Mahender Rautela: water volunteer

William Critchley, Marit Brommer and Girish Negi

Five years ago, at the age of 35, Mahender Rautela resigned from his private sector job in Delhi to come back to his home hamlet of Chhabisa, in the poor mountain state of Uttaranchal in northern India. He took up farming for an income - and dedicated himself to helping others in his spare time. Rautela joined a small group of existing part-time water volunteers. He wanted to help his community to cope with the increasing problem of water shortage. While other volunteers - elderly men - were already doing something towards the problem, Rautela felt that someone younger and more dynamic was needed to take charge of managing the water, and particularly to '*do justice to the shy ones*'.

Rautela in an irrigated kitchen garden. Photo: William Critchley

Why the streams and springs have been drying up over the last 20 years or so in the region is another story: rainfall hasn't decreased, but water levels have gone down dramatically. Some observers point to the invasion of thirsty *Chir* pine trees in place of the original oak forest, some blame increased extraction of water by pipelines upstream for urban use, and yet others criticise poor land use practises. Whatever the reason, the stream in Chhabisa where children used to swim in summer is now a trickle. The irrigated area has fallen to less than 10 percent of what it was. In the driest months –when the *naulas* (step wells) have dried up, the villagers are solely dependent on the unreliable and limited supply from the government pipelines. In areas of water scarcity, no drop of water should be wasted - but dripping taps and broken pipelines are common features in Chhabisa and other neighbouring villages. Many families in the area have to do with less than 100 litres of household water per day - a recipe for disease and poverty.

Water volunteers are a phenomenon of the last 20 years, a response of society to the growing water shortage problem. Water volunteers are now characteristic of all villages in the region and there may be between three and five part-time volunteers in a typical settlement. Rautela has become the lead water volunteer in Chhabisa. Dedicated individuals step forward informally and spontaneously, and society then accepts them on the basis of their integrity and hard work. The role of water volunteer is not limited to a particular caste, they mediate for everyone. However, volunteers do tend to come from the better educated, better off groups. Rautela, of course, has worked in Delhi, and has a comfortable home overlooking the village fields. He speaks English, which is a rarity in Chhabisa.

But what precisely is the role of these water volunteers, and how are they accepted by the community? These are questions we put to Rautela on the veranda of his cottage during the height of last summer. Vital of course is protection of water sources and outlets - step wells *(naulas),* springs *(dhara)* and pipelines. Yet what also became clear to us is that fair distribution and prudent use of limited water can make a big difference locally. So a water volunteer needs to keep his eye both 'upstream' - where the water comes from, and 'downstream' - where it is shared and used.

Rautela explains that in Chhabisa two water pipelines have been installed by the Government. The first of the two pipelines is now an ageing 40 year-old, and it is becoming increasingly unreliable. But the irony is that villagers are not permitted to 'interfere' with these, even when they break down. They are therefore continuously dependent on the slow reactions of government officials for help, which is often needed urgently. Rautela, with his fellow volunteers, now patrols the pipelines regularly for cracks in joints and dripping taps - walking, so to speak, where the shadow falls between the law and people's urgent needs. Not surprisingly, leaks are repaired quickly in Chhabisa. Rautela makes sure that this happens, even though he often needs to collect money from the villagers for tools and equipment. Officially this tends to go 'unnoticed'. The community appreciates it.

This begins to give us a clue to the character of a water volunteer. He (it is rarely a 'she' we discovered: it's basically considered to be a man's job) needs to tread with caution and sensitivity, bridging the gap between local society and government, while also helping to settle internal disputes. Conflict resolution between resource users, where common property resources are dwindling and populations are growing, is a concern worldwide. Such mediation is one key role of a water volunteer - but without the protection of an official position or the comfort of the salary that goes with it. The volunteer receives no tangible benefits. Strangely, this lack of 'officialdom' helps. That is probably because it's hard to turn away a well-intentioned, and good-natured, volunteer. Personal integrity establishes their authority within the community. Significantly, water volunteers often tend to be elected to the village *Panchayat* (village council) on the basis of their selfless deeds.

The day before we talked to him, Rautela had mediated between two families: one had allowed irrigation water to flood the ground floor of another's house. This was wastewater from the main storage tank in Chhabisa. After women wash cooking utensils in rationed amounts of water (washing clothes is not permitted here in summer), the waste is collected in an adjacent

Two of the authors interviewing Mahender Rautela in front of his house in Chhabisa. Photo: Girish Negi

storage pond with a capacity of 2 000 litres. Rautela oversees the use of that water - for irrigation of people's kitchen gardens where chillies, tomatoes, potatoes and fruits are nurtured. The area irrigated is between a quarter and one hectare , depending on the season. He supervises a rotational system: each of 14 nearby families receives the flow on a given day. These days can be 'traded' through negotiation. The flooding incident was resolved through such bargaining, arbitrated by Rautela.

