

# Interview



**R.S. Negi** is a leading environmentalist of Kinnaur. **Rinki Sarkar** is a Visiting Fellow at the Centre for Interdisciplinary Studies in Environment and Development, Bangalore. The focus of her research is on unearthing adverse environmental consequences of development and change in the Western and Central belts of the Middle-Himalayas. In this wide-ranging interview, Rinki Sarkar engages R.S. Negi on the vexed question of coping with the exigencies of development and change in the ecologically fragile belt of the Western Himalayas.

*What is the nature of development and change that is occurring in Kinnaur over the last few decades?*

Economically, there has been a sea change. Due to persistent efforts of the local community, progress in the sphere of horticulture has been quite remarkable. Improvements in the road network and better irrigation facilities have certainly triggered off these developments. As you may be aware, Kinnaur is a tribal area. A number of locals in the region have secured access to employment opportunities in government departments because of the 'reservation policy'. However, concomitant to these changes, adverse environmental consequences have arisen.

*In what respects?*

Throughout this period of development and change, road construction activities have damaged forests. Once gone, these forests are gone forever. Now, we have new mega-hydroelectric projects coming up that are encroaching upon vast tracts of forest land besides diverting the natural course of rivers and water systems. The focus seems to be merely on expropriating commercial gains associated with such projects. There is little concern and only partial knowledge about repercussions on the environment and damage caused to local inhabitants in the surrounding vicinity. We are collectively agitating against these developments.

In order to identify the affected population, stress is merely being laid on 'submergence' criteria. But locals are also affected by blasting of tunnels which is an essential element of these 'run-of-the-river' based technologies. Villagers have been complaining that incisions made to the mountain facade are drying up water springs vital for their livelihood. Dynamite blasting causes noise, vibrations and is a potential threat to land and property. Further, it weakens the sloped mountainous terrain, making the affected region more prone to landslides. Unfortunately, geologists engaged to assess the nature of damage pass such disasters off as 'natural calamities' unrelated to project construction activities. So no compensation is sanctioned.

*Are people ignorant about these sorts of developments?*

Yes. People are very innocent in the mountains and they are kept in the dark.

*How was horticulture promoted in this region?*

The basic drive came from the neighbouring Kotgarh region in Simla district where horticulture was initiated for improving local economic conditions by a philanthropist named Satyanand Stokes. The government has also played an important role by distributing inputs at subsidized rates and enhancing road-connectivity for better marketing of the produce.

*In Simla district, there is evidence of massive illegal encroachments into the forests for expanding horticulture, a classic example of how commercialization pressures can transform the natural environment in the vicinity of villages. What is the scenario in Kinnaur?*

Fortunately, this is not the case in Kinnaur as landholding constraints were less binding for experimenting with horticulture. Further, farmers usually fetch a high off-peak price as Kinnaur is located at a relatively higher elevation as compared to other apple producing belts in the country and the fruit reaches the market at a much later date. Consequently, there is less pressure to opt for extensive methods of cultivation by encroaching into forests.

*Kinnaur district is being propagated as a potential tourist destination. Could this have a negative implication for the*

*region?*

At present, the scale of tourism is very low. We have bad roads that deter most tourists from coming into the region. Therefore, the tourist season is limited to a few months.

*In course of my field visits, people expressed concern about the recurring occurrence of cloudbursts which cause considerable havoc. These were unheard of in the past. Is that true?*

Yes. A cloud burst usually leads to violent and torrential downpour with catastrophic consequences. Earlier we did not experience any such occurrences and this is essentially a post-1980s phenomenon. Rainfall used to be very scanty in summer. But over the last two decades we have been witnessing erratic and heavy rainfall in summer and less snowfall in winter. When the sloped mountain terrain is fragile and loose, excessive rainfall of this magnitude invariably causes landslides. The setting up of hydroelectric projects has aggravated the situation by making the soil structure loose and thus more susceptible to landslides, both directly and indirectly. Directly, because of dynamite blasting and indirectly due to felling of trees that hold the soil together.

*Do road construction activities have similar implications for the mountain environment?*

Certainly. Roads are also constructed by blasting rocks using dynamite which weakens the soil surface. Wherever forests are encountered during road alignment, trees are mercilessly felled causing soil and water runoff aggravating damage caused in the aftermath of a landslide. The rolling boulders are dangerous and have often caused unforeseen loss of life and property. But the dilemma is that roads are crucial for local area development. National Highway-22 is the prime reason for progress being witnessed in Kinnaur today. It is the umbilical cord that links Kinnaur to the outside world, opening up markets and creating a host of opportunities for the local population.

*I agree. But, are thorough geological surveys conducted before roads and hydroelectric projects come up so that there is minimum damage?*

If only these surveys were sufficiently thorough, possibly we would not have witnessed such natural calamities. I know for sure that roads are often haphazardly constructed. Most often it is not the insights from geology or ecological prudence that governs these decisions but short-sighted and ill-informed motives.

