

# Indiscriminate Riverbed Mining Destroying Rivers In Jhelum Basin

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**Is it possible to find a way out of this mess? Interestingly, it turns out that even with all our greed we use only a small part of the sand, gravel, and boulders that flow down our rivers, less than a fifth as reported in the Environmental Social Impact Assessment (ESIA) of Gulpur Hydropower Project located on Poonch river.**

One are the days when a poor man would go down to the river with donkeys to load sand and gravel and then sell it by the roadside to feed his family.

The game is now of investment, political influence, permits, and destruction of riverbeds on a scale that has never been seen before.

River systems comprise not just the water flowing in it, but also the sediment, the silt, sand, gravel, cobbles, and boulders that flow with the river and are deposited along the river bed and banks.

Moving the sediments, the rivers maintain diversity of habitats upon which the river's living organisms depend.

Aquatic insects and algae that are the main sources of food for the fish breed and live in cobbles; the cobbles and boulders provide refuge for fish in winters and in floods and protect the young and smaller fish from predators.

Fish lay eggs on gravel beds and side channels in rivers formed by deposit of sediments in floods.

Ecosystems of rivers in the Jhelum basin are typical of the Himalayan river systems in which the sediments support life in the river, and livelihoods of people in floodplains and deltas downstream that rely on ecosystem services provided by the rivers.

The importance of sediments is such that the Indus Waters Treaty gives explicit recognition to the right of downstream riparian population to the sediments, just as it does for the water.

The trapping and release of sediments is regulated under the treaty, and has been a subject of frequent discussions and arbitration under the treaty.

Jhelum and its tributaries are rich in aquatic fauna. Take the example of the Kashmir catfish (*Glyptothorax kashmirensis*), which is very selective about where it lives and breeds, and requires just the right size of gravel for its home.

This fish is now on its way to extinction. Other species will follow. Like the already endangered mahaseer and a number of endemic species such as the Kashmir hill-stream loach, and long distance migratory species such as the vulnerable snow trout.

And whatever is left will be wiped out by the sewage and solid waste thrown into the rivers, turning them into sewers as cities grow.

Construction in the Jhelum basin – both in India and in Pakistan – has already irreversibly altered the flow and sediment regimes in the rivers.

As if this were not enough, the ongoing construction boom is being fed by indiscriminate mining of sand, gravel, and boulders from riverbeds, which are the cheapest source of construction materials for cities and villages along the rivers.

Mining in the river bed using heavy machinery is lucrative business, but think of the damage it causes.

Quite apart from destroying the river's ecosystem, stone crushing machines that proliferate on the banks spread fine dust all around. Incidences of lung diseases in the communities living nearby is on the rise.

The residents frequently complain of sleepless nights due to the noise from the vehicles and machines



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that operate non-stop.

Complaints to environmental protection agencies, local authorities, and public interest litigation is of little use.

With loads of cash to spare, the contractors are able to buy their way through.

#### A way out

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By scientifically planning and managing the mining operations, it is indeed possible to meet the needs of the communities and minimise the damage to aquatic habitats.

To make this work, however, requires a coordinated effort of the sediment experts, the geomorphologists, ecologists, hydrologists, mining regulators, and the mining community.

One such initiative now underway is preparation of a sediment mining plan for the Poonch river in Pakistan-administered Kashmir, where local and international experts will join to find solutions within the framework of sustainable development.

The effort will be based on a range of scientific studies and consultation with the stakeholders.

The expected outcome is a licensing and regulatory system which will be community-based, cognisant of local livelihoods, setting the limits on how much sand, gravel, and boulders can be extracted from which part of the river at what time of the year.

Part of the revenues generated from licensing will be retained by the local communities to manage the system, while the rest may be used for protecting the river ecosystems.

While this may sound like a pipedream, it is just possible that the initiative will provide an example of how to respect and live with our rivers. It may even become a model that others can follow.

*The Thirdpole*

In families, nearly invisible forces stir thought, emotion, and behaviour into patterns. A sputtering flow of anxiety through years of conditioning sets in motion styles or ways in which we will tend to manage stress in life and relationships for years to come.

