Report on the Review of

Implementation of JICA Guidelines for Environmental and Social Considerations

January 2008

Japan International Cooperation Agency (JICA)

Table of Contents

1. Objectives and Review Methods

1.1 Background and Objective of the Review

(1) Background

JICA introduced the “Environmental and Social Considerations Guidelines” (hereinafter, “the Guidelines”) on April 1, 2004. By outlining JICA’s responsibilities and procedures related to environmental and social considerations and identifying the requirements of recipient governments, the Guidelines encourage recipient governments to take into consideration the appropriate environmental and social factors. Additionally, they ensure that JICA’s support for and examination of environmental and social considerations are conducted accordingly. Basic principles of the Guidelines require JICA to support the recipient governments by offering cooperation projects into which JICA incorporates appropriate environmental and social considerations so as to avoid or minimize development projects’ adverse impacts on the environment and local communities. JICA thus promotes sustainable development in developing countries.

Paragraph 2.10 of the Guidelines, on “Implementation and Review of the Guidelines,” stipulates the following: [*JICA verifies the status of implementation of the Guidelines, and based on its findings, conducts a comprehensive review of them within five years of their enforcement. Revisions are made as needed*].

On the other hand, JICA and Japan Bank for International Cooperation (sector of Overseas Economic Cooperation Operations) will be integrated into the new JICA on October 1, 2008. For the new JICA, environmental guidelines shall be consolidated into a single framework in consideration of the characteristics of each aid scheme in order to provide the appropriate environmental and social considerations in the implementation of ODA projects and to clarify environmental procedures required of developing countries.

Based on the above situation, JICA has decided to conduct a review of the status of implementation of the Guidelines at this time, although four years have not yet passed since the enforcement of the Guidelines on April 1, 2004.

(2) Objective

The objective of reviewing the status of implementation of the Guidelines is to examine how the various procedures and processes outlined in the Guidelines are actually implemented by JICA.

1.2 Method of the Review and Description

(1) Method of the Review

The status of implementation was reviewed by studying the project reports prepared before March 31, 2007 and the relevant information that followed. A consulting company examined cooperation project reports and results of internal reviews (hereinafter, “projects reviewed”). A total of 60 projects were selected for review from those listed in section 1.3 (see below). They included 11 Category A projects (all projects completed by March 31, 2007) and 49 projects randomly selected from Category B, so that all sectors are represented.

Breakdowns of the 60 projects are shown below in Table 1-1.

Table 1-1 Breakdown of projects reviewed

	Category A	Category B
Development study	9	34
Preliminary study of grant aid project	2	12
Technical cooperation project	0	3
Total	11	49

(2) Description

This report discusses the status of implementation of the Guidelines in terms of methods, trends, and case studies in essentially the same order of the actual Guidelines. Citations from the Guidelines are indicated by brackets ([ ]).

Abbreviations used in this report are as follows.

D/D: Detailed Design

EIA: Environmental Impact Assessment

F/S: Feasibility Study

IEE: Initial Environmental Examination

M/P: Master Plan

TOR: Terms of Reference

1.3 Implementation Record

The table below shows the numbers of projects that were completed up to and ongoing on March 31, 2007, according to scheme and category. Application of the Guidelines began with projects requested in FY2004. For projects requested prior to April 1, 2004, the Guidelines were applied later where possible. Therefore, the figures in the tables include projects that were requested prior to April 1, 2004.

In terms of types of projects, 60% of the projects were development studies. They constituted a particularly large part of Category A projects. Technical cooperation projects were few in number.

Table 1-2 Numbers of projects by scheme and category

	Category A	Category B
Development study	26	149
Preliminary study of grant aid project	4	99
Technical cooperation project	0	20
Total	30	268

There is no accurate record of the number of Category C projects which were requested prior to the enforcement of the Guidelines (April 1, 2004), but the table below includes the number of Category C projects, as a reference of project trends.

Table 1-3 Numbers of projects by scheme and category (projects selected in FY2005)

	Category A	Category B	Category C
Development study	3	26	34
Preliminary study of grant aid project	1	39	86
Technical cooperation project	0	3	219
Total	4	68	339

Table 1-4 Numbers of projects by scheme and category (projects selected in FY2006)

	Category A	Category B	Category C
Development study	4	27	7
Preliminary study of grant aid project	1	22	44
Technical cooperation project	0	7	175
Total	5	56	226

The breakdown of the projects in Table 1-2 by region and sector shows that in terms of region, about half the projects were implemented in Asia, followed by Africa, Central and South America, and the Middle East. In terms of sector, a large portion of the projects were in the transportation and water resources sectors. Note, however, that the sectoral breakdown varies according to scheme.

Table 1-5 Numbers of projects by region

	Development study A	Development study B	Subtotal	Preliminary study of grant aid project A	Preliminary study of grant aid project B	Subtotal	Technical cooperation project A	Technical cooperation project B	Subtotal	Total
Asia	24	75	99	3	38	41	0	7	7	147
Oceania	0	1	1	0	13	13	0	5	5	19
C. & S. America	1	20	21	0	15	15	0	4	4	40
Middle East	1	26	27	1	7	8	0	2	2	37
Africa	0	22	22	0	26	26	0	2	2	50
Europe	0	5	5	0	0	0	0	0	0	5
Total	26	149	175	4	99	103	0	20	20	298

Fig. 1-1 Numbers of projects by region

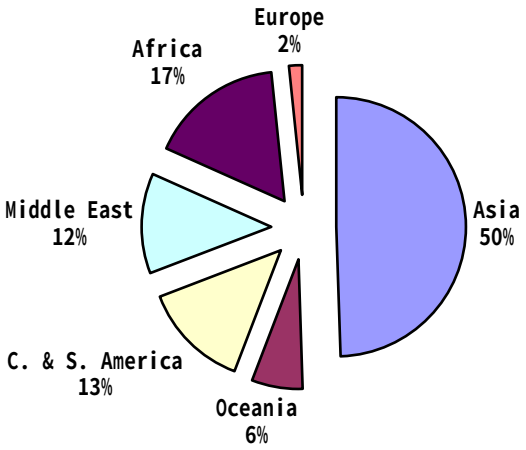


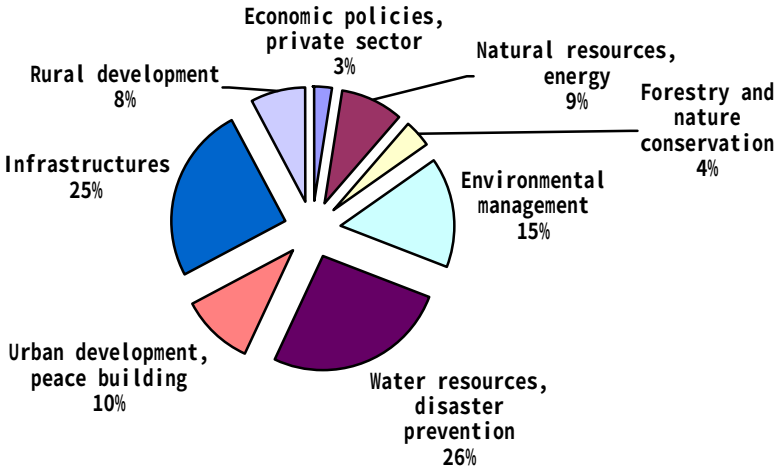
Table 1-6 Numbers of projects by sector (preliminary studies of grant aid projects)

	A	B	Total
Transportation, electric power, governance	1	51	52
Education, vocational training, healthcare	0	2	2
Water resources, environment, rural development	3	46	49
Total	4	99	103

Table 1-7 Numbers of projects by sector (development studies and technical cooperation projects)

	Development study A	Development study B	Subtotal	Technical cooperation project A	Technical cooperation project B	Subtotal	Total
Economic policies, private sector	0	4	4	0	1	1	5
Natural resources, energy	1	16	17	0	0	0	17
Forestry and nature conservation	0	3	3	0	5	5	8
Environmental management	2	17	19	0	11	11	30
Water resources, disaster prevention	5	45	50	0	1	1	51
Urban development, peace building	1	19	20	0	0	0	20
Infrastructures	17	31	48	0	1	1	49
Rural development	0	14	14	0	1	1	15
Total	26	149	175	0	20	20	195

Fig. 1-2 Numbers of projects by sector (development studies and technical cooperation projects)



2. Status of Implementation (Basic Matters)

2.1 Organizational Capacity of Environmental and Social Considerations

Paragraph 1.4 in the Guidelines contains the following paragraph: [(*7. JICA enhances organizational capacity.) JICA makes an effort to enhance the comprehensive capacity of organizations and operations to consider environmental and social factors appropriately and effectively at all times*]. JICA complies with this principle in the following manner:

(1) Implementation system

The department in charge of a project's implementation (a headquarters department or overseas office) is responsible for considering environmental and social factors for that project. The Environmental and Social Considerations Review Team in the Planning and Coordination Department is responsible for conducting an internal review of those efforts. It mainly examines the content of environmental and social considerations studies based on reports written during the implementation of projects.

In accordance with paragraph 2.4 in the Guidelines, JICA established the Advisory Council of Environmental and Social Considerations Review. The Environmental and Social Considerations Review Team serves as its secretariat.

JICA also installed an examiners' panel for objections in accordance with the *Modus Operandi* of the Objection System. Office of Audit serves as its secretariat.

Experts on matters related to environmental and social considerations were also appointed to the JICA Regional Support Office for Asia (located in Thailand), the JICA Cambodia Office, and the JICA Regional Support Office for Oceania (located in Fiji) to provide assistance in environmental and social considerations to the relevant countries.

(2) Training

1) Staff members

JICA provided its staff members with training courses on matters related to the Guidelines. Attendance for these courses is shown below in Table 2-1. A greater number of trainings were held in FY2004, as that was the year in which the Guidelines took effect.

Table 2-1 Staff attendance at training courses

Fiscal year	2004	2005	2006
Number of participants	491	193	141

2) Experts

JICA provided lectures on the Guidelines to JICA experts as part of their pre-dispatch training program. Attendance is shown in the table below.

Table 2-2 Attendance of experts at pre-dispatch training sessions

Fiscal year	2004	2005	2006
Number of participants	408	313	111

3) Consultants

JICA explained the requirements of the Guidelines to consultants selected to undertake Category A and B projects in order to ensure that the projects are implemented in line with the Guidelines.

4) Training course

JICA also offered training courses on environmental and social considerations for experts and consultants at the Institute for International Cooperation.

2.2 Responsibility of JICA

Relevant clause in the Guidelines

1.5 Responsibility of JICA

1. The recipient governments take the initiative in dealing with environmental and social considerations of their projects. However JICA supports and examines measures for environmental and social considerations that the recipient governments implement in the following ways which are responsive to the nature of such cooperation projects and are in accordance with the guidelines.
2. When requests for cooperation projects are made, JICA examines the contents with regard to environmental and social considerations and categorizes the proposed projects.

