

Part 3
Approaches to programs

Chapter 1

Identification, formulation and planning

Project identification and formulation

For more effective implementation of cooperation

As has been said in Part 1, amidst the increasing international demand for a qualitative improvement in Japan's Official Development Assistance (ODA), the following will be vital to increase technical cooperation and implement it more effectively and efficiently:

- (1) Identification and formulation of outstanding projects
- (2) Evaluation of cooperation implementation

Thus, it is very important that outstanding projects, where results can be expected from cooperation, should be identified and formulated on the basis of a thorough prior understanding of the current situation and problems of the developing country which will be the recipient. All JICA programs should also be subjected to an overall evaluation in terms of the effects they have on the economic and social development of the recipient country and there is to be feedback on future projects.

These proposals have been made at the Interim Administrative Improvement Promotion Council and the Overseas Economic Cooperation Council. Seen from this viewpoint, JICA established aid efficiency promotion programs as a new budgetary item from 1988 in order to systematize and improve the budget for formulating and assessing

projects. These programs consisted of:

- (1) Studies for the identification and formulation of worthwhile projects.
- (2) Studies for the evaluation of completed projects.
- (3) Basic research for efficient implementation of aid programs.
- (4) Collection and collation of information on developing countries.

Below an account is given of the identification and formulation of projects (For evaluation see Chapter 3 "Evaluation and Follow-up".)

Studies for the identification and formulation of worthwhile projects

Project formulation studies

In some cases a request from a developing country may be insufficiently detailed or the developing country may find it difficult, due to its own circumstances, to make a request even though this may be a matter of priority. In such cases, it is necessary to carry out a field study for the relevant sector and to consult with the recipient country about the appropriateness of the cooperation, the capability of the administrative organizations to implement it and the impact it will have on the economic and social development of the recipient country, before preparing the optimal cooperation plan. Project formulation studies, conducted for the identification and formulation of projects, may be carried out by

a study team dispatched from Japan or by a JICA overseas office.

In 1994, 38 studies were carried out on projects in 33 developing countries and regions, two developed countries and one international organization in the following geographical areas.

- (1) Asia: 17 (45%)
- (2) Middle and Near East: 3 (8%)
- (3) Africa: 7 (18%)
- (4) Oceania: 1 (3%)
- (5) Central and South America: 5 (13%)
- (6) Eastern Europe: 1 (3%)
- (7) International organizations etc: 4 (10%)

Environmental project identification studies

These are studies to actively identify cooperation in environmental fields in countries which, despite facing serious environmental problems, find it difficult to make requests in the environmental field since they are not easily able to recognize these problems and to formulate environmental projects.

In 1994 one such study was carried out in Senegal.

Basic formulation studies in specific fields and regions

The development topics and developmental needs of developing countries are becoming increasingly diverse and complex. These studies are carried out to study and analyze basic information in fields such as the transition to a market economy*, population and AIDS, in which JICA does not possess adequate experience or expertise, in order to formulate methods and cooperation program plans to carry out such projects effectively and efficiently.

Three such studies were carried out in 1994, on the provision of transport infrastructures in the three countries of Indochina (Vietnam, Laos and Cambodia).

Project confirmation studies

In these studies:

- (1) Policy discussions are carried out on Japanese aid policies and the development plans of the recipient

country, and the information necessary to select projects which conform to Japanese aid policies and schemes is collected and these are discussed.

- (2) Requested projects are collated (to confirm their priority and content), the circumstances during implementation and problems are understood, problem-solving strategies are discussed, aid schemes are described and the wishes of the recipient country regarding the implementation of the project are noted.

Such studies are meant to give a direction to future cooperation and to carry it out with greater effectiveness and efficiency.

The following 16 study groups have been dispatched to 23 developing countries in order to confirm and discuss ways of cooperation regarding the requested projects.

- (1) Asia: 7 (44%)
- (2) Middle and Near East: 2 (12%)
- (3) Africa: 3 (19%)
- (4) Central and South America: 3 (19%)
- (5) Europe: 1 (6%)

Country-specific and sector-specific aid study

This study, initiated primarily by the Institute for International Cooperation (see Chapter 2: The Recruitment and Training of Technical Cooperation Experts), and conducted by a wide range of Japanese experts, involves studies of major recipient countries and specific aid issues to identify the sectors, issues and regions which should be given priority on aid.

In 1994, country-specific study was carried out on Vietnam, India, Ghana and Senegal. Sector-specific study was carried out on participatory development.

