

Meta Analysis of Ex-Post Evaluation Reports
by Country and Sector

Country Review Report

Sri Lanka

Final Report

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This country review report (Sri Lanka) was compiled and analyzed by Global Group 21 Japan at the request of Development Assistance Operations Evaluation Office, Project Development Department of the Japan Bank for International Cooperation (JBIC).

Foreword

This analyses ex-post evaluation reports (henceforth, evaluation report) for 13 projects to Sri Lanka by the Japan Bank for International Cooperation (JBIC).

In order to improve the quality of aid projects in developing countries, JBIC has conducted ex-post evaluations of completed projects. Ex-post project evaluation is the assessment of how a project was implemented and administrated in contrast with initial plans, and whether the expected results were realized after completion of the project. The ex-post evaluations are conducted with two goals in mind. The first is to compile the lessons learned from the project evaluations, and to use the lessons in the implementation of future projects. The second goal is to improve transparency of aid projects, and to increase the accountability for people both in Japan and the borrowing countries through disclosure of evaluation results.

The goal of this review is to create an overview of the performance of the completed projects to Sri Lanka using ex-post evaluation reports, to analyze the data to determine the cumulative effect of the Japanese ODA loan projects to Sri Lanka and to derive possible lessons or recommendations for future ODA loan projects. In addition, by reviewing and studying the evaluation indices, it is hoped that reference material for future appraisals, administration and evaluations will be provided.

This report consists of four chapters. The first chapter outlines social and economic situation of Sri Lanka. Chapter two presents an overview on the ODA loan to Sri Lanka. Chapter three analyzes the performance of 13 projects based on the evaluation reports. Chapter four presents the comprehensive results of the analysis, and offers lessons learned and recommendations for future projects to Sri Lanka.

The performance analysis is conducted through the establishment and analysis of five primary criteria broken down into 23 evaluation check criteria.

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Attached Materials: Reviewed Projects

1. Economic and social trends in Sri Lanka

1.1 Politics, economy, ethnic strife and society

(1) Politics

Since gaining independence in 1948, Sri Lanka has experienced changes of the government achieved democratically by the election. The two major political parties that have held governmental power are the United National Party (UNP), which is strongly liberal, and the Sri Lanka Freedom Party (SLFP), which is oriented towards socialist policies. Starting in 1977, the UNP held power for the next 17 years. However, the SLFP-dominated People's Alliance (PA) was victorious in the 1994 general elections, placing President Kumaratunga in charge of leading the country. The UNP won in the general elections that were recently held in December 2001, creating a situation in which the ruling party will lead the country under a president who is the opposition party leader.

(2) Economy

Economic deregulation policies, which have been promoted since 1977, have continued even since the government changed in 1994. The relaxation of administrative restrictions on prices, trade, investment and foreign exchange as well as privatization of state-owned enterprises have made progress. Private sector vitality and privatization has continued in telecommunications, electric power and transportation sectors, which are closely tied to the ODA loan. This political climate has led to the expansion of private sector investment and export of manufactured goods, and resulting in a steady transition of the macroeconomy, and an achievement of relatively stable macroeconomic growth when compared with other South Asian countries. On the other hand, factors such as ethnic strife have resulted in budget deficits, prolonged high inflation and high unemployment rates, which has prevented Sri Lanka from achieving as high economic growth as other southeast Asian countries that have enjoyed in the past.

The industrial structure of Sri Lanka was traditionally based on agriculture; rice and the three major plantation crops of tea, coconut and rubber. However, in the 1980s, the textile industry, with clothing as leading, grew rapidly, gaining the most amount of foreign currency. The most important issues at present are the development of manufacturing industries other than textile as well as sustaining and strengthening the international competitiveness of the textile industry.

(3) Ethnic strife

For many years, Sri Lanka has faced ethnic conflict between the Sinhalese, and the Tamil, which comprise roughly 75% and less than 20% of the population, respectively. The Tamil independence movement has spread ground since the late -1970s. In 1983, full-scale fight occurred between government forces and the Liberation Tigers of Tamil Eelam (LTTE), a radical Tamil party aiming at independence. Civil war has continued until February 2002, when the permanent ceasefire agreement

was concluded. The escalation of internal fight and terrorism in recent years has resulted in increased military expenditures putting pressure on government finance, and bad impacts on foreign investment and tourism, which has hindered socioeconomic development.

With the mediation of Norway, the President Kumaratunga made concerted efforts in peace talks. The change in political power in 2001 made the situation take a favorable turn. In February 2002, a cease-fire agreement between the government and the LTTE was concluded.

(4) Social development

Sri Lanka is well known for the fact that its social development performance is good when compared to its income level. Policies focusing on education and social welfare taken during socialist-oriented administration have helped the nation to achieve high social development indicators, such as an average life expectancy of 73 and a 90% literacy rate (both 1997 figures). These figures are equal to those of semi-developed countries. However, it is said that twenty percent of the population belongs to poverty (mainly live in the rural regions)¹. Thus, poverty continues to be a major issue for Sri Lanka

Table 1-1: Shift in key indicators

	1980-1989 (avg.)	1990-1995 (avg.)	1996	1997	1998	1999	2000
Real GDP growth rate (%)	4.2	5.3	3.8	6.3	4.7	4.3	6.0
GDP deflator	11.8	11.4	12.1	8.6	8.4	4.4	6.7
Per capita nominal GDP (rupee)	9,608	27,102	41,940	47,998	54,220	58,077	64,855
Per capita nominal GDP (US\$)	362	549	759	814	839	825	856
Unemployment rate (%)	n.a.	14.0	11.3	10.5	9.2	8.9	7.7
Investment rate (%)	26.2	24.4	24.2	24.4	25.1	27.3	28.0
Savings rate (%)	12.9	14.6	15.3	17.3	19.1	19.5	17.3
Current account balance (% to GDP)	-8.1	-6.3	-4.9	-2.6	-1.4	-3.6	-6.4
Fiscal balance (% to GDP)	-12.4	-9.9	-9.4	-7.9	-9.3	-7.5	-9.9
Rate of increase in consumer price index (%)	12.8	12.2	15.9	9.6	9.4	4.7	6.2
Population (in thousand)	14,747	17,015	18,336	18,552	18,774	19,043	19,359
Population growth rate (%)	1.5	1.2	1.1	1.2	1.2	1.4	1.7

