

AP8.2.5 Record of Stakeholder Meeting 3-1

(1) Presentation Material

- Introduction
- Part I: Procedures for Phase II Study and EIA Study
- Part II Scope of EIA (Environmental Impact Assessment) Study
- Part III Contents of RAP (Resettlement Action Plan)

The Stakeholder Meeting 3-1 for the Construction of the Second Mekong Bridge in the Kingdom of Cambodia

Introduction

June 3, 2005
Phnom Penh Hotel

Ministry of Public Works and Transport (MPWT)
in cooperation with JICA

Introduction

1. Review on Stakeholder Meeting 2-3
2. Public Comments and Answers
3. Objectives of Stakeholder Meeting 3-1

1. Review on Stakeholder Meeting 2-3

- March 10-11, 2005: Stakeholder Meeting 2-3
- The main outcomes of the stakeholder meeting 2-3 were that:
 - To review alternatives, evaluation method and evaluation criteria for selection of the best alternative to cross the River;
 - To explain the final results of the IEE-level social and environmental studies;
 - To explain the final evaluation results of selecting the best alternative to cross the River;
 - To make a consensus on the best alternative method to cross the River; and
 - To explain the procedures for public comment period and the final decision-making.

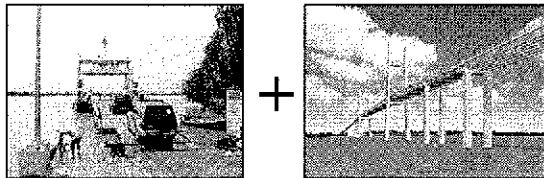
1. Review on Stakeholder Meeting 2-3

Selection of Optimum Crossing Method

No.	Option		Remarks
I. Ferry Option			
I-1	Ferry	Existing Ferry with Proper Maintenance	Zero Option
I-2	Ferry	Upsizing of Ferry Boats with Additional Piers	Ferry Improvement Option
II. Bridge Option			
II-1	Bridge	Route A	
II-2	Bridge	Route B	
II-3	Bridge	Route C	
III. Ferry Improvement + Bridge Option			
II-1	Ferry + Bridge	Route A	Additional Ferry Boats
II-2	Ferry + Bridge	Route B	Additional Ferry Boats
II-3	Ferry + Bridge	Route C	Additional Ferry Boats

1. Review on Stakeholder Meeting 2-3

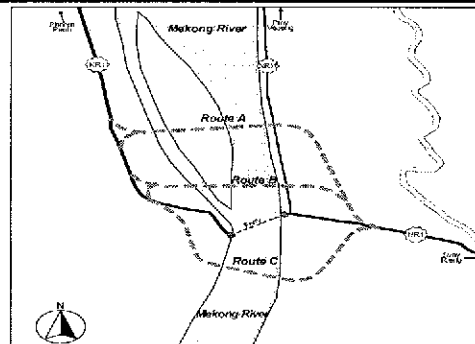
Image of "Ferry Improvement + Bridge" Option

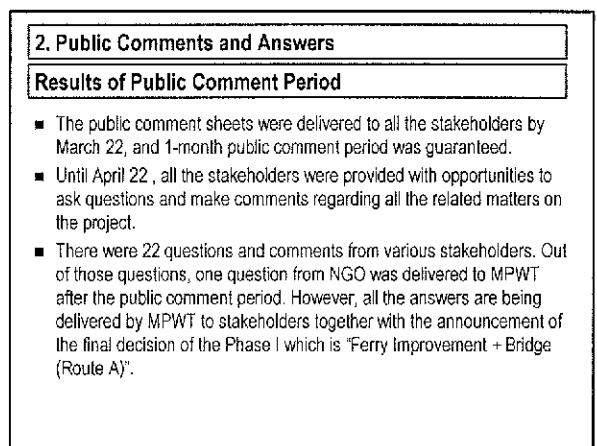
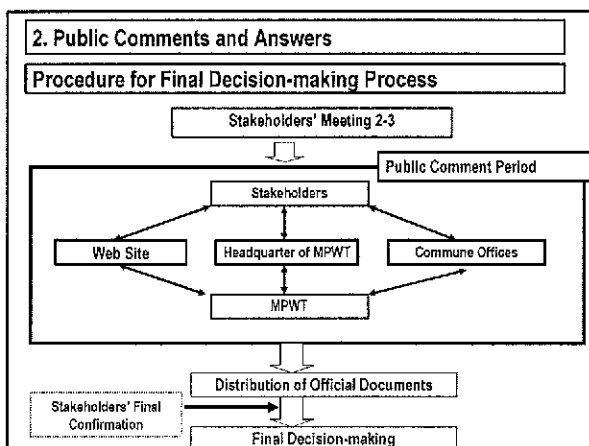
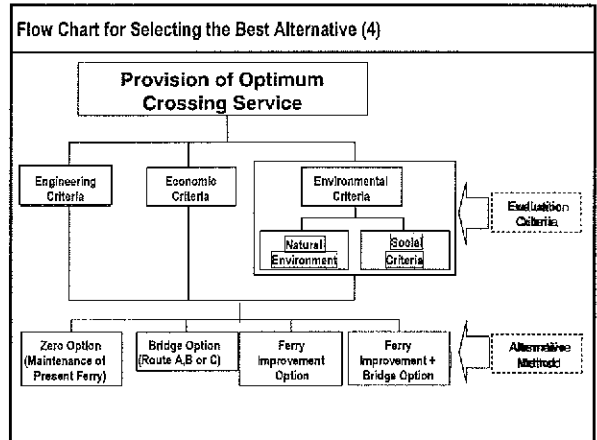
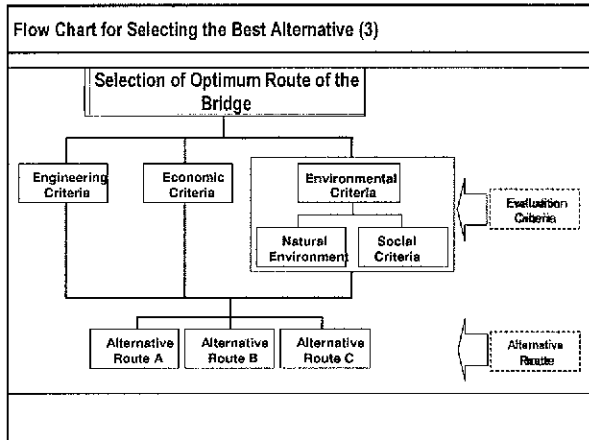
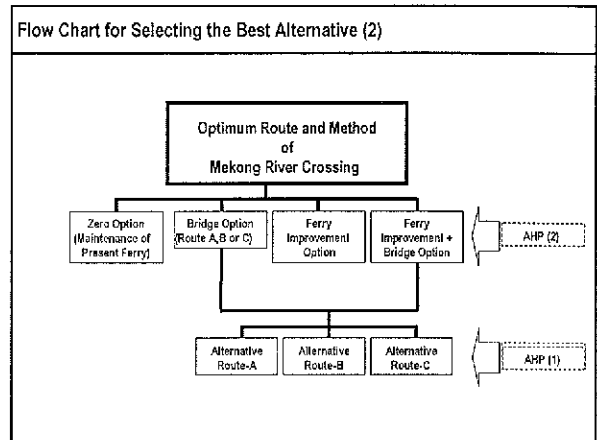
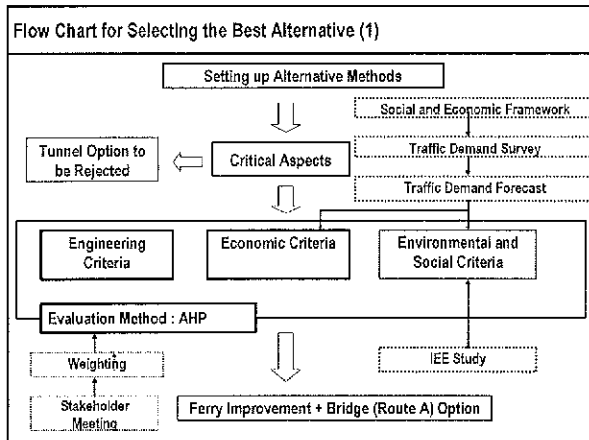


After a certain period of operating the present and improved ferry services, the bridge will be constructed.

1. Review on Stakeholder Meeting 2-3

Image of Locations of Route A, B and C





2. Public Comments and Answers

Public Comments from Various Stakeholders

Scenario	No. of Questions and Comments	No. in Handouts
Preak Khsay Kha Commune	7	A-1~A-7
Neak Loueng Commune	4	B-1~B-4
Banlich Prasat Commune	3	C-1~C-3
Preak Khsay Ka Commune	3	D-1~D-3
Private Company	1	E-1
University	1	F-1
Cambodia National Mekong Committee	1	G-1
Ministry of Rural Development	1	H-1
NGO	1	I-1

Major Comments and Questions

Commune (1)

- Question: The villagers of Village 5 has a question to the Japanese Government. When will the bridge be constructed? All the people really want to know exactly.
- Answer: The Government of Cambodia, the responsible organization of this project, is now asking the Japanese Government to provide assistance for this project. The timing of the construction will be decided after having responses from the Japanese Government. The Government of Cambodia understands that the Japanese Government will make a decision on the possible assistance based on the second phase of the Study.

Major Comments and Questions

Commune (2)

- Question: What are the impacts on natural environment and social environment by the construction of the second Mekong Bridge? How does the government solve those problems?
- Answer: There are a wide range of natural and social environmental impacts by the bridge construction, including considerable scale of the involuntary resettlement. The details of the results of the IEE-level environmental impact study are indicated in the documents of the stakeholder meeting 2-3. In the feasibility study stage, the Ministry, with the technical assistance of JICA, will study a comprehensive compensation and mitigation package to minimize those impacts, including the resettlement action plan (RAP).

Major Comments and Questions

Private Company

- Question: Can the Cambodian private company take part in the bid? I notice that the previous Japanese grant aid is always tendered in Japan.
- Answer: The eligibility of the Cambodian company to take part in the bid depends on the financial scheme of the project. Local contractors might have opportunities to become supporting companies working for and under the Japanese companies who are eligible for taking part in the bid, even in case of the grant aid by Japan.

Major Comments and Questions

University

- Question: How to deal with social environmental problems that may take place during the construction period?
- Answer: There are a wide range of the social impacts caused by the construction of the bridge. The details of the IEE-level social impacts were presented by the documents of the stakeholder meeting 2-3 which are available in the commune offices and the website. Especially, the involuntary resettlement which might be caused by the construction of the bridge will be carefully studied in the EIA of the 2nd phase of the Study.

Major Comments and Questions


International Organization

- Question: The Cambodia National Mekong Committee (CNMC) requests MPWT to keep the vessel clearance of the bridge 37.5m high over the max. water level in the rainy season, which is the same as MY THUON Bridge in Vietnam. After completing the feasibility study, please MPWT inform CNMC of those information in order to distribute among other member countries of the Mekong River Commission.
- Answer: The vessel clearance of the bridge is designed to keep 37.5m high over the max. level in the rainy season, which is the same as MY THUON bridge in Vietnam. The Ministry will keep the Cambodia National Mekong Committee as well as other member countries of the Mekong Committee informed of the results of the feasibility study and other required information.

3. Objectives of Stakeholder Meeting 3-1					
PC No.	Stakeholders Meeting	Venue	Study Level	Major Objectives	Timing
1 st	Stakeholders Meeting 1-1	Phnom Penh (PP)	Kick-off	Introduction of the Project, explanation of the JICA's Guideline and Scoping for IEE	May 24, 2004
	Stakeholders Meeting 1-2	Nesek Loueng (NL)	Kick-off	Same as above	June 21, 2004
2 nd	Stakeholders Meeting 2-1	PP, NL	IEE	Discussion on Scoping and TOR for IEE	October 7 and 28, 2004
	Stakeholders Meeting 2-2	PP, NL	IEE	Presentation of Interim Results of IEE	December 27-28, 2004
	Stakeholders Meeting 2-3	PP, NL	IEE	Presentation of Draft Final Report of IEE and Interim Study Report	March 10-11, 2005
3 rd	Stakeholders Meeting 3-1	PP, NL	EIA	Discussion of Scoping and TOR for EIA	June 3 and 7-8, 2005
	Stakeholders Meeting 3-2	PP, NL	EIA	Presentation of Interim Results of EIA	Sep 2005
	Stakeholders Meeting 3-3	PP, NL	EIA	Presentation of Draft Final Reports of EIA and Overall Study	Jan 2006

3. Objectives of Stakeholder Meeting 3-1	
<ul style="list-style-type: none"> ■ The main objectives of the Stakeholder Meeting 3-1 are that: <ul style="list-style-type: none"> - To explain the scope of PAPs (Project Affected Persons) - To explain the scope for the EIA-level social and environmental studies - To explain the outline of RAP (Resettlement Action Plan) 	

THANK YOU !



for your attention and patience.

Ministry of Public Works and Transport

**The Stakeholder Meeting 3-1
for the Construction
of the Second Mekong Bridge
in the Kingdom of Cambodia**

Part I Procedures for Phase II Study and EIA Study

June 3, 2005
Phnom Penh Hotel

Ministry of Public Works and Transport (MPWT)
in cooperation with JICA

Part I Procedures for Phase II Study and EIA Study

1. Phase II Study
2. EIA Study

1. Phase II Study

Objectives of Phase II Study

- Scrutiny of the Bridge location to minimize natural and social impacts on the Neak Loeung Area
- Execution of the Public Consultation 3 in order to ensure transparency of the Project, following the JICA Guidelines for Environmental and Social Considerations
- Study on Mitigations of the Social and Natural Environmental Impacts
- Economical Bridge Designing and Funding for Efficient Operation/Maintenance System

1. Phase II Study

Study Schedule (1)

Year	2005								2006		
	Month	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Task 1 (Study of Selected Route and Location of the Bridge)											
Task 2 (Study of Bridge Type)											
Task 3 (Support for Implementation of EIA)											
Task 4 (Assistance to Public Consultation)											
Task 5 (Study of Appropriate Ferry Development)											
Task 6 (Preliminary Design of the Bridge and Road)											

1. Phase II Study

Study Schedule (2)

Year	2005								2006		
	Month	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Task 7 (Preparation, Presentation and Discussion of Progress Report 2)											
Task 8 (Maintenance and Management Plan of Roads and Bridges)											
Task 9 (Project Cost Estimation)											
Task 10 (Economic and Financial Analysis)											
Task 11 (Consideration for the Post Evaluation Plan)											
Task 12 (Preparation, Presentation and Discussion of Draft Final Report)											

2. EIA Study


Objectives of EIA Study

- The major objectives of EIA is to qualitatively and quantitatively estimate potential major natural and social impacts to be caused by the proposed project, namely, "Ferry Improvement + Bridge Option (Route A).

2. EIA Study											
Study Schedule (1)											
Year	2005										2006
Month	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
Task 1 (Scoping and Preparation for EIA Study)	█										
Task 2 (Stakeholder Meeting 3-1: Scoping)		█									
Task 3 (Comprehensive Collection and Review of Baseline Data)		█									
Task 4 (Review on Environment-related Laws and Regulations)		█									
Task 5 (Preliminary Impact Analysis)		█									
Task 6 (Stakeholder Meeting 3-2: Interim Results of EIA)					█						

2. EIA Study											
Study Schedule (2)											
Year	2005										2006
Month	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
Task 7 (Full-scale Impact Analysis)						█					
Task 8 (Formulation of Mitigation Measures)						█					
Task 9 (Preparing Draft Final Report and Presentation/Discussions)								█			
Task 10 (Final Results of EIA)									█	█	
Task 11 (Stakeholder Meeting 3-3: Final Results of EIA)										█	
Task 12 (Preparation of Final Report)											█

THANK YOU !



