[資料]

1. 調査団員・氏名

基本設計現地調査 (B/D)

氏名	担当	所属
萩原 知	総括	無償資金協力部
尾崎 由博	計画管理	同上
澤野 邦彦	業務主任/橋梁計画/維持管理	株式会社 建設技研インターナショナル
後藤 有右	農村開発計画/社会経済調査	同上
相良 秀孝	橋梁設計	同上
森下 甲子弘	自然条件調査(河川地形·水文)	同上
土田 貴之	自然条件調査 (橋梁地形·地質)	同上
川田 晋也	環境社会配慮	同上
三浦 実	施工計画/積算	同上

基本設計概要書説明調査 (D·B/D)

氏名	担当	所属
北林 晴美	総括	フィリピン事務所
宮下 明子	計画管理	農村開発部
森下 甲子弘	業務主任代理/ 自然条件調査(河川地形·水文)	株式会社 建設技研インターナショナル
土田 貴之	自然条件調查 (橋梁地形·地質)	同上
三浦 実	施工計画/積算	同上

2. 調査行程

調杏行程(基本設計現地調杏)

	萩原・尾崎	澤野	後藤	(基本設計現地調査) 相良・三浦	森下	十.田	川田
		(辛野) 移動(東京→マニラ)	1友/探	移動(東京→マニラ)	移動(東京→マニラ)	上円 移動(東京→マニラ)	/川田
3/3 (月)		表敬(JICA)		表敬(JICA)	表敬(JICA)	表敬(JICA)	
4 (.1.5		表敬(EOJ、NEDA、DOF、	_			表敬(EOJ、NEDA、DOF、	_
4 (火)		DPWH)		DPWH)	DPWH)	DPWH)	
5 (水)	_	表敬(DAR)	移動 (東京→マニラ)	表敬(DAR)	表敬(DAR)	表敬(DAR)	_
6 (木)	_	表敬(JBIC)	表敬 (JBIC)	表敬 (JBIC)	表敬 (JBIC)	表敬 (JBIC)	
7 (金)	_	表敬(DAR-Region IV)	表敬(DAR-Region IV)	協議 (DAR-Quezon)	協議(DAR-Quezon)	協議(DAR-Quezon)	_
			協議 (DAR-Quezon)	and the state of t			
8 (土)	_		現地調査準備	- " " " " " " " " " " " " " " " " " " "		現地調査準備	_
9 (目)	_		移動 (マニラ→カバナツアン)			移動 (マニラ→カバナツアン)	
		移動 (カバナツアン→バレル)	12 604 (7)	te tet vi	10 000	to total to	移動(東京→マニラ)
10 (月)			協議(DAR-Aurora) 表敬(マリアオーロラ)	協議(DAR-Aurora) 表敬(マリアオーロラ)	協議(DAR-Aurora) 表敬(マリアオーロラ)	協議(DAR-Aurora) 表敬(マリアオーロラ)	
, ,			現地説明会 (バザル)			表敏 (マリアオーロフ) 現地説明会 (バザル)	
	_		現地調査(バザル橋)			現地調査(バザル橋)	移動 (マニラ→バレル)
11 (火)		30. 20.322	20. 24.322 () . 11.47		移動 (バザル→カバナツアン)		
(> 4)				,			移動 (バザル→カバナツアン)
