

# 6. FIRE

## FIRE SPREAD IN A DENSELY BUILT-UP SETTLEMENT

Due to their fear of the arrival of tsunamis, the inhabitants of Aonae rushed towards higher ground immediately after the shock. For this reason as well, it was very difficult to supervise the fire equipment in use. A fire which broke out in the northern part of the east block of Aonae community and was confirmed by the local fire station at 22:40, spread towards the south. A second fire occurred at around 00:30. It is suspected that this fire started on a fishery boat which had drifted over the tsunami waves from the fishery port. The two fires merged and grew into a fully developed mass fire at around 02:00 (photos top right and on cover). By around 05:00 when a firefighting team had stemmed the fire spread, 189 houses had all been burned out.

As shown in the figure on the following page, the burned area had been densely built up with combustible houses and extremely narrow streets in between. In addition, most of the houses had installed propane reservoirs for cooking fuel and kerosene tanks for heating fuel had been placed outside. It appears that those combustible materials accelerated the development of the fire. Although winds blew during the night from the east or northeast, a steep cliff about 20 m high prevented the fire from spreading over the cliff. Ultimately, only 25 houses remained in the neighbourhood, spared from the violence of tsunamis and fires.

Fire preventive construction flaming up due to fire brands



Fire spreading in Aonae community at approximately 02:00 (from helicopter of Maritime Safety Agency, 100 m above sea level)



Ruins of fire; only chimney and kerosene tank standing; staircase for emergency climb up cliff

In the highland over the cliff, some wooden houses were built with mortar and wire mesh construction to cover up the external walls of timber structures. In general, this type of construction is regarded as a fire preventive construction specified in the Building Standard Law. The UNCRD investigation team, however, discovered a house with its mortar covering fallen down due to the tremors and the exposed timber structure had actually caught fire brands and partially flamed up. (photo left)