

# THE MAHESHWAR DAM IN INDIA

*A Report by*

*Heffa Schücking*

*March 1999*

From November 30 through December 17, 1998 Heffa Schücking of the German non-governmental organization Urgewald investigated the Maheshwar dam project on the Narmada River in the State of Madhya Pradesh. Urgewald is an environment and development NGO that monitors German involvement in large-scale projects with significant social or environmental impacts in developing countries.

## 1 BACKGROUND

From November 30 through December 17, 1998 Heffa Schücking of the German non-governmental organization Urgewald investigated the Maheshwar dam project on the Narmada River in the State of Madhya Pradesh. Urgewald is an environment and development NGO that monitors German involvement in large-scale projects with significant social or environmental impacts in developing countries.

### 1.1 Project history

The Maheshwar Dam is part of the controversial Narmada Valley Development Project that entails the construction of 30 large and 135 medium-sized dams in the Narmada Valley. Maheshwar is one of the planned large dams and is slated to provide 400 Megawatts in energy. The project has been planned since 1978 and was originally under the auspices of the Narmada Valley Development Authority. In 1989 the responsibility for Maheshwar was conferred on the Madhya Pradesh Electricity Board (MPEB), a parastatal company. Subsequently in 1993, the concession for the Maheshwar Project was awarded to the S. Kumars company. In 1994, the project received a conditional environmental clearance from the Central Ministry of Environment and forests (MoEF). In 1998, preliminary contracts were signed with the German power utilities Bayernwerk AG and Vereinigte Elektrizitätswerke Westfalen (VEW) for participation in the Shree Maheshwar Hydro Power Corporation. Maheshwar is the first privately financed hydroelectric dam in India.

### 1.2 German Involvement in Maheshwar

Sixty-six percent of the capital for the Maheshwar Project is slated to come from Germany. The German utilities Bayernwerk and VEW plan to each acquire 24.5% equity in the Shree Maheshwar Hydro Power Corporation (SMHPC). On a short-term basis, the German company

Siemens will contribute an additional 17% of the equity in return for the contract to provide turbines and generators for the project. Siemens is a non-voting shareholder; its shares will be administered by the S. Kumars company, which controls 51% of the voting rights in the SMHPC. The total project costs equal US \$530 million of which US \$257 million will be provided by the German Bayerische Vereinsbank (now called HypoVereinsbank) in form of an export loan. In order to protect their long-term investment, the utilities Bayernwerk and VEW have applied to the German Government for an investment guarantee. Siemens has applied to the German Government for an export credit guarantee (Hermes guarantee). In 1997 the German Government made an in-principle decision to approve a Hermes guarantee for Maheshwar, but subsequently the final decision on the export credit guarantee as well as the investment guarantee has been put on hold due to the problems surrounding the project.

### **1.3 The Project Area**

Maheshwar is to be built in the Nimad region of Madhya Pradesh, two kilometers upstream from the town of Mandleshwar. According to official data, 61 villages will be affected by the project. 21 of these villages would be totally or partially submerged, while in the remaining 40 villages only agricultural land would be submerged. The agricultural soils here are extremely fertile and irrigated agriculture forms the mainstay of the economy in the project region. As the farmer, Badrilal, from village Jalud says: "Whatever can grow in the world, can grow on our soils". Some 90% of the agricultural lands are irrigated, mostly through lift irrigation from the river. Thus, farmers from the region are able to grow 3 crops a year, including different sorts of grain, soya, pulses, peanuts, chilies, spices, bananas, guavas, citrus fruits, sugar cane, cotton and many different vegetables. In addition, villages in the area possess large herds of buffalo, cattle and goats. For rural India, the project area is extremely prosperous. Aside from meeting the villagers own needs, agricultural production from this area supplies regional markets with grain, rice, sorghum, melons, buffalo milk and many other goods. The region exports cotton to international markets including Switzerland and Germany. Its agriculture sustains not only a large part of the population in the 61 villages, but is also an important employer for wage labourers living outside of the project area. The villages alongside the Narmada show a highly differentiated social structure that has evolved around different economic usages of the river. Alongside small farmers, one finds a diversity of occupational groups such as the Kahars (Fisherfolk) and Kevats (Boatsmen), people living from sand-mining and draw-down agriculture (seasonal agriculture on the river banks) whose livelihoods all depend on the river. In addition, there are many occupations in the craft and service sector such as carpenters, smiths, tailors, shopkeepers, drivers etc. whose livelihoods depend on the overall prosperity of the villages. The village Mardana shows a typical occupational distribution for the area. 70% of its inhabitants are farmers, 10 % are landless labourers, 10 % fisherpeople and 10% are divided among various craft and service professions. The Narmada River is the centerpiece of the economy of these