	_	表敬(ディンガラン)	表敬 (ディンガラン)	表敬(ディンガラン)	表敬 (ディンガラン)	表敬(ディンガラン)	表敬 (ディンガラン)
12 (水)							現地説明会(ウミライ・Gナ
		カール)	カール)	カール)	カール)	カール)	カール)
13 (木)	_		現地調査(ウミライ橋)	現地調査(ウミライ橋)	現地調査(ウミライ橋)	現地調査(ウミライ橋)	現地調査(ウミライ橋)
44 (4)	_	コンサルテーションミーティ	コンサルテーションミーティ	現地調査(ウミライ	現地調査(ウミライ	the state of the s	コンサルテーションミーティ
14 (金)		ング(ウミライ・Gナカール、		喬)	橋)	ング(ウミフイ・G ナカール、 ウミライ・ディンガラン)	ング (ウミライ・G ナカール、 ウミライ・ディンガラン)
	_	<u>ウミライ・ディンガラン)</u> 移動(カバナツアン	<u>ウミライ・ディンガラン)</u> 移動(カバナツアン	移動(カバナツアン	移動(カバナツアン	移動(カバナツアン	移動(カバナツアン
		→バレル)	→バレル)	1夕勁 (ルハナファン →バレル)	→バレル	1990 (ハハ) ファン →バレル)	→バレル)
15 (土)			コンサルテーションミーティ		現地調査 (バザル橋)	コンサルテーションミーティ	コンサルテーションミーティ
		ング (バザル)	ング (バザル)			ング (バザル)	ング (バザル)
16 (目)	_	現地調査 (バザル橋)	現地調査 (バザル橋)	現地調査 (バザル橋)	現地調査(バザル橋)	現地調査(バザル橋)	現地調査 (バザル橋)
17 (月)			協議 (DAR-Aurora)	協議 (DAR-Aurora)	協議 (DAR-Aurora)	協議 (DAR-Aurora)	協議 (DAR-Aurora)
		15 - 5 - 7	15 - 27 - 7	12 - 22 - 2	移動 (バレル→カバナツアン)		移動 (バレル→カバナツアン)
18 (火)	_	現地調査(ウミライ橋)	現地調査(ウミライ橋)	現地調査(ウミライ橋)	現地調査(ウミライ橋)	現地調査(ウミライ橋)	現地調査(ウミライ橋)
19 (水)	_		現地調査(ウミライ橋)	現地調査(ウミライ橋)	現地調査(ウミライ橋)	現地調査(ウミライ橋)	現地調査(ウミライ橋)
20 (木)	_	移動 (カバナツアン→マニラ)	12 - 7 - 7	D 441 0 1 1 1	12 - 22 - 1	移動 (カバナツアン→マニラ)	12 - 77 - 7
21 (金)	_	資料整理	資料整理	資料整理	資料整理	資料整理	資料整理
22 (土)	_	資料整理	資料整理	資料整理	移動(マニラ→東京)	資料整理	資料整理
23 (目)	移動(東京→マニラ) 団内協議	団内協議	団内協議	団内協議	_	団内協議	団内協議
24 (月)		表敬(JICA、EOJ、DAR)	表敬(JICA、EOJ、DAR)	協議資料作成	_	表敬(JICA、EOJ、DAR)	資料収集
		インセプション説明(DAR)	インセプション説明(DAR)	インセプション説明(DAR)		インセプション説明(DAR)	インセプション説明(DAR)

