

## **Sardar Sarovar Dam Controversy- A Case Study**

**Tanmayee Sahoo<sup>1</sup>, Usha Prakash<sup>2</sup> and Mrunmayee M Sahoo<sup>3</sup>**

*<sup>1</sup>Law Student, LLB, BILS, Bangalore, India*

*<sup>2</sup>Professor, BILS, Bangalore, India*

*<sup>3</sup>Research Student, Dept. of Civil Engg., NIT, Rourkela, India*

*E-mail: <sup>1</sup>tanmayee.clatprep@gmail.com, <sup>2</sup>usha.kbsharoff@gmail.com,  
<sup>3</sup>mrunmayee.ouat@gmail.com*

### **Abstract**

The Sardar Sarovar Dam is a gravity dam on the Narmada River crossing Gujarat in India. It is the largest dam and part of the Narmada Valley Project, a large hydraulic engineering project involving of a series of large irrigation and hydroelectric multi-purpose dams. The project took form in 1979 as part of a development scheme to increase irrigation and produce hydroelectricity. The state governments of Gujarat and Madhya Pradesh claim that the Sardar Sarovar Project (SSP) and the Narmada Sagar Project (NSP) would irrigate 1.9 million ha and 0.14 million ha of land and generate 1,450 megawatts (mw) and 1,000 mw of power, respectively. The hydroelectric power of the SSP would be shared by the states of Gujarat, Maharashtra and Madhya Pradesh; the irrigation benefits would accrue to the states of Gujarat and Rajasthan. We recognise the complexity in Sardar Sarovar Valley involved. The questions arise in the dam struggle and the development of the model that holds out the chimerical promise of material wealth. We would emphasise that the water problems of drought prone areas of Gujarat. Recently, the Indian government gave clearance for the construction of the SSP in Gujarat and the NSP in Madhya Pradesh.

**Keywords:** Environment, Gujarat, Irrigation, NSP, SSP.

### **1. Introduction**

The Dam on river Narmada was meant for the welfare of four states namely-Gujrat, Madhya Pradesh, Rajasthan and Maharashtra. The agreement of sharing and using

water by the four states were defined by the Narmada Water Dispute Tribunal (NWDT) in 1979. Under this award, Gujarat was allocated 11,000 Mm<sup>3</sup> representing about one-third of the 75 percent dependable usable annual water flow, and was authorized to implement a project comprising: (i) the Sardar Sarovar Dam, (ii) a 1,200 megawatt (MW) riverbed powerhouse (RBPH), (iii) a 250 MW canal head powerhouse (CHPH), (iv) a canal system to irrigate 1.87 m. ha in Gujarat and 70,000 ha in Rajasthan, and (v) a water supply system for about 30 million people in the drought-prone areas of Saurashtra and Kachchh. On this basis, Gujarat prepared the Sardar Sarovar Project in 1980, which was to be implemented in various phases over a period of about 20 years. Phase I comprised of: (i) the Sardar Sarovar Dam, (ii) the RBPH, (iii) the CHPH, (iv) the first 144 km of the main canal up to the Mahi River, and (v) a network of branch and distribution canals and drainage system to irrigate about 450,000 ha<sup>1</sup>.

## **2. Project Designing**

The project preparation and organization took a span of four years from identification in the year 1979 to pre- appraisal in 1983. It was completed by Narmada Planning group with assistance from the United Nation Development Program (UNDP). The Narmada Development Department that was in charge of implementing the project had prepared the detail designs and cost estimates of the project. Later in the year may 1988, responsibility for the implementation of the project was transferred from the Narmada Development Department, a government agency, to the Sardar Sarovar Narmada Nigam Ltd. (SSNNL), a parastatal corporation organized along functional lines.

The Bank and borrowers reviewed the basic hydrological data used for the project design and gave a satisfactory report. The Narmada Water Dispute tribunal had set the annual 75 percent dependable water availability for the project at 28 million acre feet (MAF) (34,580 Mm<sup>3</sup>) with 65.2 percent allocated to Madhya Pradesh, 32.1 percent to Gujarat. 1.8 percent to Rajasthan, and 0.9 percent to Maharashtra project design. The project vested its first priority to water supply, second to irrigation and the last to power generation. As per the original design of the project, the Sardar Sarovar dam was to irrigate 17.92 lakh ha land in Gujrat and 73,000 ha of land in two districts of Rajasthan. The beneficiary states claimed that in the first phase of command area development, a total of 2.46 lakh ha land of would be irrigated. At the time of raising the height the height of the dam to 121.92 m, it was estimated that 3.5 lakh ha of additional land will be brought under irrigation.