Country-specific environment and WID information collation studies

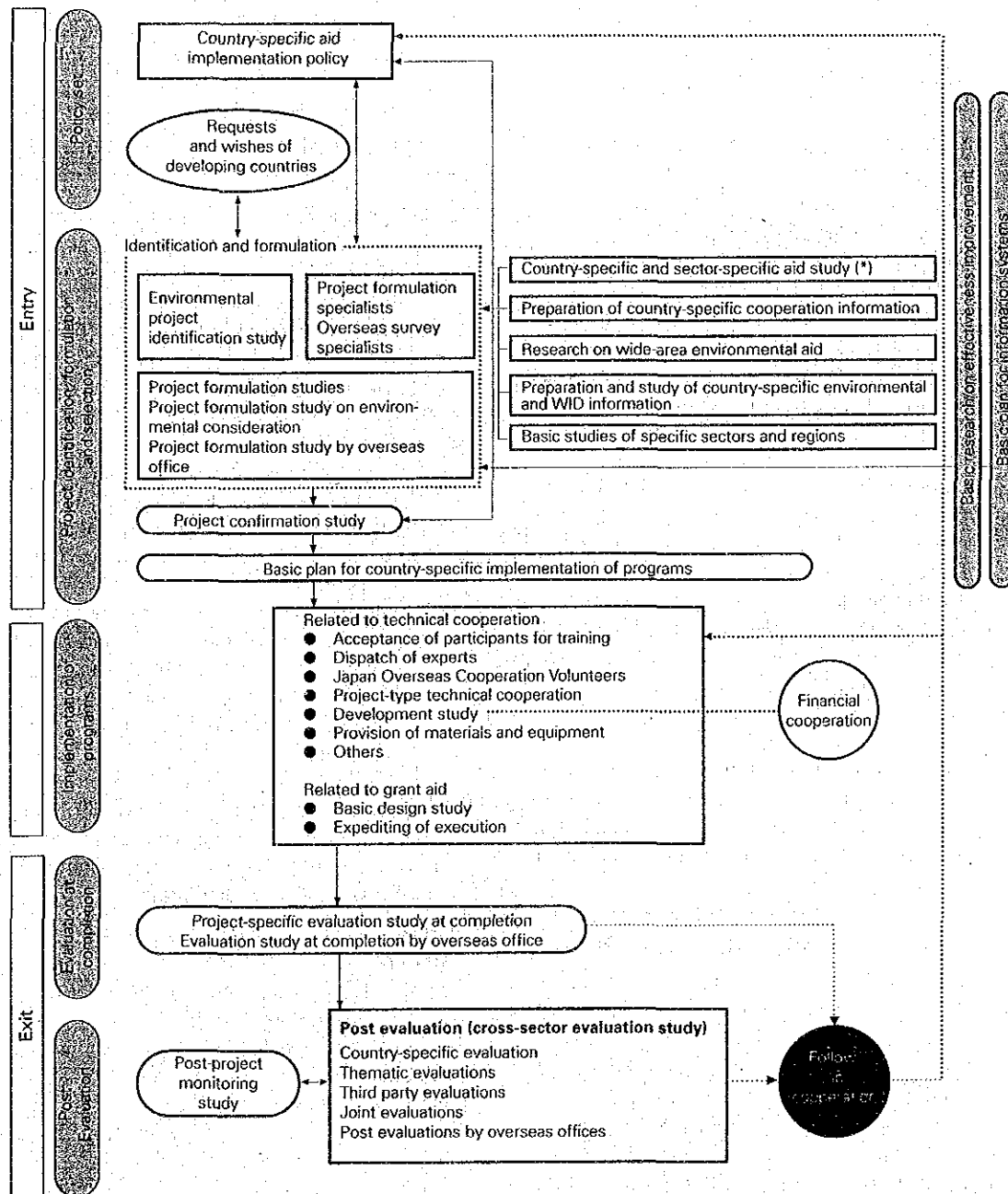
These studies are carried out to collect and collate information about the current situations and systems of environmental problems and WID (Women in Development)*, to improve environmental consideration* during the implementation of all JICA programs, and to study the engagement with environmental

* transition to a market economy: the economic reforms in general by which socialist nations introduce market mechanisms in order to break through economic stagnation.

* WID: an approach in which women's participation in development projects is considered to be important in order to carry out effective development aid, because women play important roles in developing nations.

* environmental consideration: to consider the nation's environment, when aid or investment is made to a developing nation. JICA sets guidelines and allocates management.

Figure 1-1 The relationships between identification, formulation, implementation and evaluation of cooperation projects



II administered by the Planning Department and Project Formulation Study Department

(*) Implementation is the responsibility of the Institute for International Cooperation

problems on the part of the organizations and government departments with environmental responsibilities in recipient countries and the current state of these problems.

In 1994, three such studies were carried out for Kazakhstan and Kirgiz, Sri Lanka, Zambia and Malawi.

Dispatch of project formulation specialists

It is necessary to study which forms and fields of cooperation are the most appropriate for a developing country, in order to carry out cooperation which is effective for the development of the country, and to formulate projects which accord with Japanese cooperation mechanisms. It is also necessary to take into account their compatibility with the recipient country's development plans and linkage with other aid programs when planning and promoting the formulation of potential cooperation projects. In order to respond to these needs, experts (project formulation specialists), who are knowledgeable in the priority development fields of developing countries, are dispatched to identify and formulate worthwhile projects and to coordinate and collate requested projects.

In 1994, thirty project formulation specialists were dispatched to formulate projects from their specialized perspectives in twenty countries in five regions including the Philippines, Cambodia, Mongolia, Guatemala, Syria and Malawi.

Basic Research to Improve Project Efficiency

In an effort to promote greater efficiency, JICA conducts basic research on issues common to various JICA projects.

In 1994, seven such studies were carried out: "A Practical Study of the Legal Position of JICA Associates", A PCM* Handbook (Project Identification and Formulation Volume)", "A Basic Study of Increasing Environmental Consideration in JICA Programs", "A Study of the Partnership Concept for the Progress of APEC (Asia Pacific Economic Cooperation

Forum)", "A JICA Basic Study of Environmental Improvement", "Preparation of a Handbook for WID-consideration Experts in Development Studies" and "A Basic Study of the Ending of Soviet Aid to Asian Countries and Future Japanese Aid".

Project Implementation Promotion

Post-project monitoring studies

Surveys are carried out on projects at a fixed time after the cooperation has been completed, encompassing the organizations, facilities, equipment supplies and project effectiveness. The survey findings are then systematically analyzed and used to provide basic reference materials for the follow-up of individual projects.

In 1994 studies were carried out by forty JICA overseas offices and seven JOCV overseas offices to identify the organizations, facilities, materials and equipment provided for and results of:

- (1) Project-type technical cooperation projects completed in 1986 and 1991
- (2) Grant aid projects completed in 1992 and 1993 (in principle, projects completed one and five years previously)
- (3) Individual equipment and materials provision projects carried out in 1991.

The results of these studies were analyzed and collated to provide basic reference materials for the follow-up of individual projects.

Basic planning studies for an information system

These surveys are conducted in order to create a system, through the organic integration of existing computer systems, that will enable information generated from diverse operations together with necessary information from external sources to be drawn together and used in a uniform and effective way.

In 1994, basic concepts of development and operation of project management systems for systematic information management and overseas offices information management were developed, following the basic plan for information systems.

* PCM: Project Cycle Management: to administer and manage all stages of a project from origination to completion.