3. When JICA makes plans of projects, JICA prepares reports on environmental and social considerations studies in collaboration with host countries. JICA reviews the categorization if necessary and conducts scoping with information disclosure and stakeholder consultation.
4. JICA conducts monitoring during the implementation stage of technical cooperation projects. During this stage, it is necessary to consider environmental and social factors.
5. JICA conducts follow-up activities after cooperation projects are terminated.
6. JICA provides technical assistance to host countries through mutual collaborative work for environmental and social considerations studies.
7. JICA provides technical assistance regarding the enforcement of environmental impact assessment in host countries, in response to other requests.
8. JICA makes an effort to incorporate the concept of SEA into cooperation projects when taking part in the planning or program level rather than in the project level, or comprehensive studies like master plan studies. At the same time, JICA works with the recipient governments to take measures to address a wide range of measures for environmental and social considerations from an early stage.

(1) Responsibility of environmental and social considerations

In regard to the passage, [*When JICA makes plans of projects, JICA prepares reports on environmental and social considerations studies in collaboration with host country*], JICA's policy is to provide the necessary support based on the understanding that the host country is responsible for enforcing environmental and social considerations.

In development studies, for example: (i) a JICA study team conducts various preliminary work for environmental and social considerations studies, and allocates responsibilities to the counterparts of host country during various critical stages, or (ii) a JICA study team shares responsibilities with the counterparts depending on the individual work items.

(2) Technical assistance for environmental and social considerations

In some development study projects, there were cases where the study team actively

engaged in technical transfers and human resource development about environmental and social considerations during the project period. More specifically, they provided lectures and workshops on IEE/EIA and other environment-related legal systems, introduced case examples, and implemented tours of relevant sites[1].

In regard to the passage, [*JICA provides technical assistance regarding the enforcement of environmental impact assessment in host countries, in response to other requests*], there was an example in which JICA dispatched an individual expert[2].

(3) Environmental and social considerations in the early stages of projects

In master plan studies of development study projects, JICA adopts the SEA (Strategic Environmental Assessment) concept and conducts environmental and social consideration studies at the IEE study level (see section 4.2 of this report).

In a feasibility study of a development study project, JICA performed a comparative examination of whether to implement a certain project or select a different project (or not to implement any project) during the conceptual planning stage of the project[3].

(4) Others

Details of categorization are provided in section 3.5 in this report, scoping with information disclosure and public consultation in section 3.2, technical cooperation projects in section 4.4, and follow-up activities in section 4.5.

2.3 Requirements of Recipient Governments, and Covered Schemes

Relevant clause in the Guidelines
1.6 Requirements of the Recipient Governments
1. The recipient governments are required to incorporate the outcome of environmental and social considerations studies into their planning and decision-making process once they receive authorization for a project's implementation.
2. When JICA considers either the selection of proposed projects or the support for and examination of environmental and social considerations,

[1] "The Study on the Solid Waste Management for the Katmandu Valley in Kingdom of Nepal"
"The Feasibility Study and Implementation Support on the Cavite-Laguna (CALA) East-West National Road Project in the Republic of the Philippines"

[2] An expert in EIA was dispatched to the Republic of the Fiji Islands.

[3] "The Feasibility Study and Implementation Support on the Cavite-Laguna (CALA) East-West National Road Project in the Republic of the Philippines"

JICA examines how the recipient governments meet the requirements that JICA requires as mentioned in Appendix 1.

3. Various documents prepared through the EIA process and reports (EIA documents) must be written in official languages or in languages familiar to people within the host countries. Documents written in understandable languages and forms for local people must be prepared and explained to them.
4. It is requested that EIA documents be made open to local stakeholders including local people. In addition, EIA documents should be available for public reading at all times, and the making of copies of these for the local stakeholders should be permitted.

1.7 Covered Schemes

The guidelines cover three schemes which JICA implements: Development Studies, Preliminary Studies of Grant Aid Projects, and Technical Cooperation Projects. In the case when JICA conducts studies besides the above three schemes, JICA respects related clauses of the guidelines according to project objectives.

(1) Requirements of recipient governments

When JICA provides support for and examines environmental and social considerations in its cooperation projects, it ensures that key requirements shown in Appendix 1 of the Guidelines on "Requirements of the Recipient Governments," are met.

In cases where JICA provides support for studies on environmental and social considerations, documents that JICA supplies to the host country are most often in English or Spanish. However, there were cases in which the local language was used when making posters and booklets for public notice of information[4] for consultations and explanatory meetings with local stakeholders and residents.

In many projects, information is publicly disclosed according to the EIA system of the

[4] "The Urgent Rehabilitation Support Program in Mazar-e-Sharif in Afghanistan"
"The Study on Capacity Development in Bridge Rehabilitation Planning, Maintenance and Management Based on 29 Bridges of National Highway Network in Costa Rica"
"The Study on Implementation of the Integrated Spatial Plan for Mamminasata Metropolitan Area, south Sulawesi Province in the Republic of Indonesia"
"Upgrading Feasibility Study on Upper Seti (Damauli) Storage Hydroelectric Project in the Kingdom of Nepal"
"The Study on the Solid Waste Management for the Katmandu Valley in Kingdom of Nepal"
"The Project development of New Water Sources for Damascus City in the Syrian Arab Republic"

host country. The EIA system often requires project proponents to hold resident explanatory meetings and allows stakeholders access to EIA documents.

(2) Covered Schemes

The Guidelines cover all development studies, preliminary studies of grant aid projects, and technical cooperation projects that are conducted by JICA.

See section 1.3 for a record of project implementation by scheme.

2.4 Measures Taken in an Emergency

Relevant clause in the Guidelines 1.8 Measures Taken in an Emergency An emergency is defined as a case that must be dealt with immediately - such as restoration after natural disasters or post-conflict restoration - when it is clear that there is no time to follow procedures of environmental and social considerations mentioned in the guidelines, In such an emergency, JICA consults the advisory council of environmental and social considerations review on categorization, judgement of emergency, and procedures to follow at an early stage, and discloses results of review by the advisory council and results of cooperation projects after their completion.

As for emergency cases, JICA consulted with the Advisory Council of Environmental and Social Considerations Review regarding the following projects:

Table 2-3 Emergency projects

Country	Name of project
Iraq	Development Study on Basra Unified Water Treatment and Transmission System Improvement Project
〃	Feasibility Study on Baghdad Water Supply System Improvement Project
Indonesia	Urgent Rehabilitation and Reconstruction Plan for Banda Aceh City
〃	Project for the Disaster Reconstruction of Basic Human Needs Facilities

Democratic Republic of the Congo	Development Study for Urban Rehabilitation Plan in Kinshasa
〃	Study on the Project for Community Empowerment Assistance in Cataract District in the Province of Bas Congo
Sudan	Emergency Study on the planning and support for basic physical and social infrastructure in Juba town and surrounding areas
〃	Juba Urban Supply and Capacity Development Study
〃	Juba Urban Transportation Infrastructure and Capacity Development Study
Sri Lanka	Recovery, Rehabilitation and Development Project in Tsunami Affected Area of Northern and Eastern Region in the Democratic Socialist Republic of Sri Lanka
Pakistan	Urgent Development Study on Rehabilitation and Reconstruction in Muzaffarabad City
Palestine	Development Programme in Jericho Region
〃	Feasibility Study on Agro-Industrial Park Development in Jordan River Rift Valley
〃	Feasibility Study for Water Resource Development and Management in Jordan Valley
Philippines	Urgent Development Study for Socio-Economic Rehabilitation and Development of Conflict-Affected Areas in Mindanao

As actual procedures followed, preparatory studies for the above development studies were omitted, and full-scale studies were implemented in accordance with the Guidelines. For preliminary studies for grant aid projects, processes that are normally conducted during preparatory studies were conducted at the basic design study stage.

Detailed information is available on the JICA website:

http://www.jica.go.jp/environment/guideline/index.html (Japanese)

http://www.jica.go.jp/english/about/policy/envi/index.html (English)

Reports on the results of cooperation projects can be accessed from the JICA library portal site:

http://libportal.jica.go.jp/library/ (Japanese)

2.5 Dissemination

Relevant clause in the Guidelines 1.9 Dissemination JICA makes the guidelines available through its home page. JICA explains the guidelines to the recipient governments, ministries and related institutions, and requests that they take the guidelines into consideration.

(1) The Guidelines can be accessed from the JICA website at the URL shown below. In addition to English, they are available in Spanish, French, Chinese, Russian, Vietnamese, Arabic, and Indonesian.
http://www.jica.go.jp/environment/guideline/index.html (Japanese)
http://www.jica.go.jp/english/about/policy/envi/index.html (English)

(2) In the course of implementing preparatory studies for development studies, preparatory studies for grant aid projects, and other such studies that are conducted after selection of Category A and B projects, JICA explained the Guidelines to project proponents within host countries and sought their understanding. JICA also takes advantage of other opportunities to explain the Guidelines, as needed.

(3) JICA offers the following training courses on capacity development related to environmental and social considerations to staff members of project implementing agencies and EIA-related departments in developing countries:
1）Training course in EIA for ODA projects
2）Training course in Environmental and Social Considerations in Oceania Countries

3. Status of Implementation (Process of Environmental and Social Considerations)

3.1 Information Disclosure

Relevant clause in the Guidelines

2.1 Information Disclosure

1. In principle, the recipient governments disclose information about environmental and social considerations of projects. JICA assists the recipient governments by implementing cooperation projects.
2. JICA itself discloses important information about environmental and social considerations at the main stages of cooperation projects in an appropriate manner in accordance with the guidelines.
3. JICA discusses frameworks to ensure information disclosure with the recipient governments and comes to an agreement with them at an early stage of cooperation projects.
4. The information to be disclosed includes that of the project itself.
5. Besides the information to be disclosed on JICA's own judgment, JICA provides information about environmental and social considerations to third parties within the extent possible in response to requests.
6. JICA encourages the recipient governments to disclose and present information about environmental and social considerations to local stakeholders.
7. JICA discloses information well in advance when JICA has meetings with local stakeholders in cooperation with the recipient governments, so that they have time to review the information.
8. JICA discloses information through its website in Japanese and English, and provides related reports for public reading at its library and at a concerned overseas office.
9. JICA prepares documents in cooperation with the recipient governments in an official or familiar language and an understandable form for local people, and is willing to provide them with documents at the same time of information disclosure on its website.

(1) In regard to the passage, [*JICA discuss frameworks to ensure information disclosure with the recipient governments and come to an agreement with them*], JICA confirms

the recipient government's compliance with the Guidelines in preparatory studies and other means.

(2) JICA discloses a variety of information including information on cooperation projects themselves. When requested by a third party, JICA also provides information on environmental and social considerations to the extent possible.