資料−3

(つづき)

		萩原・尾崎	澤野	後藤	相良・三浦	森下	土田	川田
26 (7	71<		12 22 3	移動(マニラ→バレル)	協議資料作成		移動(マニラ→バレル)	協議資料作成
20 (,			<u> </u>	表敬(DAR-Region III)			表敬(DAR-Region III)	
1			表敬 (DAR-Aurora、Aurora)	表敬 (DAR-Aurora、Aurora)	協議資料作成	_	表敬 (DAR-Aurora、Aurora)	協議資料作成
27 (現地調査 (バザル橋)			現地調査(バザル橋)	
<u> </u>		移動 (バレル→カバナツアン) 表敬 (Dingalan)	移動 (パレル→ガパナツァン) 表敬 (Dingalan)	移動 (バレル→カバナツアン) 表敬 (Dingalan)	協議資料作成		移動 (バレル→カバナツアン) 表敬 (Dingalan)	協議資料作成
28 (4				表献 (Dingalan) 現地調査 (ウミライ橋)	助 裁員 付TFIX		表敏 (Dingalan) 現地調査 (ウミライ橋)	励哦貝 代TFIX
29 (-		移動 (カバナツアン→マニラ)			協議資料作成		移動 (カバナツアン→マニラ)	移動(マニラ→東京)
			資料整理	資料整理	資料整理	_	資料整理	_
			M/D 協議・サイン(DAR)	M/D 協議・署名(DAR)	M/D 協議・署名(DAR)	_	M/D 協議・署名(DAR)	_
31 (月)		協議 (DPWH)	協議 (DPWH)	協議 (DPWH)		協議 (DPWH)	
			移動(マニラ→G ナカール→	資料収集	現地調査準備		移動(マニラ→G ナカール→	_
4/1 (2	火)		ルセナ)				ルセナ)	
-	_		表敬 (G. Nakar)	次似由在	4年(ユーニ・バンス)		表敬 (G. Nakar)	
2 (7			協議(DAR-Quezon) 表敬(Quezon)	資料収集	移動 (マニラ→バレル)	_	協議 (DAR-Quezon) 表敬 (Quezon)	_
2 (,	小)		表献 (Quezon) 移動 (ルセナ→マニラ)				衣敬 (Quezon) 移動 (ルセナ→マニラ)	
3 (7	木)		資料収集	資料収集	現地調査(バザル橋)		資料収集	_
	金)		資料収集	資料収集	現地調査(バザル橋)		資料収集	_
			協議資料作成	協議資料作成	現地調査(バザル橋)	_	協議資料作成	_
5 (土)		WARA SKITTI PA	MARKA TITI PA	移動 (バレル→カバナツアン)		purian partitit PA	
6 (日)	_	協議資料作成	協議資料作成	現地調査 (ウミライ橋)	_	協議資料作成	_
7 (月)	_	協議資料作成	移動(マニラ→バレル)	現地調査(ウミライ橋)	_	移動(マニラ→バレル)	_
8 (_	協議資料作成	現地調査 (バザル橋)	現地調査 (ウミライ橋)	_	現地調査 (バザル橋)	_
0 ()	八)			移動 (バレル→カバナツアン)			移動 (バレル→カバナツアン)	
9 (7	水)	_	協議資料作成	現地調査(ウミライ橋)	移動 (カバナツアン→マニラ)		現地調査(ウミライ橋)	_
`			I+	移動 (カバナツアン→マニラ)	14-46 ()		移動 (カバナツアン→マニラ)	
10 (7	_	_	協議(DAR)	協議(DAR)	協議(DAR)	_	協議 (DAR)	_
11 (4	_		協議資料作成	協議(DAR)	協議資料作成		協議資料作成	_
12 (_		協議資料作成	協議資料作成	協議資料作成		協議資料作成	_
13 (日)		資料整理	資料整理	資料整理		資料整理	_
14 (月)	_	技術協議 (DAR)	技術協議 (DAR)	技術協議 (DAR)		技術協議 (DAR)	_
15 (<u></u>		協議(NEDA)	協議(NEDA)	協議(NEDA)		協議(NEDA)	_
			報告 (JICA)	報告 (JICA)	報告 (JICA)		報告 (JICA)	
16 (7		_	移動(マニラ→東京)	資料整理	移動(マニラ→東京)	_	移動(マニラ→東京)	_
17 (7		_	_	資料整理	_	_		_
18 (4	金)	_	_	移動 (マニラ→東京)	_	=		_
沙)		EOL たフュリピンロオ		DAD.	Donoutment of Associan D	0 (0 1000)	定泊₩ . ■	コーラ

注) EOJ: 在フィリピン日本国大使館

JICA: 国際協力機構 JBIC: 国際協力銀行

NEDA: National Economic and Development Authority

DOF: Department of Finance

DPWH: Department of Public Works and Highways

DAR: Department of Agrarian Reform (Central Office)

DAR-Region III: Department of Agrarian Reform, Reginal Office, Region III
DAR-Region IV: Department of Agrarian Reform, Reginal Office, Region IV

DAR-Aurora: Department of Agrarian Reform, Provincial Office, Aurora Province
DAR-Quezon: Department of Agrarian Reform, Provincial Office, Quezon Province

宿泊地: マニラ カバナツアン バレル ルセナ

表 調査行程(基本設計概要書説明調査)