Promotion of information networks

As a part of this information system, networks are being implemented to facilitate the shared use of information by JICA headquarters and affiliated organizations and branches in Japan.

Organization of country-specific aid information

In order to make it possible to tailor aid precisely to the development needs of the recipient country and to further enhance the overall activities of JICA, it is crucial for JICA to collate and analyze technical information as well as basic social and economic information about the developing country and also information concerning assistance trends among other aid agencies. At the same time it is important to uniformly collate and compile records of Japanese aid, past experiences and information concerning implementation of this aid. Information on country-specific cooperation is provided for these purposes.

In 1994, country-specific cooperation information was updated for 103 of the 104 countries (with the exception of the former Yugoslavia) for which files had been prepared up to the previous year, and four countries, Kazakhstan, Uzbekistan, Kirgiz and Eritrea, were added to make a total of 107.

Overseas survey specialists

In order to reinforce the collection of peripheral information related to requested projects in JICA's overseas offices, the agency must gather technical and related information concerning the number of technical experts in relevant recipient organizations, their level of expertise, the state of related infrastructure at the project site, and the financial capacity of the organizations. To fulfill this need, JICA has survey specialists with a thorough knowledge of local conditions in recipient countries (overseas survey specialists) who collect and analyze technical information consisting primarily of field surveys conducted from the standpoint of the technical staff in JICA's overseas offices.

In 1994, 36 overseas survey specialists were posted to the offices in 25 countries.

Development Studies

The meaning of development studies

Description and objectives

A development study means support for the creation of a public development plan (in, for example, urban planning, water supplies, communications and energy; see Table 1-1) which is fundamental to the national development of a developing country. The study provides basic material for development planning.

A development study, which is based on a Scope of Work (S/W) agreed by JICA and the government of the developing country, is performed by consultants* chosen by JICA. Under the direction and supervision of JICA, the consultants prepare a report in cooperation with the developing country's government. At the same time as the study is carried out, there is technological transfer* to the counterparts* in the recipient country in the forms of planning methods and study and analysis techniques.

The report prepared as a result of the development study provides materials for policy decisions on the social and economic development by the government of the recipient country. It is also a source of material when international organizations and donor countries examine financial and technical cooperation. In most cases the plans incorporated in such reports are linked to Japanese yen loans and grant aid for their realization.

290 development studies were carried out in 1994. In detail, 133 were in the field of social development, 59 in agriculture, forestry and fisheries and 98 in mining and industry.

In terms of region, 147 were carried out in Asia, 31 in the Middle and Near East, 34 in Africa, 52 in Central and South America, 6 in Oceania and 20 in Europe.

Types of study

Table 1-1 Fields of development studies

Field	Main content
Planning and administration	Regional development plans, economic development plans
Public works	Water supplies and sewerage; urban cleansing
Social infrastructure	City planning, rivers, erosion control, water resources, housing, cartography
Transport	Transport planning, roads, railways, ports, airports, urban transport
Communications and broadcast	Post, electronic communications, television and radio broadcasting
Health care and medicine	Health care, medicine, public health administration, population and family planning
Agriculture	Agricultural development, irrigation and drainage, village development, agricultural product processing and distribution, livestock rearing
Forestry	Resource studies, forestry plans, forest management plans, forest product processing
Fisheries	Resource studies, seafood processing and distribution, fish farming, fishing ports
Mining and industry	Resource studies, industrial promotion, factory modernization
Energy	Energy development
Environment	Measures against air and water pollution, environment protection
Others	Human resources, education, commerce and tourism, management etc

1. Master plan studies (M/P)

Master plan studies are conducted to formulate basic plans for various types of development, and they involve the preparation of long-term plans for an entire country, a region, or a specific sector. Formulation of a master plan is the first stage in a development study in cases where many types of projects must be implemented efficiently and in conformity with each other.

A master plan makes it possible to

- (1) Maintain compatibility between more than one plan
- (2) Clarify the priority of the plans and implement them effectively

* consultants: a firm which provides services such as advice and recommendations regarding the plan and administration of a project.

* technological transfer: to pass on the necessary technologies for production/management for the development of a developing nation, and to spread the technologies and to integrate them into the nation.

* counterparts: technicians in developing nations who share activities with Japanese experts and Japan Overseas Cooperation Volunteers, and who receive technical transfers from them.

This kind of study also includes studies of the recipient country's overall economy, that is, studies for the preparation of economic development plans, general development strategies and development plans for specific regions.

2. Feasibility studies (F/S)

Feasibility studies are conducted in order to objectively ascertain whether or not projects which are given priority in development policy and planning are feasible technically, economically, financially, socially, and from an environmental standpoint, and to formulate optimal plans for project implementation.

3. Preparation of basic data

The following studies are carried out in order to prepare, collect and supply the information necessary for the creation of development plans.

(1) Preparation of topographical maps

A study to prepare topographical maps (basic maps of the country and the cities), which are fundamental elements in the formulation and implementation of development planning.

(2) Development of groundwater resources

A study to assess the reserves and development potential of groundwater resources.

(3) Development of forestry and fisheries resources

A study to prepare basic data to promote an understanding of the reserves of forestry and fishery resources.

(4) Development of mineral resources

A study to assess mineral resources through geological surveys, physical studies and boring

4. Studies for Aftercare Services

In some cases after the completion of a development study, a review, including the recalculation of the project's construction costs, may be required due to rapid changes in social and economic conditions in the developing country involved, changes in natural conditions, or the passage of a significant interval after the implementation of the previous study. In such cases, studies for aftercare services are conducted to facilitate

the effective use of study results and the achievement of plans through a review of study results or supplementary work in line with the changed conditions.

5. Detailed design studies

A detailed design study (D/D) is implemented as part of the development study to prepare the design drawings, work specifications and bid documents for projects where a yen loan or other finance has been arranged and the work authorized. In comparison with a feasibility study, the detailed design studies must be precise enough for the execution and supervision of design drawings and work cost calculations.