- Information on environmental and social considerations are available on the JICA website at the following URLs.

  http://www.jica.go.jp/environment/guideline/index.html (Japanese)

  http://www.jica.go.jp/english/about/policy/envi/index.html (English)

- Project reports are available for perusal at the JICA library and overseas offices. They can also be accessed from the JICA library portal site.

  http://libportal.jica.go.jp/library/ (Japanese)

(3) JICA encourages recipient governments to disclose and provide information about environmental and social considerations to local stakeholders. As a result, recipient governments, for example, established websites to provide information about their projects and stakeholder meeting minutes[5], and created pamphlets written in the local language[6]. In addition, they disclosed information at the time of consultations with local stakeholders.

(4) In regard to preparing documents, at least the official language of the host country is used to provide explanations, create hand-outs, and hold discussions for projects in which consultations are held with local stakeholders.

3.2 Consultation with Local Stakeholders

Relevant clause in the Guidelines
2.2 Consultation with Local Stakeholders

[5] "The Study on the Construction of the Second Mekong Bridge in the Kingdom of Cambodia"
"The Feasibility Study and Implementation Support on the Cavite-Laguna (CALA) East-West National Road Project in the Republic of the Philippines"

[6] "The Project for Improvement of Trunk Road between Kabul and Kandahar in Afghanistan"
"The Study of the Improvement / Construction of the International Airport in the Republic of Guatemala"
"The Study on Integrated Management for Ecosystem Conservation of the Anzali Wetland in the Islamic Republic of Iran"
"The Project for Rehabilitation and Improvement of Solomon Islands Water Authority's Water Supply and Sewage Systems"

1. In principle, the recipient governments consult with local stakeholders through means that induce reasonably broad public participation in order to consider environmental and social factors in the way most suitable to local situations and to reach an appropriate consensus. JICA assists the recipient governments by implementing cooperation projects.
2. With the recipient governments, JICA discusses and reaches a consensus on the frameworks for consulting with local stakeholders at an early stage of cooperation projects.
3. In order to have meaningful meetings, JICA, in collaboration with the recipient governments, publicizes in advance that JICA consults with local stakeholders, particularly the people directly affected.
4. In case of Category A projects, JICA consults with local stakeholders in collaboration with the recipient governments about the understanding of development needs, the likely adverse impacts on the environment and society of such needs, and an analysis of alternatives at an early stage. JICA will hold at least a series of discussions at each stage of scoping, preparing an outline of measures for environmental and social considerations, and the completion of a draft of the final report.
5. In case of Category B projects as well, JICA consults with local stakeholders in collaboration with the recipient governments when necessary.
6. JICA prepares minutes of the meeting in collaboration with the recipient governments when consulting with local stakeholders.

(1) Consultations with local stakeholders are normally held in conference style, but at times JICA holds focus group discussions or invites public comments in order to hear the opinions of local stakeholders[7].

(2) In regard to the passage, [*With the recipient governments, JICA discusses and reaches a consensus on the frameworks for consulting with local stakeholders*], JICA confirms the recipient government's compliance with the Guidelines in

[7] "The Study on Solid Waste Management in the Municipality of Phnom Penh in the Kingdom of Cambodia"
"The Study on the Construction of the Second Mekong Bridge in the Kingdom of Cambodia"
"The Study of the Improvement / Construction of the International Airport in the Republic of Guatemala"
"The Study on Integrated Management for Ecosystem Conservation of the Anzali Wetland in the Islamic Republic of Iran"
"The Feasibility Study and Implementation Support on the Cavite-Laguna (CALA) East-West National Road Project in the Republic of the Philippines"

preparatory studies and other means.

(3) In regard to the passage, [*JICA, in collaboration with the recipient governments, publicizes in advance that JICA consults with local stakeholders, particularly the people directly affected*], JICA holds consultations with local stakeholders targeting the residents and region, when it is possible to identify the residents or region that would be directly affected by the project. When the residents or region cannot be identified, JICA holds meetings in major cities located within the region in which studies will be performed. In many cases, counterpart organizations or local governments makes public announcements for local stakeholder meetings by distributing notices of the meeting to local stakeholders. Mass media, such as newspapers and radio, as well as advertising cars and bulletin boards of the local government, were used in some cases[8].

(4) Regarding Category A projects, JICA holds consultations with local stakeholders after disclosing information. It does so at each stage of scoping, preparing an outline of measures for environmental and social considerations, and the completion of a draft of the final report. There were cases where meetings were held at multiple sites during each stage[9]. JICA holds consultations with local stakeholders (including

[8] "The Project for Construction Bridge between El Salvador and Honduras"
"The Study of the Improvement / Construction of the International Airport in the Republic of Guatemala"
"The Study on the Improvement of Pohnpei International Airport in the Federated States of Micronesia"
"The Project for Improvement of Weno Harbor in Chuuk State, the Federated States of Micronesia"
"Upgrading Feasibility Study on Upper Seti (Damauli) Storage Hydroelectric Project in the Kingdom of Nepal"
"The Study on Protection and Rehabilitation of the Southern Romanian Black Sea Shore"
"The Master Plan Study on the Development of Power Generation and Transmission System in Sri Lanka"
"The Project for Improvement of Power Generation in the Sarakata River Hydroelectric Power Station in the Republic of Vanuatu"

[9] "The Feasibility Study of Padma Bridge in the People's Republic of Bangladesh"
"The Master Plan Study on Small Scale Water Resources Development for Poverty Alleviation through Effective Use of Surface Water in Greater Mymensingh of Bangladesh"
"The Study on the Project for Improvement of National Road No.1 (Phnom Penh- Neak Leoung Section) in the Kingdom of Cambodia"
"The Study on Sustainable Technical Development for Rice Cultivation in the Central Area in the Republic of Cuba"
"The Study of the Improvement / Construction of the International Airport in the Republic of Guatemala"
"The Comprehensive Study on Water Resources Development and Management for Bali Province in the Republic of Indonesia"
"The Master Plan Study on Pollution Risk Mitigation Program for Sustainable Coal Mine Development in East Kalimantan Province in the Republic of Indonesia"
"The Study on Integrated Management for Ecosystem Conservation of the Anzali Wetland in the Islamic Republic of Iran"
"The Study on the Improvement of Pohnpei International Airport in the Federated States of Micronesia"
"Upgrading Feasibility Study on Upper Seti (Damauli) Storage Hydroelectric Project in the Kingdom of Nepal"
"The Study on the Solid Waste Management for the Katmandu Valley in the Kingdom of Nepal"
"The Study on the Export Corridor and Grain Port Improvement in Paraguay"
"The Feasibility Study and Implementation Support on the Cavite-Laguna (CALA) East-West National Road Project in the Republic of the Philippines"

seminars and workshops) in many Category B projects as well. Of the 34 Category B development studies reviewed, JICA held such consultations more than once in 24 projects. In master plan studies, consultations are sometimes held with relevant ministries and governmental departments, because projects plans at that stage are not yet concrete, and it is difficult to specify potentially-affected people by the projects.

Table 3-1 Implementation of consultations with local stakeholders

Category	No. of projects	No. of projects in which consultations have been held
Development study A	9	9
Development study B	34	24
Preliminary study of grant aid project A	2	2
Preliminary study of grant aid project B	12	9
Technical cooperation project B	3	1

(5) With respect to the preparation of the records of consultations with stakeholders, most records were confirmed in Category A projects. However, records were not confirmed in some study reports of Category B projects.

3.3 Impacts to be Assessed

Relevant clause in the Guidelines
2.3 Impacts to be Assessed
1. The impacts to be assessed with regard to environmental and social considerations include impacts on human health and safety as well as the natural environment. Impacts on the natural environment include trans-boundary or global-scale impacts through air, water, soil, waste, accidents, water usage, climate change, ecosystems and biodiversity. The impacts to be assessed also include social impacts which include the migration of populations and involuntary resettlement; local economy such

"The Study on Protection and Rehabilitation of the Southern Romanian Black Sea Shore"

as employment and livelihood; utilization of land and local resources; social institutions such as social infrastructure and local decision-making institutions; existing social infrastructures and services; vulnerable social groups such as the poverty level and indigenous peoples; equality of benefits and losses and equality in development process; gender; children's rights; cultural heritage; local conflict of interests and infectious diseases such as HIV/AIDS.

2. In addition to the direct and immediate impacts of projects, derivative, secondary and cumulative impacts are also to be assessed in regard to environmental and social considerations within the extent possible. The life cycle impact during a project period is considered also.

3. Various kinds of relevant information are needed to assess impacts on the environment and local communities. There are, however, uncertainties in predicting impact due to incomplete understanding of an impact mechanism and limited information available. Therefore, if the scale of uncertainty is considered to be large, JICA provides environmental and social considerations which include preventive measures as much as possible.

JICA conducted scoping with items mentioned in paragraph 2.3.1 in the Guidelines (but not restricted to those mentioned in the Guidelines) and carried out studies on items that are likely to be affected by a project. Studies often focused on items such as water pollution, noise and vibration, ecosystems and biota, wastes, air pollution, involuntary resettlement, employment and livelihood.

The following are some impact mitigation measures that were taken in the past for individual items:

1) Air

- As a countermeasure to air pollution caused by the dust that accompanies the movement of construction vehicles during the construction phase, JICA proposed the following: the establishment of a speed limit on vehicles inside the construction site, washing vehicles whenever exiting from the construction site, and sprinkling water on soil disposal sites and surrounding roads[10].

[10] "Upgrading Feasibility Study on Upper Seti (Damauli) Storage Hydroelectric Project in the Kingdom of Nepal"
"The Feasibility Study and Implementation Support on the Cavite-Laguna (CALA) East-West National Road Project in the Republic of the Philippines"

- As a countermeasure to air pollution due to the use of roads, JICA proposed planting trees along the roads[11].

2) Water

- As a countermeasure to water pollution caused by the run-off of soil from a bridge construction site into the river, JICA proposed measures to prohibit the direct discharge of mud water and the establishment of an appropriate water treatment facility[12].
- As a countermeasure to the eutrophication of a dam lake after the commencement of dam operations, JICA proposed measures to control the flow of nutrient salts from upstream and the installation of a fraction fence which was most attractive measures from the viewpoint of the low cost and easy maintenance[13].
- As a countermeasure to leachates from a waste disposal site, JICA proposed the installation of a leachate treatment facility and the implementation of leachate control measures[14].

3) Wastes

- In regard to the disposal of wastes that accumulate during construction, JICA proposed a requirement for construction companies to prepare a waste-collection point within the construction site and to implement cleanup activities[15].

