Introduction

Japan is experiencing a rapid progression toward an aging society with fewer children. Accompanying this, it is estimated that the total population in 2005 has been lower than that of the previous year. Excluding a decline due to World War II, the population of Japan has grown steadily since the Meiji era, but has now started to decline. It is predicted that the aging society and a declining in population will continue over the long term in the future. This is likely to have a variety of effects on the society and economy of Japan, and our society is about to face a turning point.

The effects of an aging population with fewer children have been pointed out from a variety of perspectives. In particular, as a countermeasure to the declining birth rate, one of the factors causing the aging population, various measures have been taken to reverse the trend of fewer children. In the future, even stronger action is required to change the circumstances in society that make it difficult to give births and to bring up children, and to avoid overly rapid changes in the population structure.

On the other hand, even if the birth rate could be increased in the near future, it would take time for the effects to be seen, so the country could not entirely avoid the aging of the population and a decrease in population. For this reason, it is necessary to continue to deal with the issues of a society with a declining population, fewer children and a growing elderly population, such as by maintaining the vitality of society and achieving an abundant life for the people.

Turning eyes to the world, although the total world population is expected to increase, it is predicted that many countries may possibly experience population declines, primarily industrialized nations and Asian countries. Japan is in the position of being among the first in the world to deal with the issues of a decrease in population and an aging society with fewer children.

Along the population issues, it is necessary to adopt the perspective of sustainable development for the society, including both environmental and economic concerns, and addressing the problems that are shared with the rest of the world, with respect to the environmental problems, food supply problems, energy problems and resource problems. There is a need to reconsider the societal emphasis on mass production, mass consumption and mass use of resources, and to pursue a new vision of wealth and abundance.

Regarding such large problems, how could science and technology contribute?

Science and technology have been contributing greatly to mankind through new knowledge, such as the discovery of scientific principles, and the fruits of a wide variety of technology development. Extension of the life expectancy, which is one of the factors of the aging society, is also one result in which science and technology contributed to fulfilling a wish of human beings.

However, it is also true that the development of science and technology expands the activities of man to bring about new problems on a global scale, such as environmental problems.

The development of science and technology in recent years has made impacts on all levels of society, and it is no longer possible to separate science and technology from the daily lives of people. The relationships between S&T and society has continued to become closer and stronger, therefore, S&T should be supported by society and people, and at the same time, S&T is required

to provide benefits to society and people.

Regarding the problems of an aging society with fewer children that are now facing our nation, there are naturally limits to what could be accomplished by science and technology alone. Nevertheless, science and technology should certainly serve as an important part of the solution to these problems.

The first section of the annual report on the promotion of science and technology presents the trends in science and technology activities focusing on a specific theme. The relationship between S&T and society was broadly addressed in 2003. In this report, as Japan now faces a major turning point with prospects of shifting the decreasing population, the focus is on presenting and analyzing the role of science and technology from the view point of an aging society with fewer children.