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## Message from the President

Keiji Otsuka



I am extremely pleased with the establishment of the Japanese Association for Development Economics (JADE). When I started studying development economics in the graduate school of Tokyo Metropolitan University, in 1972, under the guidance of Professor Yujiro Hayami, there were very few graduate students in Japan who majored in development economics. Many professors in the country were interested in developmental issues, but it was Prof. Hayami who was truly active internationally and published articles in renowned journals such as *the American Economic Review*, *the Journal of Political Economy*, and *the Quarterly Journal of Economics*.

Prof. Hayami initiated the International Development Studies (IDS) Program at the National Graduate Institute for Policy Studies (GRIPS) in the year 2000, triggering a sharp rise in academic interest in development economics in Japan. I joined the IDS program in the spring of 2001 and, on Prof. Hayami's request, organized the first annual Hakone Conference in December 2001 with the participation of 25 researchers. This conference was later renamed the Hayami Conference as the venue shifted from Hakone to Tokyo (GRIPS). The IDS program and the Hakone/Hayami Conference were pioneering and heightened the interest in development economics in this country.

It was found that the extent of the Hayami Conference was inadequate, considering the increasing number of young researchers interested in development economics. Thus, the idea of expanding the Hayami Conference nationwide in the form of larger conferences arose. This was supported by major participants at the Hayami Conference, some of whom decided to set up the JADE, which now has more than 130 members now.

The JADE provides an opportunity for young researchers to write articles, present them in conferences and workshops, and receive feedback in an international environment. The JADE organizes conferences and invites outstanding development economists from prestigious institutions from abroad. It is my pleasure to announce

that the JADE successfully organized its first conference at Hitotsubashi University in August 2019 and is collaborating with the London School of Economics in organizing the second JADE conference to be held at the University of Tokyo in 2020. The Hayami Award will be offered in memory of the founder of development economics in Japan here onwards. It is my dream and the dream of the JADE that its activities provide springboards for many of our young fellow development economists to leap forward.

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## How can we effectively rehabilitate forest resources in developing countries?

Ryo Takahashi

Associate Professor Waseda University

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Conservation of forest resources is of critical importance for developing countries. With forestlands and grazing lands diminishing, and rural poverty persisting, it is becoming imperative to plant trees and fodder grasses, and to sustain our natural resources to ensure income generation and poverty reduction. Although the securing of property rights for forestlands is fundamental for sustainable resource management, a consensus on whether private or common ownership improves the sustainability of forest management is yet to be reached.



To provide empirical insights on this debate, Takahashi and Otsuka (2016) compared changes in forest quality between private and common property regimes. There were three major contributions of their study, as follows:

1. It directly compared the effectiveness of forest management under private and common property regimes within the same forest area.
2. Through the use of satellite imagery data, the study measured changes in forest quality.
3. It considered the endogenous determination of private land ownership by employing the propensity score matching method.

The results show that degradation of forest was significantly less in private property areas than in common property areas. Although these results suggest that private ownership is preferred over common ownership, it does not enable us to conclude that the conversion of common property regimes into private property regimes is a definitive solution to deforestation. The study also found that forest quality of both private and common areas substantially decreased during the study period. Thus, political intervention may be necessary to facilitate the rehabilitation of forest resources. Particularly in developing countries, intervention in common forests is crucial because a substantial share of forests is under de facto common property regimes (Agrawal et al., 2008).

This column shared two political approaches for rehabilitating forest resources in developing countries. The first is called payments for ecosystem services (PES), to reduce deforestation by making a payment contract with local forest owners (Ferraro and Kiss, 2002). A theoretical study by Harstad and Mideksa (2017) suggests that PES is an optimal approach, especially when property rights of forestlands are weak. Jack (2013) found

that the PES approach improved the survival rate of tree seedlings in Malawi. However, Jayachandran (2013), suggests that PES may not be an appropriate policy if local forest owners face credit constraints, which is common in rural regions in developing countries. If a credit-constrained forest owner needs to pay emergency expenses, such as healthcare expenditure, payments from the PES program may not be as attractive as the lump-sum income from forest products. Hence, it is premature to draw conclusions on the efficacy of PES for rehabilitating forest resources in developing countries, and an empirical investigation is warranted.

The second potential approach involves joint ownership or property rights sharing. Chankrajang (2019) addresses the unique setting in Thailand, where forest property rights are shared between the communities and the state. She showed that property rights sharing conserves forest cover and reduces forest fire incidences. Otsuka, Takahashi, and Pokharel (2015) also indicated the importance of introducing property rights sharing in developing countries, particularly the mixed management system of private and common ownership (hereafter, “mixed management system”).

