

【Grant-in-Aid for Scientific Research(S)】

Humanities and Social Sciences (Humanities)



Title of Project : Towards Sustainable Land Use in Asia

Yukio Himiyama

(Hokkaido University of Education, Faculty of Education, Professor)

Research Area: environmental geography, land use, global change

Keyword: Asia, land use, land, GLP, LUCC

【Purpose and Background of the Research】

Science Council of Japan issued a proposal entitled “Towards Sustainable Co-existence of Nature and Human on the Land and the Coastal Sea” in July 2008. This project is part of the effort to realize the proposal focusing on the use of land. It is a project of wholistic nature, with consolidation of global information base, promotion of integrative research and improvement of related policy and education dealing with Asia, with particular focus on Far-east Russia, India, China and Japan.

The objectives of the project are: a) to show the desired picture of land use under the restrictive conditions of the age of global environmental crises and the way to it; b) and to provide the society with the insights that are useful for the solution of the global problems and with the atlases and other forms of information materials that are of use. The project therefore works closely with such international initiatives as GLP (Global Land Project) and IGU-LUCC (International Geographical Union Commission on Land Use/Cover Change). The project will also be involved deeply in sustainability indicators in order to enhance its contribution to quantitative understanding of each region from the point of view of land resources, and to consolidate its position in problem solving.

【Research Methods】

Extensive field surveys will be carried out in order to grasp long-term (about a century, or period of modernization and economic development) land-use changes, their mechanisms and the related problems in Asia accurately. The surveys fully use the map resources, satellite data and GPS. The project also constructs geographic land-use information bases based on both new and old maps and statistics of various kinds and the information collected through field surveys, and analyse them. These are carried out under the framework of regional comparison, so that better understanding of such large area as Asia can be achieved and the environmental

problems, large-scale hazards and food problems related with land use in Asia will be handled more properly and better proposals can be made to solve these problems.

【Expected Research Achievements and Scientific Significance】

Publication Atlas - Land Use/Cover Change in Asia (tentative) and other related books will be published. The atlas will include many original maps, information and research findings.

Symposia The project will work closely with IGU-LUCC and relevant institutions in Asia in organizing or sponsoring meetings related with sustainable land use, and will play a key role in the Asiatic networking of specialists.

Outreach The project will contribute to realization of the above-mentioned proposal and to drafting of new proposals related with global change. Deep involvement in education and lifelong learning will be another characteristics of this project.

【Publications Relevant to the Project】

Himiyama, Y. *et al.* eds. (2001) *Land-use change in Comparative Perspective*, Science Publishers.

Himiyama, Y. *et al.* eds. (2005) *Understanding Land-use and Land-cover Change in Global and Regional Context*, Science Publishers.

【Term of Project】 FY2009-2013

【Budget Allocation】 70,700 Thousand Yen

【Homepage Address and Other Contact Information】

himiyama@asa.hokkyodai.ac.jp