*But I am sure that forests also bear the brunt of demographic change. Is that right?*

Yes. The regulated 'timber distribution' system, where a household is entitled to acquire one tree every five years is inadequate to cater to mounting pressures and, therefore, tends to be grossly misused. Timber is perhaps the most suitable material for construction of dwelling units as the region experiences frequent seismic disturbances and extremities as regards climate. There is a growing demand for timber as old dwellings are demolished to make way for more spacious units with changing village morphology. The earlier compact villages around a temple core are giving way to a more scattered kind of settlement pattern where it is crucial to live close to one's orchards for nurturing the plantations which is an all-year round activity. The breakdown of the joint-family system has also increased the need for more dwelling units in the village. The shortfall in timber requirements is usually met through the black market where timber acquired through illegal felling operations is sold. Thus actual timber extraction levels far exceed the planned levels, posing a great threat to forests.

Similarly, firewood needs can no longer be satiated by restricting lopping to dry branches or fallen twigs alone. Wet lopping that is very harmful to the growth of trees is a common sight. These unsustainable practices are attributable not only to an increase in the local population but also to an influx of migrant labourers who have come to work on hydroelectric projects.

*Since forests are so intricately linked to local livelihood, why don't people object when their forests get taken over for project purposes?*

Because, very often such damages are unanticipated. Take the case of the 100 megawatt Tedong hydroelectric project. Nearly 13000 precious deodhar (*Cedrus deodara*) and endangered neoza (*Pinus geradiana*) trees will need to be felled for project related road construction activities. Regenerating a forest of this nature will take at least a hundred years. This mammoth scale of destruction could have been avoided had more sustainable means

of transportation, such as 'spans' (ropeways), been planned. Similarly, there would have been less damage to the fragile terrain if less destructive tunnelling technology was used. In European countries, use of environmentally benign technology such as tunnel boring machines (TBM) is the norm; there is no dynamite blasting involved.

*Are these 'alternate' technologies more expensive?*

The costs of the project would mount a bit. So what? At least there would be less threat to the environment. With the latest tunnel boring technology, forests, fields and dwellings would get saved. Can you imagine the magnitude of intangible benefits that would accrue?

*Are you resorting to legal tools for defending your cause, particularly in the name of livelihood related rights and environmental protection?*

We are resorting to Article 21 of the Constitution which encompasses 'right to life'. The article propounds that if pollution is being generated due to a project or livelihood is affected then it amounts to denying right to life. Articles 46, 47, 48, 51A are all in our favour, legally and constitutionally. We have brought this to the notice of the authorities.

I would like to add that there are also problems related to national security as this region is close to the border. About nine to ten mega hydroelectric projects are expected to come up near border areas close to Tibet. These fall in the 'artillery-range'. So there is a grave threat to life and property in case of a strike. After our periodic outcries the Khab project has been stalled for some time on grounds of national security.

*What are the main issues that you are fighting for as regards the Karcham-Wangtoo project?*

The main issue is that locals affected by submergence problems have been taken care of, but no cognizance is being taken of those villages that are susceptible to damage on account of tunnel-blasting. Further, the proposed compensation does not take care of damage that affects future livelihood. It is limited to the nearest time horizon. Other issues which are much harder to quantify are threats to national security and long run

environmental impacts. How these are to be taken care of remains unclear.

*Compensation is one concern. Do villages in the locality benefit from the electricity that is generated?*

No. The state government is supposed to get 12% of the electricity generated; the rest goes to the national grid. We are demanding that the state share be increased from 12% to 25%, so that some of this electricity can be channelled to the local area, free of cost.

*During my field-research work, I realized that there are some beneficial consequences of these projects that cannot be disregarded. For instance, villages in the proximity of these project locations benefit from a growing market for milk, vegetables, local liquor and transport services. This perhaps may be one reason why the local people are more willing to live with the negative implications of these projects. What are your views on this matter?*

Yes, to some extent, but these ancillary benefits are temporary. Once the project is completed the construction company will go away.

*Since the commercial stakes in these projects are very high for the government, can measures be taken to minimize the undesirable consequences?*

Yes, of course. The use of environmentally benign blasting technology can make a big difference. In case of most projects, water is not being released from the dam site. Even if 25% of the water is released, the environmental impact will be less severe. We are not saying that projects should not come up. We believe in sustainable development. Sustainable development is not to be equated with 'no development'. But we are pleading for a balanced approach that causes minimum damage to the environment.

Since electricity is a basic need for development it should be priced accordingly. We believe that states elsewhere that are benefiting from our hydroelectric power should pay a higher price for electricity consumption. If the generated electricity is under-priced, there will be no motivation to conserve. The price

should cover not only generation costs but social and environmental costs as well. We are demanding that a part of the receipts should be invested in the affected areas to overcome damages to life, livelihood and the environment. The equation is fairly clear. Isn't it?