6. Studies to support the transition to a market economy.

The purpose of this kind of study is to create basic strategies and comprehensive implementation plans for the promotion of policies concerning the transition to a market economy and the liberalization of the economy, such as financial reforms, provision of a legal system, and privatization of nationalized and public industries. They are also intended to train and improve the administrative capabilities of the personnel involved by holding workshops and seminars.

Such studies also test the feasibility of privatization plans against primary study results and formulate practical and realistic plans. The preparation of manuals and texts for the implementation of such plans is also undertaken.

Railway improvement study in Bolivia - surveying the existing railway facilities.

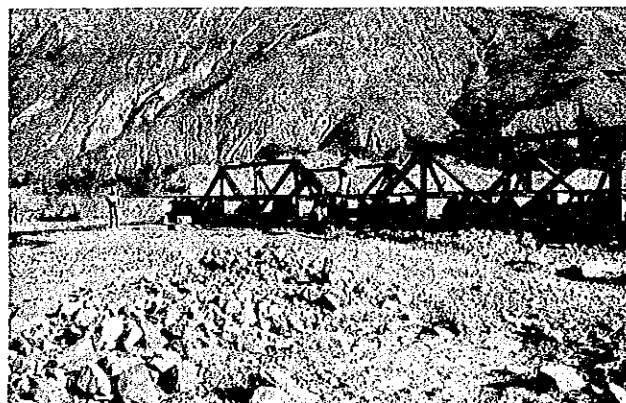
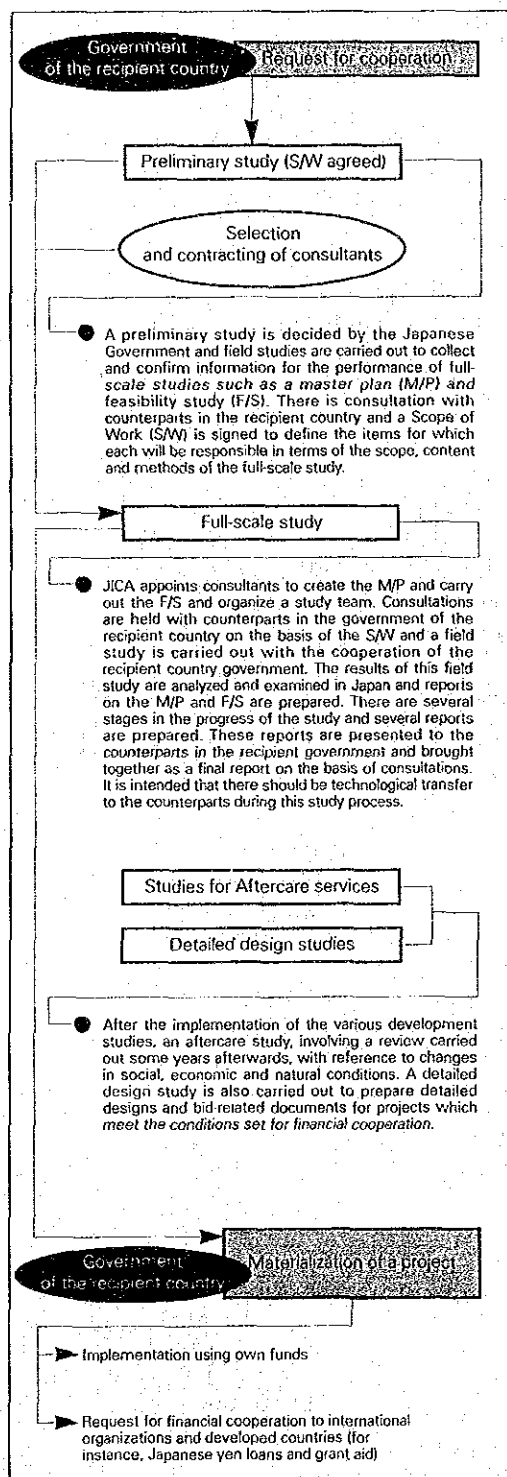


Figure 1-2
Sequence of development studies



7. Studies for enhancing project efficiency

There are three types of studies for enhancing project efficiency:

- (1) follow-up studies aimed at assessing subsequent progress in a project that has previously been studied and reflecting the results in future development studies so that the latter can be implemented more effectively and efficiently
- (2) studies for the promotion of technology transfer, in which seminars are held and texts in the local language are prepared in order to promote the transfer of technology through development studies
- (3) project research aimed at facilitating the implementation of more effective development studies, which involves the collection and analysis of information held by related organizations concerning the development plans of developing countries and basic survey methods.

Such studies promote greater efficiency in the implementation of programs.

The orientation of development studies

Responses to increasingly diverse needs

In addition to the fields, mainly centered on the provision of infrastructures, previously addressed, JICA is also engaged in studies of management-related fields focussing on policy advice; the establishment of organizations and systems and support for transition to a market economy, the new global issues* of poverty, the environment, health care and medicine (AIDS), and the social sector.

* global issues: social problems such as environment, population and poverty which are difficult to solve by the effort of individual nations and which require global commitment.

A balance between the environment and development

Poverty continues unabated in developing countries against a background of high birthrates. On the other hand, since economic growth has been given priority to the exclusion of environmental protection, environmental degradation has become serious. Both appropriate population policies and economic social development are vitally necessary to solve the problem of poverty. The importance of alleviating poverty without damaging the environment has been made clear and this approach is now established internationally.

Environmental preservation policies such as the creation of various plans to alleviate environmental problems and the assignment of experts in charge of environmental consideration to projects where such consideration is necessary are also incorporated into development studies. Strategies of avoiding or mitigating adverse effects are created when such effects are anticipated.

A wider area for aid

There has been an increase in the countries receiving cooperation with the addition of the former Communist countries of Eastern Europe and Central Asia and also Mongolia and the countries of Indochina. In many of the countries of Eastern Europe and Central Asia, efforts are being made to introduce and establish a market economy and there have been an increasing number of requests for "policy support and proposals" programs. Studies are also being carried out to support the recovery of the countries of Indochina from the ravages of civil war.

