

## TEHRI DAM

“This is a dam built with our tears” —Sunderlal Bahuguna

The Tehri Dam on India's Bhagirathi River, the main tributary of the Ganges, is one of the world's largest and most controversial hydroelectric projects. Under construction since 1978, the final phase of reservoir filling is scheduled to start by December 2002. Within six months the homes and lands of around 100,000 people would be submerged. Power production is planned to begin in August 2003.

Tehri is located 200 miles north east of Delhi, in the state of Uttaranchal. With a height of 260 meters (855 feet), the dam will be the fifth tallest in the world. Its reservoir will completely submerge Tehri Town and 40 villages, and partially submerge 72 villages.

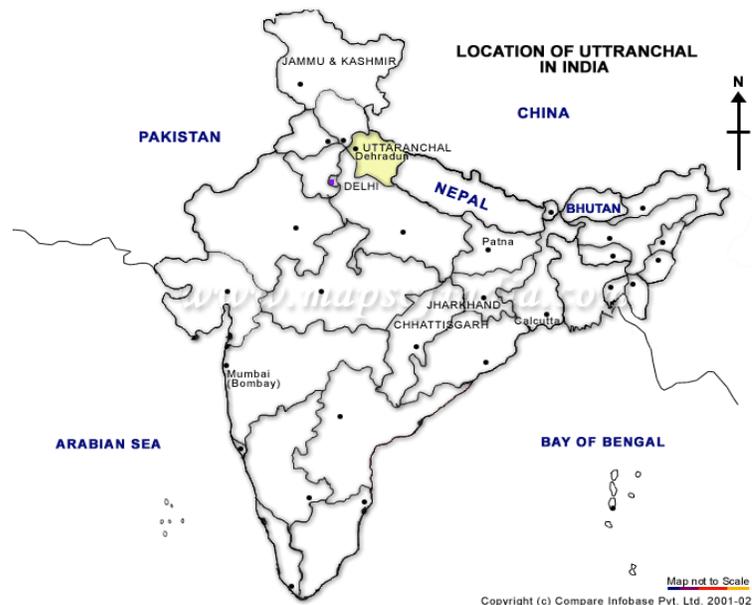
The two lower tunnels of the dam were closed in December 2001 submerging the main bridge leading to Tehri town and nearby areas. The last two tunnels, which are at a higher level, are scheduled to be closed by December 2002. This will result in complete submergence of Tehri Town and surrounding villages.

### Timeline for Tehri Dam:

- ? Tehri Development Project\* approved in 1972
- ? Construction started 1978
- ? Cofferdam completed 1996
- ? Closure of last two tunnels December 2002
- ? Projected completion August 2003

### Projected benefits:

- ? Final installed capacity of 2000 MW (only Phase I with installed capacity of 1000 MW has been approved)
- ? Additional irrigation to 270,000 hectares
- ? Stabilization to existing irrigation on 600,000 hectares
- ? 270 million gallons of drinking water per day to Uttaranchal, Uttar Pradesh and Delhi



\*Tehri Development Project also includes the 97 meter high Koteswar Dam, under construction 14 miles downstream of Tehri Dam. The 400 MW Koteswar Dam will either completely or partially submerge 16 villages.

From its inception, Tehri dam has been opposed due to concerns over its environmental and social impacts, and its ability to withstand earthquake damage. Tehri Dam officials have also been implicated in several cases of corruption.

### **Who is Building Tehri Dam?**

Tehri Hydro Development Corporation (THDC) is a joint venture of the Government of India and the state government of Uttaranchal.

In 1986 an Indo-Soviet agreement brought Soviet expertise and aid of approximately \$416 million to the project. In 2001 the German export credit agency Hermes guaranteed loans to Voith Siemens Hydro to provide generating equipment for Tehri.

### **Seismic Risk**

Tehri Dam is situated in the highly active Central Himalayan Seismic Zone. It is designed to withstand earthquakes of up to 7.2 on the Richter scale although experts predict that earthquakes of magnitude 8.5 or more could strike this region. If the dam were to burst, several major towns downstream of the dam with a total population of over half a million people could be wiped out

Landslides are common on the steep slopes above Tehri's reservoir. A major landslide into the reservoir could cause a huge wave, which could overtop the dam and cause massive damage downstream.

### **Displacement and Rehabilitation**

Although land acquisition started in 1979, resettlement of affected people is far from complete. There is no master plan for rehabilitation nor even a clear estimate of the number of people affected. Past estimates range from 67,500 to 97,000.

According to the 2002 Status Report of the Public Works Department of Tehri, the Dam will displace 12,547 families. This estimate excludes a large number of people who will lose their lands but have not been officially recognised as project-affected.

Among those officially recognised, only half of the fully affected, and very few of the partially affected families have been resettled. In most cases the land allotted is of poor quality or with multiple ownership claims.



Protestors block equipment at dam site

## Popular Resistance and Review

Tehri Dam has met strong popular resistance from its earliest days.

In 1978 a Committee to Oppose the Tehri Dam or the *Tehri Bandh Virodhi Sangharsh Samiti* (TBVSS) was formed. TBVSS succeeded in pressuring authorities to review the project on several occasions.

The project was abandoned in the mid 1980s after being sharply criticized on environmental grounds by a government appointed review committee.



Anti-dam protest in Tehri Town

In 1987 the project was again referred to a committee of the Ministry of Environment to assess its safety and environmental and social impacts. This committee unanimously ruled against the project but the Indian government overruled its findings and restarted the project.

After a 74-day hunger strike in 1996, Sunderlal Bahuguna, a Gandhian activist and long-time opponent of the dam, forced the government to set up a review of the seismic, environmental and rehabilitation aspects of the project. The Hanumantha Rao Committee submitted its report and recommendations in 1997. The government has failed to implement most of the committee's recommendations, especially those concerning rehabilitation.

In 1992 environmentalists filed a case in the Supreme Court alleging that project authorities had not acquired the mandatory environmental clearance for the dam. The petition addresses environment, seismicity and rehabilitation issues. The case is currently pending.

## Corruption

The Central Bureau of Investigation is currently investigating six cases of corruption against high-ranking officials of THDC for embezzlement of public money. The Hanumantha Rao Committee report expressed concern about the high incidence of corruption in the rehabilitation process.

## Economic Viability

The projected cost of Tehri Dam has gone up from \$612 million in 1994 to \$1.2 billion in 1999. A cost benefit analysis commissioned by the Indian National Trust for Art and Cultural Heritage (INTACH) concluded that the construction costs for Tehri are twice the projected benefits.

The INTACH study predicts the useful life of the dam will be reduced to 62 years by the huge volumes of sediment that will be trapped in its reservoir. A recent study shows that the cost of electricity per unit from Tehri is almost twice the average cost of power supply in the neighbouring states of Punjab, Himachal Pradesh and Jammu and Kashmir.

### Take Action!

The affected people of Tehri need your support to save their homes, lands and cultures from submergence this December. Please write to Mr. N.D. Tiwari, Chief Minister of Uttaranchal urging him to engage in meaningful dialogue with peoples organisations such as MATU and *Tehri Bhoomidar Sangathan* and delay closure of the last two tunnels of Tehri Dam until all affected people are satisfactorily rehabilitated.

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For more information on Tehri rehabilitation read 'Testimonies from the Ground'  
at [www.irn.org/programs/india/](http://www.irn.org/programs/india/)

OR

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Protester with anti-Tehri Dam slogans