Note: Population figures given in the first two columns are for 1980 and 1990, respectively. Figures for 2000 are provisional

¹ According to the World Bank, in 1995-96, 25.5% of all households were poor where the monthly expenses per person were 791.67 rupees or less.

1.2 National development plan

Although no long-term development plan has been drawn up in Sri Lanka, in principle, the government has annually published the Public Investment Plan (PIP) since 1978, which presents mid-term economic outlook and public investment plan in the next five years. The PIP is a rolling plan, which is annually modified, responding to the results of each fiscal year and financial resources.

The problem of the PIP is that it does not usually include new projects, but reflects only those projects approved by donors or committed by the government for implementation. The main objective of the PIP is to secure the budget for the first fiscal year, so the plans' figures for the subsequent four years are usually inaccurate.

In 2001, National Planning Department (NPD) announced "Vision 2010," which outlines the development vision and development objective guidelines until 2010. At present, under the UNP administration, the Poverty Reduction Strategy is examined, on the basis of Vision 2010.

2. The ODA loan projects to Sri Lanka

2.1 Loan condition for Sri Lanka

Table 2-1 shows the total of the ODA loans by sector committed to projects in Sri Lanka as of the end of March 2001. Of the total of 85 projects (based on the number of loan agreements), totaling 515,204 million yen, 14 of commodity loans totals 66,032 million yen, 71 project loans accounts for 449,172 million yen. Project loans were used in a variety of sectors, mostly towards infrastructure developments. Especially, economic infrastructure of transportation, electric power and telecommunications sectors has large shares. The total amount of the three sectors mentioned above accounts for 73% of the aggregate amount of project loans.

The ODA loans to Sri Lanka began in 1976, focusing on commodity loans to provide a financial support for its international balance of payments. In the 1980s, the proportion of project loans provided to economic infrastructures such as transportation, electric power, telecommunications, and irrigation. This resulted from the idea that the ODA loan was to be provided to infrastructures that had been considered absolutely insufficient, so that the government, which had changed in 1977, could promote economic reforms including governmental deregulation policies, and to achieve high growth. In the 1990s, a wide range of sectors such as social and environmental sectors were covered by the ODA loans in addition to economic infrastructure developments.

Since 1993, JBIC has been the largest donor to Sri Lanka. Recently, the amount provided by JBIC has been more than the total amount by both the World Bank and Asian Development Bank (ADB).

2.2 Priority areas of economic assistance to Sri Lanka

According to the Ministry of Foreign Affairs' Policies on the ODA in Sri Lanka, the five priority areas of economic assistance are as follows. (1) development and improvement of economic infrastructure; (2) development of mining and manufacturing industries; (3) development of agriculture, forestry and fisheries; (4) human resources development; and (5) improvement of health and medical services. In addition, the assistance on the environment has been recently emphasized.

In contrast, three sectors given particular emphasis in the ODA loan are: (1) development and improvement of economic infrastructure (2) industrial development and (3) social development programs where poor people are the direct beneficiaries.

Financial assistance and technical cooperation for constructing economic infrastructures, particularly in road, electric power, telecommunications and port sectors, will be necessary in the future. Issues in industrial development include support for small and medium enterprises and for agriculture and fisheries. Moreover, since the increased disparities of earnings accompanied with economic growth, it is crucial to provide support for social development programs such as residential environment attained by water supply and sewerage projects where poor people are direct beneficiaries.

Table 2-1: The total of the ODA loans to Sri Lanka by sector (as of the end of March 2001)

Type of industry	Number of projects	Approved loan amount (million yen)	Composition ratio (%)	Composition ratio within project loans (%)
Transportation	24	176,264	34.2	39.2
Roads	7	45,542	8.3	9.5
Bridges	1	2,929	0.6	0.7
Railways	2	17,359	3.4	3.9
Airports	2	22,584	4.4	5.0
Ports	11	85,050	16.5	18.9
Maritime transportation	1	5,800	1.1	1.3
Mining and Manufacturing	5	20,309	3.9	4.5
Manufacturing	4	16,798	3.3	3.7
Mining	1	3,511	0.7	0.8
Social services	12	56,597	11.0	12.6
Water supply, sewerage and sanitation	6	31,677	6.1	7.1
Urban and rural community infrastructure	5	23,412	4.5	5.2
Public health and medicine	1	1,508	0.3	0.3
Telecommunications	6	56,771	11.0	12.6
Electric power and gas	14	96,382	18.7	21.5
Transmission lines and distribution systems	6	22,250	4.3	5.0
Power plants	8	74,132	14.4	16.5
Agriculture, forestry and fisheries	1	4,076	0.8	0.9
Agriculture	1	4,076	0.8	0.9
Irrigation, flood control and land reclamation	9	38,773	7.5	8.6
Project loan total	71	449,172	87.2	100.0
Commodity loans, etc.	14	66,032	12.8	
Total	85	515,204	100.0	

3. Performance Analysis

3.1 Outline of reviewed projects

A table listing the project names, sectors, subsectors, dates of loan agreement (L/A), projects schedules, and evaluation dates has been included in the appendix.

