

*Preface*

## *Rivers of Life*

by Vandana Shiva  
scientist, ecologist, activist, and writer

I am a daughter of the Ganges and the Himalayas, nourished materially and spiritually by Dev Bhoomi, our sacred land. The mountains, the forests and Mata Ganga have shaped my imagination, my knowledge, my science, my life, my activism.

I have been an ecology activist for four decades, inspired by the Chipko movement that began in the early 1970s in my region of the Garhwal Himalayas in Uttarakhand. Uttarakhand is the source of the sacred Ganges and its tributaries. The Ganges that is mother to us, Mata Ganga, is India's lifeline. The sources of the Ganges have been recognised as sacred places. Materiality and spirituality are not separated in Indian civilisation. And this is the first reason why I highly appreciated a book that moves from the most pressing 'material' issues to the deepest spirituality. Rivers are sacred and are also the ecological foundation of our economy and society. The pilgrimage to four sacred sites, Gangotri, Yamunotri, Kedarnath and Badrinath, the Char Dham, aimed to connect us culturally and spiritually to the sacred sites on Earth, to connect us ecologically to the sources of life, the sources of our rivers.

Every year the glaciers of the Himalayas are losing half a metre of snow. The causes and consequences are not local. The melting of glaciers is a direct impact of industries and fossil fuels, of greenhouse

gas emissions. The formation of glacial lakes due to melting snow has doubled in the last seven years. Logging, dam building, and highway construction are carried out by national companies and non-local contractors. In addition to all this, climate change is contributing to the acceleration of disasters in the fragile Himalayas. The Himalayas, the mountain of snow, is the Third Pole that supplies water to half of humanity. Mata Ganga and our everlasting rivers are fed by glaciers and are the lifeline of half of India, creating the fertile plains that have provided us with food for thousands of years. The Himalayan disasters are an existential threat to India, both materially and spiritually. We must listen to the cry of the Himalayas because our wellbeing and survival depend on the Himalayan Ganges.

Today, driven by greed and corruption, we have become ignorant of the culture of the sacred and the ecological fragility of the Himalayas. The sacred sets limits. Ecological fragility sets limits. Justice sets limits. Today these limits are violated because rivers are dammed and diverted for electricity. The pilgrimage to Char Dhams is becoming a rough consumerist mass tourism. This book for which Fausta Speranza has chosen a beautiful title, *The Sense of Thirst*, is a reminder of these very limits. And the fact that alongside the problems there are solutions and 'sources' of thought and spirit is not only fascinating, but also effective because it reminds us that there are no more excuses. The way to reject greed and corruption and to rediscover the connection with life is there. The Himalayan disasters, including the tragedy of 7 February 2021, are a consequence of ignorance and greed, the greed to extract the last drop of oil and gas from underground, the last kilowatt of energy from the last river, including our sacred mother Ganges and its tributaries, the last penny, the last rupee of nature and workers.

The 2021 disaster took place in the Rishi Ganga Valley, near Reni, where tunnels for the Rishi Ganga project were under construction. The Rishi Ganga joins the Alaknanda, a tributary of the Ganges. Reni is the village from where women like Gaura Devi first warned about the ecological fragility of the Himalayas, forty years ago, after the 1970 Alaknanda disaster, and it was there that the first action of the

Chipko movement took place. The flood caused by a large landslide flooded one hundred square kilometres, caused the abandonment of 101 villages, destroyed 604 houses and six bridges, devastated five hundred acres of crops, barns and water mills. 142 animals and 55 people died. According to some reports, 200-500 people lost their lives.

Already in the past, women have immediately linked deforestation to landslides and floods, remarking that the primary products of the forest are not wood and revenue, but soil and water. Intact forests which protect the fragile Himalayan slopes provide more to the economy than when they are cut down as dead wood. For more than a decade, the non-violent direct actions of Chipko activists have prevented logging.

As a result of the 1978 Uttarkashi disaster, the government recognised that the women were right. The amount the government was spending to alleviate floods was much more than the revenue it was getting from timber extraction; so, the government realised that what my sisters in Chipko were saying had scientific basis. The real economy of the Himalayan forests owed everything to the land and the debate on water and the prevention of floods and droughts was central.

In 1981, as a reaction to the Chipko movement, logging was banned over a thousand kilometres in the Garhwal Himalaya. Today, government policy recognises that silviculture in the fragile Himalayas must be conservation silviculture that maximises the ecological services of the forest in protection, not an extractive silviculture. However, five hundred dams are planned in our region on the Ganges system and people talk about blowing up mountains for tunnels for hydropower projects. Most of the people who died or disappeared in the 2021 disaster were workers who were building tunnels for the hydroelectric project on Rishi Ganga near Reni and the Tapovan dam in Dhauliganga.

Private companies make profits. Nature, local communities and workers pay with their lives.

The 2013 Kedarnath disaster caused five thousand deaths and the disappearance of nearly 100,000 people. It should have been an alarm bell that the fragile and sacred Himalayas cannot suffer the heavy ecological footprint of unlimited greed and consumerism.

It has been ignored and here we had another disaster in 2021. Our study of the 2013 Kedarnath disaster revealed that most of the landslides were caused by tunnel explosions for hydroelectric projects. Explosions trigger thousands of landslides. At the first rain, these landslides fill the river bed with debris. There is no space to let water flow. We are literally stealing ecological space to our rivers. And when they have no space to flow, they will overflow, cut the banks and they will cause floods.

Usually, floods come at the end of a heavy monsoon. In 2013, they came with the first rain. The monsoon arrived early, and the rain was much heavier than usual. This is climatic instability. In the meanwhile, the ecological damage caused by poor development has reduced the ability of the mountain ecosystem to cope with heavy rain.

Climate chaos adds to vulnerability. Kedarnath, the 8th century Shiva temple, is located at the source of Mandakini River, a further tributary of the Ganges. Kedarnath's disaster was caused by the breaking of the Kedar Dome glacier, which led to the burst of Charbari, a glacial lake. These are climatic disasters. We must acknowledge that our glaciers are threatened and that melting glaciers will lead to disasters. Disaster preparation is a government duty. However, disaster preparation requires honest and robust ecological science as well as honest and solid participatory democracy. And it is a merit of Speranza's book that it also addresses the fragility of democracies.

In order to prevent future disasters, we must listen to our mountains and rivers: understand their ecological fragility and feed on their spiritual vitality. We must be aware of the latest scientific research in the field of ecology, as the second part of this book suggests, providing insights. It is crucial, in fact, to overcome that outdated model that equates trade and profit with 'development'. True development happens according to the laws of Mother Earth, the laws of the sacred Himalayas and the sacred Ganges. Kindness and respect, reverence and love are needed.

What this book – another woman's book – tells us very well is that if respected, our rivers are rivers of life and, if violated, they can become rivers of death.