

# Ocean in a Drop of Water Empowerment,

ARADHANA PARMAR

*Cet article examine les anciennes façons de vivre de cette région semi-aride de l'Inde du Rajasthan dans le district d'Alwar. L'auteure met en évidence le succès d'une ONG locale qui a aidé à réinstaller les techniques traditionnelles des récoltes redonnant ainsi du pouvoir aux femmes dans leur communauté.*

The growing scarcity of fresh water is looming as one of the most threatening ecological, economic, and political crises of the twenty-first century. Environmental degradation, over-exploitation of water resources, and privatization and commoditization of water characterize the current water crisis. In order to face these environmental challenges, it is essential to discover alternate development paradigms and implement new local and community initiatives for environmentally sustainable and socially equitable management of water resources. In India, the reinstatement of traditionally successful water harvesting techniques and community-based resource management have opened new vistas for sustainable development and water conservation in the region.

In the semi-arid province of Rajasthan in general, and in the district of Alwar in particular, in response to the impending water crisis, a local non-governmental organization (NGO), Tarun Bharat Sangh (TBS), revived traditional rain water harvesting techniques for sustainable development with the help of local villagers. These techniques were based on accumulated traditional knowledge of local climatic and geographical features. Reclaiming these traditions of sustainability has changed the face of resource-starved villages in this area. Since women in these villages are primarily responsible for fetching water, the availability of water has not only changed their lives but has also empowered them.

Currently, the "empowerment" of women has become central to gender and development discourse and efforts to "empower women" have come to be an expected component of any credible development project or strategy (Parmar 2003). This paper will argue that TBS, the local NGO in the district of Alwar, did not start their

---

**"Women started the work for rainwater collection—they selected the site, arranged for the voluntary labour, and then, worked towards distributing the benefits equally. The women led this movement from the very beginning."**

---

water conservation program with the particular objective of empowering women but, by acting as a catalyst in the process of development and social change, the program helped women to discover their inner strength and agency and thus effectively "empowered" them.

## Loss of Sustainability

Traditional water harvesting systems have long been entrenched in the Indian culture. The archeological traces of sophisticated water conservation structures found in the Harappan site date from the beginning of the third millennium B.C. (Yunus and Parmar). The *Arthashastra*, a third-century B.C. treatise on politics, is heavily loaded with environmental preservation techniques (Parmar 1988).

Other scriptures of early times also frequently refer to tanks, reservoirs, wells and step wells, and different rituals connected with the construction of water reservoirs. Until the advent of colonial rule, natural resources including water were the common property of the villages, and communities were responsible for the maintenance of these resources. Over the centuries a deep partnership evolved between nature and human actions in these communities. The preservation of the natural environment was closely tied to cultural values which paid homage to trees, rivers and certain animals on which the villages depended for their livelihoods.

This self-sufficiency of villages was, however, eroded with the advent of the colonial rule, and the capitalist centralization that ensued. In 1863, the state Public Works Department (PWD) was formed and all the water resources, like *talabs* (tanks) and *Johads* (reservoirs), were usurped from the control of the people and society at large and became the PWD's domain. Continuing in the same vein, by 1865 the "reserved forests," protected forests and revenue lands, arable land and non-cultivated land were also taken away from the people and handed over to the Crown. These resources ceased to be available to the people and were declared as "revenue" available to the Crown. This translated into a considerable decrease in

# Water and Women

community resources and communities' loss of control over their Indigenous resources. It also marked the end of the communities' interest in their upkeep. Although the resource issues remained the same, the vision changed, the systems for resource management changed, and so did the local people. The British pushed their traditional knowledge into the category of obsolete, non-scientific, and backward. After independence in 1947, the government followed the path of modernization and industrialization carved by the western intellectuals. This centralized and top-down approach led to increased bureaucratization and to the continuing alienation of local people.

## Ecosystem: The Way of Life in Rajasthan

In the desert state of Rajasthan, the tradition of water storage evolved over centuries. The *riti* (tradition) of water harvesting was developed to collect every drop of water and, in doing so, *samaj* (society) developed a deep partnership between nature and human action within an ethical as well as religious framework. The virtues of frugality and modesty reflected the awareness the ancient Indian society had about natural resources and the symbiotic relationship between the environment and humans. It is this tie that enabled them to respect natural resources and consume them without exploiting them. The notion of good deeds in the service of the community and of the environment was considered *punya* (sacred and virtuous). Individuals were linked to environment in the same way as they were to their group, clan, or village. The gift of providing labour to benefit the interests of the entire community was the underlying spirit behind the water harvesting and conservation work in this region.

