1. Background

As a series of memorial events for the tenth anniversary of the Association of Rural Planning in Japan, a Symposium was held in Tokyo on October 7th and 8th, organized by the Japan National Committee for Rural Planning and by the Association of Rural Planning, Japan Association of International Commission of Agricultural Engineering, and International Commission of Agricultural Engineering. It was also under the auspices of Japan National Committee for IGBP, HDGEC, Irrigation and Drainage Engineering, Forestry Science, Conservation of Nature, Agricultural Economics, and Inter-Agricultural Sciences.

Land resources have long been a key factor in socio-economic development, particularly in developing countries, where agriculture is the most important economic sector. During the past two decades, the increasing human population and the accelerating scope of human activities have had significant impacts on all natural resources. The developing world is still faced with high growth rates in population, and land resource problems have become increasingly serious, particularly in countries with unfavorable man-land ratio. In developing countries in Asia, there is a conspicuous decrease in arable land availability per head of agricultural population. This has resulted in the persistence of large inequalities in the sizes of land holdings and an increase in landlessness.

Various land-augmenting technologies have been developed and widely implemented to relieve the land pressure. However, the development of higher productivity in agriculture by modernized technologies has brought about pollution problems due to the successive use of fertilizers and other agricultural chemicals. Meanwhile, a new environmental challenge is posed by the heavy exodus of rural people to the cities. This is a direct consequence of rural poverty, which reflects the increasing pressure on land resources in rural areas.

It is now clearly recognized that the pressure on limited land resource is increasing due to growth of population and industrialized human activities. The adverse land resource factor does affect the poverty and the environment. The rising pressure on land resources could result in over-exploitation of existing resources and consequent environmental degradation.

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The concern for the environment and of land resources leads us to uncertainties in meeting future demand for food, and to the call for sustainable land management. Given this background, there is a need for appropriate land use and substantial reconsideration of the co-existence of human beings and land. Thus, the Symposium aimed to collect much of the information needed to ensure appropriate and integrated policies on land use, considering both changing land demand and land resource limitations.

2. Symposium Overview

Around one hundred participants from sixteen countries gathered at the Symposium. As shown in Table 1, the Symposium consisted of five sessions, at which significant topics on rural land use in Asian countries were raised and discussed.

In the opening session, two keynote speakers, Prof. Yoshino, Chairman of the Japan National Committee for IGBP, and Prof. Onchan, Kasetsart University, emphasized the importance of the rural land use study from the viewpoints of global environmental conservation and land conservation for agricultural development, respectively.

Table 1. The Program of the Symposium

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In the succeeding three sessions, nine delegates from the Asian region (India, Nepal, Indonesia, Malaysia, Philippine, Thailand, Hong Kong, Japan, and South

Table 2. Contents of Land Use Survey Report

1. Introduction
   1.1 General Issues
   1.2 Geographical Background
   1.3 Historical Development
2. Land Use Changes
   2.1 Land Use Patterns
   2.2 Changing Uses of Land
   2.3 Changes in Arable Land
   2.4 Changes in Forest Land
   2.5 Changes in Urban Area
3. Socio-Economic Influences on Land Use
   3.1 Economic Growth
   3.2 Population Changes
   3.3 Intra-country Population Movements
4. Land Limitations and Balances
   4.1 Land Suitability
   4.2 Water Management and Land Uses
   4.3 Land Use Balances
5. Land Ownership
   5.1 Historical Sketch of Land Ownership
   5.2 Types of Land Tenure Systems
   5.3 Landless Farmers and Policies
6. Agricultural Developments
   6.1 Changes in Agricultural Managements and Policies
   6.2 Changes in Production of Rice, Wheat and Upland Crops
   6.3 Changes in Tree Crops Production
   6.4 Changes in Livestocks Production and Grass Land
   6.5 Agricultural Land Improvement
7. Forestry Developments
   7.1 Changes in Forestry Managements and Policies
   7.2 Changes in Forestry Production Including Shifting Cultivation
   7.3 Changes in Nature Preservation
8. Urbanization and Other Sectoral Developments
   8.1 Main Policies in Urbanization
   8.2 Urbanization and Industrialization
   8.3 Transportation Developments
   8.4 Other Sectoral Developments Such as Recreational Interests
9. Issues on Land Use Conversion
   9.1 Issues on Land Use Conversion in General
   9.2 Conversion from Forestry Use into Agricultural Use
   9.3 Conversion from Forestry/Agricultural Use into Urban Use
10. The Institutional Setting
    10.1 Local Government Systems
    10.2 Brief History of Regional Planning and Development
    10.3 Regional Planning Systems
11. Land Use Planning
    11.1 Land Use Planning Systems
    11.2 Land Use Planning in National Level
    11.3 Land Use Planning in Regional Level
    11.4 Land Use Planning in Local Level
12. Conclusions

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Korea) reported and summarized the present conditions of land use in each of their countries and described the measures being taken to solve their land use problems. As each country report was based on the survey of land use in the context of the APO project, with the contents shown in Table 2, the situation of land use in each country could be discussed comparatively. With these reports, the Symposium aimed to determine, through interdisciplinary and international comparative discussion, what rural land use planning should be in a broad sense, including what the ordered use of rural land should be, the method of land use planning, and how rural development should proceed.

Following the country reports, two special reports were presented by Dr. Kummer, Asst. Prof. of Clark University, and Dr. Dent, FAO Regional Office for Asia and the Pacific. Dr. Kummer dealt with deforestation problems, mainly in the Philippines and used the land use change model to grasp the global land use change. Dr. Dent emphasized the need of sound land use planning for sustainable development, introducing some procedures adopted by FAO.

Finally, four commentators gave their comments on the regional reports and on land use in the Asian region, which were followed by discussions among the participants. The discussions were concentrated on the two topics of integrated rural development and principles of land use planning. The importance of holding this kind of symposium consistently was acknowledged. It is hoped that such symposiums will also contribute to creating a network among related researchers and administrative officials working for global environmental conservation, as well as contributing to the international program of IGBP-HDGEC.

The proceedings of the Symposium will be published in next spring.