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**Part II Scope of EIA (Environmental Impact Assessment)
Study**

June 3, 2005
Phnom Penh Hotel

Ministry of Public Works and Transport (MPWT)
in cooperation with JICA

Scope of EIA Study

1. Requirements of EIA
2. Impacts to be Studied
3. Study Area
4. Contents of Study

1. Requirements of EIA Study

- Comprehensive Review on Existing Environmental and Social Baseline Data
- Updating Legal Framework and Regulations
- More In-depth Analysis on Major Environmental and Social Impacts
- Capacity Building for Implementation of EIA Study
- Formulation of Mitigation Measures and Monitoring Plan
- Stakeholder Meetings and Information Disclosure

2. Impacts to be Studied (Natural Environment)

No.	Impact to be Studied	Evaluation in IEE Study (Construction Phase)	Evaluation in IEE Study (Operation Phase)	On-site Survey in EIA
1	Air Quality	C	C	X
2	Water Quality	A	D	X
3	Soil and Sedimentation Quality	A	A	X
4	Waste Disposal	A	D	X
5	Noise and Vibration	B	C	X
6	Subsidence	A	A	X
7	Bad Smells	D	D	
8	Topography and Geology	A	A	X
9	River Bed Materials	A	D	X
10	Flora and Fauna	A	B	X
11	Use of Water Resources	B	D	X
12	Accidents	B	B	
13	Greenhouse Effect Gas	C	C	

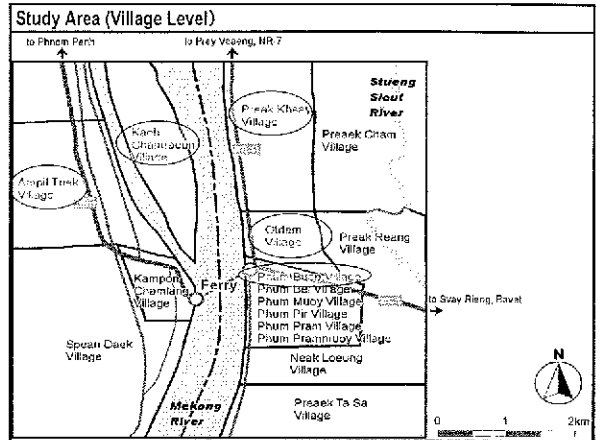
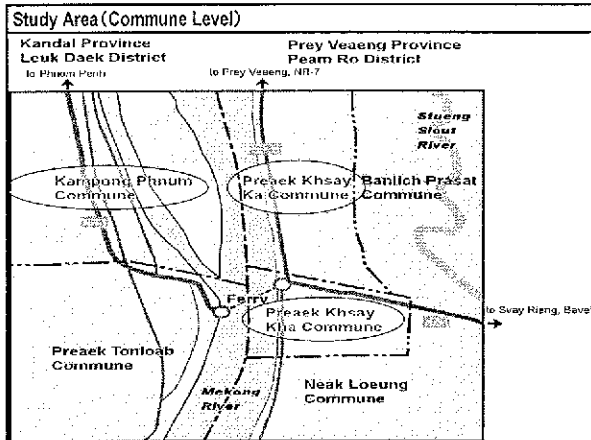
2. Impacts to be Studied (Social Environment)

No.	Impacts to be assessed	Evaluation in IEE Study (Construction Phase)	Evaluation in IEE Study (Operation Phase)	On-site Survey in EIA
1	Migration of population / Involuntary resettlement	A	D	X
2	Impact on local economy (employment, livelihood, etc.)	D	B	X
3	Utilization of land and local resources	B	B	X
4	Social institutions (social capital and local decision-making institution)	D	D	
5	Existing social infrastructure and services	D	D	
6	Vulnerable social groups	B	B	X
7	Equality of benefits and losses and equality in development process	B	B	X
8	Local conflicts of interests	C	B	X
9	Gender	C	B	X
10	Children's rights	C	B	X
11	Cultural heritage	D	D	
12	Infectious diseases (HIV/AIDS)	B	B	X

3. Study Area

- There are 5 villages under 3 communes which might be directly affected by the ROW for the construction of the Bridge.
- There are other 11 villages under 4 communes which might be indirectly affected by the construction of the Bridge.

Province	District	Commune	Directly Affected Villages	Indirectly Affected Villages	No. of Total Villages
Kandal	Leuk Daek	Kampong Phnum	2	0	2
Kandal	Leuk Daek	Preak Tonleab	0	2	2
Prey Veng	Peam Ro	Preak Khsay Ka	2	0	2
Prey Veng	Peam Ro	Preak Khsay Kha	1	5	6
Prey Veng	Peam Ro	Neak Loung	0	2	2
Prey Veng	Peam Ro	Banlish Prasat	0	2	2



<p>4. Contents of Study</p> <ul style="list-style-type: none"> ■ Natural Environment ■ Social Environment
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<p>4. Scope of Study</p> <p>Natural Environment</p> <ul style="list-style-type: none"> ■ Air Quality Survey ■ Noise Survey ■ Water Quality Survey ■ Soil Survey ■ Biological Environment Survey ■ Flow Velocity Survey
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<p>Natural Environment</p> <p>Air Quality Survey</p> <ul style="list-style-type: none"> ■ Investigate Baseline Roadside Air Quality Conditions ■ Vehicular Emission that affects human health <ul style="list-style-type: none"> - TSP (dust), CO, NO₂ & SO₂ ■ Traffic volume that indicates a gross vehicular emission correlatively ■ 24-hrs continuous survey at 2 points <ul style="list-style-type: none"> - 1 point at East Side - 1 point at West Side
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<p>Natural Environment</p> <p>Noise Survey</p> <ul style="list-style-type: none"> ■ Investigate Roadside Noise Level of Traffic ■ Averaged Hourly Noise Level (Hourly Leq.) ■ Hourly Fluctuation of Traffic Volume ■ 24-hrs continuous survey at 2points <ul style="list-style-type: none"> - 1 point at East Side - 1 point at West Side
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Natural Environment
Water Quality Survey
<ul style="list-style-type: none"> ■ Investigate Baseline Water Quality Conditions <ul style="list-style-type: none"> - Mekong River & Wells ■ 10 points <ul style="list-style-type: none"> - 6 points in the River - 4 points of Groundwater (wells) ■ Twice (once in Dry & Rain Seasons) a year ■ Parameters to be analyzed: pH, Turbidity, DO, BOD, COD, SS & others

Natural Environment
Soil Survey
<ul style="list-style-type: none"> ■ Investigate baseline Soil Conditions <ul style="list-style-type: none"> - Existence of soil-contaminated sites ■ Contaminants to be surveyed (Heavy Metals) <ul style="list-style-type: none"> - Iron, Lead, Zinc & Mercury ■ Soil survey for surface layer ■ Sampling at 2 points <ul style="list-style-type: none"> - 1 point at East Side - 1 point at West Side

Natural Environment
Biological Environmental Survey
<ul style="list-style-type: none"> ■ Investigate baseline flora/fauna conditions <ul style="list-style-type: none"> - Animals (birds, mammal, reptile, amphibian, fish and others) and Vegetation - Interaction with Bassac Marsh (west side) ■ Flora/Fauna <ul style="list-style-type: none"> - Mekong River - Floodplain (East side) - Floodplain (West side)

Natural Environment
Flow Velocity Survey
<ul style="list-style-type: none"> ■ Investigate cross-sectional Velocity-profile <ul style="list-style-type: none"> - Interaction with fish habitat & migration ■ Velocity in the Mekong Deep-Pool area

Natural Environment
Other Intensive Studies
<ol style="list-style-type: none"> 1. Hydrological Study <ul style="list-style-type: none"> - Flood-free area (east side) 2. Subsidence <ul style="list-style-type: none"> - Approach road 3. Waste Disposal <ul style="list-style-type: none"> - Requirement of disposal sites 4. Erosion <ul style="list-style-type: none"> - Approach road (rain season)

4. Contents of Study
Social Environment
<ul style="list-style-type: none"> ■ Involuntary Resettlement ■ Impact on Local Livelihood ■ Utilization of Land and Local Resources ■ Vulnerable Social Groups ■ Equity of Benefits and Losses ■ Gender ■ Children's Rights ■ Infectious Diseases (HIV/AIDS)

Social Environment
Involuntary Resettlement
<ul style="list-style-type: none"> ■ Inventory Survey on Socio-Economic Situations of Project Affected Persons ■ Survey on Experiences from Compensation Program in the Similar Projects ■ Formulation of RAP (Resettlement Action Plan), Compensation Program and Other Mitigation Measures

Social Environment
Impact on Local Livelihood
<ul style="list-style-type: none"> ■ Baseline Survey on Market-oriented People, Retailers and Vendors at Ferry Terminals ■ Baseline Survey on Locally-employed People by Neak Loeung Ferry ■ Baseline Survey on Local Procurement by Neak Loeung Ferry ■ Comprehensive Analysis on Economic Impacts on Local Economy

Social Environment
Utilization of Land and Local Resources
<ul style="list-style-type: none"> ■ Survey on Land Ownership and Land Use in the Flood-free Land ■ Study on the Land Use Plan for the Flood-free Land

Social Environment
Vulnerable Social Groups
<ul style="list-style-type: none"> ■ Baseline Survey on Project Affected Persons in Vulnerable Group

Social Environment
Equity of Benefits and Losses
<ul style="list-style-type: none"> ■ Analysis on Possibilities of Economic Disparity ■ Analysis on Possibilities of Disparity in Regional Accessibility

Social Environment
Gender
<ul style="list-style-type: none"> ■ Baseline Survey on Women's Socio-economic Situation

Social Environment

Children's Rights

- Baseline Survey on Children's Socio-economic Situation

Social Environment

Infectious Diseases (HIV/AIDS)

- Study on Present Status of HIV/AIDS Prevalence
- Impact Analysis on HIV/AIDS Prevalence due to Inflow of Construction Workers
- Impact Analysis on HIV/AIDS Prevalence due to the Increased Mobility

THANK YOU !



for your attention and patience.

Ministry of Public Works and Transport

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Part III Contents of RAP (Resettlement Action Plan)

June 3, 2005
Phnom Penh Hotel

Ministry of Public Works and Transport (MPWT)
in cooperation with JICA

Contents of RAP

1. What is RAP?
2. Directly and Indirectly Affected Persons
3. Components of RAP

1. What is RAP?

- Resettlement Action Plan (RAP) is a document drafted by the project promoter who is responsible for resettlement, specifying the procedures it will follow and actions it will take to properly resettle and compensate for affected people and communities.

2. Directly and Indirectly Affected Persons

Directly Affected Persons

- Households to be involuntarily Resettled inside the New Right of Way (ROW) for the Bridge Construction
- Landowners inside the New ROW

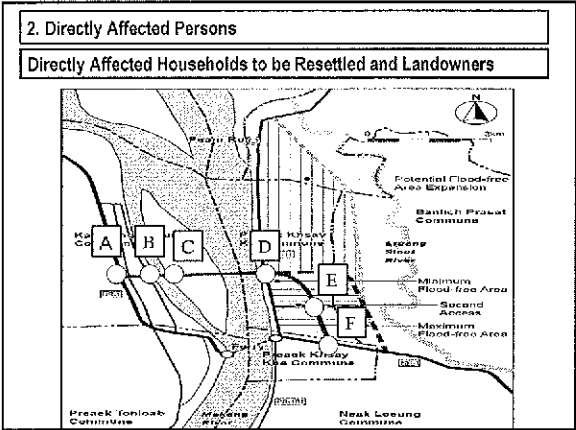
Indirectly Affected Persons

- Mobile Vendors at the Ferry Terminal of Eastern and Western Sides of the River
- Owners of Restaurants, Shops and Market Stalls at the Ferry Terminal of Eastern and Western Sides of the River
- Locally-employed Workers and Staff of Neak Loeng Ferry
- Other Socially and Economically Affected Persons, Especially Vulnerable Group of People

2. Directly Affected Persons

Tentative Number of Households to be Resettled

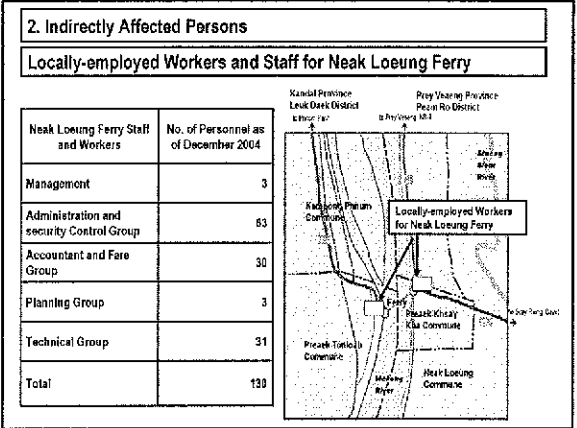
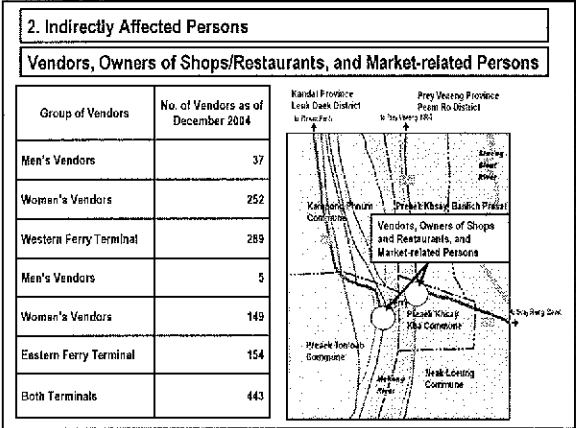
Commune		No. of Project Affected Household	PAP per Household	No. of PAP
Bridge	Route A	54	5.2	271
	Route B	69	5.2	356
	Route C	65	5.2	336
Zero Option		0	0.0	0
Ferry Improvement		70	5.2	364
Ferry Improvement + Bridge (Route A)		54	5.2	271



2. Directly Affected Persons

Tentative Number of Households to be Resettled

Location	Commune	Village	No. of Possibly Affected Households
A	Kampong Phnom	Ampil Toeuk	5
B	Kampong Phnom	Ampil Toeuk	19
C	Kampong Phnom	Koh Chamroeun	8
D	Preak Khsay Ka	Phum 4	18
E	Preak Khsay Kha	Phum 3	1
F	Preak Khsay Kha	Phum 3	3
Total		Total	54



- 3. Components of RAP**
- Identification of Project Impacts and Project Affected Persons
 - Legal Framework for Land Acquisition and Compensation
 - Framework for Compensation Package
 - Framework for Public Consultation and Information Disclosure
 - Provisions for Grievance Redress
 - Framework for Monitoring
 - Organizational Responsibility
 - Implementation Schedule

- 3. Components of RAP**
- Identification of Project Impacts and Project Affected Persons**
- Mapping of Project Affected Area
 - Preliminary Identification of Project Affected Persons and Registration according to Location
 - General Socio-economic Survey on Project Affected Persons

3. Components of RAP

Legal Framework for Land Acquisition and Compensation

- The legal framework for RAP (Resettlement Action Plan) refers to laws, sub-decrees and all other regulations relevant to the resettlement and compensation activities which cover;
 - scope of work for land acquisition and compensation activities;
 - procedures for assessing compensation values and schedule for compensation activities;
 - procedures for land titling and registration; and
 - institutional settings such as agencies responsible for resettlement and compensation.

3. Components of RAP

Framework for Compensation Package (1)

- The framework for the RAP compensation package specifies all forms of asset ownership or use rights among PAPs and the project's strategy for compensating them for the partial or complete loss of those assets.
- The compensation framework should include a description of;
 - any compensation guidelines established by the government;
 - socio-economic situation of PAPs;
 - the proposed types and levels of compensation to be paid;
 - compensation and assistance eligibility criteria; and
 - how and when compensation will be paid.

3. Components of RAP

Framework for Compensation Package (2)

- The compensation measures like cash compensation and institutional support for eligible PAPs will include;
 - loss of land;
 - loss of structures;
 - loss of productive trees;
 - loss of commune/public assets; and
 - allowances for disruption/resettlement and for vulnerable households.

3. Components of RAP

Framework for Public Consultation and Information Disclosure

- A series of public consultations should be held in order to provide opportunities for the project affected persons to negotiate compensation packages, eligibility requirements, resettlement assistance, and etc.
- During those public consultations, the information disclosure for the project affected persons covering the following points is indispensable;
 - potential negative impacts by the project;
 - resettlement strategy;
 - compensation rates and eligibility;
 - all other information relating to resettlement and compensation.

3. Components of RAP

Provisions for Grievance Redress

- It should be ensured that procedures are in place to allow PAPs to lodge a complaint or a claim without cost and with the assurance of a timely and satisfactory resolution of that complaint or claim.
- The RAP should include the grievance redress framework that will be put in place by the project promoter. The description of provisions for grievance redress should include:
 - institutional arrangements;
 - the procedures for recording and processing grievances;
 - the mechanisms for adjudicating grievances and appealing judgments; and
 - Schedule for all steps in the grievance redress process.

3. Components of RAP

Framework for Monitoring

- The RAP monitoring should include the following factors during the implementation of the RAP.
 - physical progress of resettlement and rehabilitation activities;
 - the disbursement of compensation; and
 - the effectiveness of public consultation and information disclosure.

3. Components of RAP

Other Components

In order to make the RAP practical, the following institutional details will be also included in the RAP.

- Organizational responsibilities
- Implementation schedule

THANK YOU !



for your attention and patience.

Ministry of Public Works and Transport

(2) Minutes of Stakeholder Meeting 3-1

1) General

Date: June 3rd , 2005

Duration of Meeting: from 14:30 to 18:00

Venue: Phnom Penh Hotel

Participants: Ministries and Relevant Agencies, Commune Chiefs and Deputy Chiefs from 6 Communes, Neak Loeung Ferry Staff, Universities and Research Institutes, EoV, EoJ, JICA Cambodia Office, JICA Study team, MPWT Counterparts. 82 participants in total.

2) Q&A Session

Question:

(Chief of Kampong Phum Commune) My concern is buying and selling the land and state's land is always changing. Today, commune authorities just prevent brokers from buying the land in the area of bridge construction, because bridge construction is known in Route A in the presentation. JICA Study Team directly has gone to our commune and I have cooperated closely with JICA, and prevented the brokers buying the land in bridge area. But I concerned that if people agree with the government, and people have no land to build houses that cause the problem in local, I concerned very much for people who can find the land to build new houses. Thank you.

Question:

(Vice-chief of Prek Khsay Ka Commune) My name is Young Aun, first vice-chief of Prek Khsay Ka Commune. I have two questions:

First, after listening to the detail explanation of JICA Study Team, the problem is finally the involuntary resettlement. After the team finished the study, the government is in charge of solving this impact. Thus, all project affected houses are solved according to the government policy. But the authority of the Prek Khsay Ka Commune which is affected by the project is worried, we are worried that the government compensate to the villagers, but other people whose houses are not affected by the project could sell their houses or land by following the market price; and the government did not announce them to follow the government price. As a chief of Kampong Phnom Commune has mentioned, we prohibit to buy the houses or lands in the project affected area; but the rich people has bought the houses or lands near that area. So the people who are affected by the project will face problem when the government compensate to them because they have to buy new houses or lands with the market price, not the government price. Please His Excellency gives an explanation.

