Facing Societal Challenges: Making Life Better through Research

Driven by the three pillars of science and technology, democracy, and market principles, the 20th century brought to human society great convenience, healthy aging, freedom and equality, and economic prosperity. Since the start of the 21st century, however, imbalances in these three pillars have emerged. Nuclear power plant accidents and the phenomenal progress of information science and life science technologies have made us reconsider the definition of what sound development for science and technology truly means. While globalization facilitates greater mobility of people, goods and information across national borders, it is not clear whether the current democratic system can successfully cope with the drastic changes brought about by globalization. Market principles bring about unevenly distributed wealth, and accelerate the shrinking of the middle class and the widening of social and economic gaps. Even worse, modern civilization revolving around these three pillars is having huge adverse impacts on the global environment and it is threatening the very survival of our planet. Against this backdrop, how should universities contribute to society through education and research?

The highly civilized modern society has given rise to a number of challenging societal issues. Of course, it is necessary to use the power of academic knowledge, science and technology to solve societal issues that are serious, complex, and globally relevant, such as those stated in the Sustainable Development Goals, but this alone is not enough. To find truly meaningful solutions to these problems, individuals and organizations with different backgrounds, values, and sets of skills and knowledge must be encouraged to combine their strengths, share an understanding of the issues, and work in a co-creative manner. In other words, comprehensive universities with researchers in a diverse range of disciplines, such as humanities, social sciences, natural sciences, life sciences, medicine, and engineering, are required to play an active role in facilitating co-creation with society.

Osaka University has been devoted to serving civil society since its foundation and declares the principle of contributing to society in Section 3 of the Osaka University Charter, which states "Osaka University will ... contribute to social stability and welfare, world peace, and the creation of a society in which humans will live in harmony with the natural environment." To meet the demands of society in the 21st century, we will promote education and research to solve social issues under the heading, "Facing Societal Challenges: Making Life Better through Research." The term "Life" means not only human life, but also the lives of a diverse range of organisms. "Life" as the very basis of civilization is now being threatened by the present-day

distortion of the three pillars, and we are required to restore the dignity of life. The threat to "life" underlies the challenging societal issues which we must urgently address.

As shown in the diagram, "Focusing on the Value of Life" is conducted from three perspectives – "Protecting Life", "Nurturing Life", and "Connecting Life." With this approach to life as our compass, we will encourage dialogue with stakeholders, both inside and outside Osaka University, share a vision for society and mobilize research resources available in the university to tackle the issues that need to be addressed.

Osaka University will work towards solving societal issues by promoting "Facing Societal Challenges: Making Life Better through Research" and will link this with global initiatives. We consider this our responsibility as a university to uphold the principle of contributing to society for the next century and beyond.