H-3 Land Use for Global Environment Conservation (LU/GEC)

Contact Person: Kuninori Otsubo

Principal Research Scientist

National institute for Environmental Studies

Environment Agency of Japan

Onogawa 16-2, Tsukuba, Ibaraki 305, Japan Tel: +81-298-50-2417 Fax: +81-298-58-2576

E-mail: kuninori@nies.go.jp

Total Budget for FY1995-FY1997 78,467,000Yen (FY1997: 26,791,000Yen)

Key Words

Land Use/Cover Change, Linkage Model, Asia-Pacific Region

Main Target: Prediction of the State of Land Use/Cover of Asia-Pacific Region at 2025 and 2050.

Method: Model Simulation and Field Survey on Land Use /Cover Change

- (1) Econometric Analysis (Multiple Choice Logistic Model) for Estimation of Land Use Fraction
- (2) Linkage Model Representing Labor, Commodity and Resources Flows
- (3) Application the Above Methods to a Particular Area
- (4) Field Surveys to Investigate Driving Forces of Land Use Changes
- (5) Another Modeling Approaches

Organizations and Current Activities:

- (1) Group for Model Framework Development and Application to Japan (LU/GEC-Japan)
 - -Application of the LU/GEC-I (Version 1) to Japan
 - -Modification of the LU/GEC-I (Version 2) (Development of a Linkage Model Module)
 - -Application of LU/GEC-I (Version 2) to the Kansai District, etc.
- (2) Group for China Model Development (LU/GEC-China)
 - -Field Surveys for Three Typical Areas to Investigate Driving Forces of Land Use Changes
 - -Development of LU/GEC-II (Generalized Kane's Simulation Model) and its Application to China
 - -Attempt at Applying LU/GEC-I (Version 1) to the Yangtz River Lower Basin
- (3) Group for Southeast Asia Model Development (LU/GEC-Southeast)
 - -Field Survey to Investigate Driving Forces of Land Use Change around Jakarta
 - -Application of the Multiple Choice Logistic Model to Sumatra Island
- (4) Group for Data Set Creation
 - -Collection of Historical Data of Forests of China by Provincial Unit
 - -Statistic Data Set Creation for Whole Thailand
 - -Statistic Data Set Creation for Java and Smatra Islands
- (5) Group for Geophysical Explicit Model Development
 - -2 km×2km Digital Mapping of Past and Latest Land Use in Particular Parts of China