The Narmada River and the Sardar Sarovar Dam

The Narmada wends its way across fertile Nimad Plains, famous for its agricultural produce, and the breathtaking Satpura hills before crossing Gujarat and into the Arabian Sea. Considered one of India's holiest rivers, Ma Rewa as it is called, is also witness to a unique parikrama or circumambulation by pilgrims walking its entire stretch.
Photo by Manoj Saranathan and Subramanya Sastry.

"If you are to suffer, you should suffer in the interest of the country." Jawaharlal Nehru, speaking to villagers who were to be displaced by the Hirakud Dam, 1948.

The Narmada River is found in the western states of Madya Pradesh and the northeastern state of Gujarat, India. Ancient Vedic literature describes the Narmada originating from the body of Lord Shiva, a powerful deity. Like the Ganges River, the Narmada holds religious significance for Hindus. The Sardar Sarovar Dam, begun in 1987 to provide hydroelectric power to Gujarat, is the biggest of 30 dams proposed on the Narmada River. Despite protest and temporary halts in construction, India's Supreme Court has authorized height increases for the dam, from 80 to 121 meters.

The government claims the monolithic multipurpose structure will irrigate 1.8 million hectares, delivering water to drought prone regions. Opponents claim the dam and its canal systems will displace hundreds of thousands and ultimately affect up to a million people.

Domkhed, Madhya Pradesh submerged after the 2003 monsoon. *Photo by Manoj Saranathan and Subrmanya Sastry.*

Near completion of Sardar Sarovar Dam in August 2004, monsoon winds flooded the Narmada, causing it to be clogged with sediment. Floodwater also broke through the canal wall, submerging local villages and engulfing hundreds of homes.

India's dams, including the massive Sardar Sarovar, have displaced roughly 30 million people. In protest, rural villagers threatened to drown themselves in the rising dam waters. Some rejected relocation, because they felt a move would increase poverty and worsen living conditions. When water submerged the Narmada Valley, some local dissenters stood in the water for over a day, only leaving when physically removed by authorities.

The World Bank has provided the financing and requirements for dam building, leading India into a dependent relationship with first-world countries. Managing big dam projects has also created regional, national, and international water management integration, mandated by the World Bank. Issues connected to large scale drainage, irrigation, and groundwater led to GIS (Geographic Information Systems) for electronic distribution and controlled mixing of fresh and salt water. Most big dam and development projects funded by the World Bank now require a GIS component.

In the Sardar Sarovar Reservoir, GIS technology is mapping a new future around the dam, complete with simulated local economies, five-star lakeside hotels, and controlled agriculture. The Indian government claims the monolithic multipurpose structure will irrigate 1.8 million hectares, delivering water to drought prone regions. Opponents claim the dam and its canal systems will displace hundreds of thousands and its canal systems and development will ultimately affect up to a million people.

A Narmada Basin Timeline

Second Century BCE
: Earliest phase of dam construction coincides with the rise of urbanism and the establishment of Buddhism in central India.

1940 Preliminary investigations for development of the Narmada Valley undertaken.

1950 Approximately 16 hydropower big dams sites are identified.

1962 Jawaharlal Nehru lays the foundation for the Sardar Sarovar project in Gujarat.

1972 Madhya Pradesh prepares a master plan for river development.

1974 The first big dam in the Narmada Basin is completed on the Tawa River, a Narmada tributary.

1975 Plans complete for 30 large dams, 135 medium dams, and over 3,000 small dams in the basin.

1979 The Narmada Water Disputes Tribunal declares its final award, including detailed orders on resettlement of outsted residents to make way for the Sardar Sarovar project.

1987 Work on the Sardar Sarovar Dam starts in full swing. Protest also begins over displacement without rehabilitation.

1993 Monsoons in Gujarat raise water behind the dam, flooding village homes. Several people drown in the village of Vadgam

2004 Monsoons flood the Narmada, breaking through canals and submerging hundreds of homes.

2006 The Supreme Court of Indian gives permission to raise the height of the dam to 121.92 m. Its proposed height is 136.5 meters (455 feet).

Suggested Reading

Dharmadhikary, Shripad. "The Narmada: Death of a River." *India International Centre Quarterly.* Vol. No. 1, Summer 2006.

Leslie, Jacques. *Deep Water: The Epic Struggle Over Dams, Displaced People and the Environment.* New York: Farrar, Straus and Giroux, 2005.

McCully, Patrick. *Silenced Rivers: The Ecology and Politics of Large Dams.* London: Zed Books, 1996.

Websites

Sardar Sarovar Narmada Nigam Ltd.: http://www.sardarsarovardam.org/

Friends of River Narmada: http://www.narmada.org/sardarsarovar.html