The projects can be divided by sector as follows: 6 transportation projects, 3 irrigation/flood control/land reclamation projects, 2 telecommunications projects, 1 electric power/gas project and 1 social services project. There were five large projects, in which loan amounts exceed 10 billion yen. Of these projects, two ODA loan projects; the Port of Colombo Expansion Project and the Port of Colombo Extension Project were both implemented in four separate stages, receiving a total disbursed amount of about 52 billion yen.

Loan agreements (L/A) for 2 projects were signed in the 1970s, 3 in the first half of the 1980s, 5 in the second half of the 1980s, and 3 in the first half of the 1990s. In all cases, they were signed under the previous UNP administration.

3.2 Analysis of the five primary evaluation criteria

This section presents the performance analysis of each project, based on the ex-post evaluation report. The framework of the analysis is made up of the five evaluation criteria that are based on the Principles for Evaluation of Development Assistance adopted in 1991 by the Development Assistance Committee (DAC) of the Organization for Economic Co-operation and Development (OECD). The five criteria are the relevance, efficiency, effectiveness, impact, and sustainability of the project. In order to undertake detailed analyses in this review, the above five criteria have been divided as in Table 3-1 into subordinate levels called evaluation check items (23 in total). In the following, verification of each evaluation check criterion was conducted based on information in the evaluation reports, and a performance analysis was proceeded.

Table 3-1: The Five Evaluation Criteria and Evaluation Check Items

Project Relevance	Does the goal and the approach to the project match the priorities and policies of the target group, aid receiving country and the donor?
<u>A1. Consistency with Development Policy and Priority Issues</u>	Do the project goals and overall goals of this project match the development policies (including the national policy and master plan) and priority issues of the country or region in question?
<u>A2. Relevance of Project Scope</u>	Was the project plan (scope and approach) at the time of appraisal judged appropriate to achieve the overall and project goals?
<u>A3. Relevance of Project Scope Alterations</u>	In cases where project scope was altered after the project was implemented, were the alterations relevant?
<u>A4. Relevance of Project Goals at the Time of Evaluation</u>	In cases where terms and conditions were altered after the planning stage, are the project goals still valid at the present?
Efficiency of Implementation	Was the impact appropriate and achieved as planned in terms of quality, quantity and timing? Was the method used the most efficient in regard to output?
<u>B1. Completeness of Output</u>	Was the output (project results) completed as planned?
<u>B2. Implementation Schedule Efficiency</u>	Were there any problems in the project that caused the implementation schedule to exceed original plans?
<u>B3. Project Cost Efficiency</u>	Were there any problems in the project that caused the project costs to exceed original plans?
<u>B4. Project Implementation System</u>	Was the system appropriate for decision-making, monitoring and troubleshooting during the project?
Effectiveness	Achievement of Project Purpose
<u>C1. Output Utilization</u>	Is the output (project results) being used sufficiently? (Determined primarily using operation indicators. In cases where there is no planned value, sufficiency will be determined using absolute values.)
<u>C2. Project Goal Realization</u>	Were the direct effectiveness of the project sufficiently realized, and were project goals sufficiently achieved? (Determined primarily using the effect indicators. When there is no planned value, sufficiency will be determined using absolute values)
<u>C3. Achievement of EIRR</u>	Is the Economic Internal Rate of Return sufficient when compared with initial project values?
<u>C4. Effect of Technical Assistance</u>	Were the training and technological instruction component effects sufficiently realized?
Impact	Was the intended overall goal of the project achieved? Direct, indirect and subordinate results in terms of technical, economical, socio-cultural, institutional and environmental aspects.
<u>D1. Contribution to Overall Goal Achievement</u>	To what level were the original overall goals of the plan achieved, and to what extent did the project contribute to their realization.
<u>D2. Impact on Policy and Institutional System</u>	What impact did the project have upon development policy of the country in question and the systems of the sector in question? Was the impact positive or negative?
<u>D3. Socio-Economic Impact</u>	What kind of impact was there on the regional society and economy? Was the impact positive or negative?
<u>D4. Impact on Technology</u>	What contribution did the project make to technological innovation and improvement in the country in question?
<u>D5. Impact on Natural Environment</u>	What impact was there on the regional environment? Was the impact positive or negative?

<u>D6. Resident Relocation and Land Acquisition</u>	What impact was there on regional society in terms of resident relocation and land acquisition?
Sustainability	After completion of aid, to what extent will the agencies and organizations of the counterpart country be able to sustain the output and effects of the project?
<u>E1. Output Condition</u>	Is the output (project effects) being maintained and operated appropriately? Is facility in good condition?
<u>E2. Operation and Maintenance System</u>	Are the systems, human resources (quality and quantity), work procedures (manuals) technology, maintenance facilities and equipment, and stock and procurement of spare parts for operation and maintenance sufficient?
<u>E3. Financial Resources for Operation and Maintenance</u>	Are sufficient financial resources available for appropriate operation and maintenance? Are those resources expected to remain available in the future?
<u>E4. Continuation of Needs</u>	Is it expected that need for the project will continue in the future?
<u>E5. External Factors</u>	What external factors will have a major effect on project effects and sustainability (environment, government, policy, institutional systems, market, other related projects, etc.)? Is it expected that positive factors can be maintained in the future?

3.2.1 Relevance

In the report, the words “plan” and “overall goal” refer to the initial plan and the overall goal of the initial plan (in principal, at the time of appraisal), respectively. However, in cases where project revisions were approved during the implementation of the project, they refer to the revised plan and objectives. This definition will be used throughout this document as far as it is specially noticed.

