## COVID Pandemic, Disaster Response, Information and Communications Technology, and Social Capital



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Online meetings are the epitome of the use of information and communications technology (ICT), which has been promoted by society and economic activities in general during the COVID pandemic. Many lectures are also provided online in university education, and the various educational methods used online are being accumulated as the technology used to support them has advanced continuously throughout this period. Simultaneously, however, there are limitations to online education, and there are many exercises that are not effective unless conducted face-to-face.

Regarding disaster measures, the ideal way of supporting areas affected by a disaster using ICT has been examined, even before the response to the novel coronavirus. For example, the use of ICT increases the likelihood that disaster response agencies can efficiently understand the resources needed for affected areas and transport them at the appropriate time. It is increasingly important to create effective responses by utilizing a variety of tools to natural disasters that are expected to occur frequently in the future. Therefore, it is necessary to

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strengthen the practicability of support responses utilizing ICT.

However, problems that cannot be addressed by ICT alone also occur frequently during disasters. For example, there are many cases in which injured people were transported through cooperation between the residents of affected areas because support requests could not be made from those affected areas. This is a problem that cannot be addressed simply by collecting and communicating information. In other instances, elderly people were still living with their household items in disarray because they were unable to ask for help while other houses were being restored owing to the efforts of volunteers. This is attributed to the inaccessibility of information related to support and the inability of victims to reach out for support. It is also a problem that has arisen in the current COVID pandemic.

Given the current problems and limitations, there is much to expect from local social capital to solve these issues. Social capital is broadly defined as social resources linked through trust, norms, and networks that facilitate cooperative activities in society. In disaster response, there are also many cases in which difficulties have been overcome not only through support activities from outside disaster-struck areas, but also through cooperative relationships within disaster-struck areas and cooperation between neighboring districts. Therefore, local social capital can help reduce the impact of a disaster.

It is important to more deeply consider what is possible and impossible to respond to using ICT, and what can be solved through the cooperation between inhabitants, districts, and disaster response organizations to prevent or minimize the extent of a disaster. Effective use of ICT and social capital will lead to multidisciplinary and structured measures. To do so, it is necessary to establish a mechanism that allows for collaboration between organizations and regions, as well as to engage in training by collaborating with local residents and administrations. Such efforts will also lead to smooth reconstruction of the affected region.

There are many common aspects between post-disaster situations and the COVID pandemic. We believe that technology and knowledge gained from the pandemic should also be applied to disaster responses.

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