

## Words on Publication

This year marks the 20th anniversary of the National Institute of Land and Infrastructure Management (NILIM), which was established on April 1, 2001, by reorganizing the Public Works Research Institute, the Building Research Institute, and the Port and Airport Research Institute of the Ministry of Land, Infrastructure, Transport and Tourism.

Currently, the NILIM is conducting comprehensive research on the planning and formulation of technological policies related to the development of the social infrastructure for the use, development, and conservation of national land, as well as providing instructions and disseminating the results of research through its three administrative departments (General Affairs, Planning and Research Administration, and Administrative Coordination), eleven research departments (Water Quality Control, River, Sabo, Road Traffic, Road Structures, Building, Housing, Urban Planning, Coastal Marine and Disaster Prevention, Port and Harbor, and Airport), and the Research Center for Infrastructure Management.

The research conducted by the NILIM can be categorized into three main areas: (1) research to strengthen the national land and infrastructures and protect the lives and livelihoods of the people, (2) research to increase the productivity and growth potential of society, and (3) research to support comfortable and secure living. Each of these can be described in single words as “strength”, “use”, and “beauty.” It is the mission of the NILIM to promote the realization of the national land, infrastructure, and society that have these three elements through technological development. In order to fulfill this mission, the NILIM is conducting research while responding to the demands and challenges of society.

The lineup of important issues surrounding Japanese society has probably not changed significantly over the past 20 years. However, the urgency of addressing these important issues has increased greatly in recent years as international relations have changed and time has passed, while issues have become more intertwined, and problems have become more visible and palpable. For example, looking at the impact of global warming, the United Nations Framework Convention on Climate Change was adopted in 1992, while in 2018, the Japan Meteorological Agency first mentioned its impact on a specific disaster caused by heavy rainfall. As seen in this example, in recent years, there has been an increase in the number of cases where the problems that have been pointed out for a long time are becoming recognized as actual problems. The key issues facing Japanese society, such as natural disasters, the declining birthrate and an aging population, centralization in Tokyo, globalization, sustainability, international competitiveness, and the slow growth of the economy, are large and deep structural challenges that will not be easily remedied. However, we can no longer afford to ignore them and must accelerate our response.

Under these circumstances, on the occasion of the 20th anniversary, we have decided to publish this journal to review the progress and achievements of major research projects conducted by the NILIM since its establishment, to compare them with important events and changes in society, and to use this information for future research and technological development.

We sincerely hope that you will find this publication useful in understanding the research conducted by the NILIM and as a reference for the future development of national land and infrastructure technology policy.

Kunihiko Amano,  
Director of the National Institute for Land and Infrastructure Management