(1) Consistency with Development Policy and Priority issues

11 of the 13 projects were relevant to development policies and priority issues. Concerning the two remaining projects, the underlying development policy was not referred in the ex-post evaluation reports.

As mentioned previously, Sri Lanka does not draw up mid-term and long-term national development plans. The five-year Public Investment Plans (PIP), which are announced annually, are not strategic. Thus, the consistency of the evaluated projects is judged mainly from the development plans of each sector, and continuity with previously implemented policies. For example, the Minipe and Nagadieepa Irrigation Rehabilitation Project, was implemented, targeting the area adopted in the primary plan, the Integrated Management of Major Irrigation Schemes, and thus it was deemed to be consistent with governmental policies. Also, the Telecommunication Network Expansion Project was developed in accordance with the Sri Lankan Telecommunication Development Plan (1962 – 1985).

(2) Relevance of project scope

4 of the 13 projects were deemed to have had generally good project scopes established in the planning stage, but Concerns were noted for other two projects. There was insufficient information to judge the relevance of project scope for the remaining 7 projects.

In the Telecommunication Network Expansion Project, sufficient time was not taken to the appraisal, which resulted in significant changes in project scope during the implementation. In the Greater Colombo Flood Control and Environment Improvement Project that develops the river systems of the greater Colombo metropolitan area, relocates residents in Shanties, and improves their new residential areas, since the needs of those relocated were not completely understood, the contents of support to relocated citizens during the implementation were added to the project scope.

(3) Relevance of project scope

While there were some alternations of plans and/or designs in 12 of the 13 projects, all of the

changes were considered highly relevant².

There were a variety of reasons for the changes, including public peace or weather conditions, as well as flexible response to cost fluctuations, inadequate performance of subcontracting private companies, and accommodating changes of the demand. Nevertheless, all of the changes were required and appropriate. It became necessary to change the plans in the Telecommunication Network Expansion Project, and the Greater Colombo Flood Control and Environment Improvement Project because of an inadequate understanding of the demand in the planning stage.

(4) Relevance of project goals at the time of evaluation

At the time of evaluation, the project objectives in 11 of the projects were considered to be still relevant. Two of the projects did not have enough information to know the relevance.

More specifically, the project objectives at the time of evaluation, most of whose objectives were the development of the economic infrastructures, such as transportation, electric power and the telecommunications systems, were considered relevant and necessary.

² Although there were clearly cases where manifestations of project effectiveness was inhibited, such as in the Transmission System Augmentation And Development Project, where worsening civil conditions made it necessary to significantly reduce the project scope, in situations such as this, revisions were deemed as relevant due to forces beyond anyone's control.

3.2.2 Efficiency of implementation

(1) Completeness of output

All of the projects achieved their planned outputs.

(2) Implementation schedule efficiency

Although construction schedule was delayed in a certain extent in all of the 13 projects, which has been a major problem when implementing the ODA loan projects in Sri Lanka, 4 of these projects were completed with more than three years' delays. The reason for most of delays was that it took time required for procurement procedures, which caused delays in starting construction. Construction delays were caused by worsening public peace, as was seen in the Colombo International Airport Development Project.

The causes of delays in the four projects that were more than three years behind schedule are as follows.

- Mahaweli Development Project

The tender procedures of the executing agency were largely delayed, which was one reason for construction delays. Engineering works were behind schedule for a variety of reasons, including the amount of time it took to conclude consultant and engineering contracts, abnormal amounts of rainfall, civil strife, insufficient construction materials, and a shortfall in the domestic funding.

- Minipe and Nagadieepa Irrigation Rehabilitation Project

1) As a result of problems in domestic public peace in the latter part of the 1980s, field surveys and detailed planning had to be postponed several times, causing delays to the start of construction. 2) Because bidders for a portion of the construction work did not meet standards, the tender process had to be held again.

- Road Maintenance and Rehabilitation Project

The procurement of funds, equipment and materials was behind schedule as a consequence of the executing agency taking a long time to approve changes in the types and amounts of equipment and materials.

- Transmission System Augmentation and Development Project

Worsening public peace in the country, delays in land acquisition and delays by contractors.

(3) Project cost efficiency

In 9 projects; 70% of the 13 projects, the cost (total project cost in foreign currency) fell within that of the planned or exceeded by 10% or less.

Cost overruns occurred by more than 50% in both the Colombo International Airport

Development Project and the Transmission System Augmentation and Development Project. In the former project, the reason was that the contract cost increased, due to an expansion of project scope and construction delays. In the latter project, domestic currency costs reached fourteen times as much as those estimated during the planning phase³.

(4) Project implementation system

Judging from the ex-post evaluation reports, four of the projects were deemed to be good overall, and two projects had relatively obvious problems (It was impossible for two projects to judge). The two problematic projects were the Inginmitiya Irrigation Dam Project and the Transmission System Augmentation and Development Project. In both cases, the executing agency did not have enough engineers, which was a bottleneck in smooth project implementation.

Generally, the delegation of authority to the executing agencies was poor and government involvement was high, causing low ownership of the executing agencies, which resulted in a lack of incentive in training their workforce. However, based on new governmental guidelines announced in January 2001, measures to deal with this have been taken, resulting in increased delegation of authority to the executing agencies.

³ However, detailed data regarding domestic costs is unclear; thus the information is reported as not reliable.

3.2.3 Effectiveness

(1) Output utilization

Eleven of the 13 projects recorded actual performance figures that met or exceeded the plan in their operational indicators. Or, since the absolute figure for the operational indicators themselves were improved, the projects were judged to be fully utilized.

