

Old Nakayama Tunnel

The old Nakayama Tunnel in the Komatsugura area of southeastern Nagaoka is the longest hand-dug tunnel in Japan, stretching for 877 meters. It was built by the residents of Komatsugura between 1933 and 1949 as an alternative to a long and dangerous mountain pass. For almost 50 years, the tunnel provided a safer route to the neighboring villages and was enlarged twice to allow passage for horse carts and then automobiles. It was closed to traffic in 1998, when the new Nakayama Tunnel was completed nearby. The western side of the old tunnel still allows visitors to walk along part of the route and view the original structure. For safety reasons, entry is not permitted beyond the first 70 meters.

The Need for a Safer Route

Komatsugura did not have a general store or a hospital, so the residents had to rely on the nearby villages, Hirokami and Koide (both in present-day Uonuma), for medical treatment and certain daily necessities. The only way to reach the two villages was by a poorly maintained four-kilometer mountain path, and heavy winter snowfall made the journey especially dangerous. As a result, some residents could not receive urgent medical care and others got into accidents while attempting to travel the path. This eventually spurred the Komatsugura community to devise a way to bypass the mountain route. The plan for building the tunnel was finalized in 1932, and construction began on November 12th, 1933.

Construction of the Tunnel

Funds for construction were largely raised through donations from the community and through the sale of land and other assets. The villagers worked in shifts to dig the tunnel with pickaxes and shovels. Wooden minecarts were used to remove the excavated earth and stone, and bellows pumped fresh air into the deeper parts of the tunnel. In addition to the slow speed of manual digging, flooding and fundraising issues lead to delays, and the Second Sino-Japanese War (1937–1945) caused a four-year interruption in construction. In 1949, workers digging from the east and from the west finally joined the two sections of the tunnel, completing the 16-year project.

Legacy

The old Nakayama Tunnel was slated for demolition after closure, but community members launched an initiative to preserve the structure in recognition of its historical

significance. Donations were used to produce a documentary detailing the tunnel's importance to the residents of Komatsugura and the struggles they faced during construction. The film *Horumaika* (Should We Dig?) was released in 2003 and won several awards, contributing to the successful preservation of the tunnel.

The Japan Society of Civil Engineers lists the old Nakayama Tunnel as a valuable example of the country's civil engineering heritage.