In addition to these new recipient countries, it is expected that there will be an increasing number of studies relating to supporting Palestine, as part of the Middle East peace process, and for the black people of South Africa.

Coordination with international organizations etc

In order to respond more appropriately to requests, JICA coordinates its activities with international financial institutions such as the World Bank, regional financial institutions such as the Asian Development Bank and bilateral aid organizations and NGOs.

Development Studies

Total No	NO	Area/Country	Project
		ASIA	
1	1	Bangladesh	The Study on Industrial Development of Chittagong Region
2	2		The Study on the Geodetic Survey
3	1	Bhutan	The Study on Groundwater Development in Wangduephodrang District
4	1	Cambodia	The Study on Telecommunication Network for Phnom Penh City
5	2		The Feasibility Study on Construction of Mekong Bridge
6	3		The Master Plan Study on the Integrated Agricultural and Rural Development Project in the Suburbs of Phnom Penh
7	1	China	The Integrated Air Quality Management Study for the City of Liuzhou and the Monitoring of Acid Precipitation in the Four Cities
8	2		The Study on Comprehensive Transportation System in Dalian City
9	3		The Study on Basic Planning for Shanghai Pu-dong International Airport
10	4		The Study on the Hydraulic Model Test for Baishi Dam in Liaoning Province
11	5		The Study for Factory Modernization (Suzhou Testing Instruments)
12	6		The Study for the Factory Modernization (Shanghai China Electric Works)
13	7		The Study for the Factory Modernization (Suzhou Textile Accessories)
14	8		The Study for the Factory Modernization (Changshu Carburetor)
15	9		The Study for the Factory Modernization (Yangzhou Cylinder Liner)
16	10		The Study for the Factory Modernization Wuxi Radio Component Factory NO.2
17	11		The Study for the Factory Modernization (Wuxi Pump Works)
18	12		The Study on Waste Water Treatment Project in Dexing Copper Mine
19	13		The Study on Utilization of Coal in Ningxia
20	14		Mineral Resource Exploration in the Yangzeditai Area
21	15		The Study on Water Environment Management in the Taoko River Basin
22	16		The Study on the Complex of the Shennu Coal
23	17		The Study of West-Bound Truck Construction Project in Municipality of Xiamen
24	18		The Primary Road Network Development Study in Zhe-jiang Province
25	19		The Study on Improvement Project of Drainage System in Qixing-Polder, Shunde City, Guangdong Province
26	20		The Study on the Integrated Agriculture Development Project in Heilongjiang
27	21		The Study for Factory Modernization (Shenyang Electric Motor Works)
28	22		The Study for Factory Modernization (Changzhou Forklift)

Development Studies

Development Studies

Total No	NO	Area/Country	Project
		ASIA	
29	23		The Study for Factory Modernization (Toho Insulating Material)
30	24		The Study for Factory Modernization (Hefei Mining Machinery)
31	25		The Study for the Factory Modernization (Wuxi Waste Water Treatment Equipment)
32	26		The Study for Factory Modernization (Dandong Filter)
33	27		The Study for Factory Modernization (Shanghai Roots Blower)
34	28		The Study for Factory Modernization (Nantong Fan)
35	29		The Study for Factory Modernization (Yangchow Diesel Engine)
36	1	India	The Study on the Industrial Model Town
37	2		The Master Plan Study on Pumped Storage Hydroelectric Power Development in Maharashtra State
38	1	Indonesia	The Study on the Master Plan of Container Cargo Handling Ports & Dry Ports and its Connecting Railway
39	2		The Study on Kampar-Indragiri River Basin Development Project
40	3		The Master Plan and Feasibility Study on Waste Water and Solid Waste Management for the City of Ujung Pandang
41	4		The Study on Integrated Air Quality Management for the Jakarta Metropolitan Area
42	5		The Study on Engineering Manpower Development Planning
43	6		The Detailed Design Study on Medan Flood Control Project
44	7		The Revise of the Jakarta Water Supply Development Project
45	8		The Study on Economic Model for Planning Exercises ; Long Term Programming Model
46	9		The Study on Comprehensive River Water Management Plan in Jabotabek
47	10		The Study on the Giliwang Irrigation Project
48	11		The Study on Land Rehabilitation of Semi Arid Zone in East Nusa Tenggara
49	12		The Study on the Embung Development Project (Small Scale Impounding Pond Development Project)in East Nusa Tenggara and West Nusa Tenggara
50	13		The Study for the Upper Cisokan Pumped Storage Hydroelectric Power Development Project
51	14		The Study on the Warsmanon Hydroelectric Power Development Project
52	15		The Master Plan Study on Electric Power Development
53	16		The Feasibility Study on Ujung Pandang Coal Fired Steam Power Plant Development Project
54	17		The Study on Master Plan of the Industrial Standardization and the Promotion of Quality Control
55	18		The Study on the Development of Poko Hydroelectric Power
56	19		Mineral Exploration in the Tasikmalaya Area
57	20		The Study on Industrial Sector Development - Supporting Industries

