

Investigation of Evacuation Plan through Making Landslide Evacuation Map

Towards Evacuation Planning

Though sediment-related disaster warning areas are designated in many places in Japan, there are no evacuation plans related to debris flow disaster. In Kuna-area in Chichibu city where is mountainous, they held the workshop to make Safe Check Map for being approved as a safe community. Kuna elementary school where is in a sediment-related disaster warning area is an evacuation site, however there is no guidelines who, where and how to evacuate when heavy rainfall happens.

The Application of “nigechizu” to Landslide Disaster

To make the Voluntary Disaster Prevention Plan, we held the consecutive workshops in Kuna-area with applying the method of making Evacuation Map from Tsunami.

Using how to make Tsunami Evacuation Map “nigechizu” , we changed some method to reflect characteristic of sediment disaster.

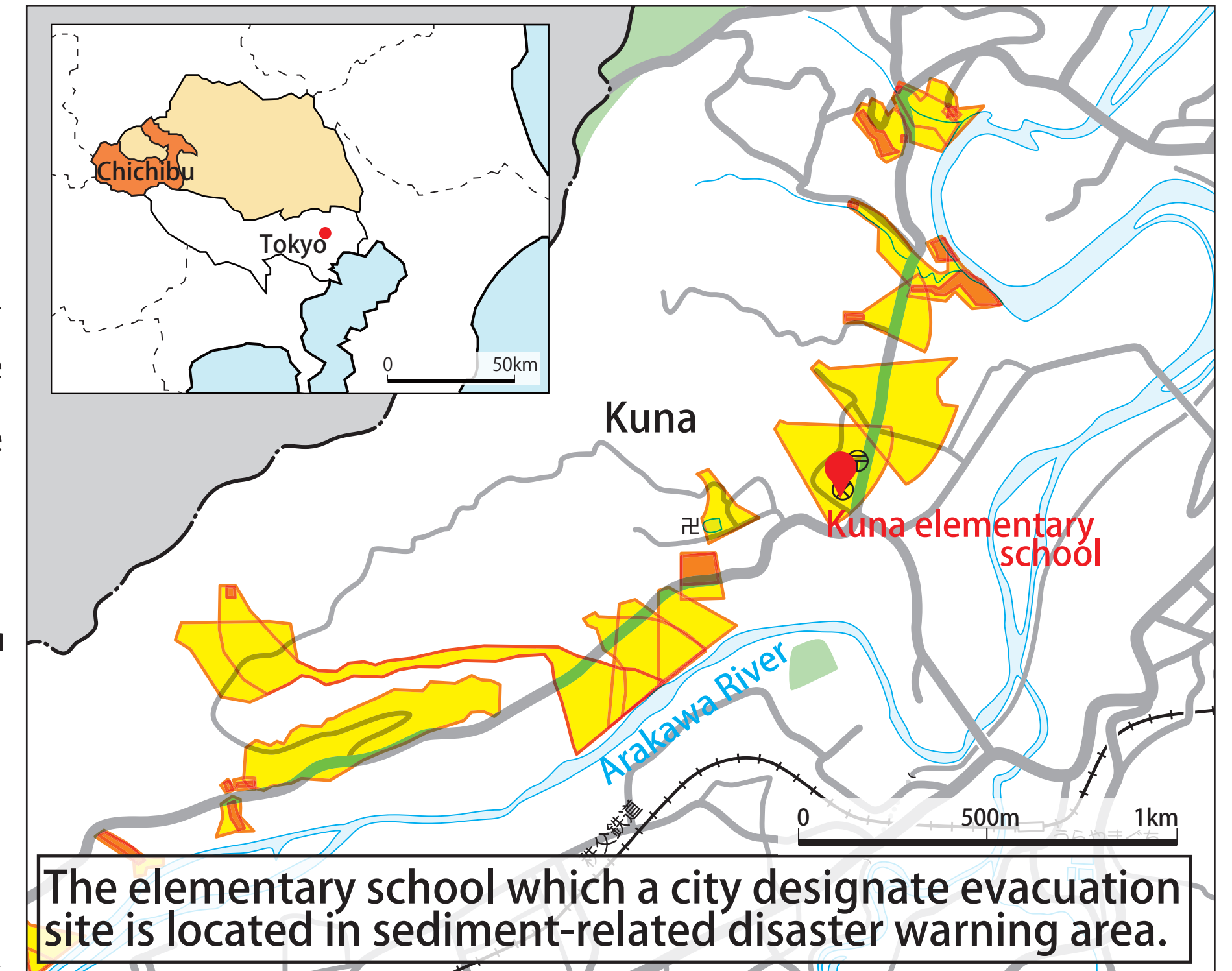


Fig.1 Chichibu city' s hazard map



Flow of Making of Landslide Evacuation Map

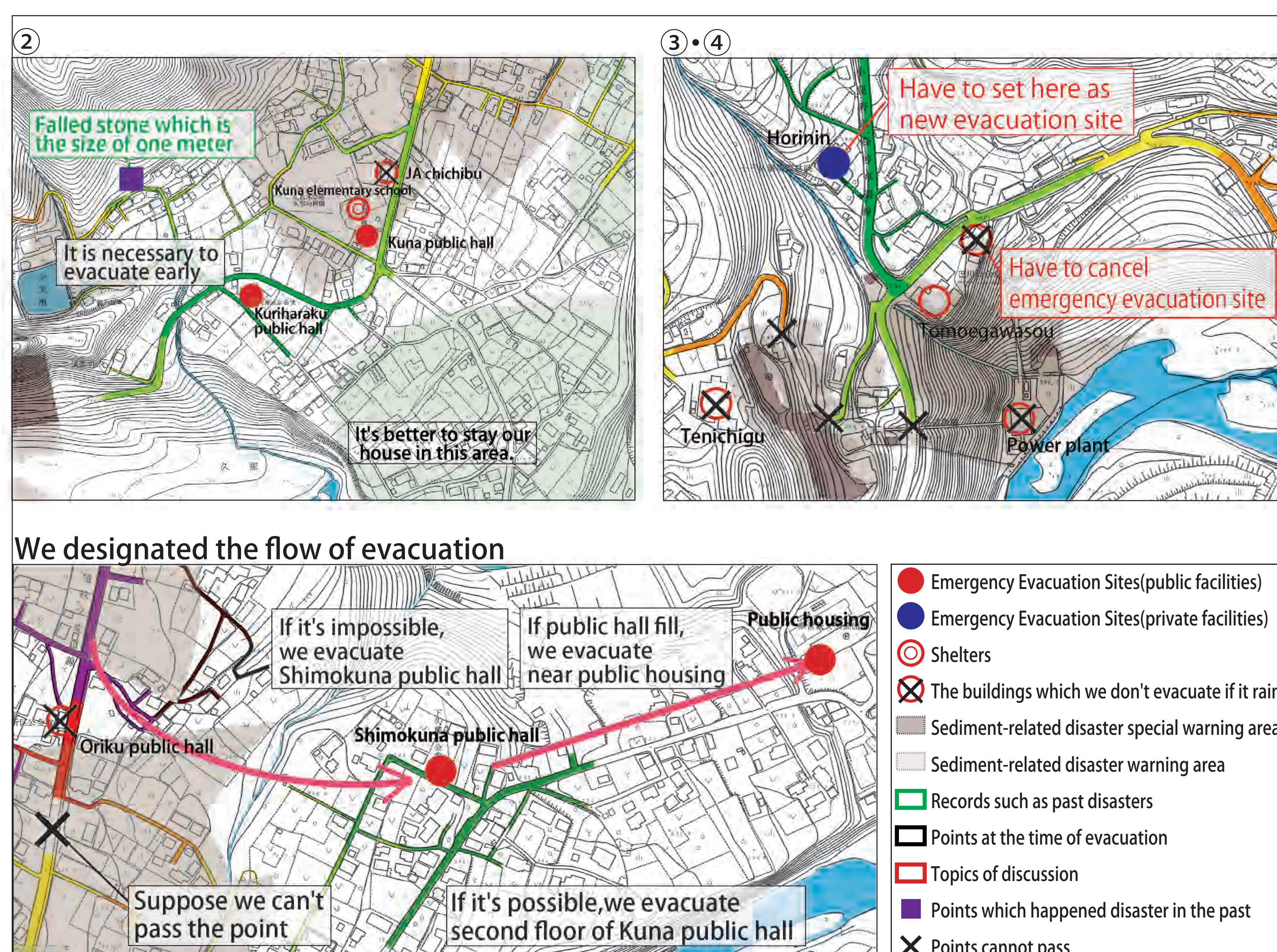
