Impact Evaluation Efforts

What is Impact Evaluation?

Impact Evaluation method rigorously measures the changes in beneficiary communities that were generated by a policy or project. It ideally does this by comparing outcomes after a project has been implemented and what would have been the outcomes in the absence of the project. However, unlike in a laboratory, such comparisons are not easy to do for development projects, whose beneficiaries are actual communities in which people live. As an alternative simpler method, the comparison of outcomes between before and after project implementation or between in the beneficiary and in non-beneficiary areas are often conducted. However, in many cases, these approaches are not appropriate comparisons and can cause the overestimation or underestimation of the change in indicators (the scale of project outcomes).

Through devising methods for determining project beneficiaries, data collection, and analysis techniques, Impact Evaluations can conduct more rigorous comparisons and accurately assess the changes generated by the project.

With greater priority being placed on results, including improvements in aid effectiveness and "Value for Money (VFM)", international organizations, beginning with the World Bank, as well as bilateral aid agencies have also promoted the implementation of Impact Evaluations. JICA, too, has been introducing the Impact Evaluation method for the future operation.

Applications of Impact Evaluation

Application to the projects

The implementation of Impact Evaluations is considered at various stages of the project. After a pilot project is implemented, Impact Evaluations can verify the presence of impacts and the cost-effectiveness of the project, which contribute to decision-making about whether or not to expand the project area. For example, in Bangladesh, JICA has created a development model to improve governance at the local government level. The Bangladeshi side has expanded the project area, and therefore, JICA is exploring ways to conduct detailed assessments of the project's impact.

During project implementation, the effects of multiple intervention approaches can be compared for the purpose to determine a more efficient methodology. One example is a participatory approach-based school management project in Senegal. Regarding the ways of establishing a school management committee, the effectiveness of multiple approaches was questioned. Thus, at the start of phase 2 of the project, the Impact Evaluation method was applied to search for the most effective approach.

Dissemination of the impact information

Highly credible evidence is essential for disseminating any information about project impact or for expanding the area of the project. Impact Evaluations are intended to rigorously assess the project impact, and are capable of providing evidence that meets internationally accepted standards regarding the impact of JICA's projects.

JICA, bearing in mind the international challenge of conducting Impact Evaluations for infrastructure projects, is undertaking Impact Evaluations of irrigation projects in four Asian countries (see p.56-57). In addition, the JICA Research Institute and Evaluation Department have presented the impact of its projects (e.g., construction of irrigation facilities, dissemination of new agricultural techniques, dissemination of maternal and child health handbooks, improvements in school-based management) at academic meetings and conferences domestically and internationally, and have contributed to making this information international public goods.

Challenges on Impact Evaluation

Accurate assessments of project impact require wide-ranging and detailed data, including data on project beneficiaries and nonproject beneficiaries. Careful planning of project design is also needed. Depending on the nature of the project, there are many projects which have difficulties to meet these requirements. For example, in large-scale infrastructure projects such as the construction of airports or ports, or financial aid projects involving policy dialogues to carry out institutional reforms in a country, it is difficult to determine the extent to which the project had impact. Since it is hard to obtain data for areas not affected by the project, Impact Evaluations are not always feasible.

In light of these limitations, it is important to select projects for Impact Evaluations, considering such factors as clear ways of using the evaluation results, unique development models, timing of information dissemination, and interests of the international community. Part 1. Project Evaluation in JICA

Reference

Mr. Masaichi Nosaka, editorial writer for Yomiuri Shimbun, toured ODA projects in Kenya, the regional base for JICA's East Africa projects

"Visible aid" which draws on Japan's characteristics: Towards better targeted assistance

To spread the message of JICA's evaluation efforts, the effect of ODA projects, and the importance of international cooperation, JICA has, since FY2004, invited journalists and celebrities on ODA project tours and shared their experiences with the Japanese public.

Below is the report of journalist Mr. Masaichi Nosaka, who toured ODA projects in Kenya from February 7 to 12, 2010.

