【パネル2 12月6日 12:50-14:45 A 会場 511 教室】

Two Centuries of Agrarian, Economic and Ecological Shifts in the North Coast of Java, 1812-2012.

(Second Panel) Comal-Climate Change, Environment, Society and Economy

Mizuno Kosuke (Kyoto University / University of Indonesia)

Second Panel of the "Two Centuries of Agrarian, Economic and Ecological Shifts in the North Coast of Java, 1812-2012" study is titled "Comal- Climate Change, Environment, Society and Economy". This panel first discusses the long-term environmental change at the Comal, especially on land subsidence, rob, and sinking through the lens of slow violence: an act of violence—against the environment and fellow human beings—committed in the past that has slow, far-reaching consequences. From this perspective, this panel argue that the sinking of the northern coast of Java in Pekalongan is not only due to sea level rise associated with global warming, but also because the coastal environment has lost its ability to absorb fluctuations in water flow as a result of the forced alteration by humans over the past two centuries.

Secondly, this panel discusses social and economic conditions in North Coast Central Java where no particular driving industry exists under Indonesian constant economic development promoted by international primary commodity export from Sumatra, Kalimantan and Sulawesi. Despite overall economic growth, over a fifth of rural Javanese households faced persistent difficulties meeting basic needs during the late 2010s, highlighting a paradox of increasing wealth alongside enduring food insecurity and precarity. (Nooteboom 2019) The panel explores the social distribution of these opportunities and the reproduction of old and new inequalities and insecurities, with a particular focus on the persistence of precarity in rural households, despite improved livelihood opportunities outside agriculture. This persistence of precarity will be discussed from the viewpoints of rural youth aspiration based on the field works at Trukosari village. This panel reveals that over the past three decades, extensive land transfers have contributed to the rural proletarianization of small and marginal farmers. At the same time, the slow pace of local economic development has resulted in limited employment opportunities. In this context, the younger generation is compelled to adopt social navigation strategies, exercising creativity and agency within a highly constrained set of options. This panel finally discusses that the trend toward stratification (or inequality), the diminishing use of hired labor in sawah cultivation, the wage-rate increase (with the growing use of labor-saving technology) although income of agricultural laborers did not increase, the constant increase in outmigration and decrease in population growth, and the persistence of landlordism are all contrary to "agricultural involution" (Geertz 1963).

【パネル 2 12月6日 12:50-14:45 A 会場 511 教室】 Slow violence and the sinking of Pekalongan Coastal Area, 1800s - 2020s

Pujo Semedi, (Gadjah Mada University)

Since the early 2000s, parts of the north coast of Java have been gradually sinking. Starting in the Jakarta area and other major cities experiencing subsidence due to excessive groundwater withdrawal, the region along the north coast of Java is transitioning from dry land to water due to rising sea levels. Thousands of hectares of fishponds have been lost, many households have had to leave their homes and find new residences, and various public infrastructures have become unusable. Researchers estimate that the environmental changes caused by climate change will persist, leading to more areas of the north coast of Java being reclaimed by the sea. On this project, I would like to examine the issue of the north coast of Java sinking through the lens of slow violence: an act of violence—against the environment and fellow human beings—committed in the past that has slow, far-reaching consequences. From this perspective, I argue that the sinking of the northern coast of Java in Pekalongan is not only due to sea level rise associated with global warming, but also because the coastal environment has lost its ability to absorb fluctuations in water flow as a result of the forced alteration by humans over the past two centuries.

【パネル 2 12月6日 12:50-14:45 A 会場 511 教室】 Historical Trajectories of Rural Change Land, Labor, Gender and Education in Comal (1904-2012)

Gerben Nooteboom (Radboud University)

In rural Java, men increasingly rely on low-skilled, often precarious urban and peri-urban employment, while agriculture has become predominantly the domain of women and retired urban workers. These shifts have led to rising household incomes, stagnant agricultural earnings, and growing dependence on unstable urban wages. Despite overall economic growth, over a fifth of rural Javanese households faced persistent difficulties meeting basic needs during the late 2010s, highlighting a paradox of increasing wealth alongside enduring food insecurity and precarity (Nooteboom 2019).