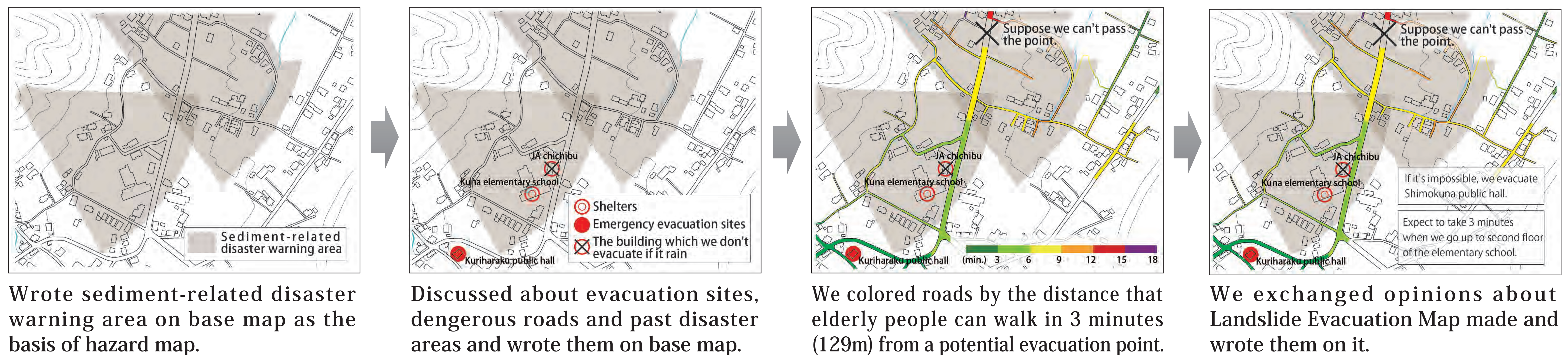


Fig.2 Completed Landslide Evacuation Map

Findings through WS

- ① We could designate the emergency evacuation sites in case of heavy rainfall.
- ② We could define whether a need to be evacuated immediately or safe to stay.
- ③ We discussed the safety of evacuation sites that were designated currently, and we found points where we should set new evacuation sites.
- ④ We set not only public facilities such as auditoriums but also private facilities like houses or guesthouses as evacuation sites.
- ⑤ We compared evacuation routes by setting various conditions.

The Results and the Issues

We found it was possible to apply the method to make Landslide Evacuation Map from Tsunami to Evacuations for sediment-related disasters. But it' s more difficult to set the evacuation points of sediment-related disasters than those of tsunami, and it' s necessary to discuss when to start evacuation. Moreover, it' s important to inform these results to residents and make a disaster prevention agreements in the region.