Development Studies

Total No	NO	Area/Country	Project
		ASIA	
58	21		The Master Plan Study on Ceramics Materials Development
59	22		The Study on Urban Arterial Road System Development Project in the Jakarta Metropolitan Area
60	23		The Study on Cuijun-Cidurian Integrated Water Resources
61	24		The Master Plan Study on Cooperative Rural Electrification in Aceh and North Sumatra
62	25		The Master Plan Study on Coastal Resources Inventory Management and Enhancement
63	26		The Study on the Development of Legal Metrology System
64	27		The Study on Bilah Barun Irrigation Project
65	28		The Follow-Up Study for Mineral Exploration in Southern Sumatra
66	1	Laos	The Topographic Mapping of Bolikhamxai Province
67	2		The Study on Groundwater Development for Champasak and Saravan Provinces
68	3		The Study on Construction of Mekong Bridge at Pakse
69	4		The Study on the Integrated Agricultural Rural Development Project in Boloven Plateau
70	5		The Master Plan Study on Hydro Electric Power Development in the Se Kong Basin
71	1	Malaysia	The Study on Introduction of Land Readjustment to Malaysia
72	2		The Study on Standardization of the Bridge Design
73	3		The Feasibility Study on Kuala Lumpur Outer Ring Road
74	4		The Study on Comprehensive Management Plan of the Muda River Basin
75	5		The Study on Management and Planning of Techno Centre for KULIM I.P
76	6		The Study on Industrial Sector Development - Supporting Industries
77	7		Mineral Exploration in the Central Saba Area
78	8		The National River Mouth Study
79	9		The Master Plan Study on Forest Plantation Development in Northern Sabah
80	10		The Feasibility Study on Small Reservoir Development in Peninsular Malaysia
81	1	Mongolia	The Topographic Mapping of Ulaan Tsav Area
82	2		The Study on Water Supply System in Ulaan Baatar and Surroundings
83	3		The Forest Resources Management Study in Selenge Aimak
84	4		The Master Plan Study on the Integrated Agricultural and Rural Development in Central Region
85	5		The Study on a Comprehensive Coal Development and Utilization Plan
86	6		Mineral Exploration in the Altan Tal Area
87	7		Prefeasibility Study for the Development in Tsau Area

Development Studies

Total No	NO	Area/Country	Project
		ASIA	
88	1	Nepal	The Master Plan Study on the Terai Groundwater Resources Evaluation and Development Project
89	2		The Master Plan Study on the Rehabilitation for Government Developed Irrigation Schemes in the Kathmandu Valley
90	3		The Study on Integrated Watershed Management in the Western Hills
91	4		The Study on Tribhuvan International Airport Modernization Plan
92	1	Pakistan	The Study on National Transport Plan
93	2		The Study on Chashma Right Bank 1st Lift Irrigation Project
94	3		The Study on the Lining of Tributaries and Minors in Punjab
95	1	Philippines	The Master Plan Study on West Central Luzon Development Program
96	2		The Study on Flood and Mudflow Control for Sacobia Bamban/Abacan River Draining from Mt. Pinatubo
97	3		The Cavite Water Supply Development Study
98	4		The Study on Pan-Philippine Highway Rehabilitation Project (Mindanao Section)
99	5		The Preparation of Provincial Water Supply, Sewerage and Sanitation Sector Plan
100	6		The Study on the Master Plan of Waterworks and Sewerage System in Metro Manila
101	7		The Study on Environmentally Sustainable Tourism Development Plan for Northern Palawan
102	8		The Study on Upland Irrigation and Rural Development Project in Southern Luzon
103	9		The Study on the Western Legazpi Irrigation and Rural Development Project
104	10		The Conceptual Approach to the Development of Exploration Strategies for Gold, Precious and Base Metal Mineralization in the Island of Catanduanes
105	11		The Study on Cebu Integrated Area Development Master Plan
106	12		The Study on the Flood Control for Rivers in the Selected Urban Centers
107	13		The Greater Capital Region Integrated Port Development Study
108	14		The Study on the Development of Viable Agrarian Reform Communities in Southern Palawan
109	15		The Study on the Marikina Watershed Development Project
110	16		The Study on Malaya Power Plant Reliability Improvement Project
111	1	Sri Lanka	The Master Plan on the Development of the New Port of Colombo
112	2		The Master Plan Study on Bridge Development
113	3		The Study on Telecommunication Networks
114	4		The Southern Area Development Plan Study
115	5		The Study on the Rehabilitation of Irrigation and Drainage Systems in the River Basins of Southern Sri Lanka

Development Studies

Total No	NO	Area/Country	Project
		ASIA	
116	6		The Study on the Kalu Ganga Water Supply Project for Greater Colombo
117	7		The Master Plan Study on the Agricultural and Rural Development for Up-Country Peasantry Rehabilitation Program
118	1	Thailand	The Study on Improvement Plan for Railway Transport Around Bangkok Metropolitan in Consideration of Urban Development
119	2		The Study on Road Disaster Prevention Plan
120	3		The Study on Urban Environmental Improvement Program in Bangkok
121	4		The Study on the Agricultural Land Rehabilitation and Conservation Project in Surat Thani and Nakhon Si Thammarat Provinces
122	5		The Master Plan Study on the Integrated Agriculture and Water Resources Development Project of Huai Mon Nam Suai and Huai Luang River Basin
123	6		The Study on Power Distribution System Improvement and Expansion Plan in the Metropolitan Area
124	7		Mineral Exploration in Chiang Khong/Doi Chong/Ratchaburi Area
125	8		The Study on Coal Exploration and Assessment
126	9		The Study on Management of Groundwater and Land Subsidence in the Bangkok Metropolitan Area and its Vicinity
127	10		The Study on Modernization of Bangkok Port
128	11		The Study on the Inter-City Toll Motorway Project
129	12		The Study on Inspection and Maintenance System for the Expressway
130	13		The Study on Industrial Sector Development-Supporting Industry
131	14		The Study on the Energy Conservation Project and Strengthening Manpower Capability
132	1	Viet Nam	Upgrading the Hanoi-Ho Chi Minh Railway Line to Speed Up the Passenger Express Trains to Average Speed of 70km/h in the Year of 2000
133	2		The Master Plan Study on Dong Nai and Surrounding Basins Water Resources Development
134	3		The Study on New Development Plan of Hanoi International Airport
135	4		The Study on Water Supply Development for Hanoi City
136	5		The Study on the Highway No.18 Improvement
137	6		The Master Plan Study on Coastal Shipping Rehabilitation and Development Project
138	7		The Study on Urban Transportation for Hanoi City
139	8		The Marine Resources Survey
140	9		The Master Plan Study on Electric Power Development

