

Services

JOC extends a full range of services to meet needs of clients

Fields

- [Road and Bridge](#)
 - [Port and Harbor](#)
 - [Irrigation and Water Resources](#)
 - [Others](#)
-

Scope

• Project Identification

- Project Appraisal
- Pre-project Evaluation

• Studies and Preliminary Engineering

- Preparatory Studies
- Master Plan
- Feasibility Studies and Preliminary Engineering
- Environmental Assessment

• Detailed Engineering

- Detailed Design
- Preparation of Tender Documents
- Cost Estimates

• Construction Supervision and Management

- Preconstruction Services
- Construction Supervision
- Construction Management
- Environmental Management

• Others

- Training Program
 - Maintenance Program
 - Post-evaluation Services
-

Experience

Country	Project Name	Client/Finance	From	To
Road and Bridges BACK				
Philippines	JICA-assisted Road Upgrading and Preservation Project (RUPP)	JICA	2013	2016
Ethiopia	Regional Bridges Rehabilitation Plan Study	Private Company	2010	2010
Malawi	Study on Development of the Sena Corridor	JICA	2010	2010
Sri Lanka	Construction of a Bridge across the Batticaloa Lagoon	JICA	2009	2009
Kyrgyzstan	CAREC Transport Corridor 1	MOTC/ADB	2009	2012
Cambodia	Second Mekong Bridge Construction	JICA	2008	2009
Sri Lanka	Road Sector Assistance Project, "Preparation of Strategy Formulation of Rural Roads Management and Financing"	MLGPC/IBRD	2006	2008
Egypt	Feasibility Study on High Priority Urban Toll Expressway	JICA	2007	2008
Zambia	Project for Improvement and Maintenance of Ndola Kitwe City Roads	JICA	2006	2007
Mongolia	Construction of Eastern Arterial Road and improvement of the Related Equipment	MRTTM/JICA	2005	2010
Philippines	Remedial Works in Specified Landslide Areas and Road Slip Sections	DPWH/IBRD	2003	2005
Cambodia	Environment and Social Study for Improvement of National Road No.1(Phnom Penh-Neakloueng Section)	JICA	2003	2003
Mongolia	Second Road Development Project	DOR/ADB	2000	2000
China	Hangzhou-Quzhou Expressway Project	ZPEPC/JBIC	2000	2000
Bangladesh	Dhaka Urban Transport Study	BRTA/World Bank	99	2003
Philippines	C-5/Boni Serrano Interchange	DPWH/JBIC	99	2001
Bangladesh	Third Rural Infrastructure Development	LGED/ADB	99	2000
Bangladesh	Feasibility Study for Rupsa Bridge Construction Project	JICA	99	2000
Philippines	ADB 6th Road Improvement Project (Structural Overlay)	DPWH/ADB	98	2002
Bangladesh	Jamuna Bridge Access Road Project	RHD/OECF	98	2001
Kyrgyzstan	Bishkek-Osh Road Rehabilitation Project	MOTC/OECF	98	2006
Bangladesh	The Road Improvement Project	RHD/ADB	98	2000
Bangladesh	Flood Damage Restoration Project (Roads & Bridges)	RHD/ADB	98	2000
Bangladesh	Master Plan for Rupsa Bridge Construction Project	JICA	98	99
Cambodia	Simplified Engineering Design for Selected National Provincial Roads	MPWT/World Bank	98	98
Vietnam	Bridge Rehabilitation for Highway No.1 (Phase II)	PMU-18/OECF	97	2000
Turkey	Maintenance and Management of Trunk Highways	JICA	97	98
Philippines	Vargas Flyover for C-5 Project in Metro Manila	DPWH/OECF	97	98
Zambia & Zimbabwe	Construction of Chirundu New Bridge on Zambezi River	JICA	97	97
Laos	Rehabilitation of Bridges on Highway No.13	JICA	97	97
Djibouti	Rehabilitation of R.N. 1 and 2 Road	JICA	97	97
Kazakhstan	Road Rehabilitation Project	Kazakhstan Govt./ADB	96	2000
Cambodia	Feasibility Study for Selected Priority National/Provincial Roads	World Bank	96	97
Thailand	Lampang-Doi Sake Expressway Project	JICA	96	96
Egypt	Construction of Bridge over Suez Canal	JICA	96	96
Bangladesh	Paksey Bridge Construction Project	RHD/OECF	96	96
China (PRC)	Liaoning and Jilin Expressways Project	ADB	96	96