villages. Accordingly the villagers show her reverence as “Mother” and “Nourisher”. Their way of life is both economically and ecologically sustainable and has brought a high degree of prosperity to their communities. The villages have access to electricity. Many families own telephon and television; some even have tractors, motorcycles and other vehicles. In addition, there is a relatively highly developed infrastructure (schools, health station, community halls etc.). As a consequence, there is almost no migration to urban areas from the project region.

## **2 THE INVESTIGATION**

### **2.1 Travel Stations**

All in all, I visited 10 villages in the submergence zone of the dam. In seven of these villages (Jalud, Sulgaon, Pathrad, Lepa, Amlatha, Bhattyan and Mardana) individual and group interviews were conducted and taped. Between 20 and 200 people participated in the group interviews in each village. Special care was taken to interview representatives of the main social groupings, as well as men and women of different age groups from the above villages. Furthermore, meetings took place with representatives of S. Kumars, MPEB, Bayernwerk, the German Embassy, non-governmental organizations, independent experts and the advisor to the Chief Minister of Madhya Pradesh. Most of these meetings were also taped.

### **2.2 Terms of the Investigation**

The main focus of the investigation were the social impacts of the project and the plans for resettlement and rehabilitation (R&R) of the affected people. The following criteria were employed, which in our experience are necessary prerequisites for successful R&R:

- The existence of a comprehensive and accurate information base regarding the number of people affected, their income structure, livelihoods and resource utilization.
- The availability of land in suitable quality and area to resettle village communities as intact social entities.
- Full information and participation of project-affected people in planning, design and implementation from project inception to completion. Furthermore, resettlement measures have to be assessed in regard to the provisions laid out in relevant state or national policies. In this case, the measuring stick was the 1989 Resettlement Policy of Madhya Pradesh for the Narmada Projects. Major provisions of this policy are:
- Every land-owning family that will lose more than 25% of its land is entitled to land-for-land compensation, with a minimum of 5 and a maximum of 20 acres to be provided.
- Long-term encroachers will be treated on par with land-owners.

- Villages should be resettled as communities.
- Each person whose land is being acquired for purposes of the project is considered a project-affected person.

### **3 MAIN FINDINGS OF THE INVESTIGATION**

#### **3.1 Underestimation of Submergence**

In each and every village I visited, people conveyed doubts regarding the official submergence data. They showed me relatively high-lying areas in their village that are marked for submergence and much lower-lying areas that - according to the authorities - will not be submerged. In two communities, villagers had even invited engineers from Delhi to assess the situation. Their contour measurements showed that the extent of submergence will be much greater than is officially acknowledged. As the experiences with other large dams in Madhya Pradesh show, these doubts must be taken very seriously. In the case of the Bargi dam which was finished in 1987, the official planning documents concluded that 101 villages would be flooded. When the dam's floodgates closed, however, 162 villages and 26 of the resettlement sites were submerged.

