



River Sand Mining Guideline for ensuring environmentally sustainable and socially responsible mining in transboundary Mahakali river

Context on river sand, gravel, stone mining in Nepal

The river sand mining in Nepal is carried out from the river for as construction materials for the bridges, houses and other development projects. The recent report¹ indicates that uncontrolled and mostly illegal extraction of river sand from riverbeds for construction is killing rivers across South Asia. The reporting about the illegal mining is quite difficult task for anyone as journalists are threatened, and there are evidences of killing of journalist in South Asia². It is quite challenging to discuss and report on such minings.

Mines and Minerals Rules, 2056 (1999), Local Self Governance Act 1999 and Environmental Assessment Guideline 1993 of Nepal has provided authority to local government to conduct sand mining which is regarded as the source of revenue generation. Currently, the Government of Nepal has practice of engaging private contractors to extract river sand³. The illegal mining in Nepal has not been documented properly and physical, socio-economic and environmental impacts of such extraction is difficult to count. In contrast, for the legal contracts also, local communities have protested against such minings as these communities residing in the bank of river have already experienced impacts of soil erosion during monsoon⁴.

There are many evidences where Government of Nepal has tried to ban illegal mining from the river. However, illegal mining of sand and gravel goes unchecked despite the ban in Nepal⁵.

In contrast, some of the researchers have provided evidences that sand mining has been regarded as a flood hazard mitigation measure in Nepal.

In this context, it is essential do the safe sand extraction observing the demand of sand in Nepal. The solution is to designate stretches of rivers from which sand can be extracted, and this designation must be done on ecological principles.

The Government of Nepal has also used Initial Environmental Examination (IEE)⁶ as license to make environmental friendly extraction of soil and gravel to the private contractors. However, the study conducted by Kathmandu University with Ministry of Federal Affairs and Local Development (MoFALD) has identified the limitations on implementation of the targets of IEE. The following major findings helps to understand the limitation on the implementation of IEE.

- Maps in the IEE reports does not reflect the exact and present locations of extraction sites.
- Rivers extractions were seen beyond the area mentioned in IEE reports.
- Extraction were noticed from environmentally sensitive areas such as flood prone zone, river bank erosion, etc.
- Occupational health and safety measures, environmental awareness program, health and sanitation also did not comply with IEE reports.

All the above-mentioned limitations from the research indicates the need of sand mining guideline that ensures sand mining contractors (private sector) consider environment friendly practices respecting riverine communities access to mining. The environmental friendly practices focuses on protection of habitats, conservation of ecosystem, control of pollution, etc. Whereas, the social aspects includes benefit sharing with communities, respecting human rights, gender and health practices of mining workers. Further, environment friendly sand mining practices of contractors in transboundary Mahakali river in Kanchanpur district of Nepal would help to maintain the river flow making less impacts in the downstream, however, detail study has not been conducted yet. Ultimately, the environmental friendly practices of private sector in the upstream creates a positive result for the communities of Mahakali basin.

● ¹<https://www.thethirdpole.net/en/2017/05/05/sandmining-is-destroying-asias-rivers/>

● ²<https://www.newsclick.in/indias-rivers-ruined-condition-due-unchecked-illegal-sand-mining>

● ³Mines and Minerals Rules, 2056 (1999), Local Self Governance Act 1999 and Environmental Assessment Guideline 1993 of Nepal

● ⁴<https://thehimalayantimes.com/nepal/locals-protest-sand-mining-seti-river/>

● ⁵<http://kathmandupost.ekantipur.com/news/2014-08-22/illegal-mining-of-sand-gravel-goes-unchecked-despite-ban.html>

● ⁶<http://publication.hils.org.np/hilspub/index.php/IJLE/article/view/95/46>

Benefits of Sand Mining Guideline in transboundary river



The proposed sand mining guideline at Bhimdatta⁷ municipality aims contractors to consider environment friendly practices respecting the communities access and control over mining for equitable sharing of benefits to the communities as outlined in the figure 1. The guideline provides the opportunity to ensure availability of adequate quantity of aggradate in sustainable manner⁸, protection of bank erosion, maintain river equilibrium⁹, streamline and simplify the mining process, smooth river flow and restoring riparian rights as highlighted in IEE report. Further, it would also help to protect the right of riverine communities as these communities will have increased occupational health and safety measures in place during the mining.

Figure 1 Benefit of Sand Mining Guideline

TROSA

The Transboundary Rivers of South Asia (TROSA) is a five-year (2017–2021) regional programme jointly implemented by Oxfam and its partners¹. The programme brings together efforts to support the lives of communities (especially women) living along the Mahakali River Basin.