Cambodia	Rehabilitation of National Highways No.6 & 7	JICA	96	96
Chile	Nation-Wide Bridge Rehabilitation Study	JICA	96	96
Indonesia	Intra-Urban Tollway Project	JASA MARGA / OECF	95	97
Turkey	Maintenance and Rehabilitation for Highway Bridge	JICA	95	96
Oman	Road Development Project (Study for Flyovers and Underpasses)	JICA	95	95
Kenya, Zambia, Tanzania	Post-Evaluation Study for Road Projects	JICA	95	95
China (PRC)	Sichuan Expressway Project	ADB	95	95
Bangladesh	Improvement of Dhaka-Khulna-Mongla Road	IDI, Japan	95	95
Bangladesh	Jamuna Bridge Railway Approaches Study	ADB	95	95
Vietnam	Bridge Rehabilitation on Highway No.1	OECF	95	95
Mongolia	State Road Construction Project (B/D, D/D)	Mongolian Govt./JICA	94	95
Vietnam	Second Road Improvement Project	ADB	94	94
Cambodia	Mekong River Bridge Study	JICA	94	94
Djibouti	Road Equipment Procurement Services	JICA	93	94
Thailand	Road Disaster Prevention Study	JICA	93	93
China (PRC)	Dalian Urban Transport Master Plan Study	JICA	93	93
Thailand	Inter-urban Highway Construction Plan	JICA	92	92
Indonesia	Jakarta Primary Road Network Study	JICA	92	92
Djibouti	Road Construction Equipment Maintenance Project	JICA	92	92
Niger	Second Niamey Bridge Project	JICA	90	90
Philippines	Circumferential Road No.5 (C-5) Project Package A	DPWH/OECF	89	97
Philippines	Circumferential Road (C-3) and Makati- Mandaluyong Road Project (C/S)	DPWH/OECF	88	92
Philippines	Mindanao Road Improvement Project	DPWH/ Kuwait Fund (KFAED)	87	98
Myanmar	Rangoon-Prome Road Improvement Project	MC/ ADB	85	93
Philippines	Third Road Improvement Project	DPWH/ADB	84	8
Sri Lanka	Colombo-Katunayake Expressway Project (F/S)	JICA	83	83
Thailand	Rama VI Bridge Construction Project	JICA	81	81
Malaysia	Johor Bahru Transport and Urban Development Study	JICA	80	81
Malaysia	Urban Transport and Development Study in George Town, Butterworth, and Bukit Mertajam	JICA	79	82
Philippines	Circumferential Road (C-3) and Makati- Mandaluyong Road Project	DPWH/OECF	79	81
Philippines	Manila-Bataan Coastal and Related Roads Project	JICA	79	80
Bangladesh	Khulna-Mongla Road Project	RHD/ADB	77	85
Philippines	Circumferential Road (C-3) and Related Road Project	JICA	77	78
Philippines	Mindanao Secondary & Feeder Roads Project	DPWH/ADB	76	85
Tanzania	Southern Coastal Road Project	JICA	76	77
Japan	The Akashi Kaikyo Bridge Project	Japanese Govnt.	75	79
Philippines	Radial Road R-10 and Urban Development Project	JICA	74	75
Burma	Irrawaddy River Bridge Construction Project	JICA	74	75
Tanzania	Rufiji River Bridge Construction Project	OTCA MPW	71	74
Philippines	Manila Urban Development and Transportation Study	OTCA	71	72
Tanzania	Southern Coastal Link Road Project	OTCA	70	72
Turkey	Golden Horn Bridge Construction Project	Turkish Govt.	70	70

Part and Harbor		BACK		
Kenya	Monbasa Container Port terminal Expansion Program	Private Company	2009	2009
Bangladesh	Mongla Port Area Development Project	ADB	95	95
Syria	Port Development Plan Study	JICA	94	94
Myanmar	Burma Outports Project	ADB	78	79
Irrigation and Water Resources		BACK		
Mexico	Ground Water Development Study Project	Mexico City/IDB	99	2000
Bangladesh	Flood Damage Rehabilitation	ADB	98	2000
Malaysia	Water Resources Supply for Santi Resort Development	Santi Resort Development Corp.	97	97
Sri Lanka	Water Resources Development for Colombo Water Supply	JICA	94	94
Bangladesh	Deep Tubewell Irrigation Project	BWDB/ADB	90	91
Malaysia	Ground Water Resources and Site Investigation for Trengganu Steel Plant	Nippon Steel Corp.	87	88
Nepal	Water Resources Development for Mountainous Area	JICA	86	87
Afghanistan	Balkh Irrigation Project	ADB	80	81
Others		BACK		
Tanzania	Zanzibar Area Regional Electricity Power Network Strengthening Plan	JICA	2010	2010
Russia	Yuzhno-Sakhalinsk Onshore and near shore Detailed Site Investigations at the Dekastri Terminal Site	Private Company	2006	2007
China	Telecommunication Project	ADB	99	99
Vietnam	Hai Van Pass Tunnel Construction Study	EPRF Japan	96	96
Indonesia	Urban Sewerage System Study in Jakarta	JICA	96	96
Nicaragua	Managua City Waste Disposal Plant Project	JICA	93	93
Burma	Upgrading of Hospital Project	ADB	80	82

JICA-assisted Road Upgrading and Preservation Project (RUPP)

Philippines, JICA, C/S, 2013–2016.



In coping with ever growing awareness of the Government of the Philippines on vital role of highway transportation in view of national, social and economic development, the Department of Public Works and Highways (DPWH) has proceeded with maintenance and management of the existing road assets extended over the Philippine archipelago, Preserving in either way of improvement, upgrading and rehabilitation, and it is currently endeavoring continued practices on ongoing project alike.

The Project is financed with the Loan Agreement between the Philippine Government and Japan International Cooperation Agency (JICA) for the purpose of financing the Consulting Services for the Construction Supervision of civil Works for the highway upgrading / improvement Projects of ;

Bongabon–Baler Road (51.3 km)

Lipa–Alaminos Road (16.7 km)

Mindoro West Coast Road (153.4 km)

Catanduanes Circumferential Road (64.2 km)

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Which are JICA-assisted Upgrading / improvement (UI) Component of the Road Upgrading and Preservation Project (RUPP).