#### **3.2 Underestimation of the Number of Affected People**

In their publications, the project developers claim that 2264 families will be affected. But even the official resettlement plan (if one bothers to add up the numbers) comes to the conclusion that some 4000 families would be affected. However, even this estimate is not based on reliable and recent census data. S. Kumars had provided me with a chart listing the number of houses in each of the affected villages. Upon visiting the villages, it quickly became clear that this data diverges strongly from the ground reality. For the full-submergence village Sulgaon for example, the document lists 196 houses. During my visit in Sulgaon I was able to ascertain that the village in fact has more than 400 houses. In addition, the resettlement plan only considers landed families. Many other occupational groups, who will also lose their livelihoods if the dam is built, are not considered. For example, the approximately 5000 workers in the sand-mining industry find no mention in any of the resettlement planning documents. They have organized themselves in cooperatives that pay dues to the Government for the right to dredge sand along this stretch of the river. As the sand banks will be submerged, these people will clearly be deprived of their livelihood. The information provided by the fisherpeople, that many of the fish species that they regularly catch will be negatively impacted by the dam, was confirmed by Dr. Tyson Roberts of the Smithsonian Tropical Research Institute. Dr. Roberts is one of the world's foremost experts on Asian fisheries and happened to be traveling through the project area during my stay. In an interview, he explained that many of the local fish species need shallow, rocky river bank areas to lay their eggs. If these areas are submerged then the species

cannot reproduce and will disappear from this stretch of the river. Small industries have also been left out of the resettlement package. In almost all of the villages I visited, there was at least one jaggery factory. A typical jaggery factory employs 80 workers for three months of the year during the sugar-cane harvest. Shop-owners, carpenters and other trade occupations also find no mention in the resettlement plan.

### **3.3 Underestimation of Resources and Infrastructure**

In spite of the fact that almost all of the agricultural lands in the villages alongside the Narmada are irrigated, the resettlement documents lists these as “unirrigated lands”. Both the cost-benefit analysis for the project and the resettlement plan systematically undervalue the richness of the resources and the developed infrastructure that characterize the villages in the submergence zone. To name only two examples: Annex 6 of the resettlement plan concludes that there are in total only 176 fruit trees and 38 pakka-wells in all of the affected 61 villages. As surveys initiated by the villagers themselves show, this is a truly gross underestimate. In just one village, Pathrad (where I was based during my investigation and thus had the chance to ascertain the findings of the villagers survey), there are 40 pakka (brick) wells and some 4000 fruit trees. Pathrad is an extremely interesting case, because it is one of the first villages in all of India that has insured itself. The entire village including land and infrastructure is worth some 420 Million Rupees. Pathrad has seven temples, three schools, a large Panchayat Bhavan, a police station, a post office, a health station, two Dharamshalas and a ration shop. Pathrad’s income from agriculture alone amounts to about 25 Million Rupees annually. If a realistic cost assessment were done, it would with all due likelihood show that the Maheshwar Project would not be viable if the property, resources and infrastructure of the affected villages were compensated at market costs.

### **3.4 No Information, No Participation**

The village communities have received almost no information regarding the project. Until the date of my visit, S. Kumars and MPEB had organized a public meeting on the project in only one village (Jalud). As S. Kumars readily supplied me with submergence maps and many other documents detailing Resettlement & Rehabilitation planning, I was very surprised to find that none of these documents had been made available to the people directly affected by the project. Instead there seems to have been a systematic policy of misinformation or withholding of information towards local people. One of the standard questions in my interviews was “When and how did you find out about the Maheshwar project and that you are affected?”. The following answer was typical of responses I received in several villages: “Surveyors came into our village for the first time in 1987/88. When we asked them what the stone markers were being laid for, we were told that a railway line was going to be built along here. Years later when

the cofferdam was built and blasting was taking place at the site, we finally realized that a dam was going to be built. In April 1997 we then went to the Subdistrict Officer in Mandleshwar and asked for information. He actually told us that not a single village is submerging for the dam. Up until today no one from the project authorities has ever come and properly informed us about the dam and the resettlement.” (Radhubhai from Pathrad) Although the Maheshwar dam has been planned since 1978(!), the first villages were not informed until January 1998 after enraged villagers occupied the dam site for more than three weeks. Only then did MPEB distribute a short booklet containing vague promises but no specific information regarding who will be affected and where they will be resettled. If MPEB and S. Kumars had gone to the trouble of disclosing relevant documents to the villagers and consulted them, it would have quickly become apparent just how deficient and removed from reality these documents are.

