# Topic-Setting Program to Advance Cutting-Edge Humanities and Social Sciences Research

(Global Humanities)

# Progress Report

(Summary of Final Report)

[A GIS-based New Global History from Asian Perspectives]

| Core-Researcher: <u>Tsukasa Mizushima</u>                  |
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| Institution: The University of Tokyo                       |
| Academic Unit: Graduate School of Humanities and Sociology |
| Position: Professor  |

Research Period: FY 2013 - FY 2016

## 1. Basic information of research project

| Research Area                    | Global Humanities                                      |  |  |  |  |  |  |
|----------------------------------|--|--|--|--|--|--|--|
| Project Title                    | A GIS-based New Global History from Asian Perspectives |  |  |  |  |  |  |
| Institution                      | The University of Tokyo                                |  |  |  |  |  |  |
| Core-Researcher                  | Tsukasa Mizushima, Graduate School of Humanities and   |  |  |  |  |  |  |
| (Name, Academic Unit & Position) | Sociology, Professor                                   |  |  |  |  |  |  |
| Project Period                   | FY 2013- FY 2016                                       |  |  |  |  |  |  |
|                                  | FY 2013 8, 144, 000 JPY                                |  |  |  |  |  |  |
| Appropriations Plan              | FY 2014 20, 000, 000 JPY                               |  |  |  |  |  |  |
| (¥)                              | FY 2015 17, 800, 000 JPY                               |  |  |  |  |  |  |
|                                  | FY 2016 12, 250, 000 JPY                               |  |  |  |  |  |  |

#### 2. Purpose of research

The purpose of the research was to carve out a new global history from Asian perspectives. The common methodology adopted was the GIS (Geographical Information System) as it enables to integrate multi-faceted regional historical information into one global picture.

Modern Asian history has been burden with negative images full of colonial stories. Her economic development and the players in it have been characterized as too passive to play any significant role in the discourse of global economy that has been created and circulated in the West. On the other hands Asian historians have been more or less indifferent to or affected by such "mainstream" or, in other words, Euro-centric interpretation of global history as they had to be occupied in constructing nation history in the process of decolonization.

Actualities of Asian societies in the modern period, however, did witness a rapid growth of population and agricultural production from the early nineteenth century. With deepening involvement in global economy, Asia provided the world not only with commodities but also with huge consumer markets. By applying GIS technologies and by producing evidences from historical evidences obtained from across Asia the research attempted to clarify the features of historical change in land utilization, demography, trade, environment, diseases, and other economic developments and tried to situate Asia in due place in the sphere of global history. Scholars of various disciplines from Asian countries participated in the research in a series of seminars/conferences held in Japan, China, Philippine, India, Vietnam, and Taiwan. The research has produced a number of case studies throwing light on the significant role that the societies across Asia played in the development of global economy and tried to propose alternative views for better understanding of the future.

#### 3. Outline of research (Including study member)

Research topics taken up in the project were as follows:

- An approach to global history from development economics (19th 21st century)
- · Visualization and analysis on spatiotemporal data of global history
- · Analysis of Indian economy by GIS (India, 1980s-)
- · Historical demography in China (Zhejiang Province, China, 17th 21th century)

- Development of Companies in the Far East from the late 19th century to 1941: a study of directories in perspective of GIS and global history
- · GIS education in history (Southeast Asia/Japan)
- · Establishment of railway network in Southeast Asia (Southeast Asia, 19th 20th century)
- · Movements of military forces of Japan, China and other countries during Sino-Japanese war (China, early 20th century)
- Production and distribution of coal under Yan Xishan's regime in Shanxi Province, China (1912—1949) (China, early 20th century)
- Development and allocation of resources in Egypt (Egypt, 19th 21st century)
- Visualize of epidemics and infectious disease (cholera, malaria, schistosoma japonicum) through history by GIS
- · Spatial analysis on death rate of cholera in 19th century India and Bengal

The following members have carried out the collaborative research in this project:

