Expecting Disaster: The 1963 Landslide of the Vajont Dam

Wilko Graf von Hardenberg

Summary

On October 9, 1963, a landslide above the Vajont Dam created a giant wave that destroyed several villages in the valley, killing about 2,000 people. Though the dam incorporated the latest technical expertise, it had been built without due consideration of geological reports, possible tectonic problems, and local knowledge of the territory. This caused debate as to whether to interpret the Vajont disaster as natural or one caused by human error.

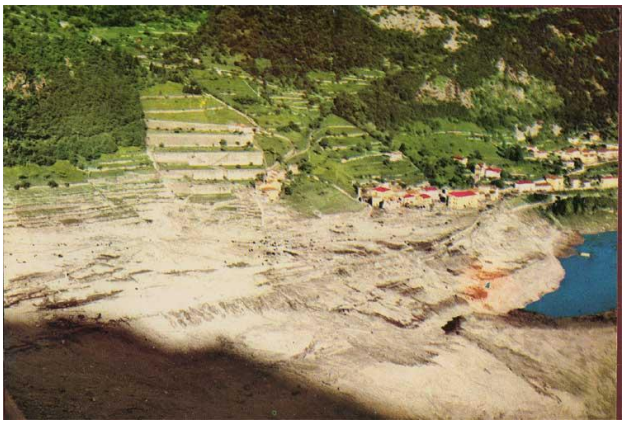
On October 9, 1963, at 10:39 pm 260 million cubic meters of rock broke off from the top of Monte Toc, on the border between Veneto and Friuli Venezia Giulia. It fell into the reservoir of the Vajont Dam, producing an enormous wave of at least 50 million cubic meters of water. The dam, completed in 1959 and one of the biggest in the world at the time, did not suffer any serious damage. However, flooding destroyed several villages in the valley and killed almost 2,000 people. A third of the population of Longarone, the largest village downstream of the dam, perished.



The town of Longarone, Italy, before the landslide, 1963.

Unknown photographer, 1963.
Courtesy of Vajont Survivor's Committee.
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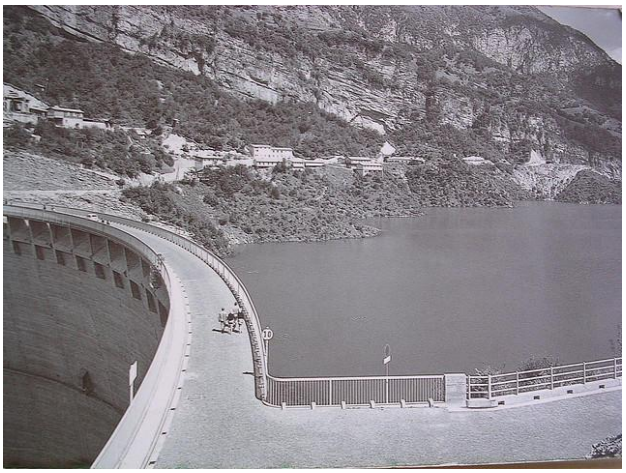
The town of Longarone after the dam was overtopped by a giant wave.

Unknown photographer, 1963.
Courtesy of the Vajont Survivor's Committee.
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Though the dam incorporated the latest technical expertise, it had been built without due consideration of geological reports, possible tectonic problems, local knowledge of the territory and Monte Toc's connate instability.



The Vajont Dam before the disaster (before 1963).

Photograph by Progetto Vajont "Io c'ero," n.d.
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View of Longarone after the wave from the Vajont Dam (1963).

Photograph by U.S. Army (SETAF), 1963.
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View of the Vajont reservoir after the landslide (1963).

Photograph by USGS, 1963.
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Already in 1960, shortly after completion, there were small landslides. The fear that Monte Toc would collapse was widespread in the area. Moreover, builders and managers had failed to observe soil conservation requirements and filled the reservoir well in excess of safety regulations. Finance-related concerns and a blind faith in development and technical expertise had eclipsed real consideration of environmental factors in the valley and of the threat to human life.

The disaster immediately became the subject of political wrangling in the mediascape. Conservative newspapers depicted the event exclusively as natural and unavoidable: the dam and its builders were not responsible since the dam had resisted the impact of the landslide. Opposition newspapers alluded to the fact that the disaster could have been avoided and that the main cause was human error.



View of the detached landslide at Mount Toc.

Photograph by Giuseppe Rossi, 2007.
Click here to view image source.

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Further readings:

- Merlin, Tina. *Sulla pelle viva: come si costruisce una catastrofe: il caso del Vajont.* 4th ed. Caselle di Sommacampagna (Verona): Cierre, 2001.
- Paolini, Marco. *The Story of Vajont.* Bordighera: Boca Raton Fla., 2000.
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- Reberschak, Maurizio, ed. *Il grande Vajont.* Sommacampagna (Verona): Cierre Ed., 2003.
- Saba, Andrea Filippo. "Le dighe." *Passato e Presente* 82 (2011): 32–37.

Related links:

- Epic Vajont Dam Disaster, Biot Report #373: June 17, 2006
  http://www.webcitation.org/5y8bd9Ztu
- Paolini, Marco, Il racconto del Vajont, Part 1/16
  http://www.webcitation.org/5y8bflPbx
- Video animation of the Vajont Dam disaster
  http://www.youtube.com/watch

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Websites linked in image captions:

- http://landslides.usgs.gov/learning/photos/largest_worldwide_landslides/voiant_reservoir__italy__rockslide_of_1963/vaointdamlargebefore.jpg
- http://landslides.usgs.gov/learning/photos/largest_worldwide_landslides/voiant_reservoir__italy__rockslide_of_1963/vaointdamafter.jpg

- https://www.flickr.com/photos/progettovajont/2896990816/
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- http://www.flickr.com/photos/akira2008/1603815629/

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Wilko Graf von Hardenberg is a modern historian focusing on socio-political aspects of nature perception and management in Europe and the history of the environmental sciences. He holds a degree in history from the University of Torino, Italy, and a Ph.D. in geography from the University of Cambridge. He was a postdoc, funded by the Autonomous Province of Trento, at the University of Trento, Italy, a Carson Fellow at the Rachel Carson Center in Munich, Germany, and a Scholar-in-Residence at the Deutsches Museum in Munich, Germany. His most recent research projects focus on the history of nature conservation, management, and rhetoric in the Alps and on the development of the idea of mean sea-level.
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