

[P1] Field Crop Production

Thu. Sep 9, 2021 12:15 PM - 2:00 PM Room 1 (Poster) (Field Crop Production)

12:15 PM - 1:00 PM

[P1-11] Importance of Water Resource Conservation in Agriculture of the Aso Region - Lessons from the Kumamoto Earthquake

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In April of 2016, Kumamoto Earthquake caused huge disaster to agriculture in the Aso region, which is a large mountainous area in central Kyushu Island of Japan. We interviewed the affected farmers about the actual situation of the damage, focusing on the problem of water supply. In Aso City, which is located in the north of the Aso Caldera and has many large paddy fields, cracks, land irregularities, and liquefaction damaged the paddy fields. In addition, a long-distance underground waterway from the river was damaged and the water supply to the irrigation canal was cut off. In some areas it took three years to recover. Under such circumstances, the irrigation canals that use "natural water" (mountain stream) were less damaged and could be used again immediately. Despite such advantage of "natural water" for paddy irrigation, the supply of natural water has become unstable due to changes in the usage pattern of Mt. Aso and perhaps due to the decrease in snowfall caused by global warming. Natural alternative water sources also played an important role in the field of livestock. Dairy cow farmers helped cows by bringing water daily from nearby springs for months to a year and a half. Although traditional beef cattle grazing is declining, conservation of Aso grasslands should be important for a stable water supply.