This paper examines the unfolding scenarios of change in Comal's rural riceproducing areas, identifying the drivers of transformation and the stability of new, urban-based livelihoods. It explores the social distribution of these opportunities and the reproduction of old and new inequalities and insecurities, with a particular focus on the persistence of precarity in rural households, despite improved livelihood opportunities outside agriculture.

【パネル2 12月6日 12:50-14:45 A 会場 511 教室】

Agrarian Structure and Rural Youth Aspirations

A Case Study of Trukosari village located in the Eastern Part of Pemalang District

Agung Wicaksono (Gadjah Mada University)

The future of Indonesian agriculture—particularly rice-based cultivation—is often portrayed in a pessimistic view. This outlook is largely shaped by the younger generation's reluctance to engage in farming, driven by the perception that agricultural work is physically demanding and offers low returns. To comprehend the roots of these assumptions, this article first examines the historical agrarian structures of peasant communities in eastern part of the Pemalang district. It uses long-term survey data analysis from six villages, collected in 1903-1904, 1990, and 2012, with sample sizes of 2,400, 500, and 1,000 households, respectively. To deepen the understanding of rural youth aspirations, this study then focuses on one village called Trukosari. In this village, I conducted ethnographic research in 2016 and 2022. This study reveals that over the past three decades, extensive land transfers have contributed to the rural proletarianization of small and marginal farmers. At the same time, the slow pace of local economic development has resulted in limited employment opportunities. Within this context, the younger generation is compelled to adopt social navigation strategies, exercising creativity and agency within a highly constrained set of options.

Keywords: agriculture, young generation, crisis, new aspirations, social navigation

【パネル2 12月6日 12:50-14:45 A 会場 511 教室】

Agrarian, Agricultural, and Wage Changes in Comal's Long-term Economic Development 1905- 2012

An Exodus from 'Agricultural Involution'

Mizuno Kosuke (Kyoto University / University of Indonesia)

This paper focuses on the changes in population, household, arable land per household, and rice production during 1990 to 2012 in comparison with the changes during 1904 to 1990 in the villages of Pesantren and Karang Tengah. Rice production increased dramatically until 1990 because of the introduction of high-yielding varieties (HYVs), fertilizers, and pesticides. Meanwhile, rice production fell during 1990 and 2012. This was partly the result of the abolition of the Soeharto-era *Tebu Rakyat Intensifikasi* (TRI) program that obliged farmers to plant sugarcane and rice. During 1990 and 2012 land and labor productivity increased somewhat, partly because of mechanization and the use of fertilizers and pesticides (including herbicides). Farmers relied on more family labor rather than hired labor. The wage rate increased from 1990 to 2012, with the real wage rate rising constantly for the period although the income of agricultural laborers did not increase. This fact is consistent with the decrease in the use of hired labor and the growth of labor-saving businesses such as *sengon* tree planting in mountain slopes or marginal lands, and sugarcane planting as a niche business.

The macro-economic changes in the last three decades show characteristics of deindustrialization, stagnation of manufacturing and agriculture, and development of the tertiary sector (both in employment and production) and non-tradable goods. These phenomena are consistent with the findings in Comal, such as the development of the tertiary sector, the rise of the informal sector, de-agrarization, vulnerability of society as seen in the high proportion of cereals as staple food in the household food expenditure.

The trend toward stratification (or inequality), the diminishing use of hired labor in *sawah* cultivation, the wage-rate increase (with the growing use of labor-saving technology), the constant increase in outmigration and decrease in population growth, and the persistence of landlordism are all contrary to "agricultural involution" (Geertz 1963).

"Agricultural involution" posits that limitless labor absorption by *sawah*, constant population increase, no real increase of income as expressed by the number of staple foods per capita, and the complicated practice of sharecropping characterized "shared poverty."

Comal also came out of serious deforestation in 19th century into afforestation/forestation since the 1980s. To be sure, labor-saving technology has enabled afforestation in most places. However, its negative impact on landless farmers is also found. The primary commodity export relied economic growth is not accompanied by the large-scale exodus of labor such as that found in countries with conventional East Asian export-oriented industrialization like Japan and South Korea and so on. A positive consequence of this is the absence of depopulation in rural areas that is commonly found in those countries.