Regional Bridges Rehabilitation Plan Study

Ethiopia, Preparation Study (P/S), Private Company.



In reply to the request of the Government of Ethiopia, JICA is conducting [Bridge Maintenance Capability Improvement Project] from 2007 for 4 years. Among it, the National Route No.1 is an important route connecting Djibouti Port of the adjacent country and capital city Addis Ababa. The present request is the replacement of Gogecha Bridge, Modjo Bridge and Awash Bridge. For which request, JICA has carried out preliminary study and confirmation has been obtained and on the basis of this, the present study is to find out necessity and reasonableness of the request in detail, carry out appropriate preliminary design as grant aid project, formulate the business plan and estimate the approximate cost estimate.

The Consultant undertook:

- confirm environmental social consideration (land acquisition, resettlement, resident participation, information disclosure)
- Confirm the system of the Ethiopia's environmental social considerations and organizations such as reviewing regulations and standards related thereto, reviewing conformity with JICA Guidelines, reviewing of the roles of related organizations, confirming legislation related to resettlement.

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Study on Development of the Sena Corridor

Malawi, JICA, P/S, 2010



Based on the candidate routes shown on the Master Plan and Pre-FS previously carried out, the four routes were taken up for the preliminary study. The Consultant carried out adverse impacts of each route and summarized them, including social and natural environment conditions.

As a result of site survey, the Consultant confirmed the conditions for Environmental Social Considerations. Also, legal framework of Environmental and Social Considerations (Law, Projects subject to EIA, Procedures, Information Disclosure and Stakeholder Participation) were studied.

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Construction of a Bridge across the Batticaloa Lagoon

Sri Lanka, JICA, P/S, 2009



This project is to carry out a preliminary study for a new bridge construction project across the lagoon Batticaloa of length at minimum, 300 m.

Based on an international standard, the project requires environmental impact assessment. The Consultant undertook environmental impact mitigation measure and post project detailed monitoring.

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CAREC Transport Corridor 1

Kyrgyzstan, ADB, D/D, C/S, 2009–2012



To implement in three phases of Bishkek–Torugart highway. This is Project 1, of which outputs are improved 39 km road section from km 400 (At–Bashy) to Km 439 (AkBeit Pass). After completion of the project, the present deteriorated AC paved or gravel road will be improved to 8m wide AC paved road with 2.5m wide shoulders. Existing culverts will be replaced or rehabilitated.

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The consultancy services include; review and finalizing engineering designs, tendering and construction supervision,

- i. project benefits monitoring and evaluation using the criteria of the project performance management system, focusing on social, environmental and poverty impact monitoring
- ii. preparation of Project 2 including EIA
- iii. provide on-the-job training to MOTC staff.

Second Mekong Bridge Construction

Cambodia, JICA, P/S, 2008 – 2009



Government of Cambodia requested the Japan Government for study of construction of the Second Mekong Bridge and the Japan International Cooperation Agency undertook the study during in 2008. The planned site Neak Loueng is located on international trunk road connecting Phnom Penh and Ho Chi Ming of Vietnam at the river crossing point. The Basic Design Study has been decided to be conducted because of necessity and urgent of this project and this Development Study has been carried out prior to the said Basic Design Study. To confirm necessity and reasonableness of this plan, collection and analysis of data and information was carried out prior to the Basic Design Study and consultation with the concerned people of the Cambodian side.

Area of the Study the Consultant undertook were:

---Resettlement plan, support the social economic study of the affected people, detailed assets survey, study related to resettlement compensation etc, development study and supplementary study of follow-up study and support of drafting of plan.

---Discussion with the Cambodian side and result of analysis in Japan and report to the Advisory Council and at the same time, prepare the Preliminary Study Report based on the report made to the Advisory Council. [BACK](#)

Road Sector Assistance Project, “Preparation of Strategy Formulation of Rural Roads Management and Financing”

Sri Lanka, World Bank, M/ P, 2006 – 2008



To formulate a country-wide approach to rural roads management and financing in Sri Lanka. The project is carried out under the supervision of the of the Ministry of Local Government and Provincial Councils. Three provinces have been initially selected for implementation of the pilot component, which are North Central, Southern and Uva Province.

The Consultants study for Strategy Formulation covers organization and institutions from national town to village level. It will also form the basis of a country-wide approach and is not limited to the three pilot provinces. [BACK](#)

Feasibility Study on High Priority Urban Toll Expressway in Cairo

Egypt, JICA, F/S, 2007 – 2008



The proposed urban toll expressway network requires huge financial resources for construction, operation and maintenance, while the government's sources are not sufficient, new and stable sources of fund are required. This financial gap is expected to be filled by Public-Private Partnership “PPP” Program. To promote the construction of the expressway network by the target year of 2022, identified high priority routes, which are composed of the extensions of existing elevated Route No.1 and Route No.2 (E1–2 and E2–2), and the new Route No.3 (E3).

Greater Cairo Region (GCR), with a population of more than 14 million inhabitants at present, is estimated to accommodate a population of 22 million in 2022 which puts growing pressure on all infrastructure systems, including the road network system. At present, the urban transport situation, in general, is characterized by traffic congestions, constrained resources for public transport and deterioration of air quality. Congestion in GCR is caused by its excessive traffic demand and insufficient road capacity with inefficient traffic flow and ineffective traffic management. [BACK](#)

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Project for Improvement and Maintenance of Ndola and Kitwe City Roads

Zambia, JICA, 2006–2007, P/S



The project is to implement Initial Environmental Examination (IEE), to assist Zambia side to prepare Resettlement Action Plan, or Resettlement Policy Framework whichever necessary. To clarify the conditions of socially vulnerable groups such as poor, aged, widowed, landless that may be affected by the roads improvement project. To review existing laws, regulations, policies and institutional arrangements related to environmental protection.