Second, the villagers wonder that if the construction of the bridge is in Prek Khsay Ka Commune, could the workers in this commune become workers for the construction?

Answer:

(H.E Uk Chan) Again, I'm very thankful to Commune Development Committee of Kandal and Prey Veng. For Kompong Phnum Commune, we haven't had technical documents until now to locate the area to construct the road yet. And as I heard the technical team has some drafted, but it's not complete. It maybe complete in one month later. So it's difficult to point temporary area to be located. I am also happy to inform that it's not part-land road, not both side-land road. It's new infrastructure construction to manage developing area to be suitable value of this infrastructure construction. The donor has the honour to be responsible to prepare itself as grand aid with high technology. And we are the recipients, our government is important to take its responsibility in receiving the grand aid and resolving Project Affected People. For the land price determination, in fact official land price is detour of economic market. The government has never determined the land price depend on the area. Mostly, depend on economic market of both land brokers and benefit industrial companies only buy and sell to develop or build houses. I agree to your concern of both Commune Development Committees. Normally, both government and official authorities know that we have changed economic plan to economic market. It means that the government has publicized generally and the officials, general people have known and get benefit from this publication of economic policy, and we all acknowledge and get benefit from economic market. So we cannot blame authorities or put the blame to our people.

But authorities' responsibility is that after getting the information from JICA or draft information, the authorities have to take timely administrative action from provincial to commune authorities. All ranking officials have to stop any land transaction temporarily to take head-on action without changing someone to another.

In the past a discussion meeting with the Study Team at the Ministry of Public Works and Transportation, I've informed Excellency of provincial governor and both vice provincial governors already to cooperate with local officials to make a local map clearly and modality of buying and selling. How to change depends on Project Affected People. It's not the government to do at all.

The Project Affected People can ask me how the government determines the price.

The rate of non-corridor compensation of road affection is based on other principle, even though other principle, we still do comparison with 24 provinces base on the result of Land Valuation and Land Committee's study. We have to consider all the area in the whole country and if we believe that this area is not as expensive as Phnom Penh City, Siem Reap Town or

Sihanoukville. But normally, it's a point of view or opinion base on market's price that is learnt from economic market policy, so no one wants the cheap price at all. As for the government also wants to sufficiently deliver to real Project Affected People who are not the brokers.

So Project Affected People will get suitable compensation base on the government determination if local authorities take action to prevent selling and buying the land in local, especially, the construction area of the bridge, and how to take action I can not decide by myself. Because there are many relevant ministries include local authorities, technical institutes of the Ministry of Public Work and Transport, the Ministry of Land Management, Urban Planning and Construction, which cannot separate from helping of both provincial authorities at all. And this time I believe that council ministers will join the meeting to ask for agreement or be given information from chiefs of state who now are in his mission at the foreign country, and how the result of meeting is, we will know on 9th June.

When I answer by personal view that like this or like that, if it becomes truth my answer my make you calm feeling, but if I answer and I can not do, you spread out my speech, and when actually do, it can not. So it causes wrong both sides.

So in order to avoid any mistake, after 9th June we will get real information with actual action measures. And where the actual place to design, how big it is. We will get actual border after Technical JICA Study Team gives the last sample of the detail map where the bridge is actually constructed. As Mr. Ogawa showed an example on the slide that just picture shows the position, but how meter of the actual position is we don't know yet. It's my concern. But other concerns related to social or natural environment is also Japanese Study Team desire. I think that the people who know un-bomb shells like UXO have to tell where they are or give information to secretary of the Ministry of Public Work and Transport H.E or H.E Leng Sochhea who is representative of CMAC to cooperate in the future. Because in order to get the grand aid as this bridge, we have to completely study first like the first report of Japan said that: this study is not determination of Japanese government to give grand aid to construct this bridge. The answer that we have to answer for the question when Japanese government replies for bridge construction, we answer by ourselves. But Japan doesn't answer like that. Japan constructs the bridge for us when our people need the bridge in this area and agree to have Japan construct. Because Japanese people who pay the tax to Japanese government as national budget don't want their aid to countries which they construct gets blame or does something unhappy way for their generous donation. They want to donate and become useful and improve economy with general, international understanding, especially to society and environment.

Bridge makes people living, transportation, and passenger easier like blood movements in our bodies. But if we use bridge, we don't give the value to it. How the bridge becomes useful?

So they want the opinion from Project Affected People who are in responsibility for people. If we welcome and support with clear responsibility, detail information and Project Affected People are willing to receive compensation based on the government principle. And we prevent spreading in big size that impact badly to people feeling. So the faster Cambodia side makes effort to improve the works, which are in Cambodia's responsibility, the faster progress of Japanese helping to Cambodia.

And Japan side can be in favor to receive willingly helps and supports of activist base on duty, ranking, hierarchy administrative or the officials in expert institutes.

Mr. Ogawa lets me answer the second question. When this project is getting start, many companies are invited for bidding. If a company wins the bid, we will clearly know the name of that company. So the people at Neak Loeung could apply for a job. I think there is no problem because we are ready when the construction starts. I remember that there are about 600 Cambodian people who worked in the KIZUNA Bridge Project, the First Mekong Bridge, in Kampong Cham Province. So there is no problem. Thank you!

Question:

(Mr. Young Aun) If the bridge is constructed in Preak Ksaykar commune, the people in this area want to be workers or masons. So please the relevant companies come to commune authorities, because we have never known the companies. The companies just contact upper ranking officials. When they go to study or research, they go to contact commune authorities to cooperate with. But when they start, they don't tell us.

So I am commune authorities represented the people who are looking for a job, how I contact or get information? I would like to propose to the Ministry of Public Work and Transport or JICA, please guide the companies to contact commune authorities.

Answer:

Normally, Japanese Grand Aid provides to more than 100 countries around the world, and Cambodia is in order of 5 or 6. In the condition of Japanese Grand Aid the companies must be Japanese companies. But these companies have the right to choose sub-companies. So I think that if construction site is in Prey Veng province, those companies have to ask permission from provincial authorities. And if in Peam Ro district, have to ask permission from district authorities. And if in Preak Ksay Kar commune, it has to relate to commune authorities.

So I will bring this problem to discuss in detail in the future meeting joined from provincial governors or both representatives of governors.

At least, there must be official permission letter from provincial authorities as supplication through JICA for something, but I am not sure yet.

But the multilateral assistance is in the condition of loan agreement. We have to change the report of donation and maybe write the report of donation. After discussion, how we achieve to the agreement, I will inform. Because they maybe raise worker expert's problem, our workers want to work but what kind of expert they have. They can do the work unless the companies train them in a short term. Because you all have the power to do, there are not enough experts. Thank you.

Question:

(Professor Chhouk Chhai Horng) My name is Chhouk Chhai Horng. I am chief of Department of Civil Engineering at the Institute of Technology of Cambodia. I would like to take this occasion to express thanks to His Excellencies, representatives of the ministries, who are struggling to study on the construction of the bridge at Neak Loeung. I think that this bridge is very important in the future. Regarding to technical works, I support the idea of His Excellency that the type of bridge should be the cable-stayed bridge. It is the first cable-stayed bridge in our country; in Vietnam and Thailand, they already have this kind of bridge. Also, I would like to express thanks to the Government of Japan to give the fund for the construction of this bridge. This construction will be a way to transfer the technologies to the students. My students may do their practical works with the new technologies such as cable pulling or other technologies that would be important for our institute. Thank you very much!

Answer:

(H.E. Nhean Leng) Thank you, H.E. Nhean Leng. I think that the compensation is a big amount. The duration of the construction is about 3 years that is not a short time. We can complete this work according to the contribution of all stakeholders such as National Institutions, Prime Minister strongly support this project. Local authorities including Kandal, Prey Veng, and Svay Rieng Province must highly contribute to this work because all of you know clearly about the negative and positive impacts on this area. And in this area, there are a lot of problems needed to be solved. Thus, chiefs of communes, districts' governors who are participating in this meeting are important forces to support the study. All of you must have a strong commitment to contribute in the project of Government of Japan as well as Cambodia. This achievement is also a historical event in Cambodia. So only the district and provincial authority could provide the information widely to the villagers, and the villagers would understand clearly. When they understand the importance of the bridge, they all

support the project. As H.E. Nhean Leng had mentioned that the people wish to be workers of the construction of the bridge; the word “worker”, the Japanese strongly need it because they think that the works could improve the quality of the people. For example, there are 600 Cambodian workers working in the KIZUNA Bridge Project, now those people become skilled worker, they are working in the construction sites or projects in Phnom Penh right now. And regarding to the construction of the bridge at Neak Loeung, there are a lot of new technologies; if you work in this project, you could gain these technologies for yourself. From day to day we would be able to build the bridge by ourselves, because our human resources are skillful. I remind that the first grant aid we’ve get from the Government of Japan is Chroy Chang Var Bridge, our people also worked in that project. I cannot remember the number of workers exactly, it is about 300 people. At the beginning of the project, those workers did not have any skill. By supporting the Japanese experts and engineers, they could respond in pouring concrete. I was very exciting when I saw they were working smoothly; this is their commitments to learn the works. On the other hand, Japanese need Cambodian workers, but our workers must respect the time and have a good discipline. I just confirm that if we are skillful, we could improve our national economy. I suggest that all of you must tightly cooperate with MPWT which is now conducting the study on the construction of the bridge. And nowadays the ministry has an expert to consult with. Hence you do not hesitate to inform any difficulties or problems to the ministry, especially to our team leader. When you go back, if there are any other problems, please inform to us directly. Have you thought about the local economy by using the ferry service? How is it? I don’t need to give detail explanation to the officials of Neak Loeung Ferry which is an affiliated organization of the MPWT. Therefore, we could complete the study and reach to the getting a start of the construction because of the contribution of all stakeholders including local authorities, Ministries, Inter-ministries Committee, then the Council Ministers, especially Prime Minister. We will succeed in this project if every thing is going smoothly. Thank you!

3) List of Attendant

No.	Name	Sex	Organization	Position
1	Ouk Chan	M	MPWT	Secretary of State
2	Yit Bunna	M	MPWT	Director
3	Phy Sophat	M	MPWT	Deputy Director
4	Hozumi Katsuta	M	MPWT/JICA	Expert
5	Makita Tokahiro	M	MPWT/JICA	JICA Expert
6	Phuy Kenrey	M	MPWT	Director Department
7	Vong Pisith	M	MPWT	Deputy Director General
8	Thov Kimhong	M	MPWT	Vice Chief
9	Kry Thong	M	MPWT	Staff
10	Chhim Phalla	M	MPWT	Staff
11	Hen Phay	F	MPWT	Officer

No.	Name	Sex	Organization	Position
12	Kang Phirith	F	MPWT	Staff
13	Pin Vuthea	M	MPWT	Staff
14	Men Vichit	M	MPWT	
15	Kim Sarorn	M	MPWT	Staff
16	Nhean Leng	M	Ministry of Economic and Finance	Under Secretary of State
17	Srey Savorn	M	Ministry of Agriculture and Fishery	Staff
18	Tol Nhok	M	Ministry of Post and Telecommunications	Staff
19	Loa Tip Siha	M	Ministry of Country Planning Urbanization & Construction	Chief of Department of Construction
20	Sé Bunhorn	M	Ministry of Women's and Veterans Affairs	Director General
21	Chhorn Sopheap	M	Ministry Economic and Finance	Staff
22	Nuth Chansoka	M	Ministry of Planning	Director General
23	Ben Daramony	M	Ministry of Economic and Finance	Chief Office
24	Suon Sam Own	M	Ministry of Water Resources & Meteorology	Represent
25	Leang Mengleap	M	Ministry of Environment	Chief Office
26	Ton Chandara	M	Ministry of Rural Development	Chief Office
27	Chan Socheat	M	Ministry of Industry Mines & Energy	Chief of Department
28	Liv Vann heng	M	Ministry of Tourism	Vice-chief of Department of Planning
29	Trak Thai Seang	M	Municipality of Phnom Penh	Deputy Governor
30	Hé Kan	M	Kandal Province	Deputy Governor
31	Kong Bun Thoun	M	Polish of Kandal Province	Vice officer
32	Youn Oun	M	Preak Khsay Ka	Fist assistance of Commune
33	Nhem Veat	M	Preak Khsay Ka	Chief of Commune
34	Kang Sokhan	M	Banlich Prasat Commune	Chief of Commune
35	Yos Lun	M	Banlich Prasat Commune	The 1 st assistance of commune
36	Srey Malish	F	Preak Khsay Kha Commune	The 1 st Secretary
37	Khun Tong	M	Kampong Phnom Commune	Chief of Commune
38	Bo Saborn	M	Preak Tonlob Commune	Council of Commune
39	Keo Chhim	M	Neak Loeung Commune	Chief of Commune
40	Chea Sary	M	Preak Khsay Kha Commune	Chief of Commune
41	Sorn Tat	M	Kampong Phnom Commune	The firth assistant Chief
42	Om Chamreoan	M	Neak Loeung Ferry	Inspector
43	Pich Chon	M	Neak Loeung Ferry	Vice-Chief
44	Pok Vanny	M	Neak Loeung Ferry	Staff
45	Sean Pheang	M	Neak Loeung Ferry	Secretary of Commune
46	Chab Bunthorn	M	Neak Loeung Ferry	Staff
47	Om Somoun	M	Koh Sontepheap Newspapers	
48	Seng Bunthoun	M	National University Management	Rice Rector
49	Hem Thoun	M	Reaksmey Kampuchea Newspaper	Reporter
50	Sos Somrit	M	AKP	Reporter
51	Leng Sochea	M	Cambodia Mine Action Authority	General Secretary
52	Chheang Bopha	F	Cambodge Soir	Reporter
53	Chhouk Cheyhoang	M	Institute of Technologies	Chief
54	Chum Samorn	M	Sinchen Daily	Reporter
55	Deip Leang	M	Cambodia Chamber of Commerce	Deputy Director General
56	Suy Sopheap	M	Preak Tonlob Commune	The firth assistance chief
57	Ung Kungkea	M	TCM News	Reporter
58	On Raksmeay	M	PWD Dandal	Deputy Office

No.	Name	Sex	Organization	Position
59	Kay Chimsary	M	Cambodia Daily	Reporter
60	Kum Measna	M	Royal University of Phnom Penh	Lecturer
61	Yu Ming	M	Jian hua Daily	Reporter
62	Prom Say Heng	M	Council Minister	Chief of Communication Department
63	Pich Dun	M	Cambodia National Mekong Committee	Staff
64	K. JIGAMI	M	Embassy of Japan	Counselor
65	Korezumi Tomoaki	M	Embassy of Japan	2 nd Secretary
66	Kaing Sao serey	M	Engineering Institution of Cambodia	Vice-chief
67	Leap Vannly	M	Council for Development of Cambodia	Official
68	Ly Qnang Bica	M	Embassy of Vietnam	Councilors
69	Ou Narya	F	World Bank	Program Asst.
70	Tamagake Mitsue	F	JICA Cambodia	Program Assistant
71	Hir Samnang	M	JICA Cambodia Office	Program Officer
72	Isam Gunji	M	JICA Study Team	Team Leader
73	Takehiko Ogawa	M	JICA Study Team	Environment Assessment
74	Takanori Hayashida	M	JICA Study Team	Environmental Assessment
75	Akira Nagamachi	M	JICA Study Team	Public Consultation
76	Kiyoshi Yasukawa	M	JICA Study Team	Transportation and Road Planning
77	Seiichi Takino	M	JICA Study Team	Ferry Planning
78	Tomoaki Takeuchi	M	JICA Study Team	Road Design
79	Yasukazu Kobayashi	M	JICA Study Team	River Planning
80	Atsutoshi Sakata	M	JICA Study Team	Geography and Geology
81	Kiminari Takahashi	M	JICA Study Team	Public Consultation/Coordinator
82	Keo Rachena	M	JICA Study Team	

(3) Minutes of Stakeholder Meeting 3-1 (Neak Loeung Session)

1) General

Date: June 7, 2005

Duration: 08:00 to 17:30

Venue: Conference Hall, Neak Loeung Ferry Office

Participants:

Morning Session : JICA Cambodia Office, JICA Study team, MPWT staff, MEF, NGO Forum, Predicted Project Affected Persons (74).

Afternoon Session : JICA Cambodia Office, JICA Study team, MPWT staff, Predicted Project Affected Persons (24).

2) Q&A Session

Question:

I don't understand the measurement of the Study Team that at my house there are Northern and Southern border until the middle road, the project affected area is only from the central line of the middle road to the National Road or all eastern area until the stream? If the project affects the eastern area of the middle road, it is a bit better; but if the project affects the whole area, I cannot sleep because there are many things to think about.

Answer:

His Excellency, because this question is related to the technical issue, I'm in charge of the technical issue, I could answer the question.

As I told you that the final plan is not completed yet. I cannot tell you exactly how far from the column of your house on the left side and how far from the staircase of your house on right side are affected by the project; I have already confirmed that you have to wait until the end of this month. For example, if we define a distance of 30m from a central line to both sides, everything in this area is affected by the project. Today there is no any definition about the project affected area; all of you are invited by the first stage of the study that only defined how many houses are affected.

At the end of this month we will inform you all the relevant information, after we complete our survey. The survey is not specifically defined which point yet, this is technical issue. Until now, all of you are not sure that the project affects the whole of your house or your land; and the people who are not invited is being happy, but you should not feel hopeless unless the result of the survey is not completed.

