3-1 Implementation status of control works

The control work that was implemented in this project mainly includes catchment well work, culvert boring work, and drainage tunnel work.

As can be seen from the photos below, groundwater was successfully drained by these facilities.

Catchment well works: A total of 131 wells



Photo of finished catchment well work



Water collection status of catchment well

Drainage tunnel works: A total of 1,873m



Photo of finished catchment drainage tunnel



Drainage status of drainage tunnel

3-2 Implementation status of restraining works

The restraining work that was implemented in this project mainly includes anchor work and pile work. Each countermeasure physically stops the movement of the slope and stabilizes the landslide blocks.

Anchor works: A total of 200 anchors



Excavation state in anchor work



Surface state after the completion of anchor work

Pile works: A total of 408 piles



Installation state in pile work



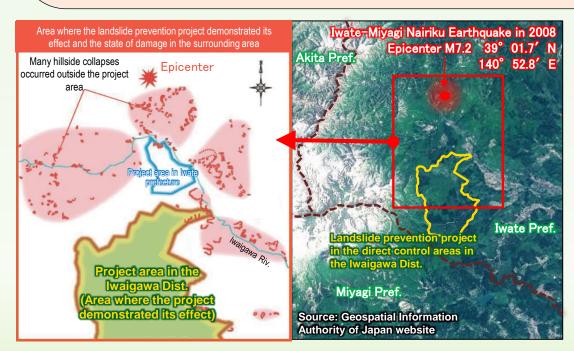
Surface state after the completion of pile work

Since the epicenter of the Iwate-Miyagi Nairiku Earthquake that occurred in 2008 was close to this project area, the areas around the Iwaigawa District were severely damaged, and the Iwaigawa River was partially blocked by the movement of soil mass from landslides.

In the project area, as well as areas where Iwate Prefecture had implemented landslide countermeasures, recurrences of landslides or new landslides were scarcely seen.

Since this project aimed to be mostly completed by 2010, most of the planned measures had been implemented. It is probable that the facilities built before the earthquake as countermeasures against landslides had advantageous effects.

Some places around the Iwaigawa District were damaged by the above earthquake and needed restoration. So, the original plan was changed to implement additional measures.





The epicenter of the Iwate-Miyagi Nairiku Earthquake in 2008 and the state of damage around the Iwaigawa Dist.

Newspaper article about the advantageous effects of the project (June 23, 2008, Iwate Daily Newspaper)

5. Efforts made at near completion of the project

To decide whether this project was near completion, the Forestry Agency held an on-site review meeting once and a review meeting twice to assess how close the project was to completion. These meetings consisted of related organizations and experts in each field. The validity of the near completion decision was determined in consideration of (1) target safety factors and (2) landslide dynamics, etc.

Since the validity of the near completion decision was confirmed in the review meetings, the Forestry Agency decided on near completion of the project in 2018 and transferred the landslide prevention facilities constructed in the project to Iwate Prefecture.



Implementation status of the 1st review meeting (July 26, 2017)



Commemorative ceremony for the near completion of the project (December 18, 2018)

6. Efforts to improve local disaster prevention capabilities

Besides hardware measures, such as the installation of structures, the Tohoku Regional Forest Office, Forestry Agency takes educational steps, such as holding disaster prevention courses for citizens, providing disaster prevention education at elementary schools, etc. The Office is striving to improve local disaster prevention capabilities from the perspectives of hardware and awareness measures.

During the project period, the Office held tree-planting festivals and other events in which local children and other citizens participate in activities designed to raise awareness to promote understanding of the role and advantageous effects of forest conservation projects.



Disaster prevention course for citizens (2010)



Classroom on forest conservation at elementary school Ichinoseki City Honji Elementary School (2011)