TROSA GOAL

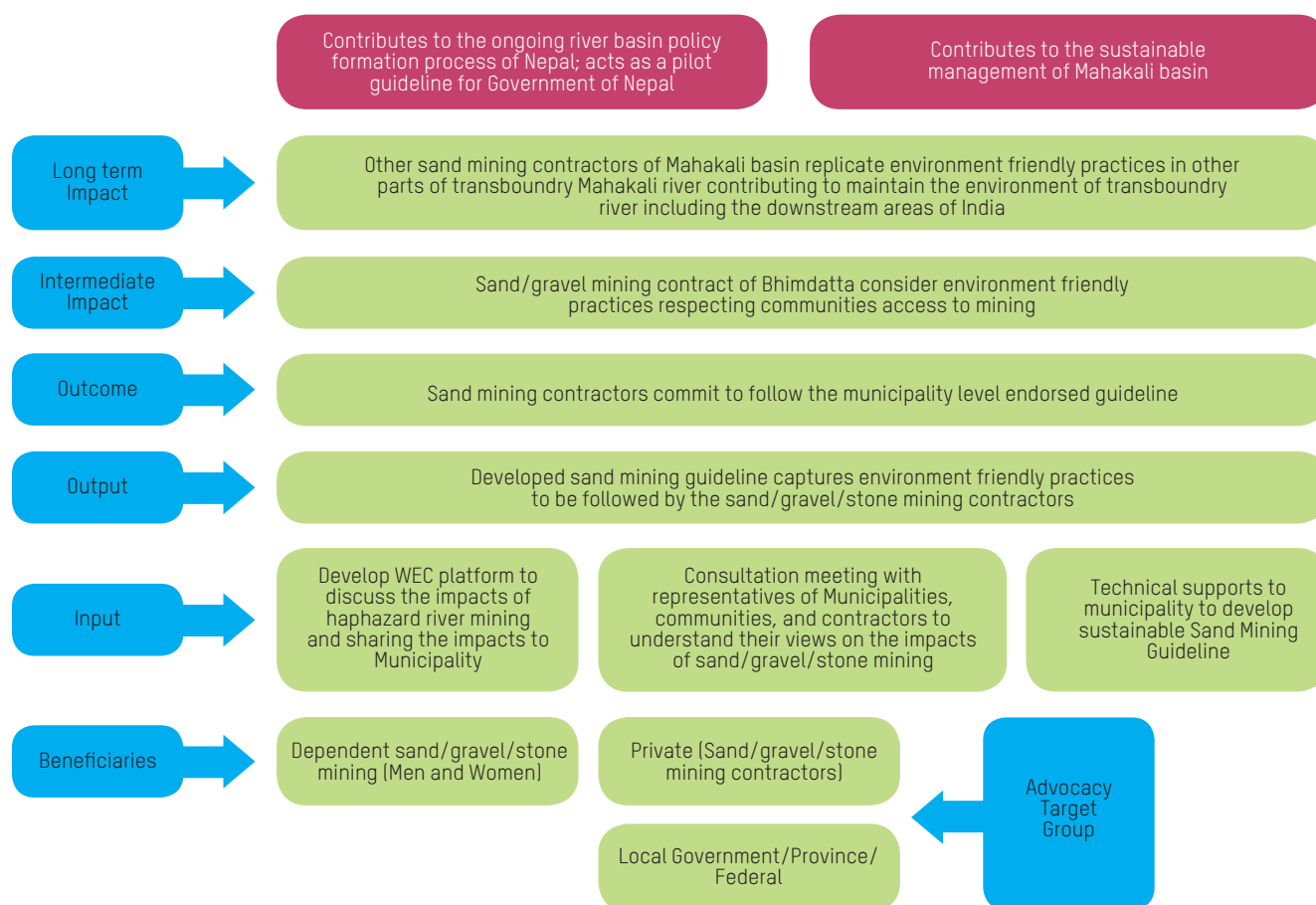
Reduced poverty of river basin communities through increased access to, and control over riverine water resources.

TROSA OBJECTIVES

- Improved policies and practices of government that protect the rights of river basin communities
- Improved policies and practice of private sector and other actors that respect the rights of river basin communities to water resources
- Strengthened capacity of the river basin communities and civil societies to influence transboundary water resource management
- Amplification of women’s profile and influence in dialogues and decision-making on water management and water infrastructure

⁷Bhimdatta municipality lies in Sudurpachim province of Nepal
⁸The IEE calculates total volume that can be extracted to make environmentally sustainable
⁹Rivers and streams maintain a dynamic equilibrium between discharge, slope, sediment load, and sediment size (Lane 1955). It is regarded as the indicator of healthy river.

Theory of Change for Sand Mining Guideline



Progress update on Sand Mining Guideline

- Bhimdatta Municipality has taken a lead to develop sand mining guideline.
- Sand mining contractors, riverine communities, sand mining workers and representatives of local government were consulted to understand the need of sand mining guideline.
- Field report was produced based on consultations and the report was shared to sand mining contractors, riverine communities, sand mining workers and representatives of local government.
- Oxfam in Nepal provided technical support to develop the guideline; financial support was provided by TROSA and PANNI project.
- Bhimdatta municipality has taken the lead to endorse the guideline.

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Supported by