I observed the status of ODA projects in Kenya, JICA's base in East Africa. In 2008, the Kenyan Government unveiled Vision 2030 and declared it will aim to join the ranks of middle-income countries by 2030. However, this goal does not seem easy to achieve. Japan has long supported human resources development, technical transfers, and infrastructure development in Kenya. My visit focused on the theme of what does Kenya expect from Japan and how should Japan aid Kenya.

Human resources is the foundation for state-building

The development of human resources is critical as they form the foundation for state-building. I was able to confirm that Japan's persistent assistance has produced positive outcomes in the education sector.

The first is the development of Jomo Kenyatta University of Agriculture and Technology. With the objective of fostering skilled technicians in agriculture and technology, Japan provided aid for 22 years from 1978 to 2000. In addition to agriculture and technology, the university now has six programs, including computing and construction. As many as 15,000 students attend, including graduate students, and the campus was full of energy. Although Japan's assistance has lessened and the university is in the hands of the Kenyan side, the university still has close ties with Japan.

I will not forget the words of Registrar Isaac Inoti, who has studied at Kyoto University. He told me, "We continue to grow. I am grateful to JICA. I look forward to working with Japan in the industry field".

The second is the Strengthening of Mathematics and Science Education (SMASE) Project, through which Japan supported the training of primary and secondary school teachers and efforts to improve education. It was a project unique to Japan that was consistent with Kenya's needs. In the neighboring countries as well, a scaled up project, SMASE-WECSA^{*1}, is currently underway. Human resources development projects are very significant.

A large rice producer like Japan

Mwea, about a 2.5-hour drive from Nairobi, resembled the farming communities in Japan's Tohoku region. The Kenyan National Irrigation Board (NIB) is located in the middle of a large rice paddy, and Japan provided technical cooperation to the MIAD*2 Center under NIB in the form of NERICA rice cultivation (pilot) as well as farmer training through a small-scale irrigation project. About 7,860 ha of land is now cultivated



Mr. Masaichi Nosaka

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Visited projects	
ODA Loans	Mwea Irrigation Development Project Sondu-Miriu Hydropower Project
Technical Cooperation	Strengthening Mathematics and Science Education (SMASE) Project Jomo Kenyatta University of Agriculture and Technology (JKUAT)/(Training) Strengthening Management for Health in Nyanza Province Project Japan Overseas Cooperation Volunteer (HIV/AIDS Control) Mwea Irrigation and Agriculture Development Plan
Grant Aid	The Project for Improvement of District Hospital in the Western Region The Programme for Community-based Flood Disaster Management to Adapt to Climate Change in the Nyando River Basin



Experienced rice cultivation specialist of the MIAD Center showing off his crop

and Mwea produces over 50% of the country's rice, making it Kenya's no.1 rice producer.

With agriculture making up about 24% of GDP, over 50% of the labor force, and around 50% of all export revenue in Kenya, agriculture

^{*1} WECSA: Western, Eastern, Central and Southern Africa
*2 MIAD: Mwea Irrigation Agriculture Development
*3 TICAD IV: The Fourth Tokyo International Conference on African Development

Part 1. Project Evaluation in JICA

Reference

holds the key to economic development. At TICAD IV^{*3}, Japan pledged to increase Africa's agricultural productivity, including doubling rice production. To this end, the Coalition for African Rice Development (CARD) was set up around JICA, in which Kenya plays a central role. This is expected to further increase rice cultivation in Mwea, where the irrigation facilities are aging and securing irrigation water is a challenge. In this context, hopes run high that Japan will support the rehabilitation of existing irrigation networks and development of new networks.

Enhancement of health services

Kenya's infant mortality rate exceeds the average for developing countries. In particular, Nyanza Province in Western Kenya has the worst rate in the country. The malaria, HIV/AIDS, and tuberculosis infection rate is also high. Unless the problems facing this region are resolved, the health indicators for the country as a whole will not improve. Problems include lack of and deterioration of medical supplies and decline in the quality and volume of health services. I visited a local hospital financed by Japan's Grant Aid. An emergency care unit including an obstetric department and other facilities were constructed next to the old hospital. Japan also provides medical supplies including equipment for emergency operations. I expect this project will contribute to improving the local health system.