The Consultant undertook:

Phase 1:

- 1) To collect and analyze necessary data of the present situation for the Study
- 2) To prepare data for presenting the results of preparatory study

Phase 2:

- 1) To review existing laws, regulations, policies and institutional arrangements
 - 2) To review upper policies, including Vision 2030, PRSP, 5th National Development Plan
 - 3) Economic relationship in Southern African countries and the Position of Zambia
 - 4) Potential industries in Zambia
 - 5) Concept of the industrial developments strategy in Zambia and MFEZ
 - 6) Assistance to Environmental and Social consideration Study implemented by GRZ
 - 7) Implementation plan [BACK](#)
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Construction of Eastern Arterial Road and Improvement of the Related Equipment

Mongolia, JICA, F/S, D/D, C/S, 2005 – 2010



The Government of Mongolia announced the scheme of Millennium Road Planning targeting to strengthen East–West transport axis, envisaging not only the improvement of road transport in Mongolia but also the promotion of regional cooperation with Russia, China, and other surrounding countries. The road is a part of the East–West transport axis on which the Millennium Road Planning emphasizes the necessity and urgency of improvement much more than before.

- 1) Prepare the design documents and assisted the Client in preparation of tender documents at the stage 1.
 - 2) Assisted the Client in pre-qualification and tendering procedures and negotiation with tenderers at the stages I and II.
 - 3) Provided construction and procurement services at the stages I and II.
 - 4) Provided operation training and management guidance services at the stage I. [BACK](#)
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Remedial Works in Specified Landslide Areas and Road Slip Sections

Philippines, World Bank, D/D, 2003 – 2005



The Government of the Philippines through the Department of Public Works and Highways (DPWH) implements the IBRD-assisted National Road Improvement and Management Program (NRIMP), as a follow-up to the completed IBRD-assisted Highway Management Project (HMP).

JOC undertook:

Feasibility study, including an inspection and preliminary assessment of the hazard, risk, and mechanisms of failure, identification of the potential remedial options to be evaluated, and definition of the scope and estimated cost of detailing and implementing the leading options as basis for advising DPWH on the option to be recommended. And also, detailed engineering design of remedial works for specified landslide areas and road slip sections. This shall include comprehensive investigation and analysis of the landslide areas and road slip sections, and detailed design and documentation and contract packaging for appropriate remedial works including slope protection and slope stabilization works. [BACK](#)

Environmental and Social Study for Improvement of National Road No.1 (Phnom Penh–Neakloug Section)

Cambodia, JICA, Preparatory Study(P/S), 2003



In the Feasibility Study, IEIA was conducted in accordance with the environmental rules and regulations of Cambodia as well as Environmental Guidelines of JICA, and it is concluded that "The Project of Improvement of the National Road No.1" has negative impact unless proper measures by the proponent for social and natural environmental considerations are fully taken into account. It is recommended as necessary to set up protection management measures in order to integrate the social and natural environments fully so that negative impacts may be reduced.

Service Provided by the Consultant was:

1) Identification of the Status of the Project and Resettlement Issue

" To study the importance of this Project, such as priority in their Second Five Year Plan of the Social and Economic Development

" Status of resettlement process and procedure after the Feasibility Study

2) Review of Road Improvement Plan

" To study a possibility to modify the road improvement plan from the view of minimizing the number of relocation

" To study the laws and regulation related ROW and land conveyance in Cambodia

3) Establishment of Process and Procedure for Resettlement.

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Second Road Development Project

Mongolia, ADB, E/D, C/S, 2000–2004



To develop a nationwide effective transportation network, the government of Mongolia intends to perform 1) detailed design for the road section between Maant and Choir (130km), 2) design review of the section between Nalaikh and Maant (70km) and 3) construction supervision of the combined Nalaikh to Choir (200km) road section.

Our scope of work includes:

1. **Detailed design** with survey,

2. **Subsoil investigation and material test**, and

3. **Supervision** of construction in accordance with FIDIC

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ADB 6th Road Project (Structural Overlay Component):

Philippines, DPWH/ADB and JBIC, D/E and C/S, 1998–2004



The Project consists of structural overlay of national roads of total 1,000 km, drainage improvement and road safety nation in Luzon, Cebu, Negros, Panay, Palawan and Mindanao, as structural overlay component of the sixth road project, financed by ADB and JIBIC.

The services includes

1. **Engineering Design:** evaluation of the existing pavement by Falling Weight Deflectometer (FWD), design of overlay, improvement of drainage and road safety.

2. **Bidding:** Assistance of bid: Prequalification of contractors, preparation of bid documents, site visit and prebid conference of bidders, bid and bid evaluation, and

3. **Construction:** Construction supervision of 21 contract packages all over the country.

The photo shows investigation of pavement of the Project roads by the FWD.