| Name              | Affiliation                         | Research Themes                        |  |  |  |
|-------------------|-------------------------------------|--|--|--|--|
| Tsukasa Mizushima | Professor, Graduate School of       | Agricultural development and urban     |  |  |  |
|                   | Humanities and Sociology, The       | formation in South Asia                |  |  |  |
|                   | University of Tokyo                 |  |  |  |  |
| Ryuto Shimada     | Associate Professor, Graduate       | Agricultural development in Southeast  |  |  |  |
|                   | School of Humanities and Sociology, | Asia                                   |  |  |  |
|                   | The University of Tokyo             |  |  |  |  |
| Shin Kawashima    | Associate Professor, Graduate       | Mining industry in East Asia           |  |  |  |
|                   | School of Arts and Science, The     |  |  |  |  |
|                   | University of Tokyo                 |  |  |  |  |
| Makoto Ueda       | Professor, College of Arts, Rikkyo  | Emigration in East Asia                |  |  |  |
|                   | University                          |  |  |  |  |
| Ichiro Kakizaki   | Associate Professor, International  | Transportation facilities in Southeast |  |  |  |
|                   | College of Arts and Sciences,       | Asia                                   |  |  |  |
|                   | Yokohama City University            |  |  |  |  |
| Hiroshi Kato      | Professor Emeritus, Hitotsubashi    | Agricultural development and urban     |  |  |  |
|                   | University                          | formation in West Asia                 |  |  |  |
| Takahiro Sato     | Professor, Research Institute for   | Regional comparative studies of        |  |  |  |
|                   | Economics and Business              | economic performance in Asia           |  |  |  |
|                   | Administration, Kobe University     |  |  |  |  |
| Toshiyuki Miyata  | Professor, Graduate School of       | Firms in Southeast Asia                |  |  |  |
|                   | Global Studies, Tokyo University of |  |  |  |  |
|                   | Foreign Studies                     |  |  |  |  |
| Kohei Wakimura    | Professor, Graduate School of       | Epidemics in South Asia                |  |  |  |
|                   | Economics, Osaka City University    |  |  |  |  |
| Tatsuki Sekino    | Professor, Center for Research      | Development and application of Asian   |  |  |  |

| Promotion, Research | Institute | for | Historical | Geographical | Information |
|---------------------|-----------|-----|------------|--------------|-------------|
| Humanity and Nature |           |     | System     |              |             |

#### 4. Research results and outcomes produced

- (1) Sessions in International Conferences
- Mizushima, Tsukasa, The 17th World Economic History Congress (WEHC) (Kyoto: 2015): 1.
   "Explaining Population Density in Early Modern India", 2. "A GIS Approaches to Land Development and Social Change in India"
- Mizushima, Tsukasa, Asian Association of World History (Singapore: 2015): 1. "A GIS Analysis of Village Land Registers in South India between 1870s and 1920s" 2. "A GIS-based Study on the Emergence of Small and Medium Scale Towns in Pre-Independent South India"
- Mizushima, Tsukasa, The 4th International Conference on Asian Network for GIS-based Historical Studies (ANGIS) (Taiwan: 2015): "Keynote Speech: Who takes Leadership and What Role does ANGIS play in Emerging Global History?"
- Shimada, Ryuto, The 7th International Congress of Maritime History (Australia: 2016): "American Shipping at Batavia from the Late Eighteenth Century to the Mid-Nineteenth Century."
- Shimada, Ryuto, The 17th World Economic History Congress (WEHC) (Kyoto: 2015): "Batavia in a Global Context, 1619–1799: Spatial Analysis of Trading Network, Ethnicity and Land-use of Batavia"
- Shimada, Ryuto, The 3rd Congress of the Asian Association of World Historians (AAWH) (Singapore: 2015): "A Spatial Analysis of Ethnicity and Land-use of Batavia, 1619-1930", The Panel on GIS for Historians: Case Studies in Asian Urban History at the Age of Globalization
- Kato, Hiroshi, The 1st International Workshop on Asian Trade Networks Using Historical GIS (Tokyo: 2016): "Global Economic History from the Egyptian Perspective"
- Kato, Hiroshi, Erina Iwasaki, The 3rd Meeting of the Project at JaCMES, "Human Mobility and Multiethnic Coexistence in Middle Eastern Urban Societies" (2015): "Spatial Transformation of Cairo viewed from Urban-rural Migration"
- Kato, Hiroshi, The 2nd Meeting of the Project at JaCMES "Human Mobility and Multi-ethnic Coexistence in Middle Eastern Urban Societies", (2014): "Local Network in Egypt"
- Miyata, Toshiyuki, The 1st International Workshop on Asian Trade Networks using Historical GIS
   (Tokyo: 2016): "The Workshop on Asian Trade Networks using Historical GIS."
- Miyata, Toshiyuki, The 3rd International Conference on GIS-based Global History from Asian Perspective (Tokyo: 2015): "Land Use in Chaophraya Delta and Siamese Rice Export Development: The Case of Siamese Garden Rice"
- Miyata, Toshiyuki, The 3rd Congress of the Asian Association of World Historians (AAWH) (2015): "Company, Industry and Network in "The Far East" in 1940: A Study of Directory published in Hong Kong", The Panel on GIS for Historians: Case Studies in Asian Urban History at the Age of Globalization
- Wakimura, Kohei, TNAU-INDAS International Conference on Toward Sustainable Development of India and South Asia: Population, Resources, and Environment, (India: 2016): "Epidemic Malaria, Semi-Arid Tropics and 'Colonial Development': The Cases of North and East India, 1871-1920"