The mixed management system is characterized by communal protection of trees and other resources, and individual management of these resources. Such a system can be realized by granting communal use rights of forestland and individual ownership rights of trees to community members. In this system, the capacity of communities to protect trees and other natural resources and the motivation of individual community members to rehabilitate resources are fully utilized. In 2018, in collaboration with four universities (Waseda, Kobe, Mekelle, and Norwegian University of Life Sciences), the RCT was conducted in Ethiopia, to empirically investigate the impact of the mixed management system on natural resource management. The results will be shared at a JADE conference shortly.

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## From Myanmar to Madagascar: Study of networks and their influence on technology diffusion

Kyosuke Kurita

Associate Professor Kwansei Gakuin University

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I am writing this article in my hotel in Antananarivo, the capital of Madagascar. The countries of interest for this research field include Madagascar, Indonesia, and Laos. My interest in spatial economics and network analysis research stemmed from my experiences in 2010 when I took up employment. In 2014, I started studying networks in Madagascar, where I investigated the number of relatives and people in the village, from whom the network members could lend and borrow money at that time. In 2016, I refined this study to uncover the workings of the network, such as the frequency of greetings and financial transactions by visiting each household and by collecting and showing photographic data (1000 households in a total of 8 villages). By doing this separately for husbands and wives, it was possible to reveal the differences in terms of greetings and money transactions, and in turn, problems with the quality of the network. An obstacle to this network analysis is the leakage attributable to the key person in the network. From the survey, it was found that he/she hinders the accurate measurement of the network effect, such as the centrality of the person in the network, if simple sampling is conducted instead of a survey to investigate the network structure. It can be assessed whether anyone knows a particular person in the village by obtaining a list of all the villagers. However, when there are illiterate respondents and those with the same name, the results of the study are affected. Furthermore, there are cases where people do not know each other's names, as they grow up in a culture where they call each other by their nicknames (because the real names are too long). Sometimes, in countries like Madagascar, there is more than one person with the same nickname. There are men who do not know the names of their wives. Customized surveys such as these are labor and cost intensive. Thus, it seems that this study cannot be completed by a single investigation as the network continues to change.



Children in a village, photo taken in 2001

I have been enthusiastic about the understanding of non-cognitive ability over the past few years. I am hoping to measure the five main factors of personality that are often used in psychology in Indonesia, Laos, and Madagascar, and to use the results for the development of human capital and for the diffusion of agricultural technology. Ali et al. (2019) showed that non-cognitive skills are very effective in the adoption of agricultural technology. However, there are instances of accordance and discordance of personality between extension workers and farmers who experienced (did not experience) technology diffusion; my field survey in Madagascar examines the effect they have on technology diffusion itself, using hundreds of samples. I am planning to continue this field survey to record the changes in non-cognitive skills and abilities and technology diffusion, and corresponding changes in the middle and long run. I do not think short-term experiments are meaningless, but I am more attracted by the middle/long run and structural analyses as I have a keen interest in the application



of such studies to the design of actual aid policies.



The author presenting a fertilizer sack for experiment (PAPRIZ sack) in a village in Madagascar, photo taken in 2016

Nearly 19 years have passed since my first field survey in the year 2001. However, looking back, I realize that the experience of that survey is valuable even now. The experience of area researchers, tropical agronomists, anthropologists, and geographers, as well as economists, provided useful lessons, and my visits to various places in Myanmar taught me the perspectives of rural communities. My experiences in Myanmar also had a significant influence on my interest in the network in rural communities, partly due to my experience of observing geographical information captured through a GPS logger, which was a rare instrument at that time, and partly due to the influence of *Tristes tropiques* of Lévi-

Strauss (1955) which I was reading during my survey. I now realize that I had been wondering how to express the relationship woven by people who live in a culture different from that of the author's.

The style of studies investigating the diverse lives of rural communities in the medium and long run is outdated and expensive. However, I wish to keep the spirit of learning from the field alive, despite being short of funds. Therefore, I have invented a low-cost approach that does not require outsourcing of the survey projects, although this may not be popular. Please contact me if you are interested.

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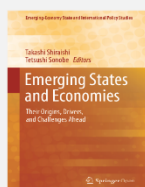
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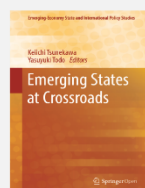
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----- Announcement -----

The Second JADE Conference, which was supposed to be held on April 18 and 19, 2020, is postponed due to the COVID-19 outbreak. The organizing committee will announce a new date on the JADE website once it is available (<http://www.jade.gr.jp/conference.html>).

----- From the Editorial Office -----

- It was our great pleasure to have worked on the very first issue of the JADE newsletter. We hope the newsletter facilitates knowledge sharing among members. (KK)
- We are grateful to the two authors of the columns for their intriguing articles that are perfect for the first issue, and we wish to regularly provide our members, particularly young researchers, with up-to-date information on research and know-how field surveys and data collection in development economics. (TO)

Editors: Kei Kajisa (Aoyama Gakuin University) and Tsunehiro Otsuki (Osaka University)