3) General

Date: June 8, 2005

Duration: 08:00 to 17:30

Venue: Conference Hall, Neak Loeung Ferry Office

Participants:

Morning Session : JICA Study Team, MPWT staff, Predicted Project Affected Persons (74).

Afternoon Session : JICA Cambodia Office, JICA Study Team, MPWT Staff, Predicted Project Affected Persons (15).

4) Q&A Session

Question:

I am exploiter of western Neak Loeung Ferry in Kampong Chamlung village, Preak Talap commune, Lek Dek district, Kandal Province.

I have the questions and want to ask JICA. I have the questions as teacher described at the moment related to bridge construction. One part, I am very happy, because of the bridge construction, and during the bridge construction, the economy of Neak Loeung area is growing as teacher presented. I agreed to this point, but after the bridge construction, the economy in this area will decrease. So I want to ask you that "How do you take action to solve economic decrease for exploiters or Project Affected People? And can I ask for any proposals for these problems?"

So I would like to propose the government that when the bridge is constructed completely, the adverse impacts like economic decrease, does JICA or government has any compensation for losing jobs or career of business? So I would like the government please surely to attract industrial investments in both side of the river in order to compensate for losing careers.

Answer:

I will repeat your opinion from the western side. He thought that the economy in this area will be weaker than the bridge is being constructed, because after complete construction, the workers will go out and business will go down. And we cannot guarantee to give something as compensation at all. But we will bring your questions and proposals to the Ministry of Public Work and Transport to analyze for this issue. This is our answer to you. All council also can answer that this question is very broad, but the people and ferry workers who come here today are indirect affected people, are not direct affected people. Yesterday was direct affected people. So the direct affected people have clear principles. If people's houses are hit by the project road and bridge, I am not sure how the government compensates for this. But for indirect affecters have no compensation. I will send all words to the Ministry of Public Work and Transport. In my opinion, I think that the balance or not the balance, before bridge construction, we are in the same level and when the bridge construction starts, there are many people here, so we still grow our local economy. And when they go back, we go down to the level like today. So he cannot guarantee clearly that it can go down seriously or not. It's just thinking, study and analysis, so the answers for his questions are not clear. It depends on another one called a social study, and local structure developers also study too. In the future, we will study in Neak Loeung area what potentiality and possibility it is to attract the investors to invest. So what we have in Neak Loeung of Prey Veng Province is agricultural plants like rice, corn and so on. So in the future, we can attract investors for agro-industry and we've also studied in our plan. Thank you.

5) General

Date: July 11, 2005

Duration: 08:00 to 17:30

Venue: Conference Hall, Neak Loeung Ferry Office

Participants:

Morning Session : JICA Study Team, MPWT Staff, Predicted Project Affected Persons (93).

Afternoon Session : JICA Study Team, MPWT Staff, Predicted Project Affected Persons (79).

6) Q&A Session

Question:

My name is Srun Heang and my address at Ampil Tek village, Kampong Phnom Commune, Leuk Deak District, Kandal Province. I have some questions on the bridge construction that will impact to landowners and households of peoples as below:

Regarding Neak Loueng Second Mekong Bridge, how much is its length and width?

Each impact of landowner and household from the national road until the river such as: the highway, trail, creek/small stream and riverbank (if including the State land?). Which is the point for construction the bridge?

How many categories of houses and landowner for compensation? How much is the price for each category in 1m²?

Answer:

For the first questions, how much is the width/length of the bridge. Now the detail design is not yet complete. But this time the Study Team has been studying the location of rout A and we have only general map of route. But, from this time to December 2005 the Study Team will study on the technical standard and its criteria of the bridge.

For the second question, I want to inform that, please people understand and separate these matters for the National Road No. 1, which is the existing road and has the Right of Way. But for the Second Mekong Bridge there is no Right of Way because it is a new construction area that will be constructed on the land and household of the peoples so that it cannot tell this the Right of Way. To say more, the creek, small stream and riverbank are Government properties according to the Government's Law of Cambodia.

Question:

I'm from Phoum Mouy, Preak Khsay Ka commune, Peam Ro District, Prey Veng Province. I want to know how the government mitigates the landowner and householder impact? When the government makes resettlement? Or the government makes the same practice to the ADB project at National Highway No. 1? Because I have met this matter with ADB project and now we meet again for Construction Bridge. However, I'm very happy, because bridge can develop our country.

But, please do the Government of Cambodia to solve the peoples' impacts caused by the project of construction for marinating a good living-life.

And also, how much is the compensation price for each category in 1m2. For the tree, for instance, there are no problem. But of the most important is the land, household and jobs. Of cause, we just moved and have a small cottage and so now we hear that we might receive impacts by the project of Construction Bridge. However, we would like to thank you to government for study on this project.

Answer:

The Study Team concentrates for maximizing the positive impacts and mitigating the negative impacts. For the people who received impacts by National Road No.1 from Neak Loung to Pa Vit, I'm not clear about this matter, but I'll bring this question to the Ministry of Public Works which ought to receive this information. For the compensation price of each category, I cannot answer this time, since the Study Team is not responsible for this matter. Please wait for the Inter-Ministry Settlement Committee that will handle these compensation matters. For the question how much width is the Right of Way, I can inform that. This project cannot say the Right of Way because it's a new construction.

7) List of Attendant (June 7)

No.	Name	Sex	Organization	Position
1	Kry Thong	M	MPWT	Counterpart
2	Hir Samnang	M	JICA Cambodia	Program Office
3	Kiminari Takahashi	M	JICA Study Team	Public Consultation/Coordinator
4	Takanori Hayashida	M	JICA Study Team	Environmental Assessment
5	Isamu Gunji	M	JICA Study Team	Team Leader
6	Kol Leakhana	M	NGO Forum	Project Office
7	Ben Daramony	M	Ministry of Economic and Finance	Chief office
8	Nheang Leng	M	Ministry of Economic and Finance	Chairman of IRC
9	Chhim Phalla	M	MPWT	Counter part
10	Kang Phearith	M	MPWT	Staff
11	Atsutoshi Sakata	M	JICA Study Team	Geography and Geology
12	Tekehiko Ogawa	M	JICA Study Team	Environmental Assessment
13	Akira Nagamachi	M	JICA Study Team	Public Consultation
14	Takeuchi Tomoaki	M	JICA Study Team	Road Design
15	Tamagake Mitsue	F	JICA Cambodia	Program Assistant
16	Keo Reachna	M	JICA Study Team	Interpreter

8) List of Attendant (June 8)

No.	Name	Sex	Organization	Position
1	Kry Thong	M	MPWT	Counterpart
2	Kiminari Takahashi	M	JICA Study Team	Public Consultation/Coordinator
3	Takanori Hayashida	M	JICA Study Team	Environmental Assessment
4	Isamu Gunji	M	JICA Study Team	Team Leader
5	Chhim Phalla	M	MPWT	Counter part
6	Kang Phearith	M	MPWT	Staff
7	Kobayashi Yasukazu	M	JICA Study Team	River Planning
8	Tekehiko Ogawa	M	JICA Study Team	Environmental Assessment
9	Akira Nagamachi	M	JICA Study Team	Public Consultation
10	Takeuchi Tomoaki	M	JICA Study Team	Road Design
11	Keo Reachna	M	JICA Study Team	Interpreter

AP8.2.6 Record of Stakeholder Meeting 3-2

(1) Presentation Material

- Introduction
- Part I: Interim Results of EIA Study
- Part II: Preliminary Design of Bridge
- Part III: Outline of Resettlement Action Plan and Simple Survey

The Stakeholder Meeting 3-2 for the Construction of the Second Mekong Bridge in the Kingdom of Cambodia

Introduction

September 20, 2005
Phnom Penh Hotel

Ministry of Public Works and Transport (MPWT)
in cooperation with JICA

Introduction

1. Review on Stakeholder Meeting 3-1
2. Objectives of Stakeholder Meeting 3-2

1. Review on Stakeholder Meeting 3-1 (1)

- June 7-8, 2005: Stakeholder Meeting 3-1
- The main outcomes of the stakeholder meeting 3-1 were that:
 - To review the questions, comments and answers during the public comment period;
 - To explain the scope of PAPs (Project Affected Persons);
 - To explain the scope for the EIA-level social and environmental studies; and
 - To explain the outline of RAP (Resettlement Action Plan).

1. Review on Stakeholder Meeting 3-1 (2)

- The main discussion points in the stakeholder Meeting 3-1 are as follows:
 - The summary of public comments from various stakeholders and answers by MPWT were fully explained by the official of MPWT to make the final consensus among all the stakeholders;
 - The detailed procedures for the second phase of the Study as well as the EIA study were explained by the JICA study team;
 - The detailed scope for the PAPs as well as the EIA study was also explained by the JICA study team;
 - The outline of RAP (Resettlement Action Plan) was described by the JICA study team;
 - Some commune officers expressed their concerns about the exact amount and contents of the compensation in case of the resettlement;
 - The IRC official explained the basic principles as well as the outline of the resettlement policy of the Cambodian government; and
 - Some commune officers expressed their interests to take part in the construction works for the Bridge.

2. Objectives of Stakeholder Meeting 3-2

PC No.	Stakeholders Meeting	Venue	Study Level	Major Objectives	Timing
1*	Stakeholders Meeting 1-1	Phnom Penh (PP)	Kick-off	Introduction of the Project, explanation of the JICA's Guideline and Scoping for IEE	May 24, 2004
	Stakeholders Meeting 1-2	Neak Loeng (NL)	Kick-off	Same as above	June 21, 2004
2*	Stakeholders Meeting 2-1	PP, NL	IEE	Discussion on Scoping and TOR for IEE	October 7 and 28, 2004
	Stakeholders Meeting 2-2	PP, NL	IEE	Presentation of Interim Results of IEE	December 27-28, 2004
	Stakeholders Meeting 2-3	PP, NL	IEE	Presentation of Draft Final Report of IEE and Interim Study Report	March 10-11, 2005
3*	Stakeholders Meeting 3-1	PP, NL	EIA	Discussion of Scoping and TOR for EIA	June 3 and 7-8, 2005
	Stakeholders Meeting 3-2	PP, NL	EIA	Presentation of Interim Results of EIA	Sep 20 and 21, 2005
	Stakeholders Meeting 3-3	PP, NL	EIA	Presentation of Draft Final Reports of EIA and Overall Study	Jan 2006

2. Objectives of Stakeholder Meeting 3-2

- The main objectives of the Stakeholder Meeting 3-2 are that:
 - To report and discuss the interim results of the EIA-level social and environmental studies;
 - To explain the outline of the preliminary design and technical conditions for the Bridge; and
 - To explain the outline of contents for "Simple Survey", RAP (Resettlement Action Plan), mitigation measures, and monitoring plans.

THANK YOU !



for your attention and patience.

Ministry of Public Works and Transport

The Stakeholder Meeting 3-2 for the Construction of the Second Mekong Bridge in the Kingdom of Cambodia

Part I Interim Results of EIA Study

September 20, 2005
Phnom Penh Hotel

Ministry of Public Works and Transport (MPWT)
in cooperation with JICA

Part I-A Natural Environment

1. Objectives of EIA Study
2. Scoping for EIA Study (Natural Environment)
3. Impact Assessment (Natural Environment)

Part I-B Social Environment

4. Scoping for EIA Study (Social Environment)
5. Impact Assessment (Social Environment)

1. Objectives of EIA Study

- The objectives of this EIA Study are
 - To carry out relevant environmental field surveys.
 - To evaluate significance of potential environmental impacts to be caused by the proposed project.
 - To summarize environmental mitigation measures.
 - To establish environmental management program including environmental monitoring program during both construction and operation phases.

2. Scoping for EIA Study

2.1 General

- EIA is concerned with potential natural environmental impacts to be caused by the construction of both new bridge and approach roads.
- EIA study is carried out in accordance with
 - Cambodian EIA Law
 - JICA New Guideline for Environmental and Social Considerations
 - Other relevant international EIA standards/guidelines.

2. Scoping for EIA Study

2.2 Categorization of Relevant EIA Subtasks

- Based on IEE results, relevant environmental studies are to be carried out,
 - "Category-A" and "Category-B" - More detailed study is carried out.
 - "Category-C" and "Category-D" - Simple analysis is carried out.

2. Scoping for EIA Study (Natural Environment)

2.3 Summary of IEE Results

	Environmental Factors	IEE Evaluation	Level of EIA Study
1	Air Quality	C	Simple Analysis
2	Water Quality	A	More detailed study
3	Soil and Sedimentation	A	Same as above
4	Waste Disposal	A	Same as above
5	Noise/Vibration	B	Same as above
6	Subsidence	A	Same as above
7	Bad Smell	D	No additional analysis
8	Topography and Geology	A	More detailed analysis
9	River Bed (e.g., benthos)	A	Same as above
10	Flora/Fauna	A	Same as above
11	Water Resources	B	Same as above
12	Accidents	C	Simple Analysis
13	Global Warming	C	Same as above

3. Impact Assessment (Natural Environment)
3.1 Descriptions of Impact Assessment
<ul style="list-style-type: none"> ■ Impact assessment is carried out based on, <ul style="list-style-type: none"> ➢ Selected best plan of route and bridge/approach road Alignment ➢ Bridge/road structures ➢ Surrounding environment ➢ Future social condition or regional development plan (e.g., future traffic volume) ➢ Then, possible environmental impacts regarding natural environmental factors are identified.

3. Impact Assessment (Natural Environment)
3.2 Results and Discussions (Soil Quality)
<ul style="list-style-type: none"> ■ Surface soil quality type is uniform across the study area. ■ Soil quality parameters such as cadmium, lead and copper are below relevant environmental standards. ■ So, the likelihood of the soil contamination at both sites by heavy metals would be small.

3. Impact Assessment (Natural Environment)
3.3 Results and Discussions (Water Quality)
<ul style="list-style-type: none"> ■ Most of measured water quality parameters are below the water quality standards for the irrigation purpose. ■ Local water body in the cross-sectional direction is well-mixed. ■ Seasonal variation exists

3. Impact Assessment (Natural Environment)
3.4 Results and Discussions (Water Flow)
<ul style="list-style-type: none"> ■ The order of magnitude of the velocity increase as the distance from the riverfront increase. ■ Maximum velocities for each area are located around the middle of each rivers. ■ The order of the magnitude of the nodal depth-averaged velocity reaches about 3.0 m/sec. ■ So, strong current that would exceed more than 3.0 m/sec around the somewhere across the Neak Loeung deep-pool area occur. ■ Entire flow condition of the shallow area is slower than that of deep-pool area. ■ So, this shallow area may play an important role as a temporal evacuation place for local aquatic species during the rainy season.

3. Impact Assessment (Natural Environment)
3.5 Discussions (Biological Environment: Flora/Fauna)
<p>1) Bridge Development Issues relating to Fish Conservation</p> <ul style="list-style-type: none"> ■ Deep pool adjacent to Phnon Knong Island and 2 km south of the bridge site potentially provide important dry season refuge habitat for fish. ■ Several globally threatened fish species have been recorded in the Mekong at or near Neak Loeung. ■ Local water quality degradation may occur around/or downstream side of those bridge pier construction sites. However, those impacts would be temporal and the significance of those negative impacts would be small as long as appropriate construction methods that would minimize the water quality degradation is implemented. ■ In case of occurrence of accidental spillage, it is essential to establish a contingency program in order to minimize the damage to be caused by that accident.

3. Impact Assessment (Natural Environment)
3.5 Discussions (Biological Environment: Flora/Fauna, cont.)
<p>2) Bridge Development Issues relating to Reptile Conservation</p> <ul style="list-style-type: none"> ■ At least, following two globally threatened turtle species reported still occur in very small numbers along the eastern approach road to the bridge. <ul style="list-style-type: none"> ➢ Asian Box Turtle (<i>Cuora amboinensis</i>, IUCN Vulnerable) ➢ Malayan Snail-eating Turtle (<i>Malayemys subtrijuga</i>, IUCN Vulnerable) ■ Road construction in this area will certainly destroy a small amount of suitable turtle habitat. ■ Mitigation measures could be considered to create suitable wetland habitat adjacent to the approach roads, and placing some interpretive facilities (e.g., signboards) in strategic locations to raise awareness of turtle conservation issues

3. Impact Assessment (Natural Environment)

3.5 Discussions (Biological Environment: Flora/Fauna, cont.)

3) Bridge Development Issues relating to Bird Conservation

- The most important feature is the large waterbird community, which use the Bassac Marsh IBA area primarily in the wet season.
- These birds (e.g., Spot-billed Pelican and Lesser Adjutant) occur in relatively small numbers, and encourage several kilometers away from the bridge route.
- If bridge construction activities do not encroach more than a 300 - 500 m west from NR-1, the bridge development will pose no direct threat to the Bassac Marshes and its bird fauna.
- No bird species of elevated conservation concern use the proposed project route and adjacent area either in significant enough numbers or with sufficient regularity for the bridge construction to have more than a negligible impact on their populations.

3. Impact Assessment (Natural Environment)

3.5 Discussions (Biological Environment: Flora/Fauna, cont.)

4) Bridge Development Issues relating to Mammal Conservation

- The only mammals of conservation importance known from the area have become locally extinct (e.g., Irrawaddy Dolphin, or occur several kilometers away from the project site).
- The bridge development will have no direct impact on any mammals of conservation importance, because there are no longer any populations using the area to be impacted by the construction activities.