## Alwar, Rajasthan

Rajasthan, the second largest province of India, is a very dry state. The annual average rainfall does not go beyond 60cm while the national average is 110cm.<sup>1</sup> The semi-arid

---

**“There are 315 women’s organizations and four women’s banks, run by women. These women have changed the theory that only development planners can make plans for development.”**

---

region of the Alwar district in Rajasthan is located at the Aravali hills. Availability of water is a common problem in this region. Low rainfall and increasing deforestation left the area devoid of any vegetation and resulted in low water tables. In the 1970s, the government of Rajasthan declared it a “dark zone” indicating rapid depletion of ground water and severe drought conditions. In 1986, with the help of a local NGO, Tarun Bharat Sang (TBS), the villagers started building *johads*—water reservoirs—made of simple mud and rubble barriers, built across the contour of a slope, to store run-off rainwater. Since the main sources of livelihood in this area are subsistence agriculture

and the rearing of livestock, the construction of *johads* had a concrete socio-economic impact in this district. In a short period of time, with the help of TBS, over 2500 *johads* were constructed in this water-starved area.<sup>2</sup> The water collected in *johads* during monsoon time is used directly for irrigation, drinking, and other domestic purposes of the villages throughout the year. The *johads* harvest the rain and hold it to improve percolation and recharge the water table.

## Water harvesting

Technically, water harvesting means “capturing the rain where it falls or capturing the run off rain water in one’s own village or town and taking measures to keep that water clean” (UN-Inter Agency Working Group on Water and Environment Sanitation 16). Water harvesting has transformed the ecology, agriculture, and the general well-being of the people in Alwar district. The construction of *johads* increased the availability of ground water as well as the surface water in the region. Currently, water availability is no longer a problem—wells are being used to their capacity, and several seasonal rivers have been converted into perennial sources of water once again. The so-called “dark zone” of the 1970s has turned out to be a lush green area on the map of the desert state of Rajasthan.

An study conducted by the former head of the Depart-

ment of Civil Engineering at the Indian Institute of Technology, showed significant increases in ground water tables as a result of the construction of *johads* (Agarwal).<sup>3</sup> According to Anil Agarwal and Sunita Narain, current research on rain-water harvesting indicates that there is no village in India which cannot meet its drinking water needs through rain-water harvesting:

Theoretically, the potential of water harvesting in meeting households needs is enormous. Rain captured from one to two per cent of India's land can provide India's population of 950 million (now one billion) as much as 100liters of water per person per day. Rain water harvesting also involves the public in water management, making water management everybody's business. (5)

#### **Water Harvesting, Women and Empowerment**

Rural life revolves around water. Village women are responsible for three important elements that sustain rural life: fetching water, fuel wood, and fodder. These women's chores are deeply affected by water scarcity as they can spend up to 12-14 hours per day carrying water for their families and livestock.<sup>4</sup>

The construction of *johads* in the villages recharged ground water resulting in increased availability of water, fuel wood, and better pasture lands. The increased availability of water for cooking, washing, and bathing liberated women from the backbreaking work of carrying water and fodder from far distances. Commenting on this achievement, Rajinder Singh, director of TBS, notes:

*Once the construction of the johads was accomplished, women who had to travel seven-eight kilometers a day to fetch only one or two buckets of water, now go to the village well and finish off this work within ten minutes. Since they have some time at their disposal they have also started educating their children. It is worth mentioning that the villages where water became freely available were the ones where girls started going to school first.*

Over the years, TBS has acted as a catalyst of change. It began its work without blueprints or any specific objectives. Indeed, TBS's mandate was ultimately decided upon by the villagers as they participated in meetings to raise their concerns. The villagers wanted to reclaim the traditional technique of constructing *johads* in their villages to resolve the impending water crisis without help from local and provincial governments. To begin with

TBS provided only organizational and moral support but subsequently they provided some financial support as well. Women took the lead in selecting the sites and volunteering to construct the *johads*. As Singh points out,

*In fact women started the work for rainwater collection—they selected the site, arranged for the voluntary labour, and then, worked towards distributing the benefits equally. The women led this movement from the very beginning.*

---

**"Water is essentially a woman's issue. It's the woman who has to arrange water for all day. It's the woman who needs water for the household work and to sustain the family. It is a woman's resource."**