Development Studies

Total No	NO	Area/Country	Project
		ASIA	
141	10		The Study on Rehabilitation of Da Nhim Power System
142	11		The Study on Master Plan of Industrial Development in the Hanoi Area
143	12		Mineral Exploration in Yanyen and Western Thanh Hoa Area
144	13		The Study on Cailan Port Construction Project
145	14		The Study on Urban Drainage and Wastewater Disposal Systems in Hanoi City
146	15		The Master Plan on Development of Northeast Port Group and the Related Transport System
147	16		The Study on Improvement Project of Drainage System in South Bac Duong Agricultural Area
		MIDDLE EAST	
148	1	Egypt	The Study on a Bridge over the Northern Part of the Suez Canal
149	2		The Master Plan Study for the Egypt National Railways
150	3		The Study on Farmland Environmental Improvement Project in the Omoum Area
151	1	Iran	The Port Sector Study
152	2		The Study on the Integrated Master Plan for Air Pollution Control in the Greater Tehran Area
153	3		The Analysis of Energy Conservation and Rational Use of Energy in the Social and Economic Sectors
154	1	Jordan	The Study on Brackish Groundwater Desalination
155	2		The Study on the Improvement Plan of the Port of Aqaba
156	3		The Study on the Tourism Development Plan
157	4		The Study on Industrial Development in the Southern Districts
158	5		The Study on the Improvement of Water Supply System for the Zarqa District
159	1	Morocco	The Study on Rural Water Supply in the Pre-rif Region
160	2		The Study on Regional Reforestation Plan for Fuelwood Production
161	1	Oman	The Agriculture Development Project in Nejd Region
162	2		Mineral Exploration in the Central Batinah Coast
163	3		The Study on the Master Plan for Industrial Development
164	4		The Study on Barka Power and Desalination Plant Project
165	5		The Study on the Road Development Project
166	1	Saudi Arabia	The Technical Cooperation for Sea Water Desalination Technology Project

Development Studies

Total No	NO	Area/Country	Project
		MIDDLE EAST	
167	1	Syria	The Study on Ports Development Plan
168	2		The Study on National Telecommunications Network Expansion Plan
169	3		The Study on the Improvement and Extension of Water Distribution System for Damascus City
170	4		The Master Plan Study on Rehabilitation and Man Power Training
171	1	Tunisia	The Study on the Irrigated Area Improvement in Oasis in the South of the Republic of Tunisia
172	1	Turkey	The Study on the Maintenance and Rehabilitation of Highway Bridges
173	2		The Study for Kucuk Menderes River Basin Irrigation Project
174	3		The Study on Rational Use of Energy
175	4		The Study on Flood Forecasting System for Seyhan River Basin
176	5		Mineral Exploration in Kure Area
177	6		The Study on Koprubasi Hydroelectric Power Development Project
178	1	United Arab Emirates	The Master Plan Study on Groundwater Resources for Agricultural Development Around Al Dhaid City
179	1	AFRICA Côte d'Ivoire	The Master Plan Study for the Integrated Rural Development Project in the N'zi River Middle Basin
180	1	Ethiopia	The Study on Eleven Centers Water Supply and Sanitation
181	2		The Feasibility Study on Becho Plain Agricultural Development Project
182	1	Ghana	The Topographic Mapping of Southern Part of Ghana
183	2		The Study for the Rehabilitation of Irrigation Projects
184	1	Kenya	The Road Network Development Master Plan Study
185	2		The National Tourism Master Plan Study
186	3		The Muronga Grand Falls Hydropower Project
187	1	Madagascar	The Groundwater Development Study in the South-Western Region
188	2		The Study on the Development of the Port of Antsiranana

Development Studies

Total No	NO	Area/Country	Project
		AFRICA	
189	1	Malawi	The Master Plan Study on Sustainable Multiple-use Resources Management of the Nkhotakota Wildlife Reserve
190	1	Mali	The Study on Agricultural Development Project for the Nara Basin
191	2		The Follow-Up Study on the Mineral Exploration in the Bougouni Area
192	3		The Study on Utilization of Photovoltaics for Pumping System in the Nara Region
193	1	Namibia	The Mineral Exploration in the Orange and Kalkfeld Area
194	1	Niger	The Topographic Mapping of the South-Western Region
195	2		The Cooperative Mineral Exploration in the Sirba
196	1	Nigeria	The National Water Resources Master Plan Study
197	1	Senegal	The Study on Development of Electric Power System in the Dakar Area
198	2		The Study on Urban Drainage and Wastewater Systems in Dakar City and Its Surroundings
199	1	Tanzania	The Monduli Urban Water Supply Study, Arusha
200	2		The Dar es Salaam Road Development and Traffic Management Study
201	3		The Study on Water Resources Development in the Ruve River Basin
202	4		The Topographic Mapping of Mwanza-Geita Block
203	1	Uganda	The Topographic Mapping of Kampala and Jinja Blocks, North of Lake Victoria
204	2		The Master Plan Study on the Integrated Agricultural and Rural Development Project in the Central Uganda
205	3		The Master Plan Study for Telecommunication Networks
206	1	Burkina Faso	The Master Plan Study on the Integrated Agricultural Development in the Upper Mouhoun River Basin
207	1	Zambia	The National Water Resources Master Plan Study
208	2		The Study on Mongu Rural Development Project in Zanbezi River Flood Plain Area
209	3		The Forest Resources Management Study for Zambia Teak Forests in South-Western Zambia
210	4		Mineral Exploration in the Chambishi Southeast Area