In the Colombo International Airport Development Project, which was deemed not to be high utilized, the number of passengers and volume of freight handled (in 1990) were much less than the planned figures. This was primarily caused by the decrease of tourists, due to worsening public peace. In the Road Maintenance and Rehabilitation Project, no data regarding the status of road utilization was given in the ex-post evaluation reports as an operational indicator.

(2) Project goal realization

The degree of achievement of project objectives was ascertained by examining the performance of effect indicators, as well as qualitative remarks contained in the ex-post evaluation reports. Many of the projects attained nearly all of their objectives, with ten of the thirteen being deemed to have sufficiently met objectives.

In the Colombo International Airport Development Project, since aviation demand itself fell far short of predictions, it was deemed that the project objectives were not adequately attained in the ex-post evaluation. In the Telecommunication Network Expansion Project, the facilities were destroyed due to the deterioration in public peace, not allowing a part of the targeted six cities to improve telephone services.

(3) Achievement of IRR

IRR (either economic internal rate of return (EIRR) or financial internal rate of return (FIRR)) was calculated for 10 projects. The actual performance figures (recalculated figures) for 5 of these projects met or exceeded 70% of the planned figures⁴, meaning that most of the quantitative outcome were attained. The IRRs of the remaining five projects were lower.

Three projects that were related to the transportation sector (airports, maritime transportation, and railways) didn't achieve 30% of estimated IRRs⁵. In the airport project, the reason was insufficient demand (causing decreased revenues), while for the maritime transportation and railway projects the reason was a lack of managerial ability on the part of the operating agencies⁶.

⁴ For example, if the planned EIRR was 20.0%, the actual figure was 14.0% or higher.

⁵ The Colombo International Airport Development Project, the Maritime Transportation Reinforcement Project, and the Commuter Train Improvement Project

⁶ In this assessment, the credibility and relevance (calculation method, component terms, etc) of the IRR calculation methods were not questioned.

(4) Effect of technical assistance (T/A)

In 11 of the 13 projects, technical instruction wasn't included in their scope or the effects were not mentioned in the ex-post evaluation reports. Therefore, only two projects were examined in this section: the Mahaweli Development Project and the Road Maintenance and Rehabilitation Project. Both projects were deemed to have shown the effects. In the former project, smooth technical transfers to the executing agency and farmers' organizations brought great outcomes such as establishment of operation and maintenance of the irrigation distributary canals by farmers' organizations, increased farmers' income due to the rise in agricultural production of rice, strengthening the connection of farmers due to collaboration and group purchasing, and building up leaderships. In the latter project, many engineers and operators were trained through the implementation.

3.2.4 Impact

(1) Contribution to overall goal achievement

Impact was evaluated from two points: to what extent overall goal was achieved, and how the projects contributed to the goal. However, overall goal was not clearly determined for nearly half of the projects (6), thus the impact of only 7 projects could be evaluated. Of the seven projects, 5 were deemed to have greatly contributed to the achievement of overall goal, while 2 projects revealed only small contributions.

For the projects that greatly contributed, the overall goal itself was highly achieved, and each project was considered to have greatly contributed to the goal. For example, the overall goal in the Mahaweli Development Project (System C) was to create macroeconomic stability and to improve the national income, and the project played a large role in achieving these goals through agricultural development. In Colombo Port Expansion Project, the overall goal was to acquire foreign currency and promote domestic industries. Foreign currencies obtained from port operations are very important to Sri Lanka's economy. Moreover, rationalization of the distribution system by containerization has contributed to promoting Sri Lanka's domestic industries.

In the Colombo Port Extension Project whose achievement of overall goal was relatively low, the improvement of safety of port operations, which was one of the overall goals, was not confirmed⁷.

(2) Impact on policy and institutional system

Almost none of the ex-post evaluation reports described evaluation check criteria for this item as well as the impacts mentioned in the following. Although it was possible that impacts (secondary effects of the projects) were not appeared, no clear definition of the concept of impact at the time of evaluation could prevent evaluators from analyzing the project's impact in the evaluation report. Therefore, the impacts will be interpreted as unclear in this review.

Of the 13 projects, only the Mahaweli Development Project (System C) referred to the impact on policy and institutional system. In the project, the possible impact was the progress of participatory management of farmers.

(3) Socio-economic impact

For only 6 projects, impacts on society and economy were mentioned in the ex-post evaluation reports contained any reference to. All the impacts were positive, consisting of four projects of job

⁷ Unless specially mentioned, the contribution to overall goals as well as all other impacts is described at the time of evaluation.

creation⁸, and one each of industrial development⁹, stability of people's lives¹⁰, increased participation of women in society¹¹, and improvement of the living environment¹².

Undesirable impacts such as resident relocation and land acquisition, which will be described later, were not reported.

(4) Impact on technology

Transfers of technology and knowhow probably occurred through the project implementation, even if the transfers were not the project objectives. However, as social and economic impacts, there are few projects where transfers are clearly specified in the ex-post evaluation reports. Five projects showed positive effects.

In the Colombo Port Expansion Project and the Colombo Port Extension Project, the project implementation through the transfer of technology to the Sri Lankan Ports Authority, the counterpart of these projects, enabled the authority to independently draw up the design and tender documents for berth construction work at other ports.

In the Greater Colombo Telecommunication Network Improvement Project, before the implementation, the communication network of the greater metropolitan area was overconcentrated. By upgrading a part of switching stations to key stations and independent stations, the hierarchical system was separated. This was the first step to establish a more efficient transmission system in order to handle the increasing telephone traffic demand.

(5) Impact on natural environment

Of the 5 projects where impacts on natural environment were mentioned, 2 were reported to have had a negative effect.

In the Mahaweli Development Project (System C), according to on-site interview survey, at the time of evaluation, a decrease in forests and negative impact on wildlife were reported.. To respond to this fact, as a part of the project, a protected forest area is being expanded and trees are being planted along roadsides.

