

# Research activities

## Practical Studies in Asia Lab.

### Problem-oriented research conducted in rural Cambodia

Rural Cambodia fell into extreme poverty during the Pol Pot regime (1975-1979) and the subsequent period of turmoil. Even today, the country struggles with low agricultural productivity and poor income. The genocide that occurred during the regime's rule left local universities short-staffed. Consequently, they are unable to adequately fulfill their responsibility to inform local policy by identifying and addressing the country's current agricultural conditions and challenges.

Since 2000, the ICREA has been supporting the Royal University of Agriculture (RUA) in Cambodia. This support aims to strengthen their educational and research capabilities, helping to reform their educational system and establish master's and doctoral programs in agricultural sciences. Additionally, an international collaborative project between the ICREA and the RUA, launched in 2008 in rural Cambodia, serves as a research and education platform for RUA faculty and students, providing vital opportunities for human resource development in the country. Some individuals trained in this project have recently found careers in government and academia, leading to multiple other joint research projects involving other universities and government agencies.

We are particularly committed to action research, focusing on traditional food products that are vanishing from the market due to the impacts of the civil war and social transformations triggered by recent rapid economic growth. Action research allows us to identify and address current conditions and challenges, test and implement solutions in real-world settings, and promote their broader application to resolve or mitigate these challenges.



Local staff providing instructions to a brewing farmer.

### Study of the impact of using a small-scale biogas system for forest conservation in Nepal's hilly region

Timber harvesting for firewood, used for everyday cooking, is one of the major contributors to deforestation in Nepal. Since the 1970s, the local government, non-governmental organizations (NGOs), and international organizations have been promoting the use of small-scale biogas systems utilizing livestock manure as an alternative to firewood. Our laboratory has been collaborating with a local NGO in Nepal since 2008 to analyze the effectiveness and impacts of using small-scale biogas systems as an alternative to firewood. This analysis has demonstrated their significant role in reducing firewood consumption. However, despite these advancements, the deterioration of community-managed forests and wildlife-related damages have occasionally been observed in the country. To clarify the current situation and make policy recommendations to government agencies, we are currently conducting quantitative and qualitative analyses to understand the changes in local residents' livelihood activities and forest management practices.

(Kasumi ITO)



Deteriorated forests in Nepal.

## Publications

### Journal of International Cooperation for Agricultural Development

URL: <https://icrea.agr.nagoya-u.ac.jp/jpn/journal/backnumber.html>

The Journal of International Cooperation for Agricultural Development (JICAD) offers a platform to support individuals looking to apply their agricultural science expertise in the field of international cooperation. This journal publishes peer-reviewed articles that explore world affairs from agricultural perspectives, propose the potential of multinational agricultural research, and present case reports on how cutting-edge research findings can help address global issues. The Japan Intellectual Support Network in Agricultural Sciences (JISNAS) oversees the editing of articles submitted for publication. Beginning with Volume 14, issues will be available as electronic journals on the J-STAGE platform.