## **3. Benefits of the project**

After examining current status of the project on the delivery of benefits as per official data the argument is always in favour of the Sardar Sarovar Project as the benefits are so large that they substantially preponderate over the costs of the immediate human

and environmental disruption. Without the dam, the long term costs for people would be much greater and lack of an income source for future generations would put increasing pressure on the environment. If the waters of the Narmada River continue to flow to the sea unutilized, then there appears to be no alternative to escalating human deprivation, particularly in the dry areas of Gujarat and Rajasthan. The Project has the potential to feed 20 million people, supply domestic and industrial water to 30 million, and provide employment to more than 1 million. Apart from the above benefits it provides valuable peak electricity in areas with high unmet power demand.

Gujarat has received Rs 4,887 crores and Rajasthan has received Rs 625 crores under the Accelerated Irrigation Benefit Programme from 1996 to 2008 from the Central Government for the Sardar Sarovar Project (SSP) command area for creation of the canal network which is lagging behind. However the drinking water benefits of the SSP have always been presented as a strong argument in its favor, whenever it was gripped by controversy. The government of Gujarat also planned to generate solar power by placing solar panels over the canal, and making it beneficial for the surrounding villages to get power and to reduce the evaporation of water. The Narmada Basin hydro-meteorological (hydromet) network for forecasting flood and reservoir operation is another important project component. The dam will also irrigate 17,920 km<sup>2</sup> (6,920 sq. mi) of land spread over 12 districts, 62 talukas and 3393 villages (75% of which are drought-prone areas) in Gujarat and 730 km<sup>2</sup> (280 sq. mi) in the arid areas of Barmer and Jalore districts of Rajasthan. The dam will also provide flood protection to riverine reaches measuring 30,000 ha (74,000 acres) covering 210 villages and Bharuch city and a population of 400,000 in Gujarat.

#### **4. Conflicts in the Project**

Despite the existence of explicit operational benefits the Sardar Sarovar project has been the most controversial and much debated project in the contemporary India and across the globe. Gradually it became a mere legal issue and a pressing concern for the environmentalist. No other river project in the world has ever before been held up for decades and locked in such ardent controversy as the Narmada. Later after 1980s the project was widely protested and one such protest took the shape of a spanner film documentary-Drowned out (2002), which follows one tribal family who decide to stay at home and drown rather than make way for the Narmada Dam. The submergence created by the dam has a number of direct and adverse impacts. However, there is no greater impact than the ousting of hundreds of thousands of people. The main issue, which is still the object of the debate, is the most fundamental one, the number of people who are displaced by the dam. When the NWDT Award was given, only estimates of the number of oustees were available. It was estimated at that time that 6,147 families were displaced<sup>ii</sup>. By the early 1990s the report given by the five member group gave a figure of 40,245 families affected by the SSP.<sup>iii</sup>

It is not only the large number of people displaced that attracts attention but the environmental aspects of the SSP have also been controversial. The project has several

adverse impacts on the ecology of the region in addition to submergence of 13385.45 ha of forest<sup>iv</sup>. An assessment of this issue reveals that environmental safeguards are not being effectively implemented. The catchment needs to be properly treated in order to check soil erosion and siltation in the reservoir as both contribute to degradation of water quality of the reservoir and reduce the life span of the dam.

The differences and the conflict became greater leading to the formation of Narmada Bachao Andolan (Save Narmada Movement) which was formed in Maharashtra in 1989 and later spread to include 150 affiliates in other parts of India. It organized village committees in various areas of Madhya Pradesh and Maharashtra that would be affected by Sardar Sarovar and other dams on the Narmada, and succeeded in maintaining a coalition between adivasis in Maharashtra and western Madhya Pradesh and members of the landowning Patidar caste in the plains. It registered its opposition to the Narmada Project on human rights and environmental grounds and staged a series of demonstrations and road blockades against its continuation. NBA increased its pressure against the whole Narmada Project by demanding that the World Bank withhold the loans and that India stop construction of Sardar Sarovar, calling on supporters to undertake “direct action” if the Bank did not announce a withholding and condemning the World Bank for promoting neocolonialism through its financing of the Project<sup>v</sup>.