### **3.5 Availability of Land**

One of the preconditions for the environmental clearance awarded to the project in 1994 by the Ministry of Environment and Forests was documentation that land-for-land compensation for the affected villages would be possible. The basis for the clearance was a document entitled “Status of Land Requirement and Availability” which was signed by the District Collector in Khargone. In the meantime it has come to light that this document contains falsified data. In Spring of 1998 the Tata Institute of Social Sciences, India’s most renowned sociological research institute, undertook research in the Maheshwar area and carefully examined all available Government documents pertaining to resettlement planning as well as visiting all 61 affected villages. Its study came to the conclusion that the majority of the resettlement areas outlined in this document lie in the submergence zone of the future dam! Subsequently, four further land availability documents have been presented. However, close examination reveals them all to be seriously deficient. The second and third document were also assessed by the Tata Institute, which arrived at a similarly devastating appraisal. The fifth land availability document is dated June 1998 and was presented to me by S. Kumars. A first analysis of this document shows that it lists lands as available for resettlement that will fall into the submergence zone of either the downstream Sardar-Sarovar dam or Maheshwar itself. It seems an almost obvious conclusion that there is simply not sufficient land available for the resettlement of those affected by the Maheshwar Project. This conclusion is borne out by the fact that none of the 50 families that have lost their land to the project to date have received land-for-land compensation. The soils of the region are not of uniform quality. In the villages along the river, the very industrious agricultural communities of Gujars, Patidars and other groups with small- and medium-sized landholdings, prosper through farming the rich alluvial soils along the river banks. The further one goes from the river, however, increasingly red murum wastelands begin to turn up, that are unsuitable for agriculture. There are no large plots of unoccupied arable land available in the region. In fact the availability of land is a problem in the whole state of Madhya Pradesh, as

the Government of Madhya Pradesh itself stated in its affidavit to the Supreme Court regarding the Sardar-Sarovar Project.

### **3.6 The Problem of “Secondary Displacement” or Displacement for Provision of Resettlement Sites**

Unsurprisingly, very few concrete resettlement sites have been identified to date. The most advanced resettlement planning has taken place for Jalud (the first village behind the dam). The resettlement site for Jalud is at a location called “Samraj” and the visit there was among the most depressing interludes in my investigation. The overall impression in Samraj is not heartening: one finds stony ground with little vegetation and red murum soils unsuitable for agriculture. Having been there, it is easy to understand why the people of Jalud have refused this site in a Gram Sabha (village assembly). However, I was most shocked to find out that even this low-quality land is already being utilized by a community of Adivasis and Harijans. They live in great poverty; many of the children show signs of undernourishment. For this community, daily survival is clearly an enormous struggle. They explained to me, that while they were never well off, their situation has become desperate since April 1998. At this time, representatives of MPEB and S. Kumars entered the village with a police force and forcibly annexed and bulldozed the land of 34 families as well as the entire pasture land of the hamlet. Although all of these families have either land titles (which I was shown) or the status of long-term encroachers (and the receipts to back this claim), there was no due process of land acquisition or even written notices served. Instead, from one day to the next, their land was bulldozed and taken from them. When some individuals attempted to peacefully intervene and explained that they own title to this land, the police responded by manhandling these people and the representative of MPEB threatened to have the entire hamlet thrown into jail. The consequences of these events for the Harijan/Adivasi community are catastrophic. Since they have lost their entire pasture lands they were forced to sell almost all of their cattle and buffaloes - some 400 animals. On the private and encroached lands that were taken, they had been growing subsistence crops such as sorghum. Anokibai, a Bhiladivasi asked “If the land has gone, then we are also gone. If we don’t have the land, will we then eat stones or pebbles? How will we live and how will we eat?” MPEB has used the land it took away from the people of Samraj to cultivate a “demonstration crop” in order to convince the people of Jalud that agricultural cultivation is possible at this site. For this purpose, they put down a layer of silt taken from a nearby tank onto the red murum. During my visit, MPEB provided me with documentation on the results of this experiment. In spite of the above described treatment, the yield equaled only 1/5 of the yield that farmers in Jalud are able to achieve on an area of the same size. In fact, on 1/4 of the planted area in Samraj the seeds did not germinate at all, as the silt was washed away during the first monsoon.