The Strengthening Management for Health in Nyanza Province Project is also partnered with this hospital. When I visited, three longterm JICA experts, including Dr. Tomohiko Sugishita, were working to improve the health administration in the province. The work was lowprofile, but I understood that it was important for solving Kenya's weaknesses and rehabilitating its health administration. In addition, I observed the fieldwork of JOCV Ms. Ai Shimomoto, who was engaged in an HIV/AIDS prevention program in the same province. It was encouraging to hear her say, "I applied to become a JOCV because I believe social support for HIV/AIDS patients is important".

How to meet the electricity demand

Along with its economic growth, Kenya's electricity demand has grown at a pace of about 5% on average over the past five years. However, electricity supply has not caught up and economic activities are disrupted.

To ensure a stable supply of electricity in the western region, the Sondu-Miriu Hydropower Plant was built with ODA Loans. The plant utilizes the water currents from the Sondu River that flows into Lake Victoria. It is unique in not requiring a dam. According to Robert Colleer



View from top level of Sondu-Miriu Hydropower Plant water pipe

from the Kenya Electricity Generating Company, the plant is capable of producing 60MW of electricity, which is equivalent to 5% of domestic demand.

The water used by the Sondu-Miriu plant is designed to be reused by the Sang'oro Hydropower Plant downstream and then returned to the Sondu River. When I visited, the Sang'oro plant was being built with Japanese assistance, and the target completion date was November 2011.

Saving children through flooding measures

The Nyando River Basin is prone to flooding and nearly every year there are casualties. Through Grant Aid, Japan implements flooding damage mitigation measures as well as soft assistance, including disaster prevention education for the community. Due to the deforestation of the forests upstream and their conversion into farmland, and by extension, their decreased water-retaining capacity, the amount of water flowing into downstream areas during the rainy season has increased and is causing frequent flooding damages. The sad reality is distortions created by deforestation are threatening human lives.

A building on the edge of a marshland was an emergency shelter constructed with Japanese assistance. Japanese aid consisted of constructing facilities as well as providing advice on evacuation plans. Training had also started when I visited. A siren rings if there is flooding, and teachers and community leaders were being trained to lead the residents to the shelter. I could see this was important assistance for protecting the lives of children who bear Kenya's future.

Continuing "visible" Japanese-style assistance

Africa has a weak economic base and is prone to suffer from the adverse effects of globalization. Thus, it is significant that Japan pledged to double ODA to Africa by 2012.

When I was in Kenya, I reconfirmed the role that Japan's ODA is playing, and I felt it was important to continue providing assistance aimed at Kenya's self-empowerment.

In concrete terms, first, I believe Japan should steadily fulfill its commitments and the pace of assistance should not go down. In Kenya, I saw that assistance consistent with the country's needs produced positive outcomes. Although it will not be easy to double ODA in light of Japan's financial difficulties, it is important to continue to implement better targeted assistance.

In Kenya, too, as with its assistance to the rest of Africa, China has been increasing its presence, including through road construction in the capital city and engaging in Japan's ODA projects. While China is expected to continue to actively extend assistance in order to acquire resources and new markets, it is problematic that its aid amounts and methods lack transparency. All of Japan's projects were" visible aid" which drew on Japan's characteristics. Moving forward, Japan will be urged to strengthen its own unique style of assistance, while bearing in mind China's moves.

The Japanese aid model in Kenya is commended for organically integrating tools such as Technical Cooperation and ODA Loans, in line with the CARD initiative Japan spearheaded. It is imperative that Japan leads the efforts to scale up the model to extend beyond the agricultural sector.

At the same time, a roadmap should be drawn up for graduating from "aid" in the future. If Kenya endlessly relies on aid, it may not be able to achieve self-empowerment for a long time. I hope Japan continues to provide beneficial assistance, keeping in mind that Kenya should eventually graduate from its aid recipient status.