Of course the key is how to attract and keep volunteers who are as effective and popular as Rautela: such volunteers are, we were told by one villager, *'as scarce as the water in this area'*. Nevertheless Rautela carries out his work with evident satisfaction, and there is no question that he, and his like, are appreciated in their communities and become trusted leaders. He has a gentle demeanour, but a firm commitment to seek for equitable access to water. Where water is limited and communities are affected it is not just scientists, or digital information highways to which we should turn, but local 'social hydrologists' as well. Their skills of applied common sense and tact can make their impact both potent and immediate. Villagers recognise this, and in return grant informal authority to such community members, to help control - and make better use of - their common resources.

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References

- Critchley, W., and Brommer M., 2003. **Innovation and Infiltration: Human ingenuity in the face of water shortage in India and Kenya.** Paper presented at the *International Symposium on Water, Poverty and Productive Uses of Water at the Household Level*, Johannesburg, January 2003
- Negi, G.C.S., and Joshi, V., 2000. **Drinking Water Issues and Development of Spring Sanctuaries in a Mountain Watershed** in *Indian Himalaya Mountain Research and Development,* Vol 22 No 1 29-31

Arvari Sansad: the River Parliament

Ambuj Kishore

The Arvari is a small river in the drought prone Alwar District of Rajasthan, India. For decades, the Arvari ran dry apart from a brief flow of runoff from the monsoon rains. Now, thanks to water-harvesting efforts in the region, the river holds water all year round.

The change began in 1987, when the NGO *Tarun Bharat Sangh* (TBS) started helping villagers in Gopalpura village to construct and rejuvenate traditional earthen dams called johads (see *LEISA Magazine* 16.1, p 14-15). More than 350 johads have been built in the Arvari catchment, and the active participation of villagers in the planning, design, implementation and monitoring of water resources has led to strong feelings of community ownership. Johads are small-scale structures but they have made a large–scale impact on water conservation. The improved availability of the water in this drought prone area has greatly improved the quality of life of those living in the area. In addition, the water harvested and stored in the johads caused the water table in the entire catchment area to rise. From 1996, the Arvari river began to flow strongly again and became perennial.

The question of ownership of these improved water resources, however, has been a source of recurring conflict. The first *johads* in the village of Gopalpura were declared illegal because formally as water resources belong to the state. When the villagers planted trees in the watershed catchment they were warned they would be fined because the land belonged legally to the state revenue department. Finally, after continued resistance by the villagers, an unwritten understanding was reached with the state agencies to let the villagers manage their environment.

The next challenge came as the Arvari River began to flow and the fish came back. In 1996, villagers received notice that the state had granted a contractor a license to fish in the river. Although the villagers are all vegetarians and do not eat fish, they realised that this might set an important precedent about control over the water resources. The villagers insisted that the river was theirs, it had begun to flow again as a result of their efforts, and they were entitled to a say in its management. The result has been a drawn-out battle between them and the fisheries department.

The *Arvari Sansad,* or *Arvari parliament,* was formed on 26 January 1999 as a way of managing the river and its waters fairly and to create a united front against outside intrusion. The river parliament represents 72 villages and meets four times a year to discuss problems and to decide on the best strategies for land and water use. It has 142 members who are nominated by their respective village institutions. The parliament has framed rules for the use and protection of the river and the surrounding land that relate to water use, the type of crops grown (excluding crops with high water needs), tree felling and illegal hunting. Another issue addressed by the parliament is the increasing value of land in the area - farmers and herders are coming under pressure to sell their land to businesses that depend on water extraction. A coordination committee comprising members selected by the parliament handles the operations and ensures that the rules are observed.

Villager's efforts have resulted in the departure of the fish contractor and they also succeeded in turning away a beer company that had hoped to set up a brewery using local barley and fresh water. The members of the river parliament and their communities have gained increasing confidence in their ability to take collective action, but this has not always been an easy process. Suspicions and conflict between different castes and factions need to be managed, and the village councils maintain many traditional limitations: they still rarely include women and the landless poor.

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Reference:

- Charlé, Suzanne, 2001. The Greening of Sariska Park. Ford Foundation report, summer 2001. Available http://www.fordfound.org/publications/ff_report/view_ff_report_detail.cfm?report_index=297