(6) Resident relocation and land acquisition

There were 3 projects where resident relocation and land acquisition had occurred or had been mentioned in the ex-post evaluation. In the Inginmitiya Irrigation Dam Project, although there was the

⁸ The Inginmitiya Irrigation Dam Construction Project, the Mahaweli Development Project (System C), the Minipe and Nagadieepa Irrigation Rehabilitation Project, and the Port Of Colombo Expansion Project

⁹ The Transmission System Augmentation and Development Project

¹⁰ The Transmission System Augmentation and Development Project

¹¹ The Mahaweli Development Project (System C)

¹² The Greater Colombo Flood Control and Environment Improvement Project

fact of the resident relocation, it was unclear whether the impact was either positive or negative.

The large-scale resettlement due to resident relocations in the Mahaweli Development Project (System C) was considered a great success. In order to solve the relocation smoothly, farmers who were forced to relocate, due to the construction of the dam in the upstream, were given priority to move to newly developed area. Approximately 37% of the relocated households, 7592 households were accepted in System C, the ODA loan project, and the ratio of people who stay was high.

The large-scale relocation that occurred in the Greater Colombo Flood Control and Environment Improvement Project was an essential part of the project scope. Although it was worried that schedule for the relocation was more delayed than the planned, and that there were some citizens who refused the relocation at the time of evaluation, almost no forced evacuation was observed through resident relocation. Moreover, the residents' standard of living environment of those who transferred has obviously improved.

3.2.5 Sustainability

An examination of the Colombo Port Expansion Project and the Colombo Port Extension Project, based on all the criteria, reveals that the sustainability of both projects is outstanding.

(1) Output condition

In 7 of the whole projects, the current state of output (physical condition) is satisfactory, while there were some problems, or, due to insufficient information, it was impossible to evaluate in the remaining projects. In 3 projects with little concerns¹³, some problems were observed such as the deterioration in a part of the facilities (the outputs of those projects)¹⁴.

Problems were clearly indicated in the Telecommunication Network Expansion Project. After the project completion, a riot broke out in the northern part of Sri Lanka. In Jaffna and Trincomalee, two of six cities targeted for projects, telephone exchanges and long-distance lines were severely damaged, rendering them unusable for almost all the facilities. Although telephone services were reestablished by installing a new exchange in Trincomalee, at the time of project evaluation, only hospitals and universities had telephone services. Thus, the aftereffects of the damage were prolonged in Jaffna..

(2) Operation and maintenance system

Of the whole 13 projects, there were 5 projects whose operation and maintenance systems were considered as satisfactory. Concerns were noted for other 5 projects, while it was impossible to assess the sustainability of the remaining 3 projects, due to insufficient information.

Farmer organizations have been created to supervise the canals in the Mahaweli Development Project (System C). However, due to problems resulting from the top-down style organization structure and financial problems, the operation and maintenance system was not established.

. In the Minipe and Nagadieepa Irrigation Rehabilitation Project, another irrigation project, the transfer of operation and maintenance control of feeder canals to farmer organizations was proceeding, but not yet complete.

(3) Financial resources

Four projects, which account for a third of all projects, were judged as being capable of securing the financial resources needed for operation and maintenance. Two projects had major resource problems, while five others also had resource problems in some way or other.

The projects facing difficulties were the Maritime Transportation Reinforcement Project and the

¹³ The Mahaweli Development Project (System C), the Commuter Train Improvement Project, and the Greater Colombo Flood Control and Environment Improvement Project

¹⁴ Unless otherwise indicated, references to the sustainability, including the current situation of the output are described at the time of evaluation.

Suburb Transport Railroad Car Renewal Project. Financial conditions of the operating agencies (Ceylon Shipping Corporation and Sri Lanka National Railway) being extremely poor, they receive vast government aid to cover their deficits, which arouse serious concerns regarding the projects' sustainability.

(4) Continuation of needs

Of the 13 projects, 10 were considered to have sufficient continuity of needs. It is observed that at the point of evaluation, demand for projects whose sectors mostly center on economic infrastructure was satisfactory, and further implementation of projects is needed in the future. The reports for 3 projects either made no mention of this item, or information was insufficient.

(5) External factors

12 project reports contained descriptions of external factors such as government policies, environmental conditions, the socio-economic environment, and related projects. The majority of them noted positive improvements in external factors such as government support, having a beneficial impact on the project effectiveness. However, concern for three projects existed at the point of evaluation. In the Mahaweli Development Project (System C), it was judged that preliminaries of external factors regarding agricultural finance and agricultural marketing were insufficient. In the Road Maintenance and Rehabilitation Project, the road administration of the government was in a state of flux over the responsibility for the project's operation and maintenance. In the Telecommunication Network Expansion Project, vulnerableness of the Sri Lanka Telecom Authority (SLTA), a government department in charge of policy and regulations of this sector, was indicated in comparison to the privatized Sri Lanka Telecom (SLTA)

3.3 Issues unique to Sri Lanka

There are two issues unique to Sri Lanka and that must be heeded when evaluating Japanese ODA loan projects. The first is security problems caused by ethnic strife, and the second is its complicated procurement procedures. This section will present a broad overview of effects that these issues influenced on the implementation of projects.

(1) Security problems

A civil war arising from ethnic strife has persisted since 1983, and just until recently, combat occurred constantly within northern and eastern parts of the country. Terrorist bombing has been ongoing in the greater Colombo metropolitan area and other cities. In addition, accompanying the aggravation of the civil war, violence stemming from ethnic feuds broke out. JBIC does not provide financial support to regions in dispute, but the political and security instability that is brought on by these hostilities and terrorist actions frequently cause plan revisions and construction delays. They also have negative repercussions on project implementation, as well as on the operation and maintenance of completed facilities.