In May 1994, Narmada Bachao Andolan sued in the Supreme Court of India to restrain further construction, technically by asking the question of whether the terms of the NWDT Award and related agreements regarding resettlement were being carried out<sup>vi</sup>. The apex Court responded in January 1995 with a stay order restricting construction of the Sardar Sarovar Dam which has already-attained 80.5 meter (263.3 feet) height for five years to provide additional time for resettling oustees.

Another visible and neglected issues that have resulted in numerous conflicts and controversies over the SSP have been the lack of accountability of agencies responsible for protecting, promoting securing the rights and entitlements of the vulnerable people affected by the dam construction. As a result, though there have been multiple agencies authorized to carry out the necessary tasks, violation of rights of people and environmental pre-conditions continues with impunity. This is the situation in a project monitored by the Supreme Court of India. When responsible and accountable government institutions and agencies fail to be faithful in reporting to the Supreme Court, the affected people have no way of realizing their rights and entitlements.

The impact of all these changes was foreshadowed in the Indian Supreme Court after the February 1999 decision to permit raising the Sardar Sarovar Dam from 80.3 to 85 meters (278.8 feet). NBA was unhappy to see the project given new life, pro-dam opinion was unhappy to see that the height was short of the 110 meters (360.8 feet) needed to create a reservoir high enough to fill the canal. It became clearer in October 2000 when a three-member bench<sup>vii</sup> of the Indian Supreme Court ruled on the case Narmada Bachao Andolan v. Union of India and Others.<sup>viii</sup> In a two-to-one decision, it invoked the common law doctrine of laches to rule that the NBA had failed to raise its

objections in a timely manner, that the Court was not going to review issues related to design of the Sardar Sarovar Dam itself but only the fundamental rights of the oustees guaranteed under Article 21 of the Constitution of India, and reminded the parties that the decision of a Water Disputes Tribunal (WDT) could not be challenged by private parties once it became binding on the states involved. The decision rejected NBA claims that the Ministry of Environment and Forests decision to grant conditional clearance of the project in 1987 was itself a violation of Article 21 because it was taken on political grounds rather than after taking full account of the environmental impacts. In the same judgment Justice Mr. Bharucha gave directions to Madhya Pradesh and Maharashtra (the Grievance Redressal Authorities of Gujarat) that before further construction begins, they should certify (after inspection) that all those displaced by the raise in height of 5 metres have already been satisfactorily rehabilitated, and also that suitable vacant land for rehabilitating them is already in the possession of the respective States. This process shall be repeated for every successive five meter increase in height.

## **5. Conclusions**

Though the project faced severe conflicts and controversies with World Bank lending, ecological issues and changes in its policies and practices, it did not lead to stopping or significantly scaling back Sardar Sarovar Dam or the Larger Narmada Project. The success or failure of the SSP from the point of view of project construction or from the point of view of remedial measures cannot be analyzed in isolation from what has happened and is happening in the case of other dams. The SSP offers many lessons and some hope for people affected by other big dams on the Narmada or elsewhere.

## **References**

- [1] World Bank, Project Completion Report - India - Narmada River Development -Gujarat Sardar Sarovar Dam and Power Project (Credit 1552-IN/Loan 2497-IN), Report No. 14159, and 29th March 1995 (extracts).
- [2] NWDT Award, Clause IV (1), at page 47.
- [3] Report of the Narmada Water Resources Development Committee, Government of India, Ministry of Irrigation and Power (Khosla Report).
- [4] Performance and Development Effectiveness of the Sardar Sarovar project, Tata Institute of Social Science. Specific Assignments, Parel, Mumbai – 40 011.
- [5] Call by NBA leader Mehda Patkar, as reported in “3 CMs to meet on Narmada,” Times of India (Ahmedabad) 2 July 1992.
- [6] Armada Bachao Andolan v. Union of India and Others, Writ Petition (C) No. 319 of 1994.

- [7] The Indian Supreme Court consists of a Chief Justice and 26 Justices; particular cases are heard by Benches of three, five, seven, nine, or eleven Justices depending on the subject matter. See Supreme Court of India. 2010. *Practice and Procedure: A Handbook of Information*. 3rd ed. New Delhi: Supreme Court of India. Available at <http://www.supremecourtindia.nic.in/handbook3rdedition.pdf> (accessed 28 July 2010).
- [8] 2000 AIR 3751; 2000(4) Suppl.SCR 94. Also available through the Supreme Court website using the search utility at <http://judis.nic.in/supremecourt/chejudis.asp> (accessed 28 July 2010).