Major Disaster Surveys

1. Field survey on the slope failure on National Road No. 57. caused by torrential rains which fell in the northern part of Kyushu in July 2012.

The torrential rains which had fallen in the northern part of Kyushu from July 11th to 14th, 2012 caused 11 slopes to fail on National Road No. 57 in the Sakanashi district of Ichinomiya town of Aso City, Kumamoto Prefecture, resulting in the total closure of the road. In response to a request from the Kyushu Road Maintenance Bureau, the Road Research Department conducted a field survey to assess the scale of the devastation. The survey was focused on the failed slopes, which had inflicted the most severe damage. The Road Maintenance Bureau confirmed the effect of spring conditions and the fragmented rocks caught by the damaged rope netting covering the slope. They also provided technical support on measures to lift the temporary traffic closure in that area.

Kazuhiko Mizutani, Research Coordinator for Road Structure Road Department.

2. On-site technical advice on the sediment disasters in Kimotsuki town, Kagoshima Prefecture

The torrential rains triggered by the rain front from June 27 to 28th, 2012 in the mountain areas of Kimotsuki town, Kagoshima Prefecture, caused a number of debris flows and slope failures leaving many houses damaged and traffic routes closed with some villages totally isolated. In response to a request to conduct disaster survey from Kagoshima Prefecture, the Sediment Control Research Department conducted a field survey in Kimotsuki town, as well as a survey via helicopter on June 30th. We provided technical advices to Kagoshima Prefecture and Kimotsuki town on the safe traffic control on National Road No. 448, the evacuation system, as well as emergency measures.

Yasuhiro Nomura, Researcher Erosion and Sediment Control Division Research Center for Disaster Management

3. On-site technical advice on sediment disasters in Yufuin town, Yufu City, Oita Prefecture.

The torrential rains triggered by the rain front on the evening of July 1st, 2012 caused debris flows in the Gakuhon River, which is a water system of the Oita River in Yufuin Town of Yufu City in Oita prefecture, inflicting damage on houses, causing flooding and debris flows in the hot spring town located in the downstream of the river. In response to a request from Oita Prefecture, the Sediment Control Research Department conducted a field survey and one via helicopter on July 5th and 6th. We provided technical advices on how debris flows occurred, the effect of the existing erosion-control dams, future evacuation measures, and maintenance of erosion-control facilities, including removal of gravel accumulated on the existing erosion-control dams.

Atsushi Okamoto, Head Erosion and Sediment Control Division Research Center for Disaster Management

4. On-site technical advice on the sediment disasters caused by torrential rains in Kinki district

The torrential rains which had fallen in the southern part of Kyoto and Shiga Prefectures from August 13th to 14th, 2012 caused many slopes failures, generating debris flows, floods, etc. in Otsu City and Uji City, as well as in the surrounding mountainous areas. The torrential rains had inflicted large scale damage on houses and loss of human lives, and leaving some villages totally isolated. In response to a request for a disaster survey from Shiga Prefecture and the Regional Development Bureau of Kinki District, the Sediment Control Department conducted a field survey from August 16th to 17th. We focused on the site where debris flows had occurred in Otsu City and Uji City, providing technical advices on the evacuation system, as well as emergency measures to those local governments.

Yasuhiro Nomura, Researcher Erosion and Sediment Control Division Research Center for Disaster Management

5. On-site technical advice on the sediment disasters in Saijyo City, Ehime Prefecture

The slope on the left bank of the Tonotanigawa River, which is a water system of the Kamo River in Saijyo City, Ehime Prefecture collapsed on September 4th, 2012. The river channel was closed due to the landslide and the bridge over the Tono River on the Tozai Line of the city road was stricken by the disaster. In response to a request to the disaster survey, the Sediment Control Research Department conducted a field survey, providing on-site technical advice. We checked the condition of the collapsedslopes and the closed river channel, examining the possibilities of further slope failure. We advised of the need to conduct continuous monitoring of the slope conditions, as well as the river water level of the water channel. In addition, we emphasized the need to formulate future policies based on the comprehensive assessment of reconstruction of the road and the water channel, as well as the measures for the slope.

> Yuki Okuyama, Researcher Erosion and Sediment Control Division Research Center for Disaster Management