

Socio-economic impacts of the tsunami on March 11, 2011, in Japan

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Abstract

Socio-economic impacts of the tsunami and the nuclear power plant accident are discussed in this study. A strong earthquake hit Japan on March 11, 2011. It triggered massive tsunamis and as a consequence, 28,612 fishing boats (equivalent to 15.4% of the Japanese fishing boats) were lost or destroyed and 319 fishing ports (11% of the Japan's fishing ports) were damaged. Despite such damages, no significant decrease was identified for Japanese fishery production statistics in 2011 probably due to the fact that the most of the lost boats were ones for small-scale fishery. Human capitals, however, have been seriously damaged in many coastal communities. Fishers have long established institutional frameworks to co-manage coastal fishery resources. Local Fisheries Cooperative Associations (FCAs) have played central role for such co-management. The tsunami destroyed many of such functions. In addition, serious damages were caused by Fukushima nuclear power plant of TEPCO (Tokyo Electric Power Company). The company failed to shut down the reactors after the earthquake and this has resulted in serious leakage of radioactive substances into the Japanese waters. Airborne radioactive pollutants also have fallen on the land and sea. High level of radiation was in fact detected in ocean waters near the damaged nuclear power plant. Human capitals for the coastal fishery management may have received irreparable damages in some areas and, therefore, it could cause adverse effect for the conservation of coastal fishery resources.