

Hot-Spring Village specific issues on Flood Disaster Response: Case Study from 2017 flood at Kawayu-onsen in Wakayama, Japan

Chiho Ochiai

Graduate School of Global Environmental Studies, Kyoto University

E-mail: ochiai.chiho.2x@kyoto-u.ac.jp

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Abstract

In August 2017, Kawayu-onsen (hot-spring-village) was heavily affected by the flood disaster which was caused by over flow of Ohto river during the Typhoon No. 20. Kawayu area has 11 accommodation facilities called hot spring inn along the Ohto river. This area is one of the first points to be flooded in the Hongu district and it has experienced flood frequently like a few times in every typhoon season. The local people have adopted ways to live with disaster and recover from it quickly over the years. However, 2017 flood was different from what they have experienced over 50 years and exceeded their assumptions.

The purpose of this study is to understand and discuss about; 1) people's evacuation activity during the flood in 2017, 2) people's perception and response to the flood as the hot spring village, 3) hot-spring-inn-village specific issues and difficulties, including tourist management during and after flood. The study was conducted by interviewing local residents and owners of hot-spring-inns in October 2018 and January 2019.

The result shows that the water level of Oto river suddenly increased and over flowed into the road and then to the hot-spring inns and residences. A local leader and local government office cooperate together to evacuate elderlies to local evacuation facility in advance. However, it is always difficult to convince hot-spring-inn owners to leave their facility and to evacuate. Many hot-spring-inn owners want to remain in the inn to clean up their mud-covered floors when flood water is drained. They want to see the flood condition and water level in their eyes. This can be called a local wisdom but in the same time causes unsafe situation.

Many of the hot spring inns were built on the 1-2m higher from the ground but nine out of eleven inns got flooded about 0.2-1.0 m in height. Many inns had to close their businesses for several months from September to January which caused major economic loss. Another issue became evident from the interview was difficulty of managing the emergency evacuation facility in the situation of local residents and tourist together. Tourists tend to behave and wanted to be treated as a guest and it caused several problems.

The flood disaster hit in the hot-spring-inn village in Wakayama gave several lessons. It is important to know the possible situation and discuss it in prior to disaster, and share with other hot-spring-inn villages.