4) Natural environment

- JICA proposed the development of a biotope for protecting aquatic organisms, including precious species, along with a cost estimate[16].
- In regard to the destruction of vegetation due to road construction, JICA proposed measures for the early recovery of vegetation, particularly in areas where soil

[11] "The Feasibility Study and Implementation Support on the Cavite-Laguna (CALA) East-West National Road Project in the Republic of the Philippines"
"The Project for Reconstruction of Dusty-Nizhniy Pyandzh Road in the Republic of Tajikistan"
[12] "The Feasibility Study and Implementation Support on the Cavite-Laguna (CALA) East-West National Road Project in the Republic of the Philippines"
"The Project for Reconstruction of Dusty-Nizhniy Pyandzh Road in the Republic of Tajikistan"
[13] "Upgrading Feasibility Study on Upper Seti (Damauli) Storage Hydroelectric Project in the Kingdom of Nepal"
[14] "The Study on Solid Waste Management in the Municipality of Phnom Penh in the Kingdom of Cambodia"
"The Study on the Solid Waste Management for the Katmandu Valley in the Kingdom of Nepal"
[15] "The Feasibility Study and Implementation Support on the Cavite-Laguna (CALA) East-West National Road Project in the Republic of the Philippines"
[16] "The Study on the Construction of the Second Mekong Bridge in the Kingdom of Cambodia"

erosion is most likely to occur. In regard to the felling of trees, JICA proposed planting the same number of trees as were felled[17].

5) Involuntary resettlement

- As part of a feasibility study, JICA conducted a survey of all households that are required to relocate and formulated a resettlement plan framework that includes compensation policies and support measures for relocating residents based on relevant systems and case examples from the host country[18].

6) Livelihoods

- In a project that involved the construction of roads, JICA proposed giving special consideration to employment within the region[19].
- JICA proposed the implementation of a vocational training program for "waste-pickers" in an existing waste disposal site that was expected to be affected by the construction of a new waste disposal site[20].

7) Gender

- As a support measure for residents who must relocate due to the construction of a hydroelectric dam, JICA proposed a program, based on the results of focus group discussions, which was specifically designed to improve women's standards of living[21].

In regard to the passage, [*In addition to the direct and immediate impacts of projects, derivative, secondary and cumulative impacts are also to be assessed in regards to environmental and social considerations within the extent possible*], in paragraph 2.3.2 of the Guidelines, JICA gave consideration to derivative, secondary, and cumulative impacts. For example in a dam project, JICA examined measures to protect the hydrological environment downstream from the dam site and to prevent eutrophication

[17] "The Project for Reconstruction of Dusty-Nizhniy Pyandzh Road in the Republic of Tajikistan"
[18] "The Feasibility Study and Implementation Support on the Cavite-Laguna (CALA) East-West National Road Project in the Republic of the Philippines"
[19] "The Feasibility Study and Implementation Support on the Cavite-Laguna (CALA) East-West National Road Project in the Republic of the Philippines"
[20] "The Study on Solid Waste Management in the Municipality of Phnom Penh in the Kingdom of Cambodia"
[21] "Upgrading Feasibility Study on Upper Seti (Damauli) Storage Hydroelectric Project in the Kingdom of Nepal"

and sedimentation of a dam lake[22]. JICA has never had to address a situation in which [*the scale of uncertainty is considered to be large*], as mentioned in paragraph 2.3.3.

3.4 Inquiry to Advisory Council of Environmental and Social Considerations Review

Relevant clause in the Guidelines

2.4 Inquiry to Advisory Council of Environmental and Social Considerations Review

1. In order to seek advice regarding support for and examination of environmental and social considerations about cooperation projects, JICA establishes a standing advisory council as a third party, composed of external experts with the necessary knowledge.
2. The advisory council takes part in Category A and B projects from a request review stage until a final stage and gives advice about the propriety of support in response to inquiries by JICA. The council also gives advice on each cooperation project. Ad-hoc members are requested to participate in the council when necessary, taking into account the nature of each project.
3. Discussions by the advisory council are open to the public. Minutes are prepared with the names of speakers in the order of speaking and are made available to the public.
4. A committee to be established for the purpose of giving technical advice to cooperation projects must obtain advice from the Advisory Council in regard to environmental and social considerations.

JICA formed the Advisory Council of Environmental and Social Considerations Review in September 2004. Since September 2006, it has entrusted matters related to environmental and social considerations to the council's second-term members.

JICA consults with and receives advice from the Advisory Council of Environmental and Social Considerations Review, regarding Category A projects that have been adopted. The table below, current as of September 30, 2007, shows a list of projects on which JICA consulted with the advisory council and received written advice. JICA also received advice on (i) JICA's comments at the request stage and (ii) emergency measures. The first-term members of the council compiled a summary report.

Advisory council meetings are open to the public and walk-in participation by

[22] "Upgrading Feasibility Study on Upper Seti (Damauli) Storage Hydroelectric Project in the Kingdom of Nepal"

observers is allowed. Meeting minutes are made available to the public along with a record of the names of speakers in the order which they spoke. Meeting minutes, schedules, documents for inquiries and advice, and a list of members of the advisory council are available on the following website:

http://www.jica.go.jp/environment/guideline/examinfo.html (Japanese)

For some projects, JICA established a technical advisory committee in order to obtain advice on project studies as a whole. JICA explained the recommendations of the advisory council to the relevant committee in a project[23].

Table 3-2 Projects on which JICA consulted with the Advisory Council of Environmental and Social Considerations Review (in the order in which written advice was given)

The Study on Solid Waste Management in the Municipality of Phnom Pehn in the Kingdom of Cambodia
The Study of the Project for Improvement of National Road No. 1 (Phnom Penh – Neak Loueng Section) in the Kingdom of Cambodia
The Study on Drainage Improvement in the Core Area of Metro Manila, the Republic of the Philippines
The Feasibility Study of Padma Bridge in the People's Republic of Bangladesh
The Study on the Construction of the Second Mekong Bridge in the Kingdom of Cambodia
The Feasibility Study and Implementation Support on the Cavite-Laguna (CALA) East-West National Road Project in the Republic of the Philippines
The Comprehensive Study on Water Resources Development and Management for Bali Province in the Republic of Indonesia
Upgrading Feasibility Study on Upper Seti (Damauli) Storage Hydroelectric Project in the Kingdom of Nepal
The Study of the Project for Construction of Sindhuli Road (Section III) in Nepal
The Feasibility Study on the Development of Dedicated Multimodal High Axle Load Freight Corridor with Computerized Control for Deihi-Mumbai and Delhi-Howrah in India
The Study on Arterial Road Network Development Plan for Sulawesi Island and

[23] "The Comprehensive Study on Water Resources Development and Management for Bali Province in the Republic of Indonesia"

Feasibility Study on Priority Arterial Road Development in South Sulawesi Province in the Republic of Indonesia

The Study on Upgrading of Cuamba - Nampula Road in the Republic of Mozambique

The Urgent Development Study on Rehabilitation and Reconstruction in Muzaffarabad City in the Islamic Republic of Pakistan

The Study on Comprehensive Flood Mitigation for Cavite Lowland Area in the Republic of Philippines

3.5 Categorization

Relevant clause in the Guidelines

2.5 Categorization

1. JICA classifies projects under three categories according to the extent of environmental and social impacts. To make this classification, JICA takes into account an outline of the project, the scale, and the site condition, and the environmental impact assessment scheme in host countries.
2. Category A: Projects are classified as Category A if they are likely to have significant adverse impacts on the environment and society. Projects with complicated impacts or unprecedented impacts, which are difficult to assess, or projects which have a wide range of impacts or irreversible impacts, are also classified as Category A. Projects are also classified as Category A if they require a detailed environmental impact assessment by environmental laws and the standards of the recipient governments. The impacts may affect an area broader than the sites or facilities subject to physical construction. Category A, in principle, includes projects in sensitive sectors (i.e., characteristics that are liable to cause adverse environmental impact) and projects located in or near sensitive areas. An illustrative list of sensitive sectors, characteristics and areas is given in Appendix 2.
3. Category B: Projects are classified as Category B if their potential adverse impacts on the environment and society are less adverse than those of Category A projects. Generally they are site-specific; few if any are

irreversible; and in most cases normal mitigation measures can be designed more readily.

4. Category C: Projects are classified as Category C if they are likely to have minimal or little adverse impacts on the environment and society.
5. JICA flexibly reviews a categorization even after screening, to determine whether a new significant impact has come to light as a result of the cooperation project process.
6. Projects may not be clearly specified at an early stage, like the Master Plan Study. In such cases, however, projects are categorized based on their likely significant impacts. At that time, derivative, secondary and cumulative impacts are also to be considered. When considering plural alternatives, projects are classified as the category of that alternative which has the most significant impact among them. JICA reviews the categorization accordingly after projects have been identified by means of a progress of studies.
7. JICA requests that the recipient governments fill in the screening form of Appendix 3 and the information in this form will be a reference for the categorization of proposed projects.

Beginning with the request stage, JICA classifies projects based on sector relevance to the project, characteristics, scale, features of the project site, and the EIA system of the host country. At this stage, JICA also requests the recipient government to fill out a screening form.

In regard to changes in categorization ([*JICA flexibly reviews a categorization even after screening, to determine whether a new significant impact has come to light as a result of the cooperation project process*]), JICA changes a project's category as needed, based on additional information and circumstances surrounding the content of the project. For example, in a development study, when selecting a priority project within a master plan (M/P) study and conducting a feasibility study (F/S) for that priority project, an M/P study that is initially classified as Category B may be changed to Category A, if the priority project that is selected is classified as Category A during the process of the study. Category is sometimes changed, either because a project is deemed to have

greater adverse impact than originally considered, or because a project is deemed to have smaller adverse impact than originally considered. After a project's category is changed, they are implemented according to the rules of the new category.

The following table shows the sectors and characteristics of projects classified as Category A.

Table 3-3 Types of Category A projects

	Content of the project
Large-scale projects in sensitive sectors	Roads, railways, bridges; airports; ports and harbors; rivers and erosion control; hydroelectric power generation, dams, reservoirs; water supply system; sewerage system; waste disposal
Sensitive characteristics	Large-scale involuntary resettlement; large-scale groundwater pumping
Sensitive area	Habitats of precious species

3.6 Laws and Standards of Reference

Relevant clause in the Guidelines

2.6 Laws and Standards of Reference

1. JICA, in principle, confirms whether projects meet the requirements for environmental and social considerations in the following ways.
2. JICA confirms whether projects comply with laws or standards relating to the environment and local communities within both central and local governments in host countries as well as whether projects conform to their own policies and plans.
3. JICA refers to international standards, treaties and declarations and good practices which Japan, international and regional organizations and developed countries have. When JICA recognizes that laws and regulations regarding environmental and social considerations of host countries are substantially inferior to these standards and good practices, JICA encourages the recipient governments – including local governments

– to take more appropriate considerations through a series of dialogues, and confirm background and justification for that.

4. JICA takes into account the importance of good governance surrounding projects so that measures for appropriate environmental and social considerations are implemented.
5. JICA discloses information with reference to relevant laws of the recipient governments and the government of Japan.

For many projects, JICA discusses and confirms project matters with environmental organizations in the host country after verifying the EIA system of that country in reference to relevant environmental laws and standards. Most typically, JICA confirms the treatment of a planned individual project and the procedures that a counterpart organization is required to follow under the EIA system of the host country.

There are several patterns to EIA systems according to the host country.

