

# The CTARA check-dam project-2006

Gudwanwadi

[www.cse.iitb.ac.in/~ctara](http://www.cse.iitb.ac.in/~ctara)

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# The story begins ...

near Bhimashankar.



## Very pretty in the monsoons



# But in Summer





## But in Summer



# Is there a solution?



# Is there a solution?



A small Check-dam!

# Gudwanwadi



- 380 Thakar people.
- 200 animals.
- 40 households.

And an acute shortage of water for 5 months.

# Tasks

## Technical:

- Geological Survey.
- Topographical Survey.
- Watershed estimation.
- Design.
- Execution.

## Social:

- Need and impact assesment.
- Land ownership and compensation.
- Labour donation.
- Village Committee.

**Funding:** Largely through Alumni.

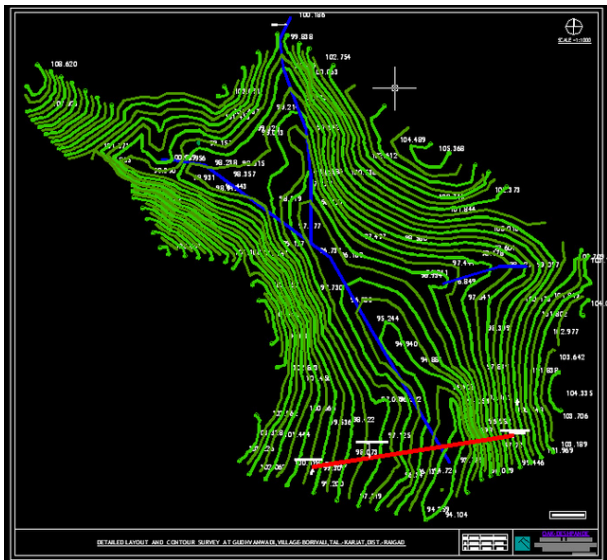
# Surveys

In August 2005...



# Surveys

The toposheet...



# Surveys

and the storage.





# Surveys

August through November: Geological surveys.



# Surveys

August through November: Geological surveys.



# Surveys

August through November: Geological surveys.



They produced a report:



# Committee

A village committee of 4 women and 4 men was constituted.



# Committee

Which started functioning to achieve the social mobilization required.



# On December 10th, 2005

## The final go-ahead.

- Project found technically feasible.
- Social arrangements were found supportive.
- Local documentation/approvals were in hand.
- Funding was coming.. Dr. Shridhar Shukla.

The IIT-ADS-Gangotree-Gudwanwadi combine was born.

- Start Date: 1st Jan 2006.
- End Date: 30th May 2006.

# The launch of December 28th

A ceremony..





# The launch of December 28th

A meeting..



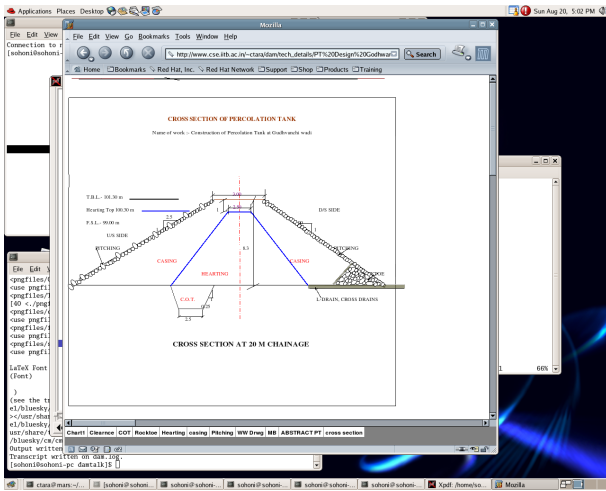
# The launch of December 28th

and then a **celebration**.



# Meanwhile...

A design was finalized,



# The site

was marked ..



# The site

and cleaned.



# The Works

in earnest, people and...



# The Works

Machines.



# The Works

First, the COT





# The Works

and then, the rock-toe



# IIT kept visiting

Sankranti in Gudwanwadi..



IIT kept visiting  
and enjoying.



# The first stumbling block

Huge geological fractures at the bed-rock!



# Social Interactions went on..

Trying out the solar cooker.



# Social Interactions went on..

Understanding the local economy.



# More Hardwork

Grouting..



# More Hardwork

## Testing Compaction





# More Hardwork

## Finishing the key-wall



On May 16th, 2006

The Director, Prof. Misra, visited the site.



On May 16th, 2006

with lots of faculty and students ...



On May 16th, 2006

There was a public meeting.



On May 16th, 2006

and every one spoke.



On May 28th, 2006

It started raining...



On May 28th, 2006

But only pitching remained!



# Fact Sheet

- Length: 85m dam, 12m waste-weir.
- Storage: 20,000 cu. m.
- Pondage Area: 2.5 acres.
- Dam Volume: 8500 cu. m. (actual 9500 cu. m.).
- Of that, COT: 800 cu. m. (actual 1700 cu. m.).
- Agricultural land submerged: 0.5 acres.
- land created: 0.25 acres.
- Cost: 20 lakhs (actual 23 lakhs).
- JCB hours: 1800 hrs.



On July 1st, 2006

Full!



On July 1st, 2006

Full!



On July 1st, 2006

Boys at work.



# The Big Question.

Will the water remain in the pond?.



# Thanks!

