Study on Cooperation between Volunteer Fire Corps and Community-based Voluntary Disaster Prevention Organizations
At the time of an Inland Earthquake in the Metropolis

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Recently, there have been many discussions on the risks of a Tokyo Inland Earthquake. According to the Headquarters for Earthquake Research Promotion, the probability of a Tokyo Inland Earthquake occurring in the next 30 years is approximately 70%.

In an effort to reduce damages from earthquake disasters, the municipalities has started to focus on ideas of "self-protection", "self-help" and "mutual aid", such as the promoting formation of voluntary disaster prevention organizations. As a result, there is an increasing trend in the number of voluntary organization. Aside from voluntary disaster prevention organizations, volunteer fire corps is another important organization for disaster prevention in the community. Volunteer fire corps is composed of local residents who have knowledge and skill in the field of firefighting. While both voluntary disaster prevention organization and volunteer fire corps are responsible for regional disaster prevention, due to their different background and structure organization, there exists some difficulty for these two organizations to work together effectively.

In the event of a Tokyo Inland Earthquake, local fire departments will not be able to respond to all simultaneous fires due to their limitation in manpower; therefore, additional help from these two volunteer organizations will be necessary. In order to do so, it is important to find ways and establish methods that allow these two organizations to cooperate effectively in the event of an earthquake.

In this study, questionnaire surveys and interviews were used to obtain a better understanding of the current framework of the voluntary disaster prevention organizations. The results were compared and analyzed based on the current goal to search of a better cooperation method in the future. The survey results show that the longer is the experience in the voluntary disaster prevention organization, the higher is the percentage of recognition of importance of cooperation between volunteer fire corps and voluntary disaster prevention organizations. Also, we found that participation of volunteer fire corps in joint trainings substantially increases familiarity with the use of fire hydrants and grasp the locations of water supplies by voluntary disaster prevention organizations in the region. Therefore, an increase in joint training participation will lead to an increase in the local volunteer's firefighting ability.

It is strongly recommended to establish a regime to allow both voluntary disaster prevention organization and volunteer fire corps to cooperate together in the community during an earthquake situation. Also, participation of volunteer fire corps in training in daily times will improve initial fire response activities and increase overall regional disaster prevention level.