

Transnational Interregional Water Footprint Analysis in China and South Korea and Japan

Topic: 714E Special session: Economic and Environmental Relationship in Asian-Pacific (1)

Author: Taku ISHIRO

The 10th meeting of the Conference of the Parties (COP10) to the Convention on Biological Diversity (CBD) ended in Nagoya, Aichi Prefecture, on Oct. 30, 2010. Previously, The Millennium Ecosystem Assessment (MA) concluded that human activity is having a significant and escalating impact on the biodiversity of world ecosystems, reducing both their resilience and biocapacity. Additionally, MA included the sub-global assessment (SGA) that is the assessment of regional, watershed, state as well as the global scale. In Japan SATOYAMA SATOMI SGA is put into practice by using SGA framework. We chose the Hokkaido Tohoku Kanto-Chubu Hokuriku Nishi-nihon cluster as the area of SATOYAMA SATOMI SGA. Above all, Kanto-Chubu cluster has four sites that is Kanagawa Tochigi Chiba Tokyo and the scope of target is Tokyo Bay, Naka River, Ise Bay, Mikawa Bay. The author collaborates with the researcher of Kanagawa site and studies the impact of ecological system through the change of socio-economy of Kanagawa, Ishiro and Hasebe(2010). Secondly the author expands this research framework into interregional relation about Kanto area, Ishiro (2011) and transnational interregional relation in China and Japan, Ishiro(2012).

On the other hand, author develops an analysis about international division of labor of the East Asia by compilation of transnational interregional input-output table in China and South Korea and Japan. According to the results of this analysis, in Japan, China, South Korean three countries, the division of labor between the international areas across the country becomes active.

Based on this analysis, the objective of this paper is to clarify the relation between economic activity and structure of water inducement among East Asian countries taking author's research one step further.

Especially, having regard to the fact that trade with other country's region is essential to regional activity in recent years, the main purpose is to see how trading of each region in Japan and China and South Korea affects the water inducement of each region and countries.

There are previous studies, Okadera, Fujita, Watanabe and Suzuki (2005), Shimoda Watanabe, Yue, and Fujikawa (2009) that has common awareness of the issues. The former analyzes water inducement by the Kanto interregional input output table they made. The latter analyzes environmental load including water inducement by Asian international input output table. On the other hand, our study analyzes transnational interregional water inducement by the Transnational Interregional Input-Output Table in China and South Korea and Japan dividing Kanto region in Japan into 11 regions.