

Supporting ASEAN Nations Through Joint Research

REAL-WORLD APPLICATIONS, REAL RESULTS

Building global networks of scientists and researchers is one role JICA takes on in its human-resource-focused activities. Since 2008 JICA has been conducting joint research with developing nations in the Science and Technology Research Partnership for Sustainable Development (SATREPS). On the Japan side, JICA works with the Japan Science and Technology Agency (JST), one of the nation's core institutions responsible for the implementation of science and technology policy.

The SATREPS program is focused firmly on the needs of developing countries. To date it has implemented a total of 78 projects in 39 countries in the areas of environment and energy, bioresources, natural disaster countermeasures, and infectious disease control. The program aims to address these global issues and produce research outcomes that will benefit both local and global communities.

SATREPS projects, which can last up to five years, are based on partnerships between researchers in Japan and developing countries. JICA expects these projects to produce results with the potential for practical application, as well as to enhance research capacity in developing countries.

ASEAN has been a region of focus for JICA and JST in pursuing a broad range of SATREPS projects. In the area of disaster prevention, for instance, a project in Indonesia investigated comprehensive hazard reduction in that seismically active country. In the three-year project ended last year, nearly 250 researchers from Japan and Indonesia pooled their knowledge to mitigate the impact of disasters caused by earthquakes, tsunamis, and volcanic eruptions.

A FIGHTING CHANCE AGAINST DENGUE

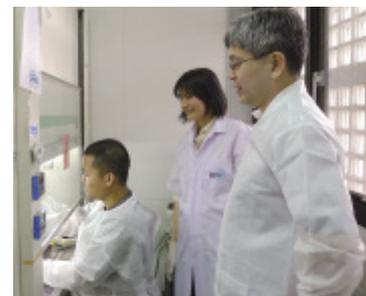
One project in the area of infectious disease control that shows considerable potential is a Japanese-Thai joint study on dengue fever that started in 2009. Led by Professor Kazuyoshi Ikuta of Osaka University, this research has resulted in the development of antibodies that could pave the way for new medicines to treat the illness, thus improving quality of life for people in the tropical areas where it is common.

The World Health Organization estimates that dengue fever infects 50 million–100 million people worldwide every year, placing a tremendous burden on healthcare and economic systems. Nonetheless, there are no effective measures to prevent or treat the mosquito-borne disease, which is regarded as a

neglected tropical illness, having received relatively little attention from affluent members of the international community.

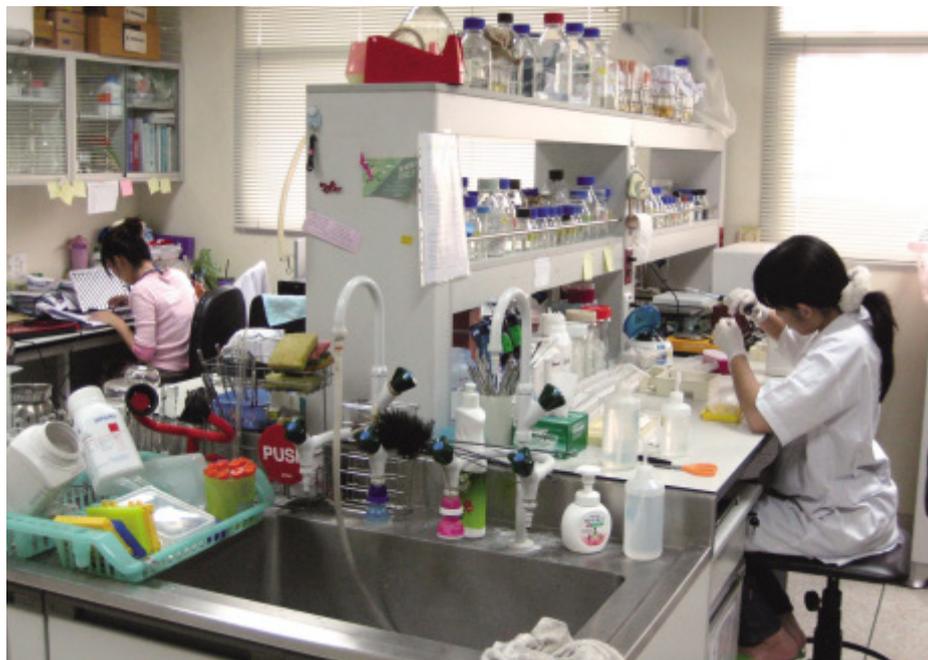
The four-year Japanese-Thai joint study involved international teamwork among government, the private sector, and academia. This cross-sectoral approach is one hallmark of JICA's approach in its SATREPS activities. In Japan, Osaka University was joined by Medical & Biological Laboratories Co., based in Nagoya; their Thai partners were the National Institute of Health and Mahidol University. One of the focuses of the research, to which JICA and JST contributed a total of ¥570 million, was to develop monoclonal antibodies effective against the dengue virus from hybridomas prepared with blood cells of Thai dengue patients. There was no shortage of donors: On average, Thailand had more than 60,000 cases of dengue fever every year between 2004 and 2010, and it has experienced a major outbreak of the epidemic this year.