3. Impact Assessment (Natural Environment)

3.5 Discussions (Biological Environment: Flora/Fauna, cont.)

5) Bridge Development Issues relating to Flora Conservation

- The flora of the project site was not intensively investigated, so conclusion about the presence and the degree of the impact on key species can not be delineated.
- One rarely recorded rattan was detected, but the bridge construction is not expected to have any significant impact on this species, whose fruits are harvested by local people.
- The lack of unusual or little-modified (i.e., intact) habitat strongly suggests that few if any rare or sensitive species occur at the site.

3. Impact Assessment (Natural Environment)

3.6 Objectives of Impact Mitigation

- The objectives of the mitigation (i.e., avoidance, reduction, and elimination) plan are
 - > To review impacts identified through the environmental impact assessment (EIA).
 - > To incorporate probable working practices into the mitigation plan at the pre-construction and construction phases of the project in order to anticipate those issues which are likely to require close environmental management.
 - > To maintain a comfortable roadside environment throughout the project.
 - > To alleviate disturbance of regional hydrological balance, in particular, drainage system, and to lessen related secondary impacts such as inundation.

3. Impact Assessment (Natural Environment)

3.6 Objectives of Impact Mitigation (cont.)

- > To alleviate secondary impacts of a large-scale subsidence around the approach roads on both sides of the Mekong River.
- > To minimize the risk of the erosion of road bank of approach roads, that may lead to new local inundation or water quality degradation, and the erosion of the riverbank of the Mekong River.
- > To alleviate disturbance of natural fauna/flora condition over the Mekong floodplain and inside of the Mekong River throughout the project.
- > To harmonize new transport facilities with surrounding communities.

3. Impact Assessment (Natural Environment)

3.6 Environmental Management Plan

- Specific objectives of the plan are to:
 - > Define organizational and administrative arrangements for the environmental monitoring, including the definition of responsibilities of staff, coordination, liaison and reporting procedures.
 - > Discuss procedures for pro-active environmental management, so that potential problems can be identified and mitigation measures to be adopted prior to the construction commencement.

Part I-B Social Environment

- 4. Scoping for EIA Study
- 5. Impact Assessment

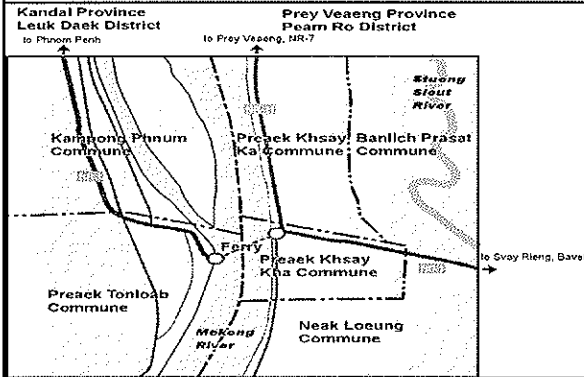
4. Scoping for EIA Study (Social Environment)

Summary of IEE Results

No.	Environmental Factors	IEE Evaluation	Level of EIA Study
1	Involuntary Resettlement	A	More detailed study
2	Impact on Local Economy	B	Same as above
3	Utilization and Land and Local Resources	B	Same as above
4	Social Institutions	D	No additional analysis
5	Existing Social Infrastructure and Services	D	No additional analysis
6	Vulnerable Social Group	B	More detailed study
7	Equity of Benefits and Losses	B	Same as above
8	Conflicts of Interests	B	Same as above
9	Gender	B	Same as above
10	Children's Rights	B	Same as above
11	Cultural Heritage	B	Same as above
12	Infectious Diseases	B	Same as above

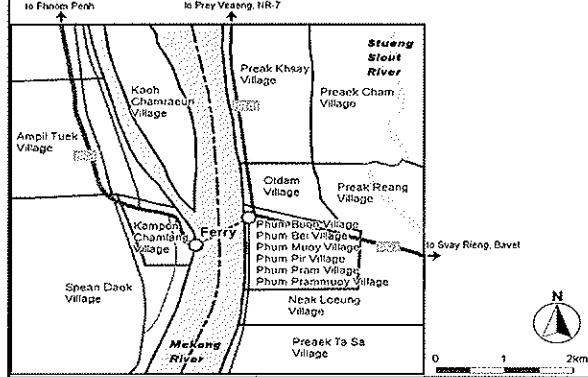
5. Impact Assessment (Social Environment)

Outline of Study Area (Commune Level)



5. Impact Assessment (Social Environment)

Outline of Study Area (Village Level)



5. Impact Assessment (Social Environment)

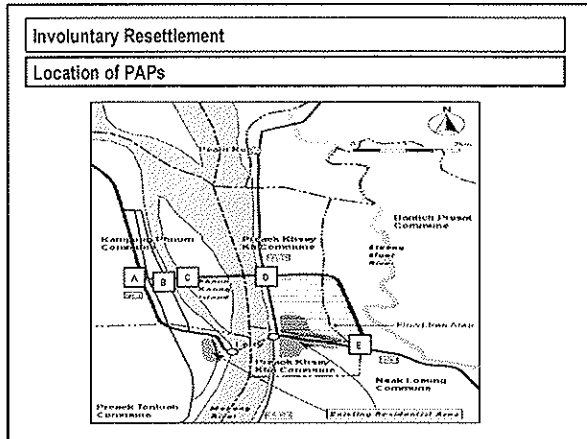
Involuntary Resettlement

- While, at the time of designing the tentative alignment of the route of the Bridge, the number of the PAPs was estimated at 54 households, at the time of revising the alignment of the route, the revised number of the PAPs in the planned "Construction Area" who will be forced to be resettled was finally estimated at 131 households. These PAPs are distributed across the route of the Bridge in 5 clusters (Cluster A, B, C, D, and E) of communities in Kampong Phnom, Preaek Khsay Ka, and Preaek Khsay Kha commune.
- In addition to these PAPs, 99 landowners are separately identified as additional PAPs inside the "Construction Area" required for the Bridge.
- Eventually, 230 PAPs (131 households and 99 landowners) are finally identified as the PAPs in the "Construction Area".

Involuntary Resettlement

Number of PAPs in the Project Affected Area

Location	Commune	Village	Number of PAP
A	Kampong Phnom	Ampil Toeuk	29
B	Kampong Phnom	Ampil Toeuk	19
C	Kampong Phnom	Koh Chamraeun	4
D	Preaek Khsay Ka	Phum 4	34
E	Preaek Khsay Kha	Phum 3	45
Total			131



5. Impact Assessment (Social Environment)

Involuntary Resettlement

- The ROW (Right of Way) for the Bridge should be declared as the new ROW. The existing ROW for the National Road No. 1 is officially based on the Prime Minister Declaration on 27 September 1999 stating that National Road No.1 is 60 meters in rural areas. However, the ROW for the Bridge should be newly declared as the "Construction Area" which is legally based on the Article 13 of the new Land Law that went effect in 2001. The "Construction Area" is categorized into the following 5 types of land.
 - > Tentative right of way (ROW) as part of the National Road No. 1;
 - > Land needed for by-passes and approach roads connecting to the Bridge
 - > Land needed for the construction yard;
 - > Land needed for the toll gate; and
 - > Other land needed for the construction of the Bridge

5. Impact Assessment (Social Environment)

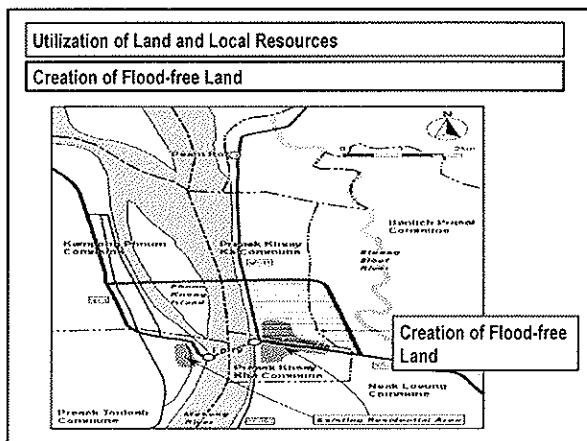
Impacts on Local Economy

- Since the portion of sales to drivers and passengers is estimated at relatively large in the business communities around the both ferry terminals, the economic impacts might remain trivial in large markets and serious in small-scale business communities.
- The massive inflow of construction workers for the construction of the Bridge might have significant economic impacts on the local economy. The business community could benefit also if the contractor is encouraged to buy local materials where appropriate.
- Although it is likely that some dozens of locally-employed workers of the Neak Loeung Ferry might lose their job opportunities, it might be solved by shifting these workers and their families to other ferry-crossing points.

5. Impact Assessment (Social Environment)

Utilization of Land and Local Resources

- The construction of the bridge will make the local land use more valuable and multi-purpose even in the rainy season. The flood-free land will be created by triangle spaces surrounded by the National Road No.1, the National Road No.11, and an approach road which is associated with the construction of the Bridge. In this case, there is a slight risk that, due to the created flood-free land, production activities of some farmers and fishermen might be affected.
- There might be some risks that those forestry crimes might be linked to the smooth traffic of trucks which might be caused by the increased in traffic by the construction of the Bridge.



5. Impact Assessment (Social Environment)

Social Infrastructure

- Basically, it is expected that the improvement of crossing the Mekong River might provide people with improved access to a wide range of social capital such as education and health services. For instance, it is obvious that the bridge will be able to provide people with 24-hour crossing service so that people will be able to access to the hospital. In addition, there are no sensitive receptors such as social capital as health centers and schools which will be forced to be resettled.
- The construction of the might improve accessibility to high-level medical services on 24-hour basis and other social services. There will be no resettlements of health centers and schools by the construction of the Bridge.

5. Impact Assessment (Social Environment)

Existing Social Institutions

- The division of communities and the restriction of access among communes as well as among villages, if any, might affect people's unity and participation, thereby hampering close intra- and inter-communications in the project affected area.
- Basically, the improvement of crossing the River by the construction of the Bridge might not incur any division of communities and the restriction of access among communes as well as among villages. Meanwhile, there might be a slight risk that an approach road associated with the construction of the bridge might hamper the smooth communication among communes or villages. The construction of the bridge will not hamper any function of decision-making activities of communes in the project affected area.

5. Impact Assessment (Social Environment)

Vulnerable Social Group

- Vulnerable groups of people are socially and economically in weak positions, and easily affected by various social impacts. Especially, they might face difficulties in coping with involuntary resettlement as well as loss of cash income due to the abolishment of ferry services. Among these groups, special attentions must be paid on children as well as women, which will be separately discussed later.
- Socially and economically vulnerable vendors working at the both ferry terminals might be affected due to the loss of their customers who are drivers and passengers stopping over at the terminals, although, in the construction phase of the Bridge, their sales might temporarily increase thanks to the massive inflow of construction workers. Special attention should be paid to the livelihood of these vulnerable group by mitigating those economic impacts.

5. Impact Assessment (Social Environment)

Equity of Benefits and Losses

- The improvement of crossing services will not necessarily equitably benefit all the stakeholders in the project affected area.
- The abolishment of the ferry services associated with the construction of the Bridge might significantly decrease the income of poor people such as vendors without capital, thereby enlarging the economic disparity in the project affected area.
- Furthermore, the construction of the Bridge might change the crossing convenience of people, thereby enlarging the geographical disparity in the project affected area.

5. Impact Assessment (Social Environment)

Conflicts of Interests

- The construction of the Bridge might change the value of land in the project affected area which might have a slight risk of inviting the conflicts of interests in relations to the land disputes.
- The flood-free land which will be created by triangle spaces surrounded by the National Road No.1, the National Road No.11, and an approach road associated with the construction of the Bridge might increase its value in comparison with other areas, thereby having possibilities of conflicts of interests among land owners.

5. Impact Assessment (Social Environment)

Gender

- The improvement in mobility accrued from the construction of the Bridge might increase a risk of trafficking of women as well as the associated chronic problems such as prostitution and spread of HIV/AIDS.
- Due to the abolishment of the ferry terminals as a result of the bridge construction, the rate of stopovers of drivers and passengers at the terminals might significantly decrease opportunities to sell various products, thereby accordingly decreasing women's income.

5. Impact Assessment (Social Environment)

Children's Rights

- The improvement in mobility accrued from the construction of the Bridge might increase a risk of trafficking of children as well as the associated chronic problems such as orphans and spread of HIV/AIDS.
- Due to the abolishment of the ferry terminals associated with the construction of the Bridge, the rate of stopovers of drivers and passengers at the terminals might significantly decrease, thereby accordingly decreasing children's income through selling various products.
- Due to the construction of an approach road associated with the construction of the Bridge, there might exist a slight possibility that children are forced to detour in their schoolings.

5. Impact Assessment (Social Environment)

Cultural Heritage

- The RAP (Resettlement Action Plan) should document all necessary actions to protect, move, and restore the cultural property of all affected people. The movement of cultural artifacts must be carried out in consultation with local communities and in collaboration with governmental agencies.
- Possible project sites such as the construction yard as well as the associated approach roads are not proximately located in any of archeological and religious heritages. Nevertheless, in case that the cultural property is found during the construction phase, they should be treated in accordance with a cultural property management plan.

5. Impact Assessment (Social Environment)

Infectious Diseases

- In summary, the inflow of massive construction workers as well as the mobility effect by the construction of the Bridge might aggravate the situation on the spread of HIV/AIDS which has various negative socio-economic impacts, unless sufficient counter-measures are taken. More specifically, the improvement in mobility accrued from the construction of the Bridge might bring about a risk of increasing the prevalence ratio of HIV/AIDS through activating various mobile groups of people.
- What is worse, massive construction workers needed for the construction of the Bridge might have a considerable risk of increasing the prevalence ratio of the epidemic through their sexual activities.

5. Impact Assessment (Social Environment)

Mitigation Measures and Monitoring Plan

- Mitigation measures as well as monitoring plans for the adverse impacts on social environment will be concretely formulated in line with the basic principles explained by the next presentation.

THANK YOU !



for your attention and patience.

Ministry of Public Works and Transport

The Stakeholder Meeting 3-2 for the Construction of the Second Mekong Bridge in the Kingdom of Cambodia

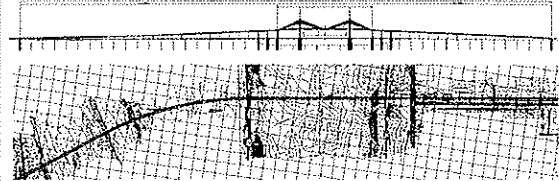
Part II Preliminary Design of Bridge

September 20, 2004
Phnom Penh Hotel

Ministry of Public Works and Transport (MPWT)
in cooperation with JICA

Part II Preliminary Design of Bridge

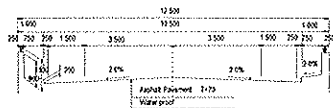
1. Overall Bridge Layout



2. Bridge Design Criteria and Standard

(1) Bridge Design Conditions

1) Width of Bridge



2) Navigation Channel Layout

	One way traffic	Two Way traffic
Vessel Size	5,000DWT Container Ship	5000DWT Coaster
Horizontal Clearance	$B=1.6 \times L=175 < 180\text{m}$ Where, L : Ship Length = 109m	$B=3.5 \times L=179 < 180\text{m}$ Where, L : Ship length = 51m
Vertical Clearance	37.5m	
Navigation Channel	180m 37,5m H.W.L. +7.93	

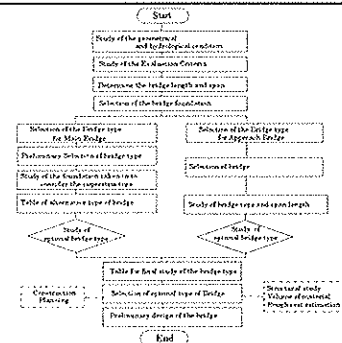
(2) Design Criteria and Standard

- Design Standard of Japan Road Association will be applied to the design of 2nd Mekong bridge.
- Load applied for the Design of Bridge

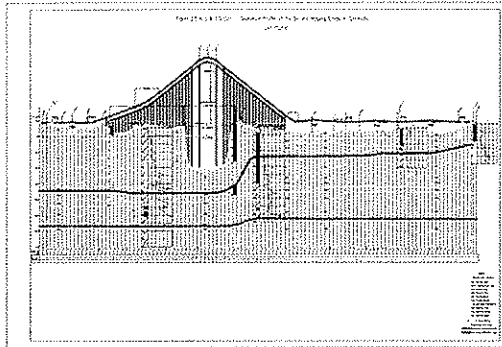
Kind of Load	
Live Load	TL-25 B-Load
Water Pressure	V max = 2.0 m/sec
Vessel Collision Force	Size of Vessel 5000DWT Velocity 2.25m/sec
Wind	V max = 30.0 m/sec
Temperature	+40°C ~ +15 °C
Seismic Force	$K_h=0.05$ $K_v=0.0$

3. Selection of Optimum Type of Bridge

(1) Procedure of Selection of Bridge Type



(2) Geographical, Geological and Hydrological Conditions

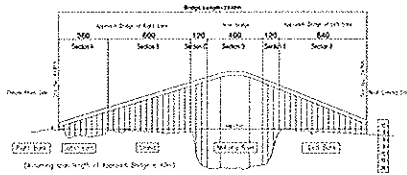


(3) Evaluation Criteria

- Construction Cost
- Property of Structure
 1. Availability of the Construction Material in Cambodia
 2. Employment of Cambodian Labor
 3. Technical Transfer to Cambodia
 4. Past Record of the Alternative Type of Bridge
 5. Technical Assurance and Stability of Bridge.
 6. Adequacy for Natural Environment at the Construction Site
- Construction Method
 1. Construction Term
 2. Safety for Construction
- Maintenance
- Aesthetic Point of View