Ex-post Evaluation of Private Sector Investment Finance Projects

For resuming the projects

JICA's private sector investment finance projects are those which will have high development impact in developing countries, but cannot be implemented by private companies alone and therefore JICA provides debt or equity financing. In 2001, the approval of new projects was stopped as part of the reform of special public institutions. However, in recent years, it has increasingly become recognized that economic growth generated by private sector-led activities is essential for poverty reduction. Therefore, in the New Growth Strategy approved by the Cabinet in June 2010, the following was decided: "In order to support the projects with high development impacts which cannot be financed by existing financial institutions, private sector investment finance by JICA will be resumed, after its full study and evaluation of the successful and failed cases in the past and its establishment of risk examination and management system".

In this context, JICA asked a third party to conduct ex-post evaluations of the projects.

Overview of ex-post evaluations

The Japan Economic Research Institute carried out desk evaluations through analysis of existing materials and interviews of companies, etc. between April and September 2010.

The evaluation had two dimensions: 1) Evaluation of the finance on all private sector investment finance projects (31 investment projects, 656 loan projects; total 687 projects); and 2) Evaluation of individual projects (all 16 projects with an outstanding balance, 15 projects with no outstanding balance but for which past data is available; total 31 projects). The latter were evaluated against seven criteria: five OECD-DAC criteria along with "JICA's investment returns" and "additionality" (additional effects due to JICA's assistance).

Evaluation findings

The financial balance for all projects (JICA's investment returns) was a surplus of 143.8 billion yen (investment: 76.7 billion yen, loans: 67.0 billion yen). Among the 656 loan projects, 3 projects resulted in default (1.9 billion yen) and the write off ratio was 0.72%.

As for individual evaluations, over 70% (23 projects) of the projects were confirmed to have achieved either more than the planned or certain level of outcomes.

Examples of project outcomes achieved:

- Local company has grown to be South America's largest iron and steel company with approximately 30% crude steel production capacity in entire nation. (Brazil iron-making joint venture project)
- Acquisition of foreign currency using unused resources (natural gas) contributed to agriculture promotion (Bangladesh fertilizer manufacturing project).

Main Evaluation Findings

Relevance

 All projects were generally highly relevant. However, relevance was a problem for some projects due to changes in development plans of the host country of the target investment and loan project.

Efficiency

• The project period and project cost exceeded the initial plan in many projects, due to the project environment, infrastructure, and other factors in developing countries.

Effectiveness

 Many projects achieved the planned impact in terms of the operation and effect indicators. However, some projects had limited effects due to risks associated with project implementation in developing countries.

Impact

- Positive impacts were observed, including the dimensions of employment creation, acquisition of foreign currency, spillover effects on related industries, and technical transfers.
- Farward steps were taken in several projects of the iron and steel, petrochemistry, industrial complex, and the paper and pulp sectors, including acquisition of international environmental standard ISO 14000 and information dissemination about CO₂ emissions.
- Environmental considerations were generally made appropriately. Although some projects faced problems related to relocations and land acquisition, their smooth resolutions were reported.

Sustainability

- There were projects that were both sustainable (about 40%) and not very sustainable (already bankrupt, etc.) (less than 40%).
- Foctors behind the low sustainability included financial issues, due to spiraling project cost, decline in demand of domestic economy, exchange rate fluctuations, and the Asian currency and financial crisis.

Additionality (need for JICA investment and loans)

 In nearly all projects, JICA had a pump-priming effect on private investment through provision of medium- and long-term finance, promotion of policies in host country of those JICA financing (reduce policy change risk), etc.

However, the development impact of over 20% of the remaining projects (8 projects) was judged to be insufficient. Causes included inevitable reasons such as project suspension due to political turmoil and conflict, or effects of international product market situation and macroeconomic trends, such as the Asian currency crisis.

Other major evaluation findings are shown in the above table.

Lessons learned and future steps

The evaluation findings summarize that "JICA's private sector investment finance function is highly significant as an ODA tool and system enhancements are sought on the basis of appropriate management".

Meanwhile, lessons learned for the future were extracted through the evaluation and analysis of projects which could not be implemented as initially planned. For example, "thorough management during project appraisal" (e.g., improve risk analysis and its control measures, formulate exit strategy, select qualified project manager with sufficient track record), and "strengthen supervising after project is approved" (e.g., monitor criteria and indicators established during project appraisal).

