get higher rating?
  - ▶ Role of Communities & Independent Civil Society: ONE VOICE IN DIALOGUES. (The FACE OF MAFIA: Checks and balances, but let us not forget the NEXUS.

# THANK YOU



For regular updates on water issues: Weekly Dams, Rivers and People News Bulletin

<https://sandrp.in/>, <https://facebook.com/sandrp.in/>  
[https://twitter.com/Indian\\_Rivers](https://twitter.com/Indian_Rivers), [ht.sandrp@gmail.com](mailto:ht.sandrp@gmail.com)

**Nov 28, 2020**

National Dialogue: **"Is sand mining killing our Rivers?"**

**INDIA RIVERS WEEK 2020**