1) Some EIA systems specifically anticipate projects that require IEE- or EIA-level examinations, mainly from two perspectives: project content and scale, and planned site of the project (e.g., projects to be implemented inside natural reserves).
2) In other EIA systems, a project description must first be submitted to the department in charge of EIA. Then, based on the description of each project, the department determines whether further procedures are necessary, and if so, outlines the necessary procedures for the project.
3) Still other EIA systems have a long list of sectors and project types that require environmental and social impact assessments. When a project applies to an item on that list, the necessary information about that project is submitted to the department in charge of EIA. The department then examines the information and determines whether or not further procedures are necessary.

Additionally, depending on the host country, stipulations related to environmental and social considerations are provided in sector-based laws and regulations. Therefore, JICA also refers to the sector-specific laws and regulations, which are relevant to the project, in accordance with the content of the project and the results of studies.

In regard to good practices, there was a case where JICA referred to Japan's and

other countries' environmental noise standards, because the host country lacked such standards[24]. JICA also referred to the water quality standards of international institutions in the past, because the host country lacked such standards in a case[25].

To ensure good governance, JICA proposed the development of training programs in the form of workshops in some projects to strengthen the project implementing capacity in the host country[26].

3.7 Concerns about Social Environment and Human Rights

Relevant clause in the Guidelines

2.7 Concerns about Social Environment and Human Rights

1. Environmental and social factors are affected by the social and institutional conditions of host countries and the actual conditions of the project location. Therefore, JICA fully takes these conditions into account when supporting and examining environmental and social considerations. In particular, special measures must be taken for cooperation projects when disclosing information and holding consultations with local stakeholders after obtaining understanding from the recipient governments, in countries and areas affected by conflict or where basic freedoms – including freedom of expression and the right to receive legal relief – are restricted.
2. JICA respects the principles of internationally established human rights standards like the International Convention on Human Rights, and gives special attention to the human rights of vulnerable social groups – including women, indigenous peoples, persons with disabilities, and minorities – when implementing cooperation projects. JICA obtains country reports and information issued by related institutions about human rights, and JICA understands local human rights situations by disclosing information about cooperation projects. Thus, JICA integrates local human rights situations into the decision-making process regarding environmental and social considerations.

[24] "The Study of the Improvement / Construction of the International Airport in the Republic of Guatemala"
[25] "The Master Plan of Greater Phnom Penh Water Supply (Phase 2) in the Kingdom of Cambodia"
[26] "The Master Plan Study on Small Hydropower Development Project in Northern Part of the LAO P.D.R"

Among the projects reviewed, there were no projects requiring special consideration in countries and areas affected by conflict.

In regard to human rights, there was a case where JICA obtained information from Amnesty reports and invited human rights NGOs to participate in consultation meetings with local stakeholders.

In many projects, JICA gives special attention to vulnerable social groups, such as women and minorities. Specifically, JICA's considerations for these people can be roughly grouped into the following three patterns: (i) consultations and workshops with local stakeholders that focus on vulnerable social groups, (ii) programs designed for vulnerable social groups, and (iii) proposals for vulnerable social groups at the project implementation stage. See section 3.11 for case examples.

3.8 Decision-making by JICA

Relevant clause in the Guidelines

2.8 Decision-making by JICA

1. JICA makes recommendations to the Ministry of Foreign Affairs of Japan (MOFA) from the viewpoint of environmental and social considerations at the review stage of requests. In addition to the categorization by screening, JICA makes these recommendations after confirming the nature of proposed projects, site description, scope of impacts on the environment and local communities, operational capacities of the recipient governments and project executing bodies, and prospect of information disclosure and public participation in addition to the categorization by screening. The recommendations include changing studies to an upper level or changing preliminary studies of grant aid projects to feasibility studies, when necessary.
2. JICA takes necessary measures to ensure suitable environmental and social considerations of cooperation projects, if unexpected inadequate matters come to light after MOFA concludes international agreements.
3. JICA makes a decision to stop cooperation projects and recommends MOFA to do the same when JICA concludes that it is impossible to ensure

environmental and social considerations even if the above measures are taken. Cases where it is impossible to ensure environmental and social considerations are, for example, where development needs are inappropriately understood, where projects are expected to have significant impacts even if mitigation measures are taken into consideration during implementation stage, where the affected residents or social organizations concerned hardly participate in projects and are not expected to do so in the future though serious impacts are to be predicted, or where it is expected to be difficult to implement mitigation measures to avoid or minimize impacts in consideration of social and institutional conditions to the project's site, etc.

As stated in paragraph 2.8.1 of the Guidelines, JICA makes recommendations on categorization and environmental and social considerations to the Ministry of Foreign Affairs. It does so, for example, by specifying a category and recommending "appropriate environmental and social considerations are needed because the project is likely to have serious impacts on air pollution and so on." So far, JICA has never had to recommend "changing studies to an upper level" or "changing preliminary studies of grant aid projects to feasibility studies."

JICA has never encountered any situations in which "unexpected inadequate matters come to light after MOFA concludes international agreements," or where "it is impossible to ensure environmental and social considerations," as mentioned in paragraphs 2.8.2 and 2.8.3 in the Guidelines, nor has it ever made a decision to stop cooperation projects and recommended MOFA to do the same.

3.9 Ensuring Appropriate Implementation of and Compliance with the Guidelines

Relevant clause in the Guidelines

2.9 Ensuring Appropriate Implementation of and Compliance with the Guidelines

JICA appropriately implements principles and procedures mentioned in the Guidelines and ensures compliance with them. JICA responds to objections regarding non-compliance with them by establishing a body for

prescribing regulations separately from the Guidelines. The body is independent from the project executing departments.

To ensure compliance with the Environmental and Social Considerations Guidelines, JICA established “the *Modus Operandi* of the Objection System.” The objection system took effect in April 2005 and has been applied to projects which were adopted from FY2005 onward.

The objectives of the objection system are as follows:

1) To provide opportunities for people actually or potentially damaged by JICA-assisted cooperation projects to submit objections in order to ensure compliance with the Guidelines
2) To reflect investigation findings on request for the cooperation projects
3) To encourage, through various efforts, dialogues between project proponents and requesters (who file objections regarding environmental and social considerations) toward accomplishing the above mentioned purposes of 1) and 2)

Objections can be filed against projects that have been adopted from FY2005 onward, in which substantial damage have been incurred, or are likely to be incurred in the future due to JICA’s failure to comply with the Guidelines.

In accordance with the *Modus Operandi* of the Objection System, Dr. Hidefumi Imura, Professor at Nagoya University, and Dr. Sachihiko Harashina, Professor at Tokyo Institute of Technology, were selected as examiners and were appointed for a second term in April 2007 again. Office of Audit, which is independent from the departments in charge of cooperation projects, serves as the secretariat of the Objection System.

No objections have been filed to date.

Information on the *Modus Operandi* of the Objection System, examiners, and the examiners’ annual report are available on the JICA website at the URL shown below.

http://www.jica.go.jp/environment/guideline/seido01.html (Japanese)

http://www.jica.go.jp/english/about/policy/envi/objection.html (English)

3.10 Implementation and Review of the Guidelines

Relevant clause in the Guidelines

2.10 Implementation and Review of the Guidelines

1. The Guidelines come into force on April 1, 2004 and projects proposed in and beyond FY 2004 are subject to the Guidelines. Ongoing cooperation projects requested before April 1, 2004 are subject to possible items mentioned in the procedures. JICA proceeds with a system to respond to objections regarding non-compliance with the Guidelines.
2. JICA verifies the status of implementation of the Guidelines, and based on its findings makes a comprehensive review of them within five years of their enforcement. A revision is made as needed. When JICA revises the Guidelines, JICA seeks opinions from the government of Japan and developing countries, NGOs in developing countries, as well as NGOs in Japan, the private sector and experts, etc., in a process which ensures transparency and accountability.
3. JICA studies problems to be solved and methods in applying the Guidelines, and incorporates the results of studies in a review process of the Guidelines.

(1) Implementation of the Guidelines

Paragraph 2.10.1 in the Guidelines states: [*The Guidelines come into force on April 1, 2004 and projects proposed in and beyond FY 2004 are subject to the Guidelines. Ongoing cooperation projects requested before April 1, 2004 are subject to possible items mentioned in the procedures*]. As stated, the Guidelines are applied to projects requested from FY2004 onward. Ongoing projects requested before April 1, 2004 are implemented in line with the Guidelines where applicable.

See section 3.9 for details of the Objection System.

(2) Studies

In regard to paragraph 2.10.3 in the Guidelines, which states, [*JICA studies problems to be solved and methods in applying the Guidelines, and incorporates the results of studies in a review process of the Guidelines*], JICA conducted the following studies, which are available for downloading from the JICA website, regarding the implementation of the Guidelines:

- “Basic Study for Implementation of JICA Guidelines for Environmental and Social

Considerations in Development Studies—Report by the Study Group" (Dec. 2004)

- Report by a guest researcher on "Environmental and Economic Assessment Methods and Case Examples in Agroforestry Projects in Developing Countries" (Mar. 2005)
- Report by a guest researcher on "Basic Study on the Introduction of Strategic Environmental Assessment" (Nov. 2005)
- Report by a guest researcher on "Human Rights in Environmental and Social Considerations" (Mar. 2006)

3.11 Requirements of Recipient Governments on Environmental and Social Considerations

The following is the situation in regard to the requirements of recipient governments, which are specified in Appendix 1 of the Guidelines:

(1) Underlying Principles

- In most projects, the costs and benefits of environmental and social consideration measures are assessed qualitatively.
- In most project reports, the findings of studies on environmental and social considerations are presented in an independent chapter.
- In regard to the establishment of a committee of experts by the host country, there was a case where the host country established a working group composed of academic experts, relevant ministries, and the implementing organization[27]. In regard to environmental impact assessments based on the EIA system of the host country, the host country organized an examination committee in a project[28].

(2) Examination of Measures

In regard to the passage, [*In the examination of measures, priority is to be given to avoidance of environmental impact, and when this is not possible, minimization and reduction of impact must be considered next.*], multiple alternatives are examined in master plan (M/P) studies and feasibility studies (F/S), chiefly to prevent impacts on the environment. Then, an EIA is conducted to a priority project, which is selected in the

[27] "The Feasibility Study on the Development of Multimodal High Axle Load Freight Corridor with Computerised Control for Delhi-Mumbai and Delhi-Howrah in India"
[28] "The Study on the Construction of the Second Mekong Bridge in the Kingdom of Cambodia"

M/P study, or conducted in the F/S to further examine specific measures to minimize and mitigate environmental impact.

Most project reports contain little information on the development of systems for the project implementing stage, but often contain monitoring plans.

(3) Scope of Impacts to be Assessed

See section 3.3 of this report.

(4) Compliance with Laws, Standards, and Plans

See section 3.6 of this report for details on compliance with laws, standards, and plans.

In regard to [*areas that are specifically designated by laws or ordinances of the governments for conservation of nature or cultural heritage*], measures for minimizing environmental impacts were examined when the planned project sites included areas that are specifically designated for conservation of nature or cultural heritage[29].

