

Chilian Earthquake Tsunami and Minamisanriku Were the lessons of 1960 learned?



▲ May 24, 1960 Near Itsukamachi, Shizugawa District

On May 24, 1960, a tsunami hit Japan. No earthquake had been observed in Japan. The tsunami—triggered by a massive earthquake in southern Chile with an estimated magnitude of 9.5 on the Richter scale—traveled across the Pacific Ocean at an average speed of 750 km/h and reached the coast of Japan 22.5 hours later. Minamisanriku was hit by tsunami waves around 5.5 meters high, killing 41 people. Many buildings in the center of the former Shizugawa Town were swept away, and the town hall building was inundated by 2.4 meters of water.

Based on the lessons learned, the town built a 5.5-meter-high seawall, installed signs indicating the height of inundation by the Chilean earthquake tsunami, and prepared hazard maps. The city strived to raise disaster awareness by conducting evacuation drills in each district. In 1995, the Disaster Emergency Center was constructed next to the town hall. Learning from the lessons of the Great Hanshin-Awaji Earthquake, the building was constructed with a steel frame structure that could withstand an earthquake with a seismic intensity of 7.

The 2004 Miyagi Prefecture earthquake damage forecast indicated that the tsunami would reach a maximum height of 6.7 meters. Following the Great East Japan Earthquake, the initial warning was for a tsunami of 6 meters. The warning was updated to a wave of 10 meters or higher only 10 minutes before the tsunami was estimated to have hit Minamisanriku at 15:25. The average height of the tsunami that hit the town was 16.5 meters. Of the town's 78 designated evacuation sites and shelters, 34 were affected.

The phrases "unexpected" and "unprecedented disaster" never apply to natural disasters. We were reminded of the fact that large tsunamis such as the Jogan Earthquake and the Meiji Sanriku Tsunami have occurred many times in the past. Natural disasters far exceed human expectations. "Prepare for the worst and do your best." That's the lifesaving lesson we've learned.