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Jamuna Bridge Access Road Project

Bangladesh, RHD/JBIC, 1998–2002



Main objective of the project is to improve the road network of the national highways section between Joydebpur - Tangail as Jamuna Bridge Access Road from Dhaka by means of restoring/upgrading the pavement and widening carriageways. The road network had been easily cut depending on the weather conditions. By this project, it can be expected that the local people's livelihood will be stabilized and that local economic development can be sustained through enforcement of transport linkages between agricultural centers and industrial areas.

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Bishkek–Osh Road Rehabilitation Project

Kyrgyzstan, JBIC, C/S, 1998–2006



The project was formulated to contribute to the government strategy of enhancing transport infrastructure especially in Bishkek-Osh section for the purpose to promote industrial, commercial and tourism developments in this area.

The consultancy services provided by us comprise::

1. **Tendering and construction supervision**
2. **Road maintenance assistance and road safety**
3. **Benefit monitoring and evaluation of the project roads**

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The Road Improvement Project

Bangladesh, RHD/ADB, C/S, 1998–2000



The Project included improvement of national roads in Dhaka-Khulna, Sunamganj-thakurakona, Shariatpur-Chandpur, Elenga-Ghatail, Kishoreganj-Nikli section. Feasibility study was conducted for the roads by HDM III, together with social and environmental study, and recommended first implementation of three corridors (Dhaka-Khulna, Sunamganj-thakurakona, Shariatpur-Chandpur).

Based on the recommendation, detailed engineering was performed and bid documents were prepared.

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Bridge Rehabilitation for Highway No.1 (PHASE II)

Vietnam, JBIC, EIA, D/D, 1997–2001



This project aims at the rehabilitation of a total of nine (9) bridges along National highway No.1, consisting of four (4) bridges located in the section between the Sino-Vietnamese border to Hanoi (163km long) and five (5) bridges located in the section of Dong Ha to Nha Trang (689km long).

The service provided by us includes engineering investigation, environment impact assessment, detailed engineering design, drawing, prequalification document, quantities and cost estimation, preparation of tender documents and supervision for the construction.

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Rehabilitation of RN.1 AND RN.2 Roads

Djibouti, JICA, D/E, C/S, 1996–1999



This is a basic design carried out under the contract with JICA. The project consists of an improvement of the National Roads No.1 and No.2 in Djibouti City to meet the increase of traffic volume by means of widening the existing narrow carriageway and rehabilitating the deteriorated pavement with overlaying. Procurement of road maintenance equipment and workshop tools with spare parts was also included in this project.

The basic design formulated the improvement alternatives, estimate of the total project cost and preparation of implementation schedule, construction plan and procurement program for road maintenance equipment.

Photo shows improved separate 4 lane National Road No. 1 along Djibouti Bay.

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Road Rehabilitation Project

Kazakhstan, ADB, D/E, C/S, 1996–2000



The prime objective of the project is to rehabilitate and construct the Almaty-Akmola corridor, a 192km section between Gulshad and Akchatau.

Scopes of the work comprise:

- (i) **consulting services and construction supervision for rehabilitation,**
- (ii) **improvement of capacity of routine road maintenance through provision of equipment, manuals, training and**
- (iii) **consulting services for detailed designing of road sections and benefit monitoring.**

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[BACK](#)

Feasibility Study for Selected Priority National/Provincial Roads

Cambodia, WB, F/S, SED, 1996–1998



It was urgently proposed to rehabilitate the road network in Cambodia, although Cambodian government had no fund, nor equipment and human resource to implement rehabilitation by themselves, and thus the World Bank decided to grant technical and financial assistance.

The consultants undertook the following services:

Feasibility Study (F/S)

-Preliminary selection of priority roads and feasibility study

-Prepare project implementation plan, IEE, SIA

Simplified Engineering Design

-Engineering design for international tender [BACK](#)

Paksey Bridge Construction Project

Bangladesh, RHD/OECF, C/S, 1996–1997



The proposed project entailed the construction of a 1,800m long Paksey Bridge crossing the Padma River, a 3.6km long connecting road on the eastern (Pabna) bank and a 3.9km long connecting road on the western (Kushtia) bank of the river. The proposed highway bridge was parallel with the existing Harding Railroad Bridge located about 600m down stream.

Technical studies, field investigations and relative services for the detailed engineering stage of the project were performed by the consultant in full cooperation with the Road and Highway Department and other relevant agencies from Bangladesh Government.

(1) Paksey Bridge

Length :1,800m, Width :14.5m consisting of 2 car lanes @ 3.75m, 2 motorcycle lanes @2.5m and 2 sidewalks @1.0m

(2) East and west banks connecting roads

3,685m long (east bank) and 3,930m long (west bank) respectively with pavement widths of 8.5m [BACK](#)

Liaoning and Jilin Expressway Project

China, ADB, E/D, EIA, 1996



Liaoning expressway constituted a 360km stretch of highway between Shenyang and Shanhaiguan while Jilin expressway stood for a 84km east-west stretch of highway between the provincial capital, Changchun, and Jilin City, the major urban center in the province. Our scope of work includes:

- Highway engineering
 - Transport economics
 - Environment and socio-economic
 - Toll expressway operations and finance [BACK](#)
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Sichuan Expressway Project, DB, F/S, 1995

China, ADB, 1995



It was proposed to rehabilitate a 130 km stretch road winding through mountainous area constructed in 1930' and cannot meet the present heavy traffic in the points of traffic volume and pavement capacity. JOC carried out:

- 1) review of technical aspects presented by the government
 - 2) economic evaluation and forecast of traffic volume
 - 3) planning of environment and socioeconomic monitoring
 - 4) suggestion of an installation of institutions and
 - 5) preparation financial statement [BACK](#)
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Jamuna Bridge Railway Approaches Study

Bangladesh, ADB AND OECF, F/S, 1995



The Jamuna Multipurpose Bridge Project would provide road transport connection across Jamuna River, one of the largest rivers which had been great obstacles for the development of the area. JOC provided following services:

1) Phase I

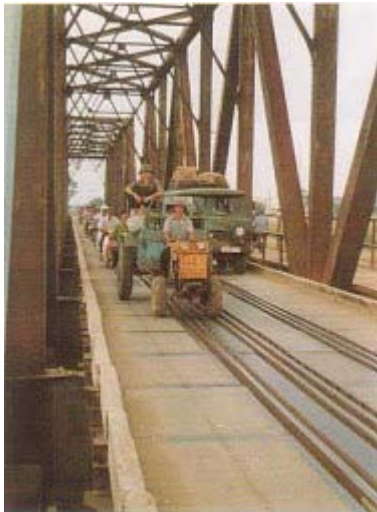
Selection of routes on the basis of potential traffic, right-of-way availability, construction cost, land acquisition and financial, economic and environmental conditions

2) Phase II

Technical, financial and economic feasibility studies on selected alternatives [BACK](#)

Bridge Rehabilitation of Bighway NO.1

Vietnam, OECF, F/S, 1995



The Vietnam government requested Japanese government both the Feasibility Study and Detailed Design for rehabilitation of the old bridges, predominantly longer than 20m, located at two sections on Highway No.1, one of which is the section from Shino-Vietnam border to Hanoi and the other from Dong Ha to Nha Trang. Study objectives included:

- Field survey of topography, bathymetry, geology, hydrology and social condition surrounding the bridges in concern
- **Review of the results of study performed by ADB fund and discussion with officials related and**
- **Formulation of a program for implementation suitable in Japanese ODA style** [BACK](#)

Second Road Improvement Project

Vietnam, ADB, F/S AND D/D, 1994–1995



The project consisted of improvement of high priority national highways between Hanoi to Lang Son section in length of 173km and Nha Trang to Dong Ha section in length of 688km, as well as improvement and/or construction of bridges.

Our scope of work provided is:

Phase I : Feasibility study and environmental impact assessment

Phase II :Detailed design and documentation for bidding and contract [BACK](#)

Circumference Road No.5 (C-5) Project, Package A

Philippines, DPWH/OECF, D/E and C/S, 1989–1994



The Project was composed of 6 lane roads of 1.2 km in Quezon City, 1.2 km in Pasig and 4 lane roads of 2.4 km in Makati including a bridge of 300 m in length.

The original plan were reviewed and revised due to changes of site and environmental conditions. Pasig Bridge was composed of 10 spans of prestressed concrete girders supported by concrete bored piles of 3 m in diameter instead of driven precast concrete piles due to Fast Track Program. The Project included Portland Cement Concrete Pavement, sidewalls, longitudinal and cross drainages, reinforced concrete and stone masonry retaining wall, intersections with traffic signal lights, street lights, traffic sign and pavement marking.

Photo shows erection of precast prestressed concrete girders of Pasig Bridge. [BACK](#)

Mindanao Road Improvement Project

Philippines, DPWH/KUWAIT FUND FOR ARAB ECONOMIC DEVELOPMENT, C/S: 1987–1993



The Project consisted of the new construction and/or rehabilitation of the road, bridges and drainage facilities of the existing national route between Molave-Oroquieta and Pagadian-Tucuran (108 km) in Mindanao. The improvement works also included the provision of 6 to 7 meters wide asphalt concrete surfacing-plant mix, the construction of gravel or DBST shoulders ranging 0.5 to 2.5 meters wide, the re-alignment of two (2) areas to improve the existing geometry, two (2) new by-passes, raising the existing roadway on three (3) flood prone areas, and the construction, repair and extension of drainage culverts. Photo shows operation of asphalt paving machine. [BACK](#)

Ragoon-Prome Road Improvement Project

Myanmar, Ministry of Construction (Construction Corporation), D/E, C/M, 1985-1993



The Project road had been a main north-south link up the Irrawady Valley to Pagan and Mandalay. The Project comprised strengthening and resurfacing existing pavement, provision of hard shoulders, improvement of roadside drainage and improvement, rehabilitation or reconstruction of culverts and bridges. In addition, improvements of alignment and the road section near the main township were required.

The Consultant assisted and advised the Construction Corporation's project staff in carrying out detailed engineering of the improvements and in management of their construction, such as construction planning, construction engineering and quality control, equipment management and administration and procurement of materials and spare parts.

Photo shows resurfacing of existing pavement. [BACK](#)

Third Road Improvement Project

Philippines, MPWH/ADB, Detailed Engineering: 1984-1985



The Project included road improvement of 900 km national roads in Cebu, Negros and Mindanao, identified as economically feasible. The services required Coordination Consultant.

The detailed engineering of the project roads was carried out by four (4) local consultants.

The Consultant issued the design guidelines for highway, drainage facilities, structures, soil and pavements to the local consultants, including standard plans, reports and bidding documents.