(5) Social Acceptability

Consultations with local stakeholders are held regarding project plans. Particularly with respect to Category A projects, consultations with stakeholders are held from the scoping stage. The results of these consultations are then reflected in subsequent studies. In some cases, local residents were given an audience in order to hear views for and against a project[30].

The following are examples of cases which promote the participation of socially vulnerable groups in consultations:

- When holding consultations with local stakeholders, the participation of women were actively encouraged, taking into account the social environment of the planned project site[31].
- When there were few female participants in the consultation meetings, the views

[29] "The Integrated Master Plan study for Dzohgkhag-Wise Electrification in the Kingdom of Bhutan"
"The Study on Improvement of Water Supply System in Managua (Nicaragua)"
[30] "The Study on the Construction of the Second Mekong Bridge in the Kingdom of Cambodia"
"The Project for Improvement of Weno Harbor in Chuuk State, the Federated States of Micronesia"
"The Study on Improvement of Water Supply System in Managua (Nicaragua)"
[31] "The Study on the Solid Waste Management for the Katmandu Valley in the Kingdom of Nepal"

of women were obtained through social economic surveys[32].

- Women were included in the target group of an HIV/AIDS prevention program, which was formed as a measure for protecting local stakeholders against infectious diseases[33].

(6) Involuntary Resettlement

In project reports, measures to prevent or minimize the impact of involuntary resettlement are proposed. For instance, some reports proposed measures such as bypassing urban areas and minimizing road widening works in road and railway projects[34]. When involuntary resettlement is unavoidable, the scale of resettlement and the necessary procedures in the host country are confirmed and proposals are made to ensure that the people who will be affected are sufficiently compensated and supported by the host country. When development studies anticipate large-scale resettlement, a framework for a resettlement action plan is proposed, since the subsequent project implementation is unclear.

It is necessary to give careful consideration to measures for restoring the affected residents' means of livelihood. In the waste management sector, there were cases in which projects included plans to close down existing open-dumping landfill sites to construct new landfill sites. As the projects threatened to hinder the livelihood of waste-pickers, appropriate measures were considered to compensate them for their loss[35].

(7) Indigenous Peoples

The following are examples of cases which involve indigenous peoples:

- Consultations with regional ethnic minority groups were held, separately from regular consultations with local stakeholders[36].
- After confirming the situation of indigenous peoples around the project site and

[32] "Upgrading Feasibility Study on Upper Seti (Damauli) Storage Hydroelectric Project in the Kingdom of Nepal"
[33] "The Study on the Construction of the Second Mekong Bridge in the Kingdom of Cambodia"
[34] "The Feasibility Study and Implementation Support on the Cavite-Laguna (CALA) East-West National Road Project in the Republic of the Philippines"
"The Study on the Project for Improvement of National Road No.1 (Phnom Penh- Neak Leoung Section) in the Kingdom of Cambodia"
[35] "The Study on Solid Waste Management in the Municipality of Phnom Penh in the Kingdom of Cambodia"
"The Study on the Solid Waste Management for the Katmandu Valley in the Kingdom of Nepal"
"The study on the safe closure and rehabilitation of landfill sites in Malaysia"
[36] "The Study on the Construction of the Second Mekong Bridge in the Kingdom of Cambodia"

confirming that few live in the site, the possibility of indigenous peoples participating in the construction work was considered[37].

- Based on the awareness that tourism development may threaten the loss of traditional cultures of ethnic minority groups, local workshops for the preservation and utilization of those traditional cultures were proposed[38].

(8) Monitoring

Monitoring plans are included in many project reports. Their content varies, but the followings are proposed, in certain projects:

- Monitoring items
- Monitoring locations
- Monitoring frequency
- Cost of implementing monitoring activities
- Organizations responsible for implementing monitoring activities

[37] "The Study of the Improvement / Construction of the International Airport in the Republic of Guatemala"
[38] "Xining-Centered Qinghai Province Comprehensive Tourism Development Study in China"

4. Status of Implementation (Procedures by Scheme)

Environmental and social considerations studies were conducted for each scheme, according to the procedures outlined in the Guidelines. This section discusses the status of implementation of the Guidelines according to scheme, and covers aspects that were not discussed in sections 2 and 3 of this report.

4.1 Common Issues

(1) Review Stage of Proposed Projects

- In addition to examining various aspects of requested projects, JICA categorizes them and makes recommendations concerning the categorization and the environmental and social considerations to the Ministry of Foreign Affairs (MOFA).
- Prior to submitting a recommendation to MOFA, JICA discloses information of Category A projects, such as country, area, and project overview, through the JICA website for a period of 30 days. JICA received two e-mail comments by the end of September, 2007 regarding proposed Category A projects whose information was disclosed.
- When there is not enough information for project categorization, JICA gathers relevant information through its overseas offices.
- After MOFA concludes an international agreement for a project, JICA discloses the name, country, location, overview, sectors, and categorization of the project, together with reasons for the categorization, through the JICA website. For Category A and B projects, JICA also discloses the recommendations it has made to MOFA.

(2) Assignment of Members for Environmental and Social Considerations

Paragraph 3.3.3.1 in the Guidelines states, [*JICA involves a member(s) for environmental and social considerations in study teams*]. Other paragraphs also require a similar procedure. In response, JICA assigns members for environmental and social considerations in each stage of Category A and B projects (preparatory and full-scale studies of development studies, preparatory and basic design studies of grant aid projects, and preparatory studies of technical cooperation projects). In Category B

projects, such members sometimes concurrently hold other responsibilities.

(3) Disclosure of Information for Ongoing Cooperation Projects

- See section 3.1 in this report for additional details on information disclosure and reports.
- JICA discloses information on individual ongoing projects. No comments have been received so far regarding the disclosure of information for ongoing projects.
- Project reports are available for perusal at the JICA library and overseas offices, as well as on the JICA library portal site.

(4) Alternatives

In compliance with the Guidelines, JICA “analyzes alternatives including a ‘without project’ situation.”

Master plan studies sometimes involve multiple alternatives or options which are essentially a combination of multiple projects. In these cases, JICA prepares a comparative study of those alternatives and options.

See section 4.2 in this report for details.

(5) Studies

JICA conducts studies on environmental and social impacts that may be caused by projects from the earliest possible planning stage.

Usually after the selection of items to be assessed at the scoping stage, a projection and assessment of each item, along with mitigation measures, are examined. Items that are most often selected for examination include (i) pollution (air, water, waste, noise), (ii) natural environment (precious species, natural reserves), (iii) social environment (involuntary resettlement, means of livelihood, gender), and (iv) others (water usage).

For Category A projects, EIA-level studies are conducted and possible impacts are divided into construction phase impacts and operation phase impacts. For Category B projects, IEE-level studies are conducted and in many cases local field studies are also completed.

4.2 Development Study

(1) Preparatory Study

Of the development studies that were reviewed, consultations on environmental and social considerations were held with host countries at the preparatory study stage in order to determine the responsibilities and coordination methods for about half of the projects.

JICA conducted provisional scoping at the preparatory study stage in many projects. In a project, JICA specifically prepared drafts of the Terms of Reference (TOR) for studies on environmental and social considerations[39].

(2) Master Plan Study

In master plan (M/P) studies, JICA often examines the TOR of IEE, or compares alternatives during the first half of the study and conducts an IEE during the latter half.

When a feasibility study (F/S) is implemented following an M/P study, JICA conducts studies in line with the provisions of paragraphs 3.2 on “Development Study (Master Plan Study)” and 3.3 on “Development Study (Feasibility Study)” in the Guidelines. In this case, JICA considers the initial stage of the F/S and the final stage of the M/P study at the same time.

(3) Feasibility Study

When only a feasibility study is conducted, JICA sometimes prepares a TOR of a priority project for environmental and social considerations after the examination of alternatives at the IEE level.

JICA explores measures for preventing or mitigating environmental and social impacts in all feasibility studies and formulates monitoring plans for many projects.

(4) Consultation with Local Stakeholders

For Category A projects, consultations with local stakeholders are held at each stage of scoping, preparing an outline of measures for environmental and social considerations, and the completion of a draft of the final report in compliance with the Guidelines.

[39] “The Feasibility Study on the Development of Multimodal High Axle Load Freight Corridor with Computerised Control for Delhi-Mumbai and Delhi-Howrah in India”

When the location, content, and scale of a project are unclear at the master plan stage, consultations are often held with relevant ministries, local governments, and NGOs, as it is difficult to identify specific stakeholder groups who would be affected by the project.

(5) Alternatives

In master plan studies, alternatives are established (as shown below). Because master plans are comprehensive plans, alternatives frequently consist of scenarios that combine a number of facility construction plans or projects. JICA examines alternatives for the means of achieving the objective or for the construction sites of planned facilities in other cases. Below are examples for the following:

- Different scenarios
  - -- Waste management scenario (scenario based on the type, location, and scale of a facility)
  - -- Regional electrification scenario (scenario based on a combination of different electrification methods)
  - -- Port/harbor development scenario (scenario based on a combination of a number of plans for the development of ports and harbors)
  - -- Water supply scenario (scenario based on a combination of plans for drilling new wells and developing a water conveyance system)
  - -- Disaster prevention scenario (scenario based on a combination of a number of disaster prevention procedures including the relocation of residents from danger areas and construction of new facilities)
- Means of achieving an objective
  - -- Methods for intermediate/final treatment of wastes
  - -- Methods for crossing rivers
  - -- Types of supply water sources (surface water, groundwater)
  - -- Water supply systems
  - -- Technologies for effective utilization of coal sludge
  - -- Methods for supplying electric power (renewal energies, fuel efficiency, demand adjustment)
  - -- Methods of closing down final disposal plants

- Construction sites for planned facilities
  - -- Construction site of final disposal plants
  - -- Bridges
  - -- Airports
  - -- Sewage treatment facilities
  - -- Water purification facilities, etc.
- Example of a choice between improving existing facilities or constructing new facilities: improvement of an existing airport or construction of a new airport
- Other Examples
  - -- Advantages of coordinating with other projects
  - -- Earthquake-resistant measures for water supply facilities

Compared to master plan studies, alternatives proposed in feasibility studies often include even more concrete plans for the construction of facilities. Therefore, such alternatives often pertain to the construction site, scale, and structure of planned facilities. Examples of these are as follows:

- Construction sites of planned facilities

  Bridge locations, construction site of final disposal plants, candidate site for the construction of a new airport, location of power plants, road routes, location of sewage treatment facilities, sewage pipe routes
- Scales for planned facilities

  Water level of dam reservoirs, length of airport runways
- Structure of planned facilities

  Structure of bridges, water supply facilities, wastewater facilities
- Means of achieving an objective

  Methods of treating wastewater

(6) In coordinated detailed design (D/D) studies with JBIC, the Guidelines stipulate: [*When JICA's assessment differs from the review by JBIC, JICA conveys its own relevant information to JBIC, and requires JBIC to undertake adequate measures*]. There has never been such a situation.