- Sekino, Tatsuki, The 4th International Conference on Asian Network for GIS-based Historical Studies
   (ANGIS) (Taiwan: 2015): "Time Information System on the Web"
- · Sekino, Tatsuki, The 1st International Conference on GIS-based Global History from Asian Perspective (Tokyo: 2014): "Integral of Historical Data based on Spatiotemporal Information"

#### (2) International Symposiums/Seminars

- Mizushima, Tsukasa, Indian Council of Historical Research (Delhi: 2016): "GIS-based Analysis of Demographic and Social Change in South India during the Colonial Period" in Inaugural Symposium celebrating the Collaboration of Indo-Japan Historical Studies (ICHR-JSPS Joint Symposium on Economic History)
- Mizushima, Tsukasa, Vietnam National University (Hanoi: 2015, 2016): "The Current Stage of GIS-based Historical Studies and Possible Collaboration among Asian Scholars", "A New Interpretation of Indian Population Movement in Pre- and Early Census Periods", "Agricultural Development and Social Transformation in Asia with Special Reference to Agricultural Finances", "Shares for Society: Life and Production in Pre-colonial India"
- Mizushima, Tsukasa, Fudan University (Shanghai: 2014): "Constructing Pan-Asian Historical-GIS Infrastructure and Collaboration for Making Global History from Asian Perspectives"
- Mizushima, Tsukasa, Sun Yat-sen University (Guangdong: 2014, 2015), "GIS-based Historical Studies and the Current Stage of its Development in Asia", "New Interpretation of Demographic Movement in India from a GIS-related Study"

#### (3) Lectures in Foreign Institutions

- · Mizushima, Tsukasa, Jawaharlal Nehru University (New Delhi: 2015, 2016): "Patterns of Urban Formation in Early Modern South India"; "Agricultural Development and Social Transformation in the Long Nineteenth Century" (Workshop: Reconsideration of the 19th century from Asian Perspectives)
- Mizushima, Tsukasa, Internationaale Instituut voor Sociale Geschiedenis (Amsterdam: 2015): "From Shares to Land: Colonial Transformation of Rural India"; "Shares, Shares, and Shares: Life and Production in Pre-colonial India"; "Big Data, Big Question: Assessing Colonial Impacts upon India"
- · Mizushima, Tsukasa, University of the Philippines (Manilla: 2014): "GIS-based Global History from Asian Perspectives"
- Mizushima, Tsukasa, Europa-Universität Viadrina (Frankfurt an der Oder: 2015): "Hinterlands and Commodities in Early Modern India", "Global History and Euro-Asian Development Paths"

## Publication in English

- Mizushima, Tsukasa, George Bryan Souza, and Dennis O. Flynn (eds.), Hinterlands and Commodities:
   Place, Space, Time and the Political Economic Development of Asia over the Long Eighteenth Century,
   Leiden: Brill, 265, 2015
- Mizushima, Tsukasa, Did India experience Rapid Population Growth in the Pre-Census Period? A Village-level Study from South India, *International Journal of South Asian Studies*, Vol. 6, 2014, pp. 13–43,

- Kato, Hiroshi, Erina Iwasaki, Réseaux locaux en Egypte: Rôle des associations villageoises au Caire,
   Mediterranean World, Vol. 22, 2015, pp. 1-16
- Kato, Hiroshi, Reiji Kimura, Erina Iwasaki, Cultivation Features Using Meteorological and Satellite Data from 2001 to 2010 in Dakhla Oasis, Egypt., *Journal of Water Resource and Protection*, Vol. 7, February 2015, pp. 209–218,
- Kato, Hiroshi, Salwa Elbeih, Erina Iwasaki, Ahmed Sefelnasr, Adel Shalaby, Elsayed Zaghloul, The Relationship between Groundwater, Landuse, and Demography in Dakhla Oasis, Egypt, *Journal of Asian* Network for GIS-based Studies (JANGIS), Vol. 2, December 2014., pp. 3-10
- Kato, Hiroshi and Erina Iwasaki, Rashda: The Birth and Growth of an Egyptian Oasis Village, Leiden:
   Brill, 294 pp, 2016
- Sato, Takahiro, India's Macroeconomic Performance in the Long Run, In Crispin Bates, Akio Tanabe and Minoru Mio (eds.), *Human and International Security in India*, Routledge, 21 September 2015, pp. 65–85
- Shimada, Ryuto, Import Trade in Precious Metals and the Economy of Japan, 1763–c.1850, In Money in Asia (1200–1900), Jane Kate Leonard and Ulrich Theobald (eds.), *Small Currencies in Social and Political Context*, Leiden and Boston: Brill Academic Publishers, January 2015, pp. 443–463
- Kakizaki, Ichiro, Trams, Buses and Rails: The History of Urban Transport in Bangkok, 1886–2010,
   Chiang Mai: Silkworm Books, 436 pp, 2014.