This chronic anxiety is passed along from generation to generation. We see its mark, among other places, in the ways that we parent, especially in the most difficult moments and trying times.

Developing awareness of our own anxieties and impulses allows us to grow beyond them, our beliefs and behaviour to become differentiated from them. As a parent, I find myself occasionally stuck in ruts of anxiety and impulse, becoming unduly controlling or simply reacting in ways that are unhelpful. Acknowledging the ways that we find ourselves acting at the whim of our own anxiety is fundamental to good parenting. Of course, that's not all.

There are two fundamental drives present throughout our lifespan: attachment and autonomy. As parents, we have a responsibility in relationship with our children to nurture safe and comfortable closeness (attachment) as well as safe and comfortable distance (autonomy) through our parenting behaviour.

When problems arise, we experience anxiety at work within us. For many parents, the immediate reflex toward problem behaviour is to rein it in by setting limits. Skillful parenting requires exerting appropriate control while simultaneously acting in loving ways that instil courage in our children to act in spite of their own anxieties and impulses. Here are some aspects of good parenting to consider:

#### Nurture attachment and nurture autonomy

When reactive emotion and impulsive behaviour define our parenting, destructive interactions may stunt our children's development of critical self-soothing skills. Knee-jerk parenting behaviours sabotage what may be good intentions to transfer values and vitality. Instead, we may simply transfer more-of-the-same cycles of conflict and distance.

Good parenting requires sufficient mindfulness during moments of stress and embattlement to act in spite of anxiety and impulse rather than at their whim. Our parenting behaviour should stir confidence, connection, and character. We should nurture both attachment (closeness and belonging) and autonomy (independence and significance).

#### Be emotionally responsive

The Harvard Family Research Project defined responsive parenting as "the use of warm and accepting behaviours to respond to children's needs and signals" and found this type of parenting critical to a child's development.

## Laugh, Play, Forgive To Help Your Children Become Wiser

BLAKE GRIFFIN EDWARDS



#### Show individualised affection

Affections are active ways that we show we care. In fact, they are an integral part of the way we literally provide care. Dr Gary Chapman has written about five ways that we show our love for one another: words of affirmation, acts of service, giving gifts, quality time, and physical touch. An affectionate parent nurtures the best inside their children to grow outward through providing affection in a variety of ways.

#### Offer genuine forgiveness

Forgiveness is about choosing peace in spite of a transgression. If we do not become a forgiving parent, we paralyse the depth of our bond as well as the effectiveness of our influence. We allow enduring stalemates that cycle into conflict, distance, resentments, and spite. We can actively demonstrate what forgiveness is for our children (and ourselves) when, inevitably, they frustrate or upset us.

Every parenting investment can result, for our kids, in more realistic and constructive thoughts, increased confidence, a more rich and resilient emo-

tional life, healthier social decision-making, better habits, less destructive problem behaviours, and a more positive and meaningful tone in family relationships.

Take courage to change what you can and receive peace to accept what we cannot

In the '30s and '40s, the American theologian Reinhold Niebuhr frequently recited a prayer that eventually integrated into our cultural consciousness as The Serenity Prayer. An early version printed in 1937 read, "Father, give us courage to change what must be altered, serenity to accept what cannot be helped, and the insight to know the one from the other."

As a sometimes stubborn, reactive father, I must learn to sit calmly within the anxiety of my own inclinations. As I do, I hear this prayer echo in the silence of my own frustration, shame, insecurity. I confess pride and reflex. As I do, I gain perspective. I am becoming a husband and a father. Becoming.

Yet I grieve over what I can't control. Economic storms and uncertainty. My children's emotions and reactions. The twists and turns of life. I find myself again and again wrestling with a compulsion to control on the outside what I have not yet mastered on the inside. As I come to understand the breadth and depth of that which I cannot change, I do change. I learn (again and again) that good parenting is not about gaining control of my children but growing wisdom as I parent.

*-Psychology Today*

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