(7) The Guidelines stipulate: [*JICA discloses its final reports promptly after their completion on its website and at the JICA library and a concerned overseas office*]. However, as final reports of coordinated D/D studies with JBIC contain tender information, they are disclosed only after a period of nondisclosure.

(8) In regard to paragraph 3.4.2 of the Guidelines on "D/D Studies other than Coordinated D/D Studies with JBIC," no such studies have been adopted since enforcement of the Guidelines.

4.3 Preliminary Study of Grant Aid Project

(1) Prior to conducting basic design (B/D) studies, JICA confirms the status of EIA by conducting preparatory studies and other means, as stipulated in the Guidelines. The results of EIAs and preparatory studies are then incorporated into B/D studies. However, for example, since the routes of road projects can only be concretized in B/D studies, JICA at times confirms EIA results at the B/D study stage[40].

(2) For Category B projects, when environmental and social considerations studies need to be made at the preparatory study phase, JICA conducts IEE-level environmental and social considerations studies. No Category B projects have been re-categorized into Category A. When Category B projects are re-categorized into Category C, JICA completes all procedures for environmental and social considerations at that stage.

(3) Of the 13 grant aid projects whose preparatory study reports reviewed, alternatives examined in a number of projects as shown in table 4-1:

[40] "The Project for Reconstruction of Dusty-Nizhniy Pyandzh Road in the Republic of Tajikistan"

Table 4-1 Examination of alternatives (preliminary studies for grant aid projects)

Category	No. of projects whose preparatory study reports reviewed	No. of projects in which alternatives were examined in preparatory studies
A	1	1
B	12	7

The contents and trends of alternatives that were examined can be divided into the following: (i) rehabilitation of existing facilities or construction of new facilities; (ii) routes of roads and other linear infrastructures; (iii) construction locations of new facilities; and (iv) structure of new facilities.

(4) In reference to B/D study reports, the Guidelines stipulate: [*JICA discloses B/D study reports promptly after their completion, on its website and at the JICA library and a concerned overseas office*]. JICA promptly discloses English language reports, but Japanese reports of certain projects are disclosed only after a period of nondisclosure, as they contain tender-related information.

4.4 Technical Cooperation Project

(1) Most technical cooperation projects are Category C projects, as mentioned in section 1.3 of this report, because they usually involve capacity development or human resource development of counterpart organizations in the host countries. No technical cooperation projects have been categorized as Category A. When the construction or rehabilitation of some type of facility is included among project activities, the project is categorized as Category B. None of the above technical cooperation projects have been completed yet.

(2) JICA conducts IEE-level environmental and social consideration studies in Category B technical cooperation projects. No Category B technical cooperation projects have been re-categorized into Category A after the completion of the IEE-level studies. When Category B projects are re-categorized into Category C, JICA completes all procedures for environmental and social considerations at that stage.

(3) JICA provides technical cooperation which includes monitoring methods. At the monitoring stage, there has never been a case in which [*third parties, etc., point out in concrete terms that environmental and social considerations are not fully undertaken*].

4.5 Follow-up Activity

(1) When JICA conducted follow-up studies, it confirmed the status of the results and recommendations of environmental and social considerations studies which were made previously.

(2) JICA has never made “recommendations to relevant organizations,” as mentioned in paragraph 3.7.3 in the Guidelines, in any of its projects.

5. Sector Trends

An overview of major sectors and an analysis of their environmental and social considerations were formulated as shown below.

The 60 projects in this review were classified by sector according to their major components. Main environmental and social consideration items to be examined related to the sectors are shown below.

(1) Thermal power

Three Category B development study projects qualified for analysis in this sector.

Focus of environmental and social considerations

1) Consultation with local stakeholders

There are large numbers of local stakeholders who will benefit from power generation across a broad geographic area. The consultations with local stakeholders were conducted in the master plan studies in Category B.

2) Environmental impacts (air pollution)

Air pollution is one of the major impacts of thermal power generation. When coal was used as fuel, JICA examined its impacts on dust[41].

3) Environmental impacts (water quality)

JICA examined the impact of thermal effluent, when its generation was anticipated[42].

(2) Hydroelectric power generation, dams, reservoirs

Two development study projects and one preliminary study for a grant aid project qualified for analysis in this sector. One development study project was a Category A project, and the others were Category B projects.

[41] "The Master Plan Study on Pollution Risk Mitigation Program for Sustainable Coal Mine Development in East Kalimantan Province in the Republic of Indonesia"
"The Study on the Improvement Measures for Electric Power generation facilities in Java-Bali Region in the Republic of Indonesia"

[42] "The Study on the Improvement Measures for Electric Power generation facilities in Java-Bali Region in the Republic of Indonesia"

Focus of environmental and social considerations

1) Examination of alternatives

Possible impacts of dam construction need to be considered. They include social impacts, such as involuntary resettlement and the loss of residents' means of livelihood, and environmental impacts on natural ecosystems which must be conserved. These impacts can be mitigated through the careful examination of alternatives. For example, lowering the full water level of a reservoir could mitigate impacts. In the case of dam construction, JICA examined alternatives which include plans for the selection of dam construction sites and the height of the dam (water level of the reservoir) to mitigate environmental and social impacts[43].

2) Consultation with local stakeholders

Dam construction has the biggest impact on residents who will be subject to involuntary resettlement and those who will lose their means of livelihood. It is necessary to explain fully its process of examining alternatives for these stakeholders, to formulate impact mitigation measures and to work toward reaching an agreement with the residents. In the case of dam construction, measures to obtain comments from less-educated community members were taken and focus group discussions were held in consideration of women who could not participate in the other consultations[44].

3) Environmental impact on reservoirs

Dam construction can result in eutrophication of reservoirs. JICA examined measures regarding this issue in feasibility studies of dam construction. JICA also considered measures for preventing a dam from hindering fish runs[45].

4) Environmental impact on rivers

Water intake from rivers and discharging water from dams to secure water is likely to have impacts on river flow. In the cases of dam construction, JICA examined the

[43] "Upgrading Feasibility Study on Upper Seti (Damauli) Storage Hydroelectric Project in the Kingdom of Nepal"
[44] "Upgrading Feasibility Study on Upper Seti (Damauli) Storage Hydroelectric Project in the Kingdom of Nepal"
[45] "Upgrading Feasibility Study on Upper Seti (Damauli) Storage Hydroelectric Project in the Kingdom of Nepal"

impacts on water intake downstream[46].

(3) Rivers and erosion control

Two Category B development study projects qualified for analysis in this sector.

Focus of environmental and social considerations

1) Examination of alternatives

As a measure for mitigating flood damage, JICA presented alternatives which combine both non-structural measures and structural measures such as river improvement, construction of weirs, levees and discharge channels.

2) Impacts on river flow

Measures such as river improvement, construction of weirs, levees and discharge channels are likely to have impacts on river flow. JICA therefore examined the possibility of impacts on intake of river water and aquatic ecosystems derived from change in flow[47].

(4) Roads, railways, bridges

Three Category A and four Category B development studies, and one Category A and four Category B preliminary studies of grant aid projects qualified for analysis in this sector.

Focus of environmental and social considerations

1) Examination of alternatives

Among the impacts that accompany the construction of roads, bridges, and railways, special consideration must be given to the possibility of involuntary resettlement. The scale of involuntary resettlement can be minimized by examining alternatives in regard to the routes of roads and railways and the construction locations and structures of bridges. JICA therefore considered alternatives that aim

[46] "The Master Plan Study on Small Hydropower Development Project in Northern Part of the LAO P.D.R"
"Upgrading Feasibility Study on Upper Seti (Damauli) Storage Hydroelectric Project in the Kingdom of Nepal"

[47] "The Study on Flood and Debris Flow in the Caspian Coastal Area Focusing on the flood-hit Region in Golestan Province in the Islamic Republic of Iran
"The Study on Natural Disaster Prevention in Pyanj River in the Republic of Tajikistan"

to prevent or minimize the impacts of involuntary resettlement[48].

2) Consultation with local stakeholders

Information disclosure and the formulation of impact mitigation measures are important. JICA proposed several ways of consultations with local stakeholders in accordance with the study phase and the nature of the region. There were cases where JICA increased the number of consultations[49].

3) Environmental impacts of road and railway projects

In addition to the above, consideration was given to other environmental impacts that were specific to road and railway projects, such as air pollution resulting from automobile traffic, noise from driving vehicles and railcars, impacts on river environment by bridge construction, and traffic accidents[50].

(5) Airport

One Category A and one Category B development study qualified for analysis in this sector.

Focus of environmental and social considerations

1) Consultation with local stakeholders

On the one hand, a broad range of stakeholders stand to benefit from the construction and improvement of airports. On the other hand, there are also stakeholder groups around the planned construction site of a new airport or in the

[48] "The Study on the Construction of the Second Mekong Bridge in the Kingdom of Cambodia"
"The Study on the Project for Improvement of National Road No.1 (Phnom Penh- Neak Leoung Section) in the Kingdom of Cambodia"
"The Feasibility Study and Implementation Support on the Cavite-Laguna (CALA) East-West National Road Project in the Republic of the Philippines"

[49] "The Feasibility Study of Padma Bridge in the People's Republic of Bangladesh"
"The Study on the Construction of the Second Mekong Bridge in the Kingdom of Cambodia"
"The Study on the Project for Improvement of National Road No.1 (Phnom Penh- Neak Leoung Section) in the Kingdom of Cambodia"
"The Feasibility Study and Implementation Support on the Cavite-Laguna (CALA) East-West National Road Project in the Republic of the Philippines"

[50] "The Feasibility Study of Padma Bridge in the People's Republic of Bangladesh"
"The Study on the Construction of the Second Mekong Bridge in the Kingdom of Cambodia"
"The Project for Construction Bridge between El Salvador and Honduras"
"The Project for Improvement of Urban and Rural Roads in Koror and Airai States in the Republic of Palau"
"The Feasibility Study and Implementation Support on the Cavite-Laguna (CALA) East-West National Road Project in the Republic of the Philippines"
"The Project for Reconstruction of Dusty-Nizhniy Pyandzh Road in the Republic of Tajikistan"

vicinity of an existing airport, who are likely to receive negative impacts such as involuntary resettlement or aircraft noise. There was a case where invitation letters for consultations were distributed to individual residents who lived in a planned construction site in order to encourage them to participate in meetings[51].

2) Impacts of noise from aircrafts

Many developing countries lack environmental standards for aircraft noise. However, it is necessary to explain the estimated level of aircraft noise and its significance to residents who will be affected by the noise. There was a case where JICA made a projection and assessment based on WECPNL (weighted equivalent continuous perceived noise level), which is employed as a calculation method for environmental standards relating to aircraft noise in Japan[52].

(6) Ports and harbors

One Category B development study project and two Category B preliminary studies for grant aid projects qualified for analysis in this sector.

