

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

### Humanities and Social Sciences (Humanities)



**Title of Project : The Hydrosphere and Socioeconomics in Modern Asia  
- Exploring a New Regional History Using a Database  
and Spatial Analysis**

Tomoko Shiroyama  
(The University of Tokyo, Graduate School of Economics, Professor)

Research Project Number : 17H06116 Researcher Number : 60281763

Research Area : History, Asian History

Keyword : Modernity, Asia, Hydrosphere, Database, Spatial Analysis

#### 【Purpose and Background of the Research】

Under modern globalization, we are required to explicate the connections between various parts of the world, going further than simply aggregating the histories of individual countries. In addition, as the Western-centric worldview faces multipolarization, much attention is directed to Asia as the new center of world history. Here, we have the important task of envisioning a regional history of Asia based on its unique internal characteristics, going beyond the West/non-West dichotomy. The natural environment of the Asian region has two features related to water. One is the great influence of monsoons and seasonal rainfall. Another is that many regions in Asia are terrains surrounded by water systems, that is, part of the hydrosphere. The aim of this study is to construct a new Asian regional history as a meta-narrative by analyzing socioeconomic activities under the environmental conditions of monsoons and the hydrosphere.

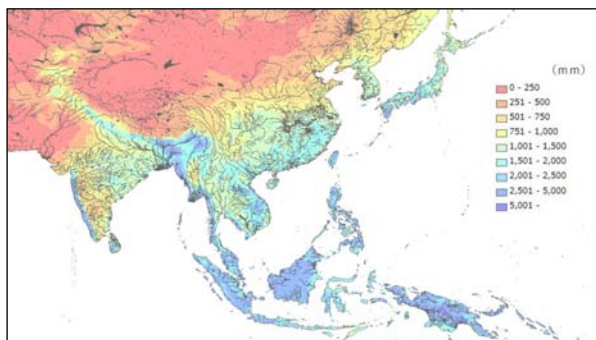


Figure 1 Seasonal Rainfall and Hydrosphere in Asia

#### 【Research Methods】

Firstly, we identify three sets of issues regarding climate and the hydrosphere: the natural environment and natural phenomena, production and lifestyle, and movement and distribution. We construct a spatial information database (DB) by attaching spatial IDs, including latitude and longitude, to the related information of each set of issues. Next, we apply the analytical method of spatial analysis to the data. Finally, we examine the results of the spatial analysis according to time,

location, and issue-set combination, considering the structure and dynamics of modern Asian society from the perspective of its responses to climate and the hydrosphere.

#### 【Expected Research Achievements and Scientific Significance】

We suggest a new kind of regional history that integrates climate and the environment with the production and distribution of goods. At the same time, we hope to make a broad academic contribution to the humanities and social sciences through the development of research methods. In addition, we will make a social contribution by sending our DB to the Data Integration and Analysis System (DIAS) on global environment.

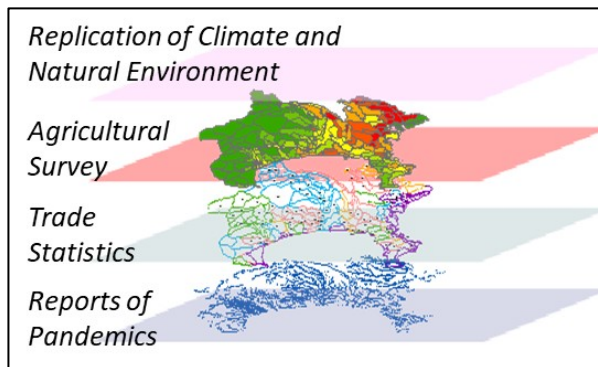


Figure 2 Example of Spatial Analysis

#### 【Publications Relevant to the Project】

Tomoko Shiroyama, *China during the Great Depression*, Harvard Asia Center, 2008.  
Sayako Kanda, *Salt and India* (in Japanese), Nagoya University Press, 2017.

【Term of Project】 FY2017-2021

【Budget Allocation】 140,800 Thousand Yen

#### 【Homepage Address and Other Contact Information】

Visualizing Economic History in Asia (VEHA)  
<http://www.veha.e.u-tokyo.ac.jp/>