The photo shows site inspection of a road in Mindanao. [BACK](#)

Rama VI Bridge Construction Project

Thailand, JICA, Feasibility Study, 1981

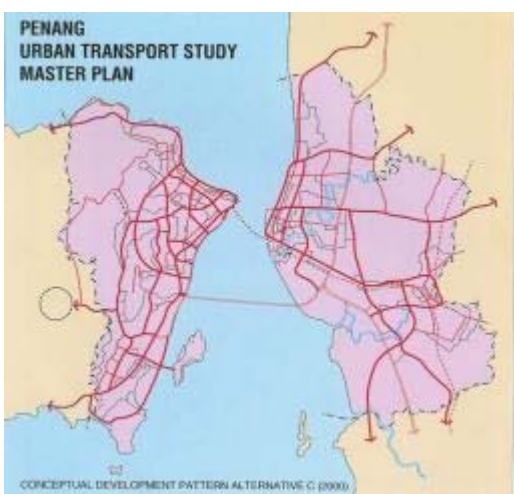


The bridge was studied in order to solve serious traffic congestion in rush-hour in Metro Bangkok. The Study was conducted on the following items;

- Traffic forecast and required number of traffic lanes for the new bridge
 - Selection of route and alignment
 - Optimum bridge plan and implementation program
 - Economic analysis
 - Preliminary design
 - Review of economic evaluation
 - Implementation program [BACK](#)
-

Urban Transport and Development Study in George Town, Butterworth and Bukit Mertajam

Malaysia, JICA, Mhand Bukit Mertajam master Plan (1979-1980), Feasibility Study (1980-1982)



The Greater Metropolitan Areas of George Town, Butterworth and Bukit Mertajam (Penang Metropolitan Area) had serious urban transport problems due to intensive industrial and urban development in the area, as well as a rapidly increasing number of private vehicles. Moreover, intensive transport development projects, such as the Penang Project, the Toll Expressway projects, the East-West Highway Supporting Road Project and the Penang Port Development made it necessary to renew and develop the existing transport system in the region.

The Urban Transport Study was conducted to solve the urban transport problems;

- To formulate a master plan for the Penang Metropolitan Area and
- To determine the feasibility of specific projects selected through the study in the above.

[BACK](#)

Circumferential Road No.3 (C-3) and Makati-Mandaluyong Road Project

Philippines, DPWH/OECF, Design: 1979-1981, C/S: 1988-1994



The Project roads were one of major missing links in Metro Manila recommended by Urban Transport Study for the Metropolitan Manila Area (UTSMMA).

The Feasibility Study reported that the construction of six(6)-lane road with grade separation at some major intersections would yield an Internal Rate of Return of 49%. The detailed engineering included field survey and investigation, preparation of plans, bill of quantities, cost estimates, bidding documents, construction plan, implementation schedule and public hearing.

During the pre-construction stage, plans and bid documents prepared in the detailed design were reviewed and updated. and assistance was rendered for bidding and contract award.

The Project included the construction of the northern component of C-3 and Makati-Mandaluyong Road linking Makati and Mandaluyong (total L=14 km), and services of construction supervision was provided.

Photo shows the intersection of C-3 Road and Quezon Avenue just after completion. [BACK](#)

Khulna-Mongola Road Project

Bangladesh, RHD/ADB, D/E and C/S, 1977-1985



The Project road connected Khulna City, the largest city in the western half of Bangladesh and second biggest sea port at 40 km south of Khulna. The Project included 2-lane paved road on a 12 m wide embankment 1.5 m above existing ground levels, 7 RC and PC bridges, 64 box culverts and 2 ferry terminals with pontoon-type jetties on the Rupsa River.

The Consultant reviewed the feasibility study, detailed engineering, preparation of bid documents, assistance of prequalification of contractors, bidding.

Contracts for the embankment works were let in 4 lots, while 5 contracts were let for construction of pavement, shoulders, and terminals.

Construction was executed only during the dry season.

Photo shows labor intensive earth work. [BACK](#)

Mindanao Secondary and Feeder Roads Project

Philippines, DOH/ADB, F/S, D/E and C/S, 1976-1985



The Project was to improve secondary and feeder roads in rural areas in South Cotabato, Sultan Kudarat, and Misamis Oriental Provinces, as farms to market road.

Feasibility study was conducted to select 675km of feeder roads and 125 km of secondary road using the computerized Feeder Road Analysis Model (FRAM).

Detailed engineering included field investigation of existing road conditions, evaluation, preparation of improvement plan of surfacing (gravel or hard surface), bridges (concrete or Bailey bridges, and spillways), and counter measure to minimize erosion in the areas.

The Project finally consisted of re-construction of 1 secondary road and 37 feeder roads under 8 contract packages. The Project was implemented by packaging based on labor-intensive, labor-equipment combination and equipment intensive construction considering the scale of work and scattering of areas. Photo shows one of a spillway in General Santos-Kiamba Secondary Road.

