

7 Ports

7.1 The Port at Port Blair, South Andaman Islands

The complex at Port Blair serves as the major throughput for goods and passengers to the islands, providing about 97 percent of all commerce. Some 275,000 passengers pass through Port Blair from the mainland each year, and as many as 375,000 for inter-island passage. The port handles about 800,000 mt of cargo and 15,000 TEU's per year. The main port has multiple wharves, including Chatham Wharf, a concrete pile structure, 150 m long with a width of 9 m to 14 m. The Haddo wharf, a concrete pile structure, is approximately 180 m long. The Junglighat small craft pier is used for fishing and small craft. The Phoenix Bay pier is near the main ferry terminal building. The main port also features a dry dock. Container wharves, general cargo wharves, and an oil terminal are all within the port area. The island's major product is coconuts. The natural harbor area has a large mouth facing east and was partially shielded from the tsunami by Ross Island. The harbor at Port Blair is about 1,000 km north and slightly west of the earthquake epicenter. Figure 7.1 shows the general layout of Port Blair's natural harbor.

Intense ground shaking occurred at about 6:30 a.m. the day of the earthquake and tsunami, and there were 50 minutes between the initial earthquake and the first wave. Port Blair was hit with four waves, the largest being about 5 m in height. The approximate time between waves was 30 to 35 minutes. There was no accelerometer on these islands, and thus there is no indication of the peak ground acceleration.

According to reports there were 20 vessels in the port at the time of the earthquake. The port's operational procedure was to have all vessels vacate the port immediately following an earthquake. This policy had been established prior to the earthquake and without any real knowledge of what a tsunami was or what it could do. The port quickly took action following the 6:30 a.m. earthquake. All mooring lines were immediately cut, and captains had been told to depart immediately. The policy had been carried out without knowledge of the impending tsunami. Some passengers had already embarked on a ferry, and it departed; others still on the wharf were escorted away, without a single injury.

Following the earthquake and tsunami, the water depth in main port area of Port Blair had increased by about 1 m. The probable cause is a tectonic uplift following the earthquake. On the western side of the island, a correlated decrease in water depth was noted. The maximum increase in water depth on the island is reported to exceed 2 meters.

Due to time constraints, the team only surveyed damage to the Port Blair area. The Indian government port engineers had surveyed and recorded damage to other port facilities along the Andaman Islands and, except for Kondul Island, had prepared rehabilitation programs for the following port/harbor areas:

- Hut Bay, Little Andaman Island
- Mus Harbor, Car Nicobar
- Chowra Island
- Teresa Island
- Katchal Island