Conclusion

The international science journal, Nature has an article titled "Quake shakes Japan's Science" in its March 24, 2011 edition. The article cited concerns about the adverse effects the Great East Japan Earthquake had on facilities in universities and research institutions and to the researchers and their research at severely-damaged Tohoku University, etc. The world's attention is not only on Japan's reconstruction, but also on the reconstruction of Japan's S&T.

The 20th century is known as the century of S&T, and the past 100 years, the world's S&T has improved by leaps and bounds, with Japan playing a role as one of the world leaders. The effects of S&T on human lives and society are unlike anything we have seen in other centuries.

The improvement of S&T continues in the 21st century. People think nothing about using a mobile phone, so small it can fit into the pocket, to instantaneously exchange information with people around the world. IT is an effective means to connect society. Even during the Great East Japan Earthquake, mobile phones were used to take pictures of evacuees' information listed on the notice boards at the shelters and to relay the information to family members living far away through the hands of many people. Social networking sites such as Twitter were also used to exchange information on one's safety. On the other hand, we also live in a world where our personal information can be found on the Internet and spread in a flash.

The developments of S&T have made our lives more fulfilling and convenient, but also brought threats in the forms of production and spread of toxic materials, development of weapons of mass destruction, environmental destruction, global warming to society. The Great East Japan Earthquake showed how S&T, which has permeated in and enriched all aspects of our lives, also has a fragile side which could threaten our health and daily lives. The future S&T policies need to accept both the positive and negative aspects and through sincere dialogs between related parties such as researchers, technicians, the government, and the Japanese public, work toward a future society wants while focusing on factors such as the harmony of S&T and society and social demands.

It goes without saying that as we strive to reconstruct our society after the earthquake, S&T is the key to achieving various issues and will continue to produce social values that not only enrich society economically, but also spiritually. The promotion of S&T is what we choose our future to be, and for this reason, is a public endeavor involving all members of society such as citizens, researchers, technicians, academic associations, companies and NPOs.

In issues arising in local areas, such as disaster prevention, crime prevention, environment protection, etc., residents are beginning to work together with researchers and technicians to come up with specific countermeasures. There are also growing activities where the local communities, universities and companies support science education. These activities will definitely become the pulling power to create a "New Public Commons" suitable for S&T.

With the recent earthquake, tsunami and nuclear power station accident, it is timely for S&T personnel to reconsider the future role of S&T together with the public and take new actions in order to gain public understanding, support and confidence. This White Paper shows a path of how each and every citizen can view S&T as his or her own and supported by S&T literacy, work together with researchers and technicians through communication activities, and participate in planning S&T innovation policies. Practical examples

may be still in its early stages, but in the future, it is important to use them as a starting point to create a future society we hope for with the S&T that we possess.