## 4 CONCLUSIONS AND RECOMMENDATIONS

Fundamental preconditions for successful resettlement planning and implementation are a solid and up-to-date information base, the availability of fertile agricultural replacement land and full information and participation of the affected people. In the case of Maheshwar, resettlement planning does not fulfill any one of these criteria. What we are seeing on the ground is instead the making of a resettlement fiasco.

Of the 50 families who have lost their land for the project to date, not a single family has been resettled. The official resettlement plan is not only unrealistic, but severely lacking in credibility. A solid data base is nowhere to be seen: The planning agencies do not know how many people live in the affected villages nor what their livelihoods are based on. Five land availability documents have not been able to show sufficient agricultural land for resettlement purposes. The efforts by MPEB and the project promoter to show resettlement sites is leading to displacement and provisions of the Resettlement Policy of the State as well as the conditions of the environmental clearance for the project are being grossly violated.

In all likelihood, the project will uproot at least 20,000 people. No one can say with certainty how many people will be affected, but by my own estimate it could easily be up to 35,000 people.

The cost-benefit analysis for the project is based on erroneous data (poor villages, unirrigated lands, little infrastructure). If compensation at replacement value would be undertaken, the project would very likely not be economically viable.

In view of their past experiences both with the authorities and the project company, local people have lost all trust that their concerns will be dealt with fairly. They will do their utmost to save their lands and stop the project. The project can only be completed - if at all - through the use of continuous and massive police force against the communities.

A coalition of 120 German NGOs representing over one million citizens therefore calls upon the Government of Germany Fundamental preconditions for successful resettlement planning and implementation are a solid and up-to-date information base, the availability of fertile agricultural replacement land and full information and participation of the affected people. In the case of Maheshwar, resettlement planning does not fulfill any one of these criteria. What we are seeing on the ground is instead the making of a resettlement fiasco.

Of the 50 families who have lost their land for the project to date, not a single family has been resettled. The official resettlement plan is not only unrealistic, but severely lacking in credibility. A solid data base is nowhere to be seen: The planning agencies do not know how many people live in the affected villages nor what their livelihoods are based on. Five land availability documents have not been able to show sufficient agricultural land for resettlement purposes. The efforts by MPEB and the project promoter to show resettlement sites is leading to displacement and provisions of the Resettlement Policy of the State as well as the conditions



of the environmental clearance for the project are being grossly violated. In all likelihood, the project will uproot at least 20,000 people. No one can say with certainty how many people will be affected, but by my own estimate it could easily be up to 35,000 people.

The cost-benefit analysis for the project is based on erroneous data (poor villages, unirrigated lands, little infrastructure). If compensation at replacement value would be undertaken, the project would very likely not be economically viable.

In view of their past experiences both with the authorities and the project company, local people have lost all trust that their concerns will be dealt with fairly. They will do their utmost to save their lands and stop the project. The project can only be completed - if at all - through the use of continuous and massive police force against the communities.

A coalition of 120 German NGOs representing over one million citizens therefore calls upon the Government of Germany to withhold guarantees for this project. German taxpayer's money must not be used to insure a project that will harm Indian farmers and destroy their livelihoods. In addition and with all due respect, we call upon the Government of Madhya Pradesh to listen to its people in the Nimad Region and to step back from Maheshwar.

There are many alternatives to meeting Madhya Pradesh's energy needs; alternatives that do not cause social havoc and destroy the thriving and peaceful villages along the Narmada. to withhold guarantees for this project. German taxpayer's money must not be used to insure a project that will harm Indian farmers and destroy their livelihoods. In addition and with all due respect, we call upon the Government of Madhya Pradesh to listen to its people in the Nimad Region and to step back from Maheshwar.

There are many alternatives to meeting Madhya Pradesh's energy needs; alternatives that do not cause social havoc and destroy the thriving and peaceful villages along the Narmada.

**END**