

16th ODA Evaluation Workshop Method of Project Evaluation: Case Study of Infrastructure Projects

JICA's Ex-Post Evaluation and the Use of Lessons Learned

January 29, 2019

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国際協力機構



- Overseas Offices: Around 100
- Domestic Offices: 15

JICA's Operations : Three main arms of operations



Exchange rate: USD/JPY = 100

Fiscal year runs from April to March of next year.

Finance and Investment

(ODA Loans and Private-sector Investment Finance)

JICA provides ODA Loans with concessional conditions (similar to development finance provided by Multilateral Development Banks, etc.) for developing countries to finance investment for development.

Technical Cooperation

By sharing Japan's technologies and expertise, technical cooperation aims to foster the human resources that will lead economic and social development in developing countries.

Grant Aid

Assistance in the form of grants with no repayment obligations to provide the goods and services necessary for economic and social development in developing countries.



Delhi Mass Rapid Transport System Project in India



Assistance in agricultural production in Uganda



Rural water supply in Ethiopia

Three main arms of operations/ breakdown (FY2016)

Exchange rate: USD/JPY = 108.8



Purpose of Evaluation

• <u>ACCOUNTABILITY</u>

to stakeholders including Japanese nationals and people of the partner country

• <u>LEARNING</u>

to improve projects and quality of operations further through the PDCA (Plan Do Check Act) cycle

Ex-post Evaluation

•All projects over 200 million yen

• External Evaluation

- over 1 billion yen
- by external evaluators

Internal Evaluation

- under 1 billion yen
- by JICA's staff of overseas offices

Disclosure of evaluation report: 100%

Evaluation Criteria of JICA's Ex-Post Evaluation



Evaluation Method

Rating criteria and main items examined		Reasoning		
		3	0	0
Relevance	Validity of aid (relevance with development policy of recipient country, Japan's ODA policy, and JICA's aid strategy)	Fully relevant	Partially relevant	Serious problems in consistency
	Relevance with development needs (needs of beneficiary, project area, and community)			
Effectiveness/ Impact	Achievement of expected project outcomes in target year (including use of facilities and equipment)	Objectives largely achieved, and project generated outcomes (80% or more of plan)	Some objectives achieved, but some outcomes were not generated (between 50% and 80% of plan)	Achievement of objectives was limited, and project did not generate outcomes (50% or less than plan)
	Status of indirect positive and negative outcomes	Project generated indirect outcomes as assumed / no negative impacts	Some problems with indirect outcomes generated / some negative impacts	Problems with indirect outcomes generated / grave negative impacts
Efficiency	Comparison of planned and actual project inputs, project period and project cost, etc.	Efficient (100% or less than the plan)	Partially inefficient (between 100% and 150% of plan)	hefficient (exceeding 150% of plan)
Sustainability	Institutional sustainability (e.g., structure / skills / HR of organization)	Sustainability is ensured	Some problems, but prospects of improvement exist	Insufficient
	Financial sustainability (availability of operation and maintenance budget)			

JICA's Rating flowchart





Resources of Lessons Learned

- 1. Ex-Post Evaluation of Each Project (over 1500 evaluations)
- 2. Additional evaluation after ex-post evaluation
- 3. Sectorial Analysis →Knowledge Lesson (200 lessons)
- 4. Annual Overhaul Projects Review (internal portfolio review of selected projects)

Lesson Learned System (Information Data System)

How to encourage the utilization of the lesson data in the system (Lessons Learned System) ?



Mandatory description of the lessons learned from the past project for new project's document.



Evaluation Department's Review for project document and Advice.



JICA Evaluation Department's support



Continued support after the ex-post evaluation results

<u>Provincial Cities Water Supply and Sewerage System Improvement and Expansion Project (Peru)</u> <Ex-Post Evaluation in 2015: Overview of evaluation results and issues observed>



El Indio Sewage Treatment Plant (Piura)

This project was implemented to rehabilitate and expand water supply and sewerage facilities to improve the water supply and sewerage services in Northern Peruvian local cities of Piura and Chimbote. However, the volume of sewage received by the sewage treatment plants far exceeded the planned levels, resulting in the discharge of sewage not satisfying the effluent standards.

<Measures to be taken by JICA>

JICA is continuing to encourage the Peruvian government to steadily proceed with the extension of the sewage treatment plant in Piura at the expense of Peru. JICA is also providing continued support to bring out the effects of the project, including dispatching experts to strengthen the managerial and technical capacity of municipal sanitation service companies. **Applying lessons learned to similar new project (1)**

<Lessons learned from similar projects>
<u>Railway Modernization Project (II) (Myanmar) : Ex-post evaluation in 2001</u>
(1) the constant shortage of spare parts

(2) the insufficient capacity of engineers in **the maintenance and management system**.

<Measures> for Yangon Circular Railway Line Upgrading Project (Myanmar) in 2015 (1) Enough spare parts for two years after completion of this project will be provided, and maintenance clauses should be incorporated into the contract with the contractor, including the scheduled procurement and delivery method of spare parts.