Focus of environmental and social considerations

1) Water pollution accompanying the construction/rehabilitation of new port/harbor facilities

JICA examined impacts, such as increases in turbidity and concentration of suspended solids (SS) caused by the whirling-up of sand which accompanies dredging work on the seabed[53].

2) Impacts on natural coastal environments

JICA examined the possibility that the construction of port/harbor facilities and the rehabilitation of existing facilities could cause changes in coastal tidal currents and sedimentation[54].

[51] "The Study of the Improvement / Construction of the International Airport in the Republic of Guatemala"
[52] "The Study of the Improvement / Construction of the International Airport in the Republic of Guatemala"
[53] "The Project for Improvement of Weno Harbor in Chuuk State, the Federated States of Micronesia"
"National Ports Development Strategy Study in the Sultanate of Oman"
[54] "National Ports Development Strategy Study in the Sultanate of Oman"

(7) Water supply and sewerage systems

Eight Category B development study projects qualified for analysis in this sector.

Focus of environmental and social considerations

1) Examination of alternatives (selection and methods of securing water sources)

JICA examined alternatives by selecting water sources in installation of water supply facilities[55] although the choices of water sources tend to be restricted compared to master plan studies for water resources development.

2) Confirmation of the wishes of local stakeholders

At times, JICA surveyed the willingness of local people, who would benefit from water supply or sewage treatment facilities, to pay expenses related to the operation of them for the effective operation of the facility to be constructed[56].

3) Environmental impacts (offensive odor, sludge)

When operating a sewage treatment facility, the impacts of offensive odors and sludge generated from wastewater treatment, were examined as principal items[57].

(8) Waste management

Four development study projects and three technical cooperation projects qualified for analysis in this sector. Two development study projects were Category A projects and the others were Category B projects.

Focus of environmental and social considerations

1) Examination of alternatives

Waste management measures and policies include facility construction such as final disposal plants, and organizational policies such as the development of collection systems, as well as software measures such as awareness-raising activities intended to promote garbage separation and reduction. There were cases

[55] "The Study on Improvement of Water Supply System in Managua (Nicaragua)"

[56] "The Master Plan of Greater Phnom Penh Water Supply (Phase 2) in the Kingdom of Cambodia"
"The Study on Augmentation of Water Supply and Sanitation for Goa State in the Republic of India"

[57] "The Study on the Development Plan for Sewerage System and Sewage Treatment Plant for Greater Tirana in the Republic of Albania"
"The Study on Augmentation of Water Supply and Sanitation for Goa State in the Republic of India"

where JICA examined diverse components as alternatives and analyzed each alternative carefully from the viewpoint of environmental and social considerations[58].

2) Consultation with local stakeholders

At times, waste management plans cannot be effectively implemented without the cooperation of residents in the surrounding area. They include, for example, plans for general garbage collection and garbage separation/reduction. To properly realize these plans, consultations with local stakeholders were held, which also included awareness-raising activities for local residents[59].

3) Environmental impacts accompanying final disposal plants

JICA examined such impacts as offensive odors and surface and underground water pollution resulting from leachates, which often accompany the operation of final disposal plants[60].

4) Consideration for socially vulnerable groups

In some cases of final disposal plant construction, JICA examined the impacts on waste-pickers[61].

(9) Agriculture

One development study project and one preliminary study for grant aid project qualified for analysis in this sector. Both were Category B projects.

---

[58] "The Study on the Solid Waste Management for the Katmandu Valley in the Kingdom of Nepal"
"The Project on Improvement of Bouffa Landfill (Vanuatu)"

[59] "The Study on Solid Waste Management in the Municipality of Phnom Penh in the Kingdom of Cambodia"
"The Study of Management on Sanitation Environment in the Coast of Quintana Roo State in the United Mexican States"
"The Study on the Solid Waste Management for the Katmandu Valley in the Kingdom of Nepal"
"The Project on Improvement of Bouffa Landfill (Vanuatu)"

[60] "The Study on Solid Waste Management in the Municipality of Phnom Penh in the Kingdom of Cambodia"
"The Project on Integrated Solid Waste Management for Small Municipalities in the Republic of El Salvador"
"The study on the safe closure and rehabilitation of landfill sites in Malaysia"
"The Study of Management on Sanitation Environment in the Coast of Quintana Roo State in the United Mexican States"
"The Study on the Solid Waste Management for the Katmandu Valley in the Kingdom of Nepal"
"The Project on Improvement of Bouffa Landfill (Vanuatu)"

[61] "The Study on Solid Waste Management in the Municipality of Phnom Penh in the Kingdom of Cambodia"
"The Project on Integrated Solid Waste Management for Small Municipalities in the Republic of El Salvador"
"The study on the safe closure and rehabilitation of landfill sites in Malaysia"
"The Study on the Solid Waste Management for the Katmandu Valley in the Kingdom of Nepal"
"The Project on Improvement of Bouffa Landfill (Vanuatu)"

Focus of environmental and social considerations

1) Active involvement of local stakeholders

In some cases, it is necessary to consider measures and policies and to encourage the active involvement of local stakeholders. This is to prevent adverse impacts resulting from the inappropriate usage of agricultural water including during the construction of irrigation facilities. There was a case where JICA promoted awareness of proper water usage during a rehabilitation period of existing irrigation facilities[62] in consultation with local stakeholders.

(10) Fishing industry

Two Category B preliminary studies for grant aid projects qualified for analysis in this sector.

Focus of environmental and social considerations

1) Active involvement of local stakeholders

Consultations with local stakeholders engaged in the fishing industry were held to promote the utilization of fish processing facilities[63].

(11) Water resources development

Two development study projects (one Category A project, one Category B project) and one preliminary study for grant aid project (Category A) qualified for analysis in this sector.

Focus of environmental and social considerations

1) Examination of alternatives

JICA examined diverse alternatives in the master plan study phase through different combinations of water sources and water intake facilities. From these proposed alternatives, it established the optimum project in various views including environmental and social considerations[64].

[62] "The Project for Rehabilitation of Irrigation in Cochabamba in the Republic of Bolivia"

[63] "The Project for the Promotion of the Sustainable Coastal Fisheries in the Republic of Indonesia"
"The Project for Owia Fish Landing Complex Construction (Saint Vincent)"

[64] "The Comprehensive Study on Water Resources Development and Management for Bali Province in the Republic of Indonesia"

2) Confirmation of impacts on existing water usage

In a large-scale water resource development project, which seeks to use ground water as the water source, JICA examined whether a decrease in the groundwater level would affect the existing water usage[65].

(12) Regional development

Four Category B development study projects qualified for analysis in this sector.

Focus of environmental and social considerations

1) Employing the Strategic Environmental Assessment (SEA) concept

Since development studies in this sector aim to formulate regional development strategies, the SEA concept is introduced.

2) Consultation with local stakeholders

The regional development sector has potential for a variety of programs and projects; hence, there exists a wide-range of stakeholder groups. There were cases where a number of consultations with local stakeholders were held[66].

3) Items requiring environmental and social considerations

When diverse programs and projects are involved, it is necessary to address items requiring environmental and social considerations with an understanding of the characteristics unique to each regional society. There was a case where JICA consciously gave special consideration to ethnic groups and other socially vulnerable groups in the case of restoration assistance[67].

(13) Urban wastewater

One Category A development study project and one Category B preliminary study for grant aid project qualified for analysis in this sector.

---

[65] "The Project development of New Water Sources for Damascus City in the Syrian Arab Republic"

[66] "The Study on Integrated Master Plan for Sustainable Development of Siem Reap / Angkor Town in the Kingdom of Cambodia"
"The Study on Implementation of the Integrated Spatial Plan for Mamminasata Metropolitan Area, south Sulawesi Province in the Republic of Indonesia"

[67] "Jericho Regional development study Project in Palestine"

Focus of environmental and social considerations

1) Maintenance for drainage canals

There was a case where JICA examined measures for mitigating environmental and social impacts which included the maintenance for drainage canals to prevent a decrease in the discharge capacity of drainage canals due to waste disposal[68].

2) Dredged-sludge countermeasures

When projects generate dredged-sludge, JICA examined the disposal method to prevent secondary impacts that could be caused by inappropriate treatment of dredge sludge[69].

[68] "The Study on Drainage Improvement in the Core Area of Metro Manila"

[69] "The Project for Improvement of Storm Water Drainage System in Dhaka City (Phase 2) in the People's Republic Bangladesh"
"The Study on Drainage Improvement in the Core Area of Metro Manila"

6. Conclusion

(1) Implementation of the Current Guidelines

JICA created sector-based environmental guidelines in the 1990s, but full-scale implementation of environmental and social considerations began with the introduction of the current Guidelines in April 2004. The current Guidelines apply to a wide range of activities (schemes, etc.) and address broad-ranging impacts by promoting environmental and social considerations from the early stages of a project, clarifying necessary procedures, and strengthening JICA's operational capacity.

The status of implementation of the first sector-based environmental guidelines and the current Guidelines cannot be directly compared, because past data on the implementation of the previous sector-based environmental guidelines is lacking. However, the requirements contained in the current Guidelines show that the following institutional changes have occurred during the transition:

- Increased awareness of environmental and social considerations from the review stage of proposed project
- Improved environmental and social considerations studies (clarification of procedures and level of studies in each category)
- Introduction of the strategic environmental assessment (SEA) concept
- Commencement of information disclosure
- Involvement of local stakeholders in project formulation
- Development of JICA's organizational capacity for environmental and social considerations

(2) Status of Implementation

This review has been made in accordance to the provisions of the Guidelines in order to confirm the status of implementation of the Guidelines in individual projects through an examination of relevant projects and to examine how the Guidelines are actually being implemented.

As discussed in sections 1 to 4, it was confirmed that JICA implemented projects in line with the Guidelines.

JICA is particularly careful to abide by what the Guidelines specify as major principles

of environmental and social considerations—that is, (i) a wide range of impacts to be addressed is covered, (ii) measures for environmental and social considerations are implemented at an early stage, (iii) JICA asks stakeholders for their participation, and (iv) JICA discloses information.

In regard to the principle that “a wide range of impacts to be addressed is covered,” JICA studied, predicted and assessed items of not only pollution and other natural environment issues, but also social impacts such as involuntary resettlement.

In regard to the principle that “measures for environmental and social considerations are implemented at an early stage,” JICA conducted environmental and social considerations studies for its Category A and B master plan studies. In some feasibility studies as well, JICA conducted studies from the early planning stage prior to concrete project formulation (e.g., the stage of comparison of alternative development scenarios).

In regard to the principle that “JICA asks stakeholders for their participation,” consultations with local stakeholders were held in Category A projects in line with the Guidelines. Consultations with local stakeholders were held in a significant number of Category B projects.

In regard to the principle that “JICA discloses information,” JICA not only disclosed information, but encouraged host countries to do so as well.

By inviting the participation of local stakeholders and actively disclosing information, JICA fulfills its responsibility for accountability.