---

Inspired by the initiatives and support of local women, TBS helped women form *Mahila Sangathan* (Self-Help Women's Groups). These groups meet once a month in various villages and provide women with an opportunity to discuss personal problems and possible solutions. In these groups women learn how to read and write, and are provided information on the topics ranging from fuel technology, use of local herbs, personal hygiene, control, and women's right to equal participation in local institutions. TBS also helped women to form *Mahila Bacah Samoh* (MBS), women's saving groups, in most of the villages in the Alwar district. Accord-

ing to the coordinator of MBS,

*It was difficult to get women together because they were very busy carrying water and they spent all their energy drawing water out of the wells. Now, when it has become convenient for them to get water, they get enough time to sit together, to meet, and to organize themselves. So with the availability of water there is a change in their economic status—women have started a saving scheme. Now women in these saving groups have started saving between rupees 10 and 100 a month. (Bhagirithi)*

This initiative introduced the concept of women's banking in the region.

*Now there are 315 women's organizations and four women's banks, run by women themselves, run by illiterate women. These women do their accounting themselves and have changed the theory that only a literate person can do development or only development planners can make plans for development. (Singh)*

Men who earlier were skeptical of the women's groups and their activities have started appreciating their work. Suresh Kumar, an employee of MBS notes:

*Initially, men used to think that women didn't know*

*much, and now they realize that women have learned a lot through women's groups and can even make better contribution for the development of the village. This has resulted in equal partnership with women and their empowerment.*

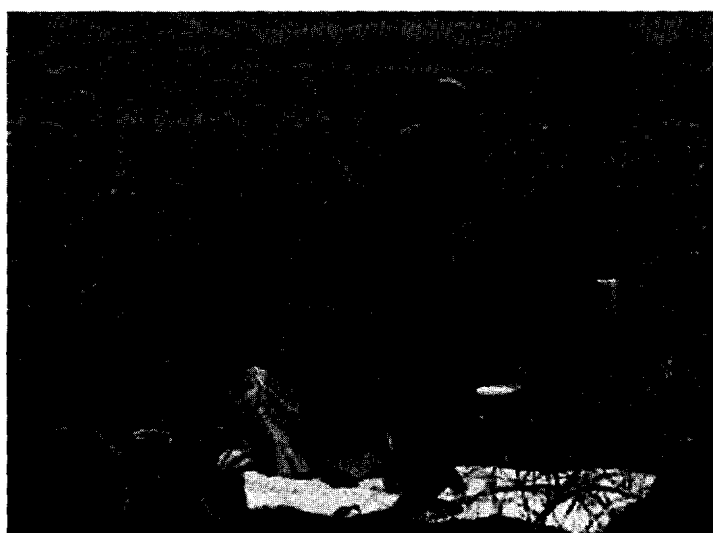
Women's active participation in these groups has helped them to effectively articulate and develop their own ideas and views. They discovered their internal strength, their capacity to change, have greater autonomy over their lives, and began devising strategies to change their position in their society. Kajori Bai, an activist and grandmother, observes:

*Water is essentially a woman's issue. Men are not really bothered about it. They just wash their hands and sit down for food. It's the woman who has to arrange water for all day. Women need the water. And if there is no water in the house, the man will take a stick in his hand and ask—you didn't get water? It's the women who have to pay the price. It's the woman who needs water for the household work and to sustain the family. It is a woman's resource.*

## Conclusion

I define empowerment as a process of discovering one's internal strength, agency, and capacity to effect change in the institutions, behaviours, and ideologies that form the basis of one's experience of systemic oppression and exploitation in daily life. Empowerment also means devising strategies to challenge and change one's subordinate position in the society. In case of the district of Alwar, the program initiated by TBS together with the villagers, provided women with a platform to raise their "voice." The first step developed a sense of self in relation to others. The second and the third step of choosing the sites for the construction of *johads* and volunteering physical labour for the construction of *johads* involved active participation of women. This process of reclaiming traditional water harvesting technique of *johads* empowered women in their communities because it gave women an opportunity to act independently, devise their own strategies to collect water and gain control over their lives. The symbiotic relation between participation and empowerment facilitated women's capacity to tackle their own problems by themselves. Women also acted as allies in their struggles and started women's not only self help groups but also women's banks. Women's groups foster a gender-based solidarity among women. This process of empowerment was driven by women themselves through their establishment of, and active participation in, grassroots women's groups with a long-term commitment to social change.