(2) The maintenance and management policy for railway facilities will be formulated and technical capabilities is to be improved with the current technical cooperation project.

Applying lessons learned to similar new project (2)

<Lessons learned from similar projects> <u>Program for Rehabilitation and Recovery from Typhoon Yolanda (Philippines)</u> <u>Ex-post evaluation in 2001</u>

- The following 3 points need to be considered in implementing this project:
- (1) Establishment of a **progress management committee** comprised of relevant organizations in the country and the regular holding of committee meetings
- (2) **Steep rise in prices** due to demand fueled by rehabilitation/reconstruction projects
- (3) Support for reconstruction taking into account the risk of disaster

<Measures> for <u>Emergency Housing Reconstruction Project (Nepal)</u> in 2015

The provision of reconstruction aid, taking into account the risk of disasters other than earthquakes, will be considered, based on the following three concepts:

(1) **Establishment of an implementation and monitoring system** for the smooth implementation of the project

- (2) Estimation of costs and determination of sub-projects taking into account the steep rise in the cost of materials and labor
- (3) "Build Back Better"

Knowledge Lessons Learned by Sectorial Analysis: ⇒about 200 lessons

- Energy
- Sewerage
- Solid Waste Management
- Irrigation, Drainage and Water Management
- Nature Conservation
- Disaster Management
- Inland Aquaculture/Fishery Resource Management
- Peace Building
- Local Governance

etc.

"Knowledge Lessons learned" : Irrigation, drainage and water management projects

- 1. Selection criteria for partner countries/target areas
- 2. Needs of target farmers to enhance agricultural productivity and generate income
- 3. Financial and technical sustainability of pump irrigation systems
- 4. Preconditions for developing new irrigation facilities
- 5. Irrigated agriculture projects in disaster-prone areas
- 6. Appropriate project implementation period and scope of activities (Technical Cooperation projects)
- 7. Clear definition of target groups
- 8. Disputes and conflicts between farmers in project target areas
- 9. Development of on-farm irrigation canals at the expense of partner countries
- 10. Activities and costs incurred by partner countries (financial cooperation)
- 11. Smooth acquisition of land for irrigation
- 12. Availability of irrigation water and water resource use plans
- 13. Establishing and developing the capacity of irrigation associations
- 14. Modifying water distribution methods and plans following changes in the pattern of agricultural production
- 15. Developing farming models which local farmers can apply
- 16. Deployment of farming models
- 17. Managing the project schedule in case of collaboration with other assistance schemes and donor organizations
- 18. Motivating project counterpart organization staff
- 19. Exploring the potential to provide medium- to long-term assistance by taking a program approach

Lesson 13: Establishing and developing the capacity of irrigation associations

Applicable cases: Where on-farm irrigation facilities are maintained at the expense of beneficiaries (farmer participatory approaches)

Risks:

- 1) Unless <u>roles or responsibilities</u> for maintaining on-farm irrigation canals are clearly divided, the necessary efforts may not be made, hindering all or most of the irrigation system function as a whole.
- 2) An unequal <u>distribution of water may</u> discourage some farmers from maintaining irrigation facilities and the area of irrigated land may become smaller than planned.
- ◆ Possible measures to be taken:
- [Establishing and developing the capacity of irrigation associations] Build irrigation associations, develop maintenance manuals and train association staff to maintain on-farm canals.
- [Equal distribution of water] Establish a coordination mechanism to formulate and implement water distribution plans via a participatory approach.
- [Setting irrigation service fees payable by beneficiaries] Let beneficiaries set service fees at an affordable level.

applied for "Agriculture Income Improvement Project" (Myanmar): L/A in 2018



"Knowledge Lessons learned" : Sewerage projects

For "Jakarta Sewerage Improvement Project" (Indonesia) L/A in 2018

Lesson 5 (citizen's understanding), 4 (capacity of agency), 6 (sustainable collection method) and 7 (appropriate maintenance system), derived from Indonesia Denpasar Sewerage Project, Ho Chi Minh City Environmental Improvement Project and others:

- Intercept Collection without new residential connection
- Environmental education to citizens to reduce solid waste
- O&M training for 2 years after the construction

For "Yangon Sewerage Improvement Project" (Myanmar) L/A in 2018

- Lesson 5(citizen's understanding) and 6(sustainable pricing), derived from Brazil Billings Lake Environmental Improvement Project and others:
 - Enlightenment to users for fee collection
 - Analysis of appropriate fee system and pricing

Encourage of Lessons Learned

- 1) Lessons Learned System (Knowledge Data)
- 2) Mandatory Description of Lessons in New Project Document
- 3) Documental Review and Advice
- 4) Improve the Quality of Lessons to be More Useful
- 5) Actualization of Information



Thank you for your attention.

Website of JICA's project evaluation https://www.jica.go.jp/english/our_work/evaluation/index.html