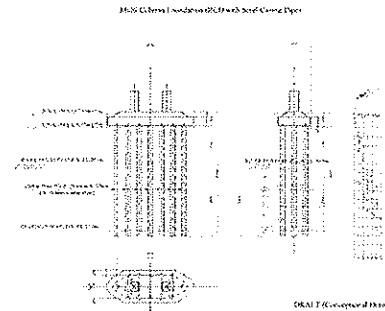
(4) Bridge Length and Span

- Total Road Length = 5,200m
- Total Bridge Length = 2,240m
- Span Arrangement of Bridge



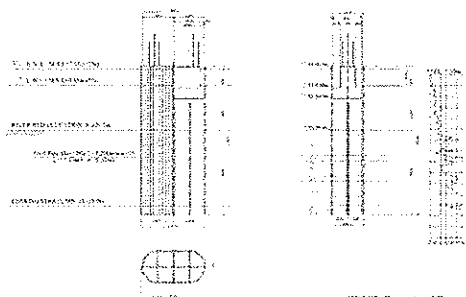
(5) Selection of Bridge Foundation

- 1) Multi Column Foundation (Cast in Place Concrete Pile or Steel Pipe Pile)



2) Steel Sheet Pile Foundation

Steel Pipe Sheet Pile Foundation (S.P.S.P.F.) (25mm)



(6) Selection of Main Bridge Type


- Alternative Type of Main Bridge

Type	Elevation	Cross Section
I	Steel Box Girder with Orthotropic Deck	
II	Steel Truss Bridge	
III	Through Arch Bridge	

Type	Elevation	Cross Section
IV	Cable Stay Bridge (Steel) 	
V	Extra Dosed Bridge (Concrete & Steel Composite) 	
VI	Cable Stay Bridge (Pre-stressed Concrete) 	

(7) Selection of Bridge Type for Approach Bridge	
■ Alternative Bridge Type for Approach Bridge	
Type	Cross Section
I	Pre-Stressed Concrete Composite I Girder
II	Continuous Steel I Girder
III	Pre-Stressed Concrete Box Girder

THANK YOU !



for your attention and patience.
Ministry of Public Works and Transport

The Stakeholder Meeting 3-2 for the Construction of the Second Mekong Bridge in the Kingdom of Cambodia

Part III Outline of Resettlement Action Plan and Simple Survey

September 20, 2005
Phnom Penh Hotel

Ministry of Public Works and Transport (MPWT)
in cooperation with JICA

Part III Outline of Resettlement Action Plan and Simple Survey

1. Outline of Resettlement Action Plan
2. Assistance to Simple Survey
3. Basic Principle for Mitigation Measures and Monitoring Plan

1. Outline of Resettlement Action Plan

1.1 General

- Resettlement Action Plan (RAP) is a document drafted by the project promoter, which specifies an action plan and procedures, covering outline of project, compensation policy to PAPs, schedule for project and resettlement activities and the total budget for compensation.
- The outline of the RAP would be as follows:
 - > Legal Framework
 - > Compensation Framework
 - > Public Consultation and Information Disclosure
 - > Grievance Mechanism
 - > Institutional Framework
 - > Monitoring and Evaluation

1. Outline of Resettlement Action Plan

1.2 Legal Framework

- The legal framework for the RAP refers to laws, sub-decrees and other relevant regulations, including;
 - > Scope of work for land acquisition and compensation activities;
 - > Procedures for assessing compensation values and schedule for compensation activities;
 - > Procedures for land titling and registration; and
 - > Institutional settings such as agencies responsible for resettlement and compensation

1. Outline of Resettlement Action Plan

1.3 Compensation Framework (1)

- The compensation framework should include a description of:
 - > Any compensation guidelines established by the government;
 - > Socio-economic situation of PAPs;
 - > Proposed types and levels of compensation to be paid
 - > Compensation and assistance eligibility criteria; and
 - > How and when compensation will be paid

1. Outline of Resettlement Action Plan

1.3 Compensation Framework (2)

- The compensation measures like cash compensation and institutional support eligible PAPs will include:
 - > Loss of land;
 - > Loss of structures;
 - > Loss of productive trees;
 - > Loss of commune and public assets; and
 - > Allowances for disruption/resettlement and for vulnerable households

1. Outline of Resettlement Action Plan			
1.3 Compensation Framework (3)			
		Kind of Asset	Unit
1	Fixed Assets	1 st Category	m ²
2		2 nd Category	
3		3 rd Category	
4			
5	Well	Dig Well	1
6		Pump Well	
7	Fence	Wood Stand, Barbed Wire	m
8		Rock (Concrete)	
9	Fruit Tree	Mango Tree	each
10		Tamarind Tree	
11		Palm Tree	

1. Outline of Resettlement Action Plan			
1.3 Compensation Framework (4)			
		Kind of Asset	Unit
12	Fruit Tree	Coconut Tree (Milk-fruit Tree)	each
13		Bamboo	
14		Jackfruit	
15		Soursop Tree	
16		Custard Tree	
17		Papaya	
18		Wood Tree	
19		Banana	
20		Lemon/Lime Tree	
21		Guava Tree	

1. Outline of Resettlement Action Plan	
1.4 Public Consultation and Information Disclosure	
<ul style="list-style-type: none"> ■ The information disclosure for the project affected persons covers the following points: <ul style="list-style-type: none"> ➢ Relevant details of the project; ➢ Potential negative impacts by the project; ➢ Details of the entitlements under RAP; ➢ Implementation schedules; ➢ Compensation rates and eligibility; ➢ Grievance process; and ➢ All other information relating to resettlement and compensation 	

1. Outline of Resettlement Action Plan	
1.5 Grievance Mechanism	
<ul style="list-style-type: none"> ■ The RAP should include the following grievance redress framework: <ul style="list-style-type: none"> ➢ Institutional arrangements such as structure of grievance committee; ➢ Procedures for recording and processing grievances; ➢ Mechanisms for adjudicating grievances and appealing judgment; and ➢ Schedule for all steps in the grievance redress process 	

1. Outline of Resettlement Action Plan	
1.6 Institutional Framework	
<ul style="list-style-type: none"> ■ The following institutional framework will be clarified in the RAP: <ul style="list-style-type: none"> ➢ Resettlement unit under IRC; ➢ Project management unit of MPWT; ➢ Provincial (Kandal and Prey Veang) resettlement unit; ➢ District and commune resettlement unit under relevant provinces; and ➢ Budgetary framework with the cost estimate of RAP 	

1. Outline of Resettlement Action Plan	
1.7 Monitoring and Evaluation	
<ul style="list-style-type: none"> ■ The RAP is required to provide a coherent monitoring plan that identifies the following components: <ul style="list-style-type: none"> ➢ Physical progress of resettlement and rehabilitation activities; ➢ Disbursement of compensation; ➢ Effectiveness of public consultation and information disclosure; and ➢ Other performances for the smooth implementation of the RAP 	

1. Outline of Resettlement Action Plan

1.8 Other Components

- > Organizational responsibilities; and
- > Implementation schedule

2. Assistance to Simple Survey

- The "Simple Survey" is being prepared and will be shortly implemented to preliminarily confirm the PAPs' will to accept the resettlement by the Project, taking into the following considerations.
 - > The "Construction Area" will be shortly announced to the public through commune offices based on the new Land Law.
 - > The basic scenario of "Ferry Improvement + Bridge (Route A)" option will be fully explained by the "Simple Survey" team.
 - > The date of the "Simple Survey" is completed would be the "Cut-off Date".
 - > The results of the "Simple Survey" will be referred to when the RAP is formulated.
 - > The DMS will be conducted to accurately assess the compensation amount in the next stage of the Simple Survey".

3. Basic Principles for Mitigation Measures and Monitoring Plan

3.1 General

- Mitigation measures and monitoring plan for the adverse impacts on social environment will be formulated in line with the following basic principles.
 - > Mitigation of Population and Involuntary Resettlement
 - > Impact on Local Economy
 - > Utilization of Land and Local Resources
 - > Vulnerable Social Groups
 - > Equity of Benefits and Losses and Equality in Development Process
 - > Local Conflicts of Interests
 - > Gender
 - > Children's Rights
 - > Infectious Diseases (HIV/AIDS)

3. Basic Principles for Mitigation Measures and Monitoring Plan

3.2 Mitigation of Populations and Involuntary Resettlement

- To accurately assess the detailed impacts on persons, households and properties with regard to the involuntary resettlement associated with the planning and construction of the facilities;
- To formulate the basic resettlement action plan to mitigate and minimize those impacts; and
- To formulate the monitoring plan of the livelihood of the project affected persons after the involuntary resettlement.

3. Basic Principles for Mitigation Measures and Monitoring Plan

3.3 Impact on Local Economy

- To accurately assess the detailed impacts on markets, restaurants, retailers and vendors by the abolishment of the ferry terminals;
- To provide those affected persons with a wide range of job opportunities in the newly-designed roadside stations along the approach roads; and
- To formulate the monitoring plan of the livelihood of those project affected persons after the abolishment of the ferry terminals.

3. Basic Principles for Mitigation Measures and Monitoring Plan

3.4 Utilization of Land and Land Resources

- To accurately assess the detailed impacts on farming and fishing in the designated flood-free area; and
- To formulate proper mitigation measures for farming and fishing in the designated flood-free area.

3. Basic Principles for Mitigation Measures and Monitoring Plan

3.5 Vulnerable Social Groups

- To accurately assess the detailed impacts on the vulnerable social group such as landless farmers, female-headed households and minority people with regard to the involuntary resettlement associated with the planning and construction of the facilities;
- To formulate the basic resettlement action plan to mitigate and minimize those impacts; and
- To formulate the monitoring plan of the livelihood of the vulnerable social group such as landless farmers, female-headed households and minority people after the involuntary resettlement.

3. Basic Principles for Mitigation Measures and Monitoring Plan

3.6 Equity of Benefits and Losses and Equality in Development Process

- To monitor the distribution of economic benefits and improvement in access among the different group of the project affected persons; and
- To provide the economically-disadvantaged persons with job opportunities in the newly-designed roadside stations along the approach roads.

3. Basic Principles for Mitigation Measures and Monitoring Plan

3.7 Local Conflicts of Interests

- To monitor the price of lands in the designated flood-free land; and
- To formulate the proper prevention plan for the economic and land disputes in the project affected area.

3. Basic Principles for Mitigation Measures and Monitoring Plan

3.8 Gender

- To monitor the income level of women, especially vendors at the ferry terminals;
- To monitor the prevalence of HIV/AIDS of women during the construction and operation of the facilities; and
- To formulate a comprehensive supportive action plans to improve the economic and social livelihood of women.

3. Basic Principles for Mitigation Measures and Monitoring Plan

3.9 Children's Rights

- To monitor the livelihood of children, especially vendors at the ferry terminals;
- To monitor the prevalence of HIV/AIDS of children, especially orphans, during the construction and operation of the facilities; and
- To formulate a comprehensive supportive action plans to improve the economic and social livelihood of children.

3. Basic Principles for Mitigation Measures and Monitoring Plan

3.10 Infectious Diseases (HIV/AIDS)

- To monitor the prevalence of HIV/AIDS among the project affected people and construction workers during the construction and operation period of the facilities; and
- To formulate and implement a comprehensive counter-measures to minimize and mitigate the prevalence of HIV/AIDS.

THANK YOU !



for your attention and patience.

Ministry of Public Works and Transport

(2) Minutes of Stakeholder Meeting 3-2

1) General

Date: September 20th, 2005

Duration of meeting: from 14:30 to 17:30

Venue: Phnom Penh Hotel

Participants: Ministries and Related Agencies, Commune Chiefs and Deputy Chiefs from 6 communes in the Project Area, Neak Loeung Ferry Staff, Universities and Research Institutes, International Agencies, Private Sector, JICA Cambodia Office, JICA Study Team.

2) Comments and Questions after Presentation

Q1. Mr. Ly Tech Heng, Garment M Association of Cambodia

After listening to the presentations of the Japanese Study Team, I have 3 points.

1. The width of the bridge. I don't know that the bridge could be constructed exactly or not. In case the bridge will be constructed, I heard the width of the bridge is about 12m which is the same to Monivong Bridge. I think even though traffic volume passing the bridge is not too much, we could face with the traffic jam if there is an accident on the bridge. And it may be a serious traffic jam because the length of the bridge is longer than Monivong Bridge. If the bridge will be constructed, I suggest that the width of the bridge should bigger than 12m.

2. Because our section strongly focus on the investments which may use the bridge more than others. As you know there are now 230 factories in Cambodia and we are considering on the investment in Vietnam's part. Last few months we have opened a Special Economic Zone at Bavet; and this region will attract more investments.

3. AIDS matter: the presentation of Mr. Ogawa show that when the construction of the bridge starts, many workers will move to this region. The problem is the sexual intercourse. I think it doesn't matter but AIDS is a serious disease. Any way, National AIDS Authority (NAA) and other organizations will contribute into this matter. Thank you!

A1. Mr. Yasui

I can answer the first question. The bridge width is 12 meters; it supposes two traffic lanes. We just calculated the traffic volume in 20 years or 30 years later. Our forecast on the traffic volume demand of the bridge does not exceed over 30 years. The two traffic lanes are enough capacity for traffic demand. According the Kizuna Bridge, the increase of traffic volume is still. In contrast, for Monivong Bridge is near by a huge population area, the main metropolitan area. But Neak Loeung area is not a huge metropolitan area, not so much

population. Of course in 100 years or 200 years after, if there are some necessities for additional touring bridge, at that time you can develop another bridge. Thank you!

Mr. Ogawa: I response the second and third comment.

Regarding the second comment, I understand the garment industry is an allowed industry in Cambodia. I think the construction of the bridge will make the allowed industry more active. And I understand the Special Economic Zones are now being developed in the border of Vietnam and also Sihanoukville. So we welcome the use of new bridge as a part of Asian Highway No. 1. I think that bridge should be utilized for the economic growth by activating and attracting foreign investors in Cambodia and borders with neighbor countries.

Regarding the third comment, I think it is very useful to notice that the NGOs are very actively contributing to combat the serious epidemic. In the mitigation plan and monitoring plan, we will propose NGOs to involve in these plans. Thanks for your kind comment!

Q2. Mr. Khim Romony, Neak Loeung Ferry office.

After listening to the explanation about the study on the construction of the Second Mekong Bridge at Neak Loeung, I think it strongly affects to the Neak Loeung Ferry staff, loosing the jobs. My questions are:

1. Where will you send the staff who are not the official staff to? Which ferry terminal? For example, staff at Tonle Bit Ferry lost their job after the construction of Kizuna Bridge. And I was sent to Prek Tamak Ferry. At that ferry, we did not get any benefit.
2. I suggest to the ministry and also the government to transfer all the staff, about 100 people, to be government officials or find a new job for us.
3. I would to ask to the project team that we will get the compensation for this affect or not.

A2. Mr. Phalla

Study Team has a clear planning. When we construct the bridge at Neak Loeung, we have planned already where the ferries will be moved to. We called “ Bridge+Ferry” option. And now we are conducting a study where the ferries will be moved to after the construction of the bridge. For example, we may move to Takhmao to mitigate the traffic flow.

H.E. Tauch Chan Kosal

I would like to inform that we are now in feasibility study stage. We don't know yet the bridge will be constructed or not because it is the initial study, feasibility study. Your comment that has been mentioned is absolutely true. To develop the economy, we cannot use the ferry service forever. As we have discussed many time in the previous meetings, the ferry is bottleneck; when we want to go to Svay Reang Province, we have to spend at least 20

minutes for crossing the river of about 1km of length. So we have to construct the bridge to fulfill the economic growth and the construction will exactly affect to the business and works of the people and staff in this area. I believe that the ministry and also the Government will have a consideration on this matter; actually when we loose a job, we have to find another job to survive. But today I cannot give an exact answer about this; we have to wait for the result of the study. I would like to confirm that the Government will have a consideration.

Regarding to your request of transferring all staff into the official statute, I will propose this request to the heads of state for consideration. Thank you!

Q3. H.E. Nhien Leng, Under Secretary of State of the Ministry of Economy and Finance

It's not my own comment or question; I get it from a participant during the time of coffee break. This comment is similar to Mr. Tech Heng's. The owner of this comment has ever been to our neighbor countries, Thailand and Vietnam; and he asked this to me but I cannot answer. That's why I would to propose this question to the meeting for discussion. If Cambodian counterpart cannot answer this question, please the Japanese Study Team gives a clarification. Actually this stage is a feasibility study stage which is the same as Khmer proverb "Think before act". It means that we must have a very careful consideration before implementing. He has seen the design of the National Road No. 1, and he wondered why some sections have 4 traffic lanes and some sections have 2 traffic lanes. In the future, if the road will be developed to 4 traffic lanes and the bridge has only 2 traffic lanes, how to cross the bridge? Then he asked more: Is this Japanese Grant Aid policy which is already defined and we cannot propose anything?