*Aradhana Parmar is Assistant Professor in Development Studies Program, Faculty of Communication and Culture,*



*University of Calgary. As an interdisciplinary scholar, her specific area of interest and expertise includes development studies, gender and development, South Asia, immigrant women in Canada and ancient Indian political thought. She is a recognized scholar, with numerous publications—book, articles, reports—to her credit. Her interests have also taken*

her out of the university into the community, where she has worked hard to bridge the gap between the university and the community. She is also the past-president of India-Canada Association of Calgary and Calgary Immigrant Women's Association and Canadian Association for the Study of International Development.

<sup>1</sup>Rajasthan's average rainfall amounts to only half of what the rest of the country receives. However, these figures do not provide an actual picture of the state's rainfall as it can go up to 100cm in some places and less than 25cm in others.

<sup>2</sup>This initiative of TBS has been called a spectacular success story by the Center for Science and Environment in New Delhi and the UN-Inter Agency Working Group on Water and Environmental Sanitation (which consists of six other members: UNICEF, UNDP, WHO, FAO, UNESCO and World Bank).

<sup>3</sup>Agarwal and Narain found that not only did water harvesting have a direct impact on the economy of the region, increases in income were strongly correlated with the investments that had been made in *johads*. For example, an investment of Rs. 1000 (CDN \$33.00) on *johads* raises economic production by over Rs. 4,200 per annum.

<sup>4</sup>It is customary in these areas that income from agriculture goes to men while income from animal husbandry goes to women. Thus, women are equally interested in better grazing grounds for their livestock.

#### References

- Agarwal, Anil and Sunita Narain. *Community and Household Water Management: A Key to Environmental Regeneration and Poverty Alleviation*. name of the site. 2000. Online: <http://www.undp.org/seed/pei/share/sample.html>. Retrieved on April 16, 2003.
- Agarwal, G. D.: *Putting Tradition Back into Practice: Johad-Watershed in Alwar District, Rajasthan*. New Delhi: UN-Inter Agency Working Group on Water and Environment Sanitation, 1998.
- Bai, Kajori. Personal interview. July, 22 2002.
- Drops of Empowerment*. (video) Dir. Aradhana Parmar. Delhi Center. 2002.
- Fernando, J. "Non-governmental Organizations, Micro-Credit, and Empowerment of Women." *Annals of the American Academy of Political and Social Sciences* 554 (1997): 150-78.
- Khandker, S. R. "Micro-Credit Programme Evaluation: A Critical Review." *IDS Bulletin* 29 (4) (1998): 11-20.
- Mayoux, L. *Micro-Finance and The Empowerment of Women: A Review of Key Issues*. 2000. Online: <http://www.ilo.org/public/english/employment/finance/download/wpp23.pdf>
- Parmar, Aradhana. "Micro-Credit, Empowerment and Agency: Re-evaluating the Discourse." *Canadian Journal of Development Studies* 24 (3) (2003): 461-476.

Parmar, Aradhana. *Techniques of Statecraft: A Study in Kautilya's Arthashastra*. Delhi: Atmaram and Sons, 1988.

Rankin, K. N. "Governing Development: Neoliberalism, Microcredit, and Rational Economic Woman." *Economy and Society* 30 (1) (2001): 18-37.

Sharma, Bagirithi. Personal Interview. July 20, 2002.

Singh, Rajinder. Personal interview. July 28, 2002

*Putting Tradition Back into Practice: Johad-Watershed in Alwar District, Rajasthan*. New Delhi: UN-Inter Agency Working Group on Water and Environment Sanitation, 1998.

Yunus, M. and A. Parmar. *Narratives of South Asia*. Karanchi: OUP, 2003

### FREDERICK RYAN

#### To my daughter, after a friend's wedding in Montreal

How strongly we weave our memories into the future.

Do you seek me  
as I sought my father?  
What do you see with memories?

I have his scent on my handkerchief,  
his pride in his son, love pouring  
like leaves out his dry eyes,

I sit wearing his housecoat,  
using your pen,  
inventing this backfill  
for our future.

Your old lover is now married.  
How good a sacrament it was,  
dancing with you.

Frederick Ryan is a journalist and a newspaper editor who has won for a number of years firsts, seconds, and thirds in the Best Editorial, Best Column, and Best Feature Awards from the Quebec Community Newspaper Association. He resides in rural West Quebec, where he is the working owner of three successful community newspapers.