

Part 1

Science, Technology, and Innovation Starting on the Regional Level

The population of Japan, which continues to rapidly decline alongside similarly decreasing birth rates, has been decreasing since 2011, and while metropolitan areas in Western countries with relatively large populations contain roughly 5% to 15% of their national populations (as of 2017), the Tokyo Metropolitan Area, which consists of one metropolis and three prefectures, accounts for roughly 29% of Japan's population (as of 2021), demonstrating a trend of population overconcentration in the Tokyo Metropolitan Area. In consequence, at a regional level, not only are there fewer key players in regional societies, but social and economic issues such as the shrinking of regional economies are also coming to the fore.

Globally, in addition to responding to ongoing issues such as population growth, various constraints like those on energy, resources, and food, and environmental problems, we must also respond flexibly to new issues like the spread of COVID-19 and changes in the national security environment.

Under such circumstances, the government has decided to invest heavily in science, technology, and innovation, which will contribute to resolving various social issues that the world faces, such as infectious diseases, global warming, and aging societies with declining birth rates. In addition, one goal of the 6th Science, Technology, and Innovation Basic Plan to realize Society 5.0 is to promote R&D aimed at resolving social issues in Japan like the declining population and birth rate, as well as issues facing urban and rural areas, while contributing to the world as a developed problem-solving country and improving diverse forms of well-being for each and every individual.

To that end, the government is promoting

various initiatives, such as the development of human resources in the fields of science and technology, the University Endowment Fund to help shape world-class research universities, bold investments in advanced science and technology, and thorough support for startups. Furthermore, we are working on initiatives such as the creation of local university-centered innovation, the establishment of a startup ecosystem that will generate innovation on the regional level, and the design of smart agriculture, forestry, and fishery industries from perspectives that include resolving regional social issues caused by the excessive overconcentration of people in the Tokyo Metropolitan Area, the declining population and birth rate coupled with advanced aging, and other factors, and contributing to regional economies through said resolutions.

The rapid development of science and technology in recent years has shortened the physical and psychological distance to all sorts of places, things, and people, and has enabled access to necessary information. Coupled with government-run science, technology, and innovation policies, it has also yielded various R&D accomplishments and startups of all shapes and sizes, even in rural areas. Diverse regional bases have also sprung up around the world, like those in Silicon Valley in the U.S.A., Aachen in Germany, Flanders in Belgium, and Shenzhen in China. Part 1 discusses several examples of how regional universities, colleges of technology (KOSEN), local governments, and businesses are leveraging their respective strengths to bring about innovation on the regional level, expanding the appeal of their regions in various ways like giving back to

regional societies and creating employment opportunities. In addition, it introduces initiatives to expand such efforts to other

regions and various countries that may need them.

What is the 6th Science, Technology, and Innovation Basic Plan?

In Japan, the Science, Technology, and Innovation Basic Plan (previously known as the Science and Technology Basic Plan from the 1st iteration to the 5th iteration; hereinafter referred to as “the Basic Plan”) is formulated every five years based on the Basic Act on Science, Technology, and Innovation, and the current 6th Basic Plan was started in April 2021. The plan puts forth an objective to continue to create knowledge with diversity and excellence, and restore the world's highest level of research capabilities for the realization of Society 5.0.

What is Society 5.0?

Society 5.0 is a concept proposed in the Basic Plan as a future society that Japan should aim for. It is defined as “a human-centered society in which economic development and the resolution of social issues are compatible with each other through a highly integrated system of cyberspace (virtual spaces) and physical space (real spaces)” and as “a society that is sustainable and resilient against threats and unpredictable and uncertain situations, that ensures the safety and security of the people, and that allows individuals to realize diverse well-being.”



The staff at MEXT explain three important points of the future society Japan should aim for—“Society 5.0.”

Video Guide to Society 5.0 for the White Paper on Science, Technology, and Innovation 2021 (Staff Explanation Ver.)
URL: <https://www.youtube.com/watch?v=ggS9VQLsMrQ>