

## Research activities

### ■ Joint research efforts to improve educational and research conditions in an agricultural university in Cambodia

After over 20 years of civil war, many farmers in Cambodia are still living in extreme poverty, which is exacerbated by low agricultural productivity and income. The genocide perpetrated by Pol Pot's regime in the 1970s and the subsequent civil war left the country with a severe shortage of labor. Furthermore, Cambodia's agricultural universities have been unable to fulfill its duty of identifying agricultural issues in the country and delivering good solutions for them. Since 2000, the ICREA has been assisting the Royal University of Agriculture (RUA) in Cambodia improve its educational and research conditions, reform the education system, and establish both master's and doctoral programs in agricultural sciences. We have been committed since 2008 to lead the movement towards the introduction of the practical training and research approaches that offer the opportunity for hands-on experience and practice in the local farming communities.

Our focus is on the traditional agricultural products and vegetable production that, if handled properly, should yield good profits. Through our research activities, we have identified the current agricultural issues and challenges in Cambodia, proposed and tested several solutions to them, and put our research findings into practice by taking part in the JICA (Japan International Cooperation Agency) Partnership Program. By combining research and on-site support activities, we have been able to undertake a wide variety of basic research studies and offer university instructors and students the chance to not only get hands-on experience of investigating and solving the problems that are actually occurring in the local farming communities but also understand how research and education can contribute to identifying and solving the agricultural issues in the country.

By building on the experience we have gained through our research and support activities with the RUA, we have started gradually a human resources development assistance through a series of basic research studies with other universities in Cambodia.



Rice liquor producer in Takeo Province:  
A step-by-step guide from a Japanese expert.

### ■ Empirical research exploring how biogas production from livestock manure may help preserve forests in Nepal



Degraded forests in hilly areas of Nepal

Timber harvesting to supply fuelwood used for cooking every day is one of the major factors contributing to deforestation in many developing countries. Nongovernmental organizations (NGOs) and international institutions are accelerating their efforts to encourage developing countries to use biogas produced from livestock manure to replace wood fuel sources. Although the use of biogas can clearly reduce fuelwood consumption, little is known about other desirable and undesirable effects of biogas use. This research uses data obtained from field surveys conducted in a hilly district in Nepal where biogas technology was introduced nearly 20 years ago to analyze (both quantitatively and

qualitatively) the positive and negative impacts of biogas production on fuelwood consumption, forest vegetation, livelihood of local residents, and forest management schemes.

## 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) provides a human development platform for training individuals who aspire to plunge into the field of international cooperation to make use of their expertise in agricultural sciences. This journal publishes peer-reviewed articles that examine world affairs from the agricultural perspectives, explore the possibility of conducting multinational agricultural research, or present a case report describing how leading-edge research findings can be applied to solve global issues. Articles submitted for publication are edited by the Japan Intellectual Support Network in Agricultural Sciences (JISNAS). Vol. 14 and later issues of the journal are published in online version.



### ICREA News

This is a periodical published twice a year by the ICREA. It provides an update on ICREA's current research activities.