Second, in the documents of the study on the construction of the National Road No. 1 and the construction of the second Mekong Bridge, their prefaces describe that although this bridge is granted to Cambodian government and Cambodian people, this bridge's got a value of using in the region, not only for Cambodia. In the future, the road will serve as Asian Highway No. 1 which Thailand and Vietnam sections have 4 traffic lanes but Cambodia section has 2 lanes only. Technically, the experts of ADB and also of JICA had mentioned that the traffic volume demand in Cambodia is still small. We must not construct the 4 traffic lanes road from the start because that wastes money. We accept the reason for the road, but not for the bridge. As Mr. Tech Heng has mentioned above, Monivong Bridge was constructed in 1960s after the old bridge which was constructed in 1928 was fallen down by lacking of maintenance. Let's have a look at Chroy Chang Va Bridge which was the first Japanese Grant Aid to Cambodia in the 1950s, now there are some problems. We've planned to widen the National Road No. 6A. Road could be widened, but for bridge is a matter. Our proposal comments are not for the Japanese Study Team to deal all, they are just for the consideration

in the study stage to assure in 50 years or 100 years later as the expert from CHODAI Co., Ltd. has mentioned last moment that 100 years later you could construct another new bridge by yourself. According to the result of the stakeholder meeting 3-1 at Neak Loeung, we estimated that the income of the Neak Loeung Ferry of about 100 years or 97-98 years shall be enough for the construction of the bridge. I know this cost is very high. My suspicion is that maybe the Japanese Grant Aid policy is limited not more than 100 millions or the Japanese Grant Aid is defined 2 traffic lanes for the bridge. Thank you!

A3. Mr. Isamu GUNJI, Team Leader of JICA Study Team

I would like to explain to you about the traffic demand forecast which was made by our study team in the phase one. The present traffic volume which is used at ferry is less than 3000PCUs, PCU means Passenger Car Unit. Passenger Car Unit is the size of the car, a car is one unit. For example, a large truck will be equivalent to 3 units. Base on this unit, the present traffic volume at Neak Loeung Ferry is less than 3000. And we have estimated that the traffic volume will grow in the year of 2020 nearly 10.000, less than 10.000. That means more than three times. The capacity of the two lanes road is nearly 20.000PCUs per day. We can say in minimum 15.000 or 17.000PCUs of capacity is provided by two lanes road. We suppose if the estimated traffic volume demand is not 10.000, ok it is 17.000; the traffic volume that we assumed or estimated from the present time 2004 up to 2020 is about 6 times. So this is a very rapid growth that we expected in the future. And we have to think about the difference in the traffic between Monivong and Neak Loeung. Monivong traffic is characterized by many of commodious or the morning or the evening peak travelers. They use the Monivong Bridge for their commuting purposes, so very dense, very congested in the morning or in the evening. And if we look at the traffic in the Neak Loeung, that is not the commodious. They are the medium and long travelers. The long travelers are more flooded and distributed all the days. So the peak hours flooded of the Neak Loeung is very small. I mean the congestion at the Moniving, the traffic might be 10%; at Neak Loeung 8%. So the difference in the traffic characteristics can show that Neak Loeung Bridge capacity can be smaller than Monivong Bridge. That is not only the characteristics of the traffic, but also the marveling of the Moniving Bridge is very much populated, so the people all use the bridge not only commuting but also shopping or private proposes. But Neak Loeung very few people use the ferry at the present for shopping because they have shopping places in their sides; eastern side they have the market, western side they have the market. They no need to cross the river. Two lanes road capacity or bridge capacity of the Neak Loeung Bridge is enough for the future traffic demand. Maybe when the Neak Loeung-Vietnam border section of National Road No. 1 is designed, the consultant also estimated the future traffic demand. After the consequence of the study, I suppose they have concluded the two lanes road is

enough. Of course the bridge, the initial investment cost is very big. If the initial investment cost is very big, then we have to save the money. If only the two lanes road is enough in 20 or 30 years, why we need to provide the four lanes bridge. Two lanes, you know, is very effected for the estimate. If we calculate the things in the pre-estimate, the initial investment cost is very heavy. If the economy grow in 20 or 30 years later, I think your Government or your people can afford to provide another bridge that is not more economically effected. Can you find the fund for constructing the four lanes-bridge or road at the present? Maybe you can wait 10 or 20 years later then you can afford to provide more money for constructing another bridge at Neak Loeung. Those kinds of option have been examined in our feasibility study. Even the two lanes of bridge exists economic future or not, after we have selected the very optimum type of bridge, we estimate the cost which is very benefit and we compare the benefit and the cost. If the benefit is more lager than the cost, ok we say this is feasible. But if assume the initial investment cost is very large then the cost maybe more higher than the benefit we expected. So we have to think about the initial investment cost that should be reduced or should be smaller as much as possible to make the project feasible. We understand the bridge is a permanent structure and it's not easy to widen, but as you see the cross section of the bridge, two carriage ways contain 1.5 meter motor way; suppose 10 or 20 years later the people still use the motorcycles often or they change from motorcycles to cars. If the motorcycle lanes can be used for passenger cars, there are some spaces for the cars instead of the motorcycles in the future. For the moment we propose to provide the motorbike lane because there are many motorcycles users now. Ok 20 or 30 years later we still keep for the motorcycles or that can be changed to the car? There are some spaces for the future car road. If we think about the future growth of the economy in your country, maybe you need to have another bridge, better to say the initial investment cost that might be the proposal of the last moment of the feasibility study. Thank you!

3) List of Attendant

No.	Name	Organization	Position
1	H.E. Mr. Kep Than	MPWT	Under Secretary of State
2	H.E. Mr. Touch Chankosal	MPWT	Under Secretary of State
3	H.E. Mr. Nhean Leng	MEF	Under Secretary of State
4	H.E. Mr. Trak Thai Seng	Municipality of Phnom Penh	Deputy Governor
5	H.E. Mr. Ung Sami	Prey Veng Province	Governor
6	Mr. Isamu Gunji	JICA Study Team	Team Leader
7	Mr. Takehiko Ogawa	JICA Study Team	Environmental Assessment
8	Mr. Akira Nagamachi	JICA Study Team	Public Consultation
9	Mr. Junji Yasui	JICA Study Team	Bridge Planning

No.	Name	Organization	Position
10	Mr. Hitoshi NAKAMURA	JICA Study Team	Bridge Design (Superstructure)
11	Mr. Yoshinori ABE	JICA Study Team	Bridge Design (Substructure)
12	Mr. Masahiko MORI	JICA Study Team	Construction Program/Cost Estimate
13	Mr. Kiminari TAKAHASHI	JICA Study Team	Public Consultation/Coordinator
14	Mr. Chhim Phalla	MPWT	Counterpart
15	Mr. Kry Thong	MPWT	Counterpart
16	Ms. Un Vanna	JICA Study Team	Translator
17	Mr. Geerinck Lieven	MRC	
18	Mr. Choup Chanssitha	Norton University	Student
19	Mr. Ung Ketona	Norton University	Student
20	Mr. Khun Sokha	MPWT	Deputy Director
21	Mr. Nida Ouk	ADB	Program Office
22	Mr. Hozomi Katsuta	JICA/MPWT	JICA Expert
23	Mr. Leng Sochea	CMAA	Deputy S.G
24	Mr. ISA Kohei	JICA	Staff
25	Mr. Tunn Chandara	Ministry of Rural Development	Staff
26	Mr. Leap Vannly	CDC	Staff
27	Mr. Chheang Hong	CNMC	Senior Program Officer
28	Mr. Pek Sereprattanak	NPCFEL	Assistant
29	Mr. Un Sarim	Preak Ksay Ka Commune	Secretary of Commune
30	Mr. Akira Kaneko	JICA	Advisory Committee
31	Mr. LY Tek Heng	GMAC	Manager
32	Mr. Chou Vanny	MEF, IRC	Deputy Chief
33	Mr. Makita Tokuhiro	MPWT/JICA	JICA Expert
34	Mr. Ben Daramony	MEF/IRC	Chief of DV
35	Mr. Ngeth Ratha		
36	Mr. Chao Sophoak phihal	MPWT	Technical Staff
37	Mr. Thung Kairy	MPWT	Director
38	Mr. Souy Sopheap	Preak Tonlab	The first assistant chief
39	Ms. Ou Narga	World Bank	Program Assistant
40	Mr. Slat Sanan	Sovereign	Office Manager
41	Mr. Hun Mesavuth	Department of Engineering	Deputy Chief
42	Mr. Chuy Chearom	Neak Loeung Ferry	Deputy Chief
43	Mr. Khim Romany	Neak LOeung Ferry	Deputy Chief
44	Ms. Nop Navy	Ministry of Environment	Staff
45	Mr. Krouch Phanat	Banlich Prasat Commune	Secretary of Commune
46	Mr. Meas Soeun	Kandal Province	Representation of Governor

No.	Name	Organization	Position
47	Mr. Meng Chanvibol	JICA	JICA Staff
48	Mr. Vann Ry	Kampong Phnom Commune	Council of Commune
49	Mr. Youn Oun	Preak Ksay Ka	The first assistant
50	Mr. Sean Pang	Neak Loeung Commune	Secretary of commune
51	Mr. Hek Phirun	Phnom Penh Port	Chief office
52	Mr. Om Samoun	Kohsuntepheap Newspaper	Reporter
53	Mr. Om Chanreoun	Neak Loeung Ferry	Deputy Chief
54	Mr. Kheng Ngun	Az Investmetn	General Manager
55	Mr. Yos Lon	Banlich Prasat Commune	The first assistant chief
56	Mr. Ann Samol	Phnom Penh Port	Deputy Chief
57	Mr. Prom Sayheng	Council Minister	Staff
58	Mr. Chan Sochet	Ministry of Industry Mines & Energy	Chief of Department
59	Ms. Tamagake Mitsue	JICA Cambodia	Program Assistant
60	Mr. Keo Rachana	JICA Study Team	Interpreter
61	Mr. Oum Borith	MLMUPC	Deputy Director Department
62	Mr. Nginkoy Sorphak	Az Investment	Technical Management
63	Mr. Chreng Nov	Neak Loeung Commune	Council Commune
64	Mr. Khoun Mondol	Police Inspector of Kandal Province	Deputy Chief
65	Dr. Phy Lida	MPWT	Director
66	Mr. Sorn Tat	Kampong Phnom Commune	The first Assistant Chief
67	Mr. Noun Chanroung	Department of Public Work of Prey	Deputy Chief
68	Mr. Bo Saborn	Preak Tonlab Commune	Council of Commune
69	Mr. Oun Reaksmeay	Department of Public Work of	Deputy Chief
70	Mr. Ith Sameth	EIC	Member
71	Mr. Sok Sopheak	MOE	DDG
72	Mr. Hong Sinara	MPWT	Dept. General Director
73	Mr. Lim Sovanvichet	ITC	Professor
74	Mr. Khang Samol	Preak Ksay Kha Commune	Council Commune
75	Mr. Em Ninol	Preak Ksay Kha Commune	Secretary of Commune
76	Mr. Peter Hengkingson	Master plan Report	Translator
77	Mr. Ouk Somaly	MPWT	Member
78	Mr. Bun Veasna	World Bank	Member
79	Mr. So Vannak	CDC	Official
80	Mr. Kang Phirith	MPWT	Department Director Heavy Equipment
81	Mr. Phy Sophat	MPWT	Deputy General Director
82	Mr. Prum Chan sovannary	MPWT	Director
83	Ms. Kong Nimol	CD Cam	Assistant Director

No.	Name	Organization	Position
84	Mr. Kan Sopheareak		Staff
85	Mr. Hem Eng	Raksmey Kampuchea	
86	Mr. Sou Phalla	National University of Management	Dean
87	Mr. Un Nal	Ministry of Women's Affair	Inspector General
88	Mr. Dy Narin	TVK	Report
89	Mr. Mao Sithor	MPTC	
90	Mr. Sgnoun Samneang	TVK	Report
91	Mr. Gnor Salong	Chew Daily	Reporter
92	Mr. Liv Vann Heng	Ministry of Tourism	Deputy Director

(3) Minutes of Stakeholder Meeting 3-2 (Neak Loeung Session)

4) General

Date: September 21st, 2005

Duration of meeting: from 8:30 to 17:30

Venue: Neak Loeung Ferry Office

Participants:

Morning Session: JICA Cambodia Office, JICA Study Team, MPWT, MEF, NGO Forum, Predicted Project Affected Persons (94), including Mobile Vendors and Restaurant and Shop Owners.

Afternoon Session: JICA Cambodia Office, JICA Study Team, MPWT, MEF, NGO Forum, Predicted Project Affected Persons (28).

5) Comments and Questions after Presentation

Q1. Mrs. Sum Sam On, Ampil Toeuk Village

I would like to ask about the survey on the properties affected by the project which is made on August 15, 2005. For my family, I did not answer completely to the survey team. For example, only the first floor and repairing works of my house were noted in the survey paper; but the concrete foundation, 13 meters of width and 25 meters of long, was not noted in the paper. The second question is about my land, on the Eastern side of the road that I did not note in the paper too. At that time I have also asked to the survey team about that but they said no need because there is no house in that land. But this land is belonged to me and there are some trees and plants. So when the Government compensates, are there any problem? Other thing, I strongly request that the bridge should be constructed. On behalf of the

Cambodians, I am very happy with the bridge which is granted by the Japanese Government. But I am also worried about the resettlement. The resettlement is very difficult for the poor people. If we have enough money, we can afford to buy another land; but if we don't have enough, we have to face with many difficulties.

Q2. Prek Khsay Ka

My land is located from PK3+800 to PK4+150. Is my land affected by the bridge or the road? If it is affected by the bridge or the road, I am very happy to sell the Government with an acceptable price for the bridge construction. But I heard that from 230 meters of the central line to the west will be used for the construction yard; if so I won't sell but I will rent it to the construction company. And after the project is finished, the land is still my property.

Q3. Mr. Ouk Sokly, Prek Khsay Village, Prek Khsay Ka Commune

I have some questions related to the bridge. When the bridge is constructed, will we have to pay for the use of the bridge? Why does the project need space for the toll construction?

A1. Mr. Phalla

I would respond the first question. I would like to inform you that this is the second stage of the phase one study. Last few days there was a team which is a local consultant come and conduct a survey. They respond on the Socio-Economic Survey which is part of the Simple Survey. The main objective of this study is that you are happy or unhappy with this project. For the Detail Survey of the project affected houses will be done in the subsequent study.

A2. Mr. Phalla

It is not sure yet that your land will be acquired for the construction yard. I would like to inform you again that it's just the feasibility study. So do not be worried!

A3. Mr. Isamu Gunji, Team Leader of JICA Study Team

Good afternoon Ladies and Gentlemen!

I would like to explain about the toll system that might be applied to the bridge. Before I explain the possibility of the toll system applied to the bridge, I will explain to you what is the feasibility study which we are doing now? The feasibility study is carried out to judge whether the bridge should be implemented or not. The result of the feasibility study is examined from many various aspects, for example from the economic point of view, environmental point of view and so on. If the feasibility study is not verified then the project is not implemented. Now we are also examined the financial of the feasibility of the project that will be required the maintenance the bridge, not only the construction cost. Do you see

many damages on the road of the National Road No. 1, many big holes or the damages on the sides of the pavement? Do you think the Government has enough budgets to repair those damages now? According to the analysis the Government does not have enough money, enough fund to maintain all the National Roads and Provincial Roads in your country. Some percentages of the petroleum price are delegated to the road maintenance. If the maintenance cost or maintenance budget is not enough, what will happen after the bridge is constructed? A very good bridge and road is constructed but if it is not maintain well, what will happen? The total project cost is estimated around 70 millions US Dollars. So the maintenance is very important and how we can find the money or fund to maintain the bridge? We have several options for funding the money for the maintenance: increase the price of the gasoline or can we collect money from the users of the bridge. The study does not yet finalized what is the best way to collect the money for maintaining the bridge. The toll collection is one of the options that your Government may use. So in our study we analyze if the toll is collected, how much will be the level of the toll? The toll level that we estimated is not like the ferry tariff, much less than ferry tariff. Finally, your Government will decide the toll should be collected from the bridge users or not. That from the starting point of view we have to analyze any possibilities to collect those funds from the bridge users. So please understand, if your Government does not want to apply the toll to the bridge, of course the toll place is not necessary.