JICA will continue to draw on these lessons learned in system and project design of this function.

Support to Increase Evaluation Capacity of Developing Countries, etc.

Improving the evaluation capacities of project executing agencies in developing countries further increases their ownership, and contributes to the effective and efficient implementation of JICA projects. Furthermore, it may have spillover effects on non-JICA development projects. Therefore, JICA actively provides support aimed at developing the evaluation capacities of developing countries and emerging donors.

1 Cooperation with emerging donors

As developing countries' economies grow, aid recipients are emerging as new donors. They include the Republic of Korea, which has graduated from foreign aid, as well as Thailand and China, which are now making this transition. In order for those emerging donors to be able to implement more effective aid, JICA shares its experiences by implementing various evaluation partnerships and assistance.

During the session entitled "Practices and Evaluation of Rural Development Projects of Korea International Cooperation Agency (KOICA) and JICA" at the conference for the Japan Society for International Development (11th spring conference) that was convened at Hokkaido University in June 2010, KOICA and JICA presented their respective rural development projects and their evaluation. Views were exchanged on the outcomes as well as each others' evaluation systems and initiatives. In December, the first regular meeting between the two agencies was held, and talks were initiated on how they can work together in the area of evaluation.

Aside from such academic activities, JICA has supported the development of evaluation officers of emerging donors i.e. through trainings for the staff of Export-Import Bank of China and China's local governments (June 2010) and for Neighboring Countries Economic Development Cooperation Agency (NEDA) of Thailand (August 2010). JICA also invited a staff of the Economic Development Cooperation Fund (EDCF) of the Export-Import Bank of Korea to the seminar on ODA Loan project evaluation (November 2010).

2 Promoting joint evaluations with developing countries

Conducting ex-post evaluations jointly with developing countries is one way by which JICA supports the capacity building of developing country governments. Joint evaluations facilitate the transfer of evaluation techniques and sharing of evaluation results. To date, JICA has carried out joint ex-post evaluations in many countries, and has achieved some success in realizing effective and efficient projects through improved evaluation techniques.

In recent years, JICA has concluded Minutes of Understanding (MOU) on evaluation with the relevant agencies of Viet Nam, the Philippines, and other countries. Comprehensive assistance is provided to transfer monitoring and evaluation methods through joint ex-post evaluations, and establish mechanisms to generate further impact and increase project sustainability.

Viet Nam

JICA provides evaluation support based on MOU concluded with the Ministry of Planning and Investment (MPI) of Viet Nam in July 2007. The MOU consists of two pillars: 1) Implementation of joint ex-post evaluation; and 2) Evaluation system and capacity-building related assistance. The specific details are set forth in the work plans formulated by JICA and MPI each fiscal year.

In the third fiscal year of FY2009, JICA provided assistance to develop evaluation officers and implement budgetary measures, to cope with implementation issues that came to light from past assistance. As in FY2008, an ODA evaluation seminar for Vietnamese government officials was held in the three cities of Da-nang, Ho Chi Minh, and Hanoi. This seminar on evaluation management was attended by many Vietnamese officials who are in charge of project evaluation and monitoring. In addition, to support the launch of a Vietnamese evaluation association, JICA coordinated for them to participate in an



MPI staff training (Viet Nam)

international evaluation conference in Malaysia as well as to provide training for the development of Project Cycle Management (PCM) instructors. As for the joint ex-post evaluation, the Vietnamese evaluation team was involved in the series of activities up to the preparation of the evaluation report, and fulfilled an even larger role than in FY2008.

In FY2010, JICA will continue to support the capacity development of evaluation officers. To further increase the ownership of the Vietnamese side, the Vietnamese evaluation team will conduct the ex-post evaluation and a Japanese evaluator will conduct a secondary evaluation.

Philippines

JICA provides comprehensive support to develop evaluation capacity based on an MOU concluded with the National Economic Development Topics

Reterence

Authority (NEDA) of the Philippines in May 2006. In Phase 1 (2006-2008), assistance was provided to increase the evaluation capacity of NEDA's project monitoring staff (PMS). Based on the outcomes, in Phase 2 (2009-2011), assistance is provided to enable PMS to independently conduct ex-post evaluations and to enable NEDA to carry out internal training to develop the evaluation capacity. NEDA and JICA will work together to consider measures for addressing the issues of project impact which have come to light through the evaluations and in particular improve project sustainability (For more information about the FY2009 joint ex-post evaluation, see also p.41).