(2) Procurement procedures

In Sri Lanka project implementation is often delayed by time lags caused by procurement procedures, which results in a low implementation ratio of ODA loan projects. The chief cause for such delays is that after the change of the government regime in 1994, procurement procedures were made more complex in order to maintain transparency with projects ordered from the government. (i.e., to prevent corruption). Thus, there was delay in starting projects. With tenders above a certain amount, a Tender Evaluation Committee (TEC); composed of implementing agencies and others and a Cabinet Appointed Tender Board (CATB); made up of ministers and undersecretaries, were established for procurement procedures. In addition, most procurement requests required approval of the Cabinet. These formalities were required at all stages of procurement, causing project delays and the need of a long time for approval.

However, aid agencies such as JBIC have lobbied for change, achieving the establishment of the CATB as a permanent organization and a revision of procurement guidelines. Accordingly, procurement procedures have become simplified to a certain degree, although it is hoped that there will be further improvement in the future.

(3) Effect on projects

Table 3-2 presents the consequences of the worsening civil conditions and whether or not the procurement procedures established by the Sri Lankan government caused delays in project

construction for the reviewed 13 projects.

There are seven cases where worsening civil conditions were one of the causes for construction delays. Thus, it can be inferred that in implementing projects in Sri Lanka, the deterioration in civil conditions must be considered as a risk factor. There were only two cases where construction delays were explicitly stated as the reason for increased project costs. However, it is easily surmised that delays of construction causes greater costs. Therefore, it is quite possible that more projects were affected negatively regarding project costs. In addition, as mentioned in the previous section, two of the project sites themselves became targets of terrorist bombings and/or facilities constructed by the project were destroyed. Thus, deteriorating civil conditions had a direct, negative impact on the manifestation of project effects. .

Meanwhile, five projects suffered delays as a result of the time required for Sri Lankan governmental procurement procedures. The L/As for all projects under review here were concluded with the Sri Lankan government prior to the 1994 change in administration, and six projects were actually completed before 1994. Even so, bungling by the implementing agency or time required for procurement request approval caused delays in construction. Following the change in political administration, the number of projects that experienced these problems increased.

Table 3-4 Consequences of worsening civil conditions and whether procurement procedures caused delays

Project Name	Year of L/A	Construction Schedule	Actual Construction	Effects of worsening civil conditions	Delays caused by procurement procedures
Inginmitiya Irrigation Dam Project	1978	May 1978 – December 1983	March 1979 – December 1986		
Mahaweli Development Project (System C) (II)	1988	December 1980 – December 1991*	December 1980 – May 1995*	First phase of construction delayed, increased project costs	
Minipe and Nagadieepa Irrigation Rehabilitation Project	1988	November 1989 – October 1994	April 1992 – September 1998	Start of construction delayed	
Port of Colombo Extension Project (I) – (IV)	1980	January 1981 – September 1991	May 1981 – September 1993		
Port of Colombo Expansion Project (I) – (IV)	1990	August 1989 – May 1996	December 1989 – December 1998		Yes
Colombo International Airport Development Project	1983	August 1983 – August 1986	July 1984 – October 1988	Delayed construction, drop in project effectiveness	Yes
Maritime Transportation Reinforcement Project	1980	August 1981 – June 1983	August 1981 – June 1983		
Commuter Train Improvement Project	1988	March 1989 – June 1990	November 1988 – April 1991		
Road Maintenance and Rehabilitation Project	1988	March 1988 – December 1992	August 1993 – September 1998		
Transmission System Augmentation and Development Project (II)	1993	April 1988 – March 1991*	February 1993 – December 1998*	First phase of construction delayed, increased project costs, revised project scope	
Telecommunication Network Expansion Project	1978	January 1979 – December 1981	December 1980 – March 1983	Drop in project effectiveness	Yes
Greater Colombo Telecommunication Network Improvement Project (I), (II)	1985	August 1986 – June 1995	November 1987 – August 1996	Delayed construction	Yes
Greater Colombo Flood Control and Environment Improvement Project	1992	April 1993 – January 1997	October 1993 – March 1998	Delayed construction	Yes

Note: In cases where there were multiple L/A, the year of the first loan agreement was used.

4. Conclusions

4.1 Performance analysis overview

Performance of the majority of the 13 projects surveyed was essentially satisfactory. Among these, some achieved excellent results, while others proved disappointing; no dismal failures, however, were reported.

Successful projects can be observed in the port, irrigation, and communications sectors, and all of them had in common the fact that they were long-term projects continued over several stages. Since these long-term projects were well-suited to changing needs, implementation with a view to the long rather than short term was possible.

On the down side, a number of projects in the airport, electric power, and communications sectors failed to yield the desired results, with poor efficiency and effectiveness affecting total performance. This is largely attributable, however, to deterioration in public security that was difficult to predict, and it can be inferred that performance would not have been as negative.

The following is a summary of evaluation findings, by the five major evaluation criteria, on performance for the 13 projects carried out in Sri Lanka subjected to evaluation.

(1) Relevance

Economic infrastructure building is a critical issue for Sri Lanka's industry base. The majority of projects, focused primarily on infrastructure were, therefore, considered highly relevant, and though most projects incurred some type of modification to scope, all changes to project planning were made appropriately according to needs.

(2) Efficiency

Project implementation in Sri Lanka tends to be plagued by delayed construction periods. All projects reviewed under the survey were delayed, with major reasons including complicated, inefficient procurement procedures on the Sri Lankan side as well as problems with public security.