[BACK](#)

The Aksshi Kaikyo Bridge Project

Japan, 1975-1979



A largest suspension bridge ever built was to be constructed over Akshi Strait, with a main span of 1,990m in length and a main tower of 297m in height. In this project, our affiliated firm of Kiso-Jiban Consultants Co., Ltd. joined and carried out a part of following:

Field investigation

- Geological mapping
- Geophysical exploration and logging
- Soil and rock samplings
- Insitu testing

Laboratory testing

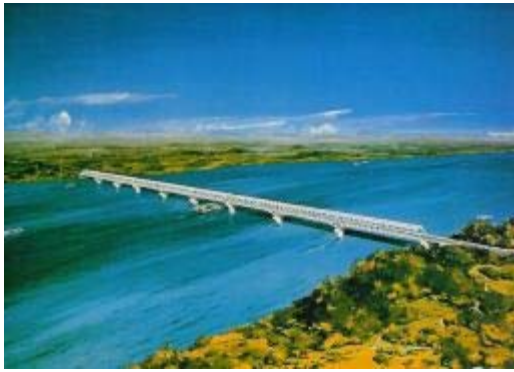
- Soil and rock testings

Simulation

- Numerical analysis
- Model testing [BACK](#)

Irrawaddy River Bridge Construction Project

Myanmar, JICA, F/S, 1974-1975



The purpose of this study was to examine the technical and economical feasibility of constructing a bridge across the Irrawaddy and an access railway and road connecting Prome and Sinde to development of the west region of the Irrawaddy River. The study also aimed at recommending the optimum bridge site of three sites proposed by the Government.

The Study was divided into two phase:

- Route alternative to select most feasible railway route connecting the existing Prome Line with Sinde,
- Field Investigation and studies of socio-economic development, traffic, highway access, and a bridge. [BACK](#)

Ports

Mombasa Container Port Terminal Expansion Program

Kenya, Private Company, F/S, 2009



The development plan of a new large-scale full-fledged modern container terminal at the Port of Mombasa in Kenya, which is an important gateway port on the east coast of Africa, was formulated in 2006 by JPC under a Special Assistance for Project Formation (SAPROF) extended by JBIC, and the loan agreement (L/A) for which was concluded in November 2007 between the Japanese government, or JBIC, and the Kenya Ports Authority (KPA).

The consulting service for the engineering works of the Project was awarded to JPC and its contract was signed on 25 November 2008.

The Consultant undertook:

Geo-technical survey including boring, analysis of data, recommendation to JPC, Consultants' boring specialist was sent to the site for three months altogether in 2009. [BACK](#)

Mongla Port Area Development Project

Bangladesh, ADB, Master Plan and F/S, 1995



Mongla Port, the second largest port in Bangladesh, located 40km south to Khulns. In spite of the strategic advantages of its location, Mongla Port's facilities and equipment had long been underutilized. This underutilization may have been partly attributable to the server siltation that had been taking place over the previous few years, and the resulting limitations imposed on draft of ships approaching the berths. Another factor contributing to its low utilization may also have been the absence of vital linkage across the Rupsa River, which severely limited the road access to the port. [BACK](#)

Burma Outports Project

Myanmar, ADB, Feasibility Study, 1978-1979



Most of the facilities at the Outports, namely Akyab, Bassein, Moulmein, Mergui, Kyaukpyu, Tavoy and Kwathaung, were reaching the end of their useful lives due to age and a lack of repair and maintenance.

The Consultants conducted the feasibility study for the project, which included the following aspects: Evaluation of communication facilities within harbor area and between the ports,

- Need for replacement of harbor craft, navigational aids and cargo handling equipment,
- Pier arrangements regarding suitability for effective cargo handling, as most were designed to serve mainly schooners, not coastal ships,
- Siltation problem at all Outports, except Kyaukpyu and Sadoway, due to the absence of maintenance dredging, and
- Policies and practices for port operations and management, including tariffs. [BACK](#)

Flood Damage Rehabilitation Project

Bangladesh, ADB, D/E and C/S, 1998-2000



The 1998 flood has been a major, and produced country-wide destruction in particular due to the simultaneous occupancy of three peaks of water levels in Jamuna and Padma rivers and in rainfall on west of the Jamuna river.

The key damage in the road-subsector would be for the failure of embankments, pavements, bridges, approaches and other drainage structures due to scour, overtopping and to the fact that water was entrapped due to long standing on the road. Further the damages to embankments and pavements have been critical and some places washed out were also related to design weakness and lack of maintenance.

The service required preparation of plan, bid documents, assistance for bidding, construction supervision of contractors' work. [BACK](#)

Others

Zanzibar Area Regional Electricity Power Network Strengthening Plan (Environmental Social Consideration)

Tanzania, JICA, P/S, 2010



Government of Zanzibar requested Government of Japan for rehabilitation of electric power transmission cable network in Unguja Island. However, there were some points to be confirmed in their request paper. This study was to identify specific area for installation, to evaluate data condition and maintenance ability of the existing power cables, and to confirm social and natural environmental impacts.

The Consultant undertook:

To confirm environment regulations of Tanzania and required procedures for this project, To explain JICA Guidelines for Environmental and Social Considerations and obtain their understanding, to confirm existing implementation status of the environmental and social considerations including resettlement and land acquisition, To hold stakeholders' meeting and formulate monitoring plan. [BACK](#)

Yuzhno-Sakhalinsk Onshore and Near Shore Detailed Site Investigations at the Dekastri Terminal Site

Russia, Private Company, C/S, 2006-2007



The project is a construction works of export oil and LNG terminal both onshore and offshore by developing oils produced at north part of Sakhalin.

The Consultant undertook:

Supervision of asphalt pavement works of the roads in terminal including asphalt repairing manual, materials arrival manual, asphalt pavement manual and follow-up of the comments on these manuals.

JOC dispatched its pavement specialist to the site from 2006 to 2007 to mainly supervise pavement works. [BACK](#)