3 Seminar on Evaluation of Japanese ODA Loan Projects

The Seminar on Evaluation of Japanese ODA Loan Projects targeted at developing countries' executing agency staff in charge of development projects, had been held since FY2001 with the cooperation of former JBIC and former JICA. After the merger of the two organizations, JICA has continued to hold the seminar.

In FY2010, the seminar was held from November 8 to 19, 2010 in Japan, and was attended by 15 people from 15 countries. The program covered a wide range of topics, including an overview of JICA's evaluation system (a presentation given by JICA's Evaluation Department staff), sharing experiences among participants (a hands-on workshop), field visits (the Isewangan Expressway and the Central Japan International Airport), and a presentation on the challenges of emerging donors given by the staff of the Economic Development Cooperation Fund (EDCF) of the Export-Import Bank of Korea who were participating the seminar as observers.

Coming from executing agencies or aid agencies with plans to carry out ex-post evaluations of ODA loans in the near future, the seminar participants raised specific and focused questions and opinions which allowed information and knowledge sharing among the participants. The participants actively took part in the Q&A sessions, and proactively sought to clarify any items they were unclear about.

The seminar aims at enhancing the participants' understanding on the importance of evaluations as well as the evaluation method of the ODA Loan projects, and developing the participants' evaluation capacity. Further, the participants are expected to actually utilize the knowledge and experiences they obtained at the seminar in their country and share them within their organization. Therefore, upon returning to their countries, the seminar participants either implement or plan steps to develop the necessary evaluation capacity at their organization based on an activity plan they have created. The outcomes of these steps are then reported to JICA in the form of a final report. In some countries, the ex seminar participants play a central role in preparing to hold seminars for government-related agencies. In these seminars, the ex seminar participants give presentations on what they have learned through the Seminar on Evaluation of Japanese ODA Loan Projects. JICA will continue to be an active supporter of these efforts to encourage feedbacks by the ex seminar participants.

OECD-DAC Peer Review of Japan Report commends JICA's improved feedback mechanism and joint evaluations with partner countries

The OECD-DAC, which reviews aid trends in the DAC member countries, conducted a Peer Review of Japan for the first time in seven years since 2003. The findings were compiled through a visit to Japan (October 2009), field visits to Bangladesh and Kenya (October and November 2009), and the Peer Review in Paris (May 2010), and the report was released in June 2010.

The report gave a generally positive evaluation of Japan's ODA, beginning with JICA, including the establishment of the new JICA, the strengthening of the country-based approach, capacity development, South-South cooperation, and aid coordination efforts in the field. Meanwhile, it made several recommendations, including setting a timeline for increasing ODA volumes, strengthening the PR strategy and policy coherence, further streamlining procedures, reviewing the division of labor between the Ministry of Foreign Affairs and JICA, delegating more authority to the field, and making progress in reporting the untied status of aid.

Accountability, evaluation and results-based approach

The section which discusses accountability, evaluation and results-

based management of Japan's ODA projects commends Japan for advancing efforts to strengthen the feedback of evaluation findings since 2003. In particular, with reference to JICA, the report notes that the improvement measures relating to poor performing projects are reported to its board, and that JICA has established a system to make use of the lessons learned from evaluating findings when designing projects.

In addition, the report points out that a distinctive feature of Japan's ODA project evaluations is "the high degree to which they are conducted jointly with partner governments", and underlines that such evaluations offer the advantage for lessons to be learned by both donors and aid recipients. On the other hand, the report also indicates that "Japan should examine ways to design, monitor and evaluate Japan's contribution to wider outcomes and impacts, not only those where the results are directly attributable".

Furthermore, the report, while acknowledging Japan's efforts to establish a results-based management framework and apply it in its projects, recommends that the outcome-based approach should be expanded to all schemes and programs.