Development Studies

Total No	NO	Area/Country	Project
		AFRICA	
211	1	Zimbabwe	The Master Plan Study on the Lower Muniyati Basin Agricultural Development
212	2		Mineral Exploration in the Makomde Area
		LATIN AMERICA	
213	1	Argentina	The Study of Economic Development (II)
214	2		The Forest Resources Management Study at Chaco
215	3		The Study on Air Pollution Control for Thermal Power Plants
216	4		The Topographic Mapping of North-East Region
217	5		The Cooperative Mineral Exploration in the Oeste Area
218	1	Bolivia	The Study on the Improvement Project of the Oruro-Cochabamba Line
219	2		The Topographic Mapping of La Paz-Beni Region
220	3		The Study on Provincial Ground Water Development
221	4		The Environmental Impact Assessment of Road Improvement between San Borja and Trinidad
222	5		The Master Plan Study on Flood Control in the Northern Rural Region of Santa Cruz
223	6		The Master Plan Study on Agricultural Marketing Systems in Santa Cruz
224	7		Mineral Exploration in the Huanuni Area
225	8		The Follow-Up Study on the Mineral Exploration in Colquiri Area
226	1	Brazil	The Master Plan for the Utilization of Water Resources in Parana State
227	2		The Fishery Resources Study of the Amazon and Tocantins River Mouth Areas
228	3		The Study on Evaluation of Environmental Quality in Regions Under Influence of Coal Steam Power Plant
229	4		The Study on Recuperation of Mined-out Areas in South Region of Santa Catarina State
230	5		The Study on the Navigation of the Parnaiba River Basin
231	1	Chile	Mineral Exploration in the Veraguas Progreso Area
232	2		The Master Plan on Industrial Solid Waste Management in the Metropolitan Region
233	3		The Study on the New Bio-bio Bridge
234	4		The Study on the Development of Water Resources in Northern Chile
235	1	Colombia	The Study on Transport Plan in Satafe City, Bogota
236	1	Costa Rica	The Study on Los Llanos Hydroelectric Power Development Project

Development Studies

Total No	NO	Area/Country	Project
		LATIN AMERICA	
237	1	Dominican Republic	The Study on the Limon del Yuna Area Agricultural Development Project
238	1	Ecuador	The Study on the Master Plan for the Port of Guayaquil
239	2		Mineral Exploration in the Junin and Cuellaje Area
240	3		The Detailed Design Study on the Water Transbasin Schemes for the Chone-Portoviejo River Basins
241	4		The Study on Service Reliability Improvement Project of National Interconnected System
242	5		The Study on the Tumbabiro Irrigation Project
243	1	El Salvador	The Study on Integrated Agricultural Development in the Jiboa River Basin
244	1	Guatemala	The Study on Groundwater Development in the Central Plateau Area
245	2		The Study on the Project of Urban Transportation in the Metropolitan Area of Guatemala
246	3		The Study on the Improvement of Wastewater Management in the Guatemala Metropolitan Area
247	4		The Master Plan Study on Forest Management in Baja Verapaz
248	1	Honduras	The Study on the Strategies and Plans for the Upgrading of Public Health Status
249	2		The Maintenance Project of the Vehicle Traffic System in Teguchigalpa
250	3		The Forest Resources Management and Development Study in Teupassenti
251	4		The Study on the Irrigated Agricultural Development Project in Jesus de Otoro Valley, Intibuca Department
252	1	Mexico	The Study on the Combustion Technologies for the Air Pollution Control in the Metropolitan Area of the City of Mexico
253	2		The Master Plan Study on the Integrated Agriculture, Livestock and Rural Development in the Coast of Jalisco
254	3		Mineral Exploration in the Campo Seco Area, Guerrero State
255	4		The Study on Wastewater Treatment in the Federal District of Mexico
256	5		The Follow-Up Study on the Mineral Exploration in Tejpilco Area
257	1	Nicaragua	The Study on the Improvement of the Solid Waste Management System for the City of Managua
258	2		The Road Improvement and Rehabilitation Study
259	1	Panama	The Study on Tourism Development in the Coastal Area

Development Studies

Total No	NO	Area/Country	Project
		LATIN AMERICA	
260	1	Paraguay	The Master Plan Study on the Program for Supporting Small Farmers
261	2		The Study on the Solid Waste Management for the Metropolitan Area of Asuncion
262	3		The Master Plan Study on the Integrated Agricultural and Livestock Development Project at Lower Chaco
263	1	Trinidad and Tobago	The Study on Pollution Prevention and Control within the Petroleum Sector
264	1	Venezuela	The Study on the Establishment of the Coke Plant
		OCEANIA	
265	1	Cook Islands	The Study on Coastal Protection and Port Improvement
266	1	Fiji	The Study on Groundwater Development in North Viti Levu
267	2		The Preparation of Nautical Charts in the Northern Lau Islands Region
268	1	Kiribati	The Study on Ports Development
269	1	Solomon Islands	The Study on Improvement of Nationwide Fish Marketing System
270	1	Vanuatu	The Ocean Resources Investigation in the Sea Area of SOPAC

Development Studies

Total No	NO	Area/Country	Project
		EUROPE	
271	1	Bulgaria	The Study on Restructuring and Modernization of Steel Industry
272	2		The Study on Maritsa East No.1 Replacing Thermal Power Plant for Improvement of the Performance of the Units and the Environmental Protection
273	3		The Study on the Solid Waste Management for the Territory of the Sofia Greater Municipality
274	4		The Master Plan Study for the Investment Priorities of the Transport Infrastructure
275	1	Slovak	The Study on Heating System Modernization
276	1	Hungary	The Restructuring of the State-Owned Automotive Parts Company
277	2		The Study on an Integrated Air Pollution Control Plan for Sajó Valley Area
278	1	Romania	The Study on Irrigation Project in Ruginesci-Pufesti-Panciu District Vrancea
279	2		The Study on the Solid Waste Management System for Bucharest Municipality
280	3		The Study on Energy Saving and Environmental Pollution Control in the Integrated Iron and Steel Works "SIDEX" S.A., Galati
281	1	Poland	The Study on Modernization and Environmental Pollution Control in Mazovian Oil Refinery and Petrochemical Works in Plock
282	1	Kazakhstan	The Study for Development of Road Network in Western Kazakhstan
283	2		The Master Plan Study on Promotion of the Nonferrous Metals Industry
284	3		The Mineral Exploration in the Dzhaman Aybat and Samalsky Area
285	1	Kyrgyz	The Study on Master Plan of Industrial Development Plan
286	2		Mineral Exploration in the Talas Area
287	3		The Study on Improvement of the Payment System
288	4		The Master Plan Study on the Development of Nationwide Radio and TV Broadcasting Network
289	1	Uzbekistan	The Study on Water Supply Systems in Six Cities of Aral Sea Region
290	2		The Mineral Exploration in the Eastern Bukantau Area