The delays also had the effect of contributing to increased project costs. Additional hindrances included problems with the project executing agencies, i.e. lack of technical skill or insufficient autonomy stemming from lack of authority. As of January 2001, however, based on new official guidelines, authority is now being delegated to the executing agencies.

(3) Effectiveness

Satisfactory results were reported for many projects typical to the port and irrigation sectors, with output and usage as well as the quantitative indicator IRR, essentially reaching desired levels. In the irrigation sector, technology transfer was effectively carried out with regard to the executing agencies and agricultural associations, resulting in the establishment of operations and maintenance systems, increased farming household incomes due to enhanced production, and enhanced coordination

between farmers. On the down side, an airport project did not achieve the desired results, but this was largely attributed to unpredictable external causes such as the destruction of airport facilities by terrorists, as well as weak demand for airport services stemming from deteriorating public security.

Impact

Level of impact is difficult to ascertain due to lack of data. With regard to irrigation projects, however, positive impact on policy and organizational aspects, in the form of the promotion of participation-based management of facilities by farmers, was conspicuous. In addition, roughly half of the projects were reported to have positively impacted project areas in terms of employment creation, promotion of industry, stability, women's participation, and improved living environment, amongst other socioeconomic aspects.

Technology transfer was carried out under port projects to enable the design and bidding procedures for future ports to be handled by local authorities. As for environmental impact, it was indicated that a loss of forest resources stemmed from an irrigation project. This has been balanced somewhat by the establishment of protected forest areas as well as urban tree-planting activities. The same irrigation project is also seen as a successful example of large-scale relocation.

(4) Sustainability

In terms of sustainability, physical status of the facilities for half of the projects was reported satisfactory. Problematic projects were particularly conspicuous in the northern part of the country, where external factors such as political disturbances affected performance. In addition, half of the projects demonstrated problems in regard to the organizational and financial resources required for maintenance and operations, a factor considered critical to sustainability.

Economic infrastructure development is considered crucial to Sri Lanka in the future due to ongoing need. Port projects for the capital area are considered excellent all around in terms of sustainability.

4.2 Lessons Learned / Recommendations

(1) Continuous assistance to priority sectors, with a long-term view

As can be observed with the series of port projects conducted in Colombo, the provision of continuous, concentrated assistance for a specified period of time is linked to efficient, sustainable project effect. Continuous assistance enables greater flexibility with regard to changing needs, and facilitates mutually potentiating project effect.

Projects implemented to date in Sri Lanka have been consistent with the country's development plans, and therefore considered extremely relevant. However, to ensure even greater effect, assistance should be carried out aggressively on a concentrated, continuous basis to priority sectors with a view to long term prospects.

(2) Coordination with other donors

The origin of the Colombo Port projects lies with a master plan implemented by JICA. Following project implementation, JICA carried out development studies, making revisions and additions based on the status of ODA loan-sponsored development, thus forming the basis for future ODA loan projects. This process demonstrates how greater coordination with JICA can significantly contribute to project effectiveness.

Other notably successful cases in Sri Lanka have involved cooperation with JICA and JICA's Japan Overseas Cooperation Volunteers (JOCV), the results of which point to the need for an even greater level of cooperation in the future. Also, technology transfer is considered crucial to the success of ODA loan projects in order to ensure efficiency of assistance over the long term, and coordinated efforts with JICA represents one extremely effective option in this regard.

Still closer coordination with other major donors including the World Bank, the Asian Development Bank (ADB), and so on is expected to enhance the efficiency of assistance on both the Sri Lankan and donor sides.

(2) Realistic countermeasures against implementation delays

Delayed implementation has become the norm for projects implemented in Sri Lanka. To resolve this hurdle, JBIC should coordinate with other donors to call for system improvements (simplification of procurement procedures, and so on) on the Sri Lankan side. At the same time, risk should be properly considered at each of the planning stages with a view to establishing more realistic implementation periods. Finally, an element of flexibility should be incorporated into the implementation process to the greatest possible extent.

Reviewed Projects (Sri Lanka)

Project Name	Sector	L/A
TRANSMISSION SYSTEM AUGMENTATION AND DEVELOPMENT PROJECT(II)	Electric Power/Gas	Aug-93
ROAD MAINTENANCE AND REHABILITATION PROJECT	Transportation	Jul-88
COMMUTER TRAIN IMPROVEMENT PROJECT	Transportation	Nov-88
COLOMBO INTERNATIONAL AIRPORT DEVELOPMENT PROJECT	Transportation	Apr-83
PORT OF COLOMBO EXPANSION PROJECT	Transportation	Oct-80~May-85
PORT OF COLOMBO EXTENSION PROJECT (I)	Transportation	Oct-87~ Aug-93
MARITIME TRANSPORTATION REINFORCEMENT PROJECT	Transportation	Apr-80
TELECOMMUNICATION NETWORK EXPANSION PROJECT	Telecommunications	Mar-78
GREATER COLOMBO TELECOMMUNICATION NETWORK IMPROVEMENT PROJECT	Telecommunications	May-85
THE GREATER COLOMBO TELECOMMUNICATIONS NETWORK IMPROVEMENT PROJECT	Telecommunications	Mar-91
INGINIMITIYA IRRIGATION DAM PROJECT	Irrigation/Flood Control	Aug-78
MAHAWELI DEVELOPMENT PROJECT (SYSTEM C) (2)	Irrigation/Flood Control	May-88
MINIPE AND NAGADEEPA IRRIGATION REHABILITATION PROJECT	Irrigation/Flood Control	Jul-88
GREATER COLOMBO FLOOD CONTROL AND ENVIRONMENT IMPROVEMENT PROJECT	Social Services	Mar-92

The first Loan agreement year/month and the last Loan agreement year/month are described for multi-phased projects, etc.