The research team held a briefing session in Bangkok in June 2013 for pharmaceutical firms on the results of the four-year project before wrapping up their activities in July. Professor Ikuta noted that an Indian pharmaceutical firm has already expressed interest in developing anti-dengue medicine based on the project outcome. He added that if everything goes smoothly, a drug to effectively treat dengue fever could be developed in five to six years.



A Japanese researcher works with Thai scientists to create a treatment.

Mahidol University researchers tackle the task of developing antibodies to fight dengue fever.



Modernizing Myanmar's Financial Sector:

An All-Japan Team Steps Up

MOVING FROM CASH TO ELECTRONIC PAYMENTS

In March 2011 Myanmar inaugurated a new administration, with former Prime Minister Thein Sein as president. Since then the country has set off on a new path of nation building, undertaking reforms at a rapid clip to move toward democracy and a market economy. Among the many reforms underway, one of the most important keys to spurring economic activity is reforming Myanmar's lagging financial sector. JICA is part of an "all-Japan team" of assistance, finance, and capacity-development actors helping to realize these reforms.

At the banks in Yangon (formerly Rangoon), the economic hub of Myanmar, one sees sights from a past era of banking—large stacks of bills piled up on the counters at teller windows. Credit cards remain relatively uncommon in Myanmar, where it's said that paying for a major purchase can mean filling a truck with cash.

The majority of Myanmar people do not have bank accounts. Banks manage accounts using paper ledgers, confirming account balances and making entries by hand. For customers looking to withdraw money, the process can sometimes take several hours. This inefficiency impacts business and everyday activities alike.

Myanmar has 4 state-owned and 19 private-sector banks (including semi-private banks). The major banks affiliated with conglomerates have their own automated teller machines, but these can only be used to withdraw cash. The central bank does not effectively serve as a hub linking the private-sector banks. As the shift to a market economy progresses, domestic companies' demand for funds increases, and investment by foreign companies picks up, it will be essential to shift from cash to electronic transactions and from manual to automated processing.

Markets in the region are to be unified under ASEAN in 2015. Myanmar has pledged to participate in this ASEAN Economic Community, and it urgently needs to upgrade its financial system to bring it into line with those of the other members. At the same time it is working to set up a stock exchange and establish capital markets.

A COMPREHENSIVE APPROACH BUILT ON PUBLIC-PRIVATE PARTNERSHIPS

JICA organized a joint mission to Myanmar in November 2012 to have further comprehensive discussion of finance sector reform planning. The mis-



PHOTO: MIKA TANIMOTO

sion comprised public- and private-sector finance authorities including representatives of the Ministry of Finance, Financial Services Agency, Bank of Japan, Japanese Federation of Bankers Associations, the Japan Exchange Group, several private firms, and JICA.

A series of meetings were held to build mutual understanding and address the concerns and expectations of the Myanmar side; participants exchanged questions and opinions on everything from finance policy to ODA schemes. Following up on the meetings, Myanmar's Deputy Finance Minister visited Japan in February 2013 to observe the Japanese financial sector and to attend discussions with Japanese authorities, continuing the multifaceted policy dialogue.

Japan's approach goes beyond just dialogue. Japan provides both public- and private-sector assistance to reform Myanmar's financial sector. To develop the country's capital markets, the Policy Research Institute of the Japanese Ministry of Finance is supporting the creation of regulations on securities exchange; meanwhile, the Japan Exchange Group and Daiwa Institute of Research are helping to build a stock exchange. Japanese finance experts are addressing the many challenges ahead for Myanmar in its financial sector. JICA's role is to assist these efforts by furnishing related training and other support in the securities and banking sector.

JICA will continue to promote policy dialogue and work in Myanmar to provide reliable and consistent support through public-private partnerships.

Much of Myanmar's banking is still done by hand, but work is underway to change this.