AP8.2.7 Record of Stakeholder Meeting 3-3

(1) Presentation Material

- Introduction
- Part I: Final Results of EIA
- Part II: Final Results of the Feasibility Study including Preliminary Design of the Bridge
- Part III: Draft Framework for RAP

The Stakeholder Meeting 3-3 for the Construction of the Second Mekong Bridge in the Kingdom of Cambodia

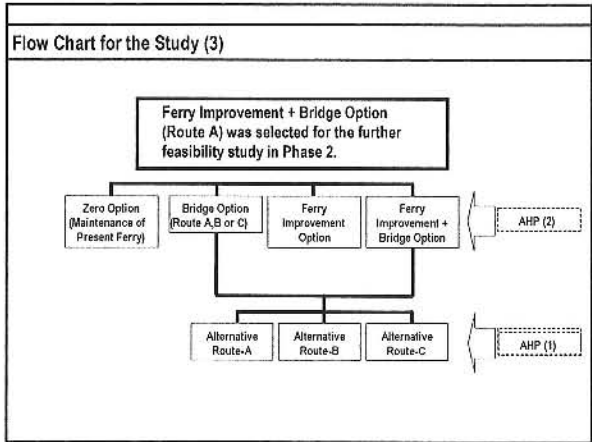
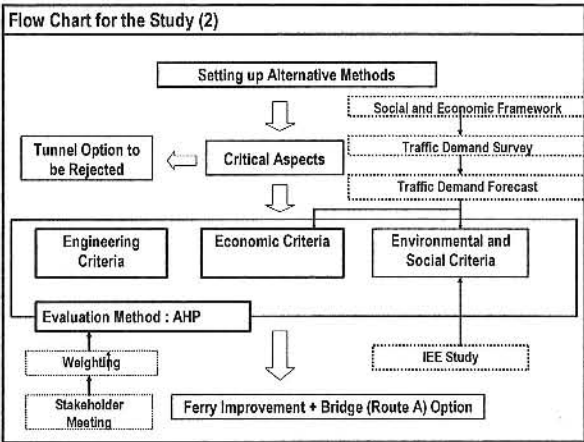
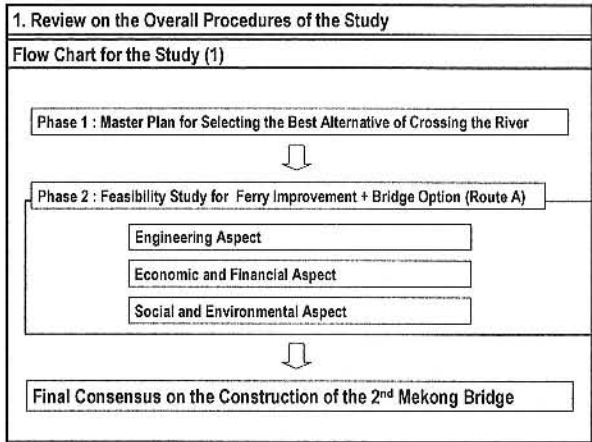
Introduction

January 29, 2006
Bun Rany Hunsen Primary School

Ministry of Public Works and Transport (MPWT)
in cooperation with JICA

Introduction

1. Review on the Overall Procedures of the Study
2. Objectives of Stakeholder Meeting 3-3


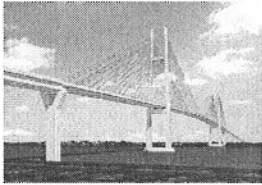



1. Review on the Overall Procedures of the Study

Consensus in Phase 1 and Objective of Phase 2

- In phase 1 of the Study, all the concerned stakeholders, as the result of their ratings on the evaluation criteria, lead to the conclusion that "Ferry Improvement + Bridge Option (Route A)" was given to the highest priority among the alternative crossing methods in terms of engineering, economic and environmental aspects.
- Eventually, it was concluded that the 2nd Mekong Bridge Project, through the verification of the public consultation process, should be pursued and forwarded to the feasibility study stage in Phase 2.


1. Review on the Overall Procedures of the Study			
Target of the Feasibility Study in Phase 2			
No.	Option		Remarks
I. Ferry Option			
I-1	Ferry	Existing Ferry with Proper Maintenance	Zero Option
I-2	Ferry	Upsizing of Ferry Boats with Additional Piers	Ferry Improvement Option
II. Bridge Option			
II-1	Bridge	Route A	
II-2	Bridge	Route B	
II-3	Bridge	Route C	
III. Ferry Improvement + Bridge Option			
II-1	Ferry + Bridge	Route A	Additional Ferry Boats
II-2	Ferry + Bridge	Route B	Additional Ferry Boats
II-3	Ferry + Bridge	Route C	Additional Ferry Boats

1. Review on the Overall Procedures of the Study	
Image of Ferry Improvement + Bridge Option (Route A)	
	
+	
<p>After a certain period of operating the present and improved ferry services, the bridge will be constructed.</p>	

- 2. Objectives of Stakeholder Meeting 3-3**
- The main objectives of the Stakeholder Meeting 3-3 are that:
 - To explain the outline of the conclusion of the feasibility study on the construction of the 2nd Mekong Bridge;
 - To report and discuss the final results of the EIA-level social and environmental studies;
 - To explain the outline of "Simple Survey" and RAP (Resettlement Action Plan);
 - To explain the procedures for the public comment period for the final decision-making; and
 - To make consensus on the construction of the 2nd Mekong Bridge among all the stakeholders

2. Objectives of Stakeholder Meeting 3-3					
PC No.	Stakeholders Meeting	Venue	Study Level	Major Objectives	Timing
1 st	Stakeholder Meeting 1-1	Phnom Penh (PP)	Kick-off	Introduction of the Project, explanation of the JICA's Guideline and Scoping for IEE	May 24, 2004
	Stakeholders Meeting 1-2	Nesak Loeng (NL)	Kick-off	Same as above	June 21, 2004
2 nd	Stakeholders Meeting 2-1	PP, NL	IEE	Discussion on Scoping and TOR for IEE	October 7 and 28, 2004
	Stakeholders Meeting 2-2	PP, NL	IEE	Presentation of Interim Results of IEE	December 27-28, 2004
	Stakeholders Meeting 2-3	PP, NL	IEE	Presentation of Draft Final Report of IEE and Interim Study Report	March 10-11, 2005
3 rd	Stakeholders Meeting 3-1	PP, NL	EIA	Discussion of Scoping and TOR for EIA	June 3 and 7-8, 2005
	Stakeholders Meeting 3-2	PP, NL	EIA	Presentation of Interim Results of EIA	Sep 20 and 21, 2005
	Stakeholders Meeting 3-3	PP, NL	EIA	Presentation of Draft Final Reports of EIA and Overall Study	Jan 24 and 29, 2006

THANK YOU !



for your attention and patience.

Ministry of Public Works and Transport

**The Stakeholder Meeting 3-3
for the Construction
of the Second Mekong Bridge
in the Kingdom of Cambodia**

Part I Final Results of Feasibility Study
on the 2nd Mekong Bridge

January 29, 2006
Bun Rany Hunsen Primary School

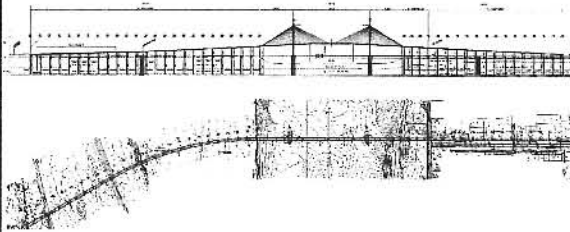
Ministry of Public Works and Transport (MPWT)
in cooperation with JICA

Part I-a Final Results of Engineering Aspect of the Study
(Design and Its Technical Conditions for the Bridge)

Part I-b Final Results of Economic and Financial Aspects of the
Study (Economic and Financial Evaluation)

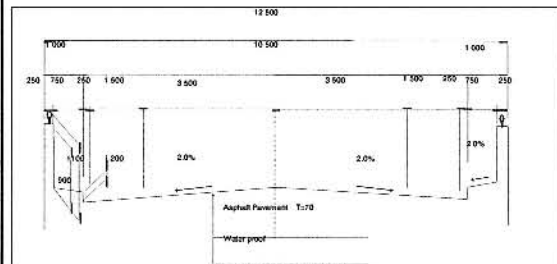
Part I-a Design and Its Technical Conditions for the Bridge

1. Overall Bridge Layout



2. Bridge Design Criteria and Standard

(1) Bridge Design Conditions
(a) Width of Bridge



2. Bridge Design Criteria and Standard

(1) Bridge Design Conditions
(b) Navigation Channel Layout

	One Way traffic	Two Way traffic
Vessel Size	5,000DWT Container Ship	500DWT Coaster
Minimum Horizontal Clearance	$B=1.6 \times L=175 < 180\text{m}$ Where, L: Ship Length = 109m	$B= 3.5 \times L=179 < 180\text{m}$ Where, L: Ship length = 51m
Minimum Vertical Clearance	37.5m	
Navigation Channel	180m 37,5m H.W.L. +7.93	

2. Bridge Design Criteria and Standard

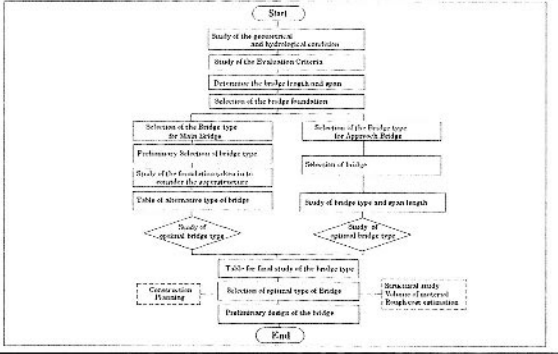
(2) Design Criteria and Standard

- Design Standard of Japan Road Association will be applied to the design of 2nd Mekong bridge.
- Load applied for the design of the Bridge

Kind of Load	
Live Load	TL-25 B-Load
Water Pressure	V max = 2.0 m/sec
Vessel Collision Force	Size of Vessel 5000DWT Velocity 2.25m/sec
Wind	V max = 30.0 m/sec
Temperature	+15 °C ~ +40°C
Seismic Force	Kh=0.05 Kv=0.0

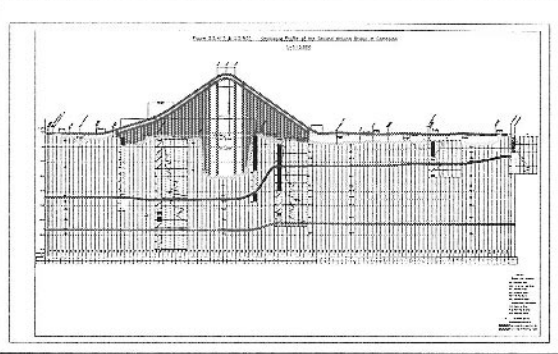
3. Selection of Optimum Type of Bridge

(1) Procedure of Selection of Bridge Type



3. Selection of Optimum Type of Bridge

(2) Geographical, Geological and Hydrological Conditions



3. Selection of Optimum Type of Bridge

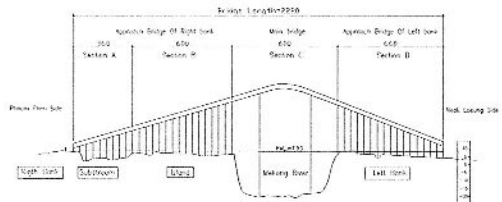
(3) Evaluation Criteria

- Construction Cost
- Property of Structure
 1. Availability of the Construction Material in Cambodia
 2. Employment of Cambodian Labor
 3. Technical Transfer to Cambodia
 4. Past Record of the Alternative Type of Bridge
 5. Technical Assurance and Stability of Bridge.
 6. Adequacy for Natural Environment at the Construction Site
- Construction Method
 1. Construction Term
 2. Safety for Construction
- Maintenance
- Aesthetic Point of View

3. Selection of Optimum Type of Bridge

(4) Bridge Length and Span

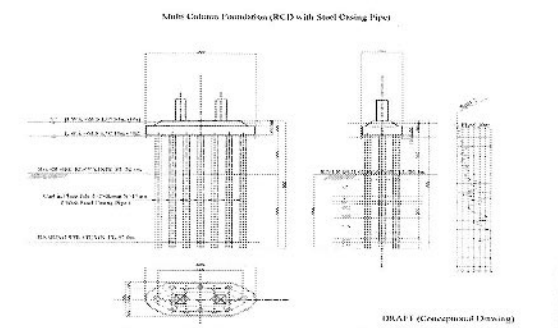
- Total Road Length = 5,430m
- Total Bridge Length = 2,220m
- Span Arrangement of Bridge



3. Selection of Optimum Type of Bridge

(5) Selection of Bridge Foundation

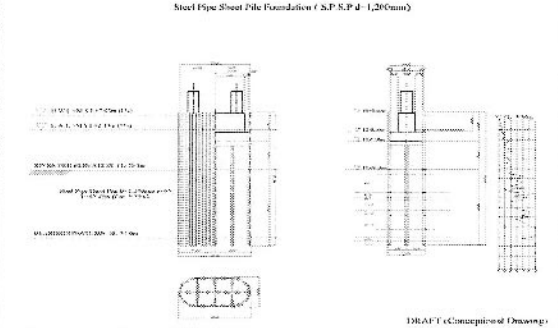
(a) Multi Column Foundation (Cast in Place Concrete Pile or Steel Pipe Pile)



3. Selection of Optimum Type of Bridge

(5) Selection of Bridge Foundation

(b) Steel Sheet Pile Foundation

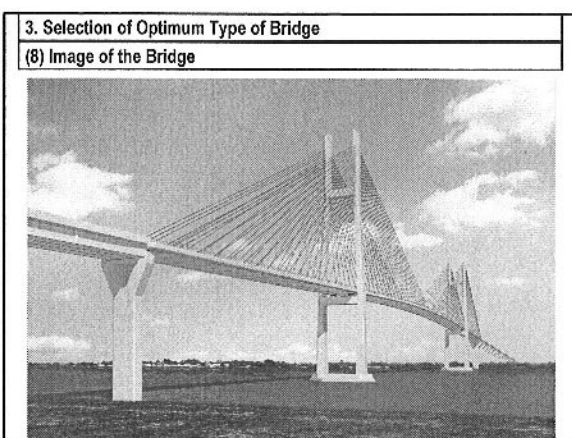


3. Selection of Optimum Type of Bridge		
(6) Selection of Main Bridge Type		
Alternative Type of Main Bridge		
Type	Elevation	Cross Section
I	Steel Box Girder with Orthotropic Deck	
II	Steel Truss Bridge	
III	Through Arch Bridge	

Alternative Type of Main Bridge (Conti.)		
Type	Elevation	Cross Section
IV	Cable Stay Bridge (Steel)	
V	Extra Dosed Bridge (Concrete & Steel Composite)	
VI	Cable Stay Bridge (Pre-stressed Concrete)	

Alternative Bridge Type for Final	
Steel Truss Bridge	
Through Arch Bridge	
Concrete Cable Stay Bridge	

3. Selection of Optimum Type of Bridge		
(7) Selection of Bridge Type for Approach Bridge		
Alternative Bridge Type for Approach Bridge		
Type	Cross Section	
I	Pre- Stressed Concrete Composite I Girder	
II	Continuous Steel I Girder	
III	Pre-Stressed Concrete Box Girder	



Part I-b Economic and Financial Evaluation	
1. Economic Evaluation	
(1) Objectives	
<p>■ The main purpose of economic analysis is to show the effects of the project investment.</p> <p>■ The economic analysis evaluates whether or not the project investment benefits to national economy by analyzing the consumption of the resources which national economy holds.</p>	

1. Economic Evaluation

(2) Basic Assumptions

■“With Project” and “Without Project”

While “With Project” means the situation where the proposed bridge is implemented, “Without Project” stands for the situation where no such investment takes place. The quantified economic benefits, which would be realized from the implementation of the project, are defined as savings in the vehicle travel costs (vehicle operating costs and vehicle time costs) derived from the comparison between “With Project” and “Without Project”.

■Implementation Schedule

The evaluation period is assumed to be 25 years after the completion of the Project in 2012.

1. Economic Evaluation

(3) Project Benefits

■Savings are derived from the comparison between costs (with project) of road users who would pass the project bridge and costs (without project) of either those who have crossed the River by the Neak Loeung Ferry or those who would take the alternative route via Kampong Cham and Kizuna Bridge due to the lack of the ferry capacity.

■Those savings composed of:

- Vehicle operating costs
- Travelers time costs (Savings of passenger travel time and savings in the opportunity cost of capital caused by the delayed freight by trucks)

1. Economic Evaluation

(4) Project Costs

■The project costs in terms of **financial prices** are based on the preliminary engineering design and estimated at **US\$ 74 million**.

■The project costs in terms of **economic prices** for the proposed bridge are estimated at **US\$64 million**, by converting domestic prices to border prices based on the adjustment of the distortion of prices in the domestic market.

1. Economic Evaluation

(5) Results of Cost and Benefit Analysis and Sensitivity Analysis

■Summary of Cost Benefit Analysis

Indicator	Result
EIRR	23.0%
B/C (at discount rate of 12%)	3.43
NPV (US\$000, at discount rate of 12%)	100,632

■Summary of Sensitivity Analysis

		Construction Cost		
		Base Case	10% Increase	20% Increase
Traffic Demand	Base Case	23.0%	22.0%	21.1%
	10% Decrease	20.5%	19.6%	18.9%
	20% Decrease	18.4%	17.6%	16.8%

2. Financial Evaluation

(1) Objectives

The purpose of financial analysis is to examine the financial viability of the investment to the Project from the viewpoint of the implementation body.

(2) Basic Assumption

■Implementation Schedule

Actual opening of the bridge to traffic is expected in September 2012.

■Project Life

The project life is assumed to be 30 years, after the completion of the bridge construction.

2. Financial Evaluation

(3) Revenue for the Project

■ Possible sources of revenues to cover the project cost

- Tax (including special purpose tax)
- Toll

■ The financial evaluation of the Project was conducted in case of the toll bridge, although it has not yet been decided whether the 2nd Mekong Bridge would be a toll bridge.

■ The cases of toll level

Base Case: Level to maintain the project
Case 1: Level at the current ferry rate
Case 2: Level to cover surplus and maintain the project
Case 3: Level at 80% of user's benefit
Case 4: Level at 100% of user's benefit

2. Financial Evaluation

(4) Summary of Financial Evaluation

■ The result shows that the Project is financially not feasible in any of the cases.

■ Even in Case 1 and Case 4, a funding on the commercial-level conditions is not financially feasible.

	Case	FIRR	Estimated Toll Level
Base Case	Level to cover maintenance cost of the Project	Unsolved	7.5% of current ferry rate
Case 1	Level at current ferry rate	6.60%	Same as current ferry rate
Case 2	Level to cover USD 0.5 million surplus + Base Case	Unsolved	25% of current ferry rate
Case 3	Level at 80% of user's benefit	Unsolved	44% of current ferry rate
Case 4	Level at 100% of user's benefit	2.93%	55% of current ferry rate

THANK YOU !



for your attention and patience.

Ministry of Public Works and Transport