	日程		JICA (北林、宮下)		コンサルタント(森下、土田、三	[浦]
	口住		実施内容	宿泊地	実施内容	宿泊地
9月	12 日	金			東京 09:35 →マニラ 13:05(JL741) JICA 表敬	マニラ
	13 日	土			打合せ (DAR 担当者)	II .
	14 日	日			移動(マニラ→バレル)	バレル
	15 日	月			DAR オーロラ州事務所協議 マリア・オーロラ町長表敬 バザル橋現地調査	II
	16 日	火			オーロラ州知事表敬 ステークホルダーミーティング (バザル橋) 移動 (バザル→カバナツアン)	カバナツアン
	17 日	水			移動 (カバナツアン→ディンガラン) ディンガラン町長表敬 移動 (ディンガラン→ウミライ橋) ウミライ橋現地調査 ステークホルダーミーティング (ウミライ橋) 移動 (ウミライ橋→マニラ)	マニラ
	18 日	木			移動(マニラ→サンフェルナンド) DAR 地域事務所協議(Region III) 移動(サンフェルナンド→マニラ) DAR 地域事務所協議(Region IV-A)	"
	19 日	金			移動(マニラ→ルセナ) ケソン州知事、ジェネラル・ナカール 町長、DAR ケソン州事務所表敬・協議 移動(ルセナ→マニラ)	II
	20 日	土			団内打合せ	"
	21 日	П	東京 09:35 →マニラ 13:05 (JL741) 団内打合せ	マニラ	団内打合せ	11
	22 日	月	JICA 表敬訪問 大使館表敬訪問 DAR 表敬訪問	II	同左	II
	23 日	火	DAR 協議 NEDA 表敬訪問 DPWH 表敬訪問	II	同左	II
	24 日	水	DAR ミニッツ協議	"	同左	"
	25 日	木	DAR ミニッツサイン 大使館報告 JICA 報告	II	同左	II
	26 日	金	マニラ 09:00 →東京 14:25 (JL746)	-	同左	_

3. 関係者(面会者)リスト

在フィリピン日本国大使館(Embassy of Japan: EOJ)

伊藤 光弘 一等書記官

国際協力機構 フィリピン事務所(Japan International Cooperation Agency: JICA)

松田 教男 所長

高嶋 清史 事業実施管理班

国際協力銀行 マニラ駐在員事務所(Japan Bank for International Cooperation: JBIC)

渡辺 淳 駐在員

農地改革省(Department of Agrarian Reform: DAR)

Central Office

Nasser Pangandaman, Secretary

Narciso B. Nieto, Undersecretary

Hermina Fe B. San Juan, Director

Ma. Celerina G. Afable, Project Development Officer V, Project Development and Management Services (PDMS)

Ma. Cristina C. Dagdag, Project Development Officer IV

Henry M. Zapata, Project Development Officer IV

Engr. Imelda G. Lamboon, Technical Coordinator/ Team Leader

Irma T. Canlas, Project Development and Management Services (PDMS)

Regional Office, Region III

Teofilo Q. Inocencio, Regional Director

Regional Office, Region IV

Antonio G. Evangelista, Regional Director

Provincial Office, Aurora Province

Darlene Anicia B. Galicia, Provincial Agrarian Reform Officer II

Provincial Office, Quezon Province

Plaridel C. Vera Cruz, Provincial Agrarian Reform Officer II

Lucia Campomanes, Provincial Agrarian Reform Officer I

Municipality Office, Maria Aurora

Nelson D. Belen, Development Facilitator

Municipality Office, Dingalan

Roberto S. Baliwag, Development Facilitator

Municipality Office, Genera Nakar

Romeo U. Viado, Municipal Agrarian Reform Officer

Corazon S. Mercado, Development Facilitator

国家経済開発庁(National Economic and Development Authority: NEDA)

Amy Benjamin

Aurora T. Collantes

Ederlyn Nott, Infrastructure Staff (IS)

Josue Mirabite, Infrastructure Staff (IS)

Katherine D. Firmeza, Agricultural Staff (AS)

財務省 (Department of Finance: DOF)

John Adrian M. Narag, Project Evaluation Officer, International Finance Group

Erwin Sta Ana, Planning Officer, International Finance Group

公共事業道路省(Department of Public Works and Highways: DPWH)

Mr. Ernesto Gregorio, Jr., Director, Rural Water Supply/CARP Project Management Office

Manny Bulusan, Engineer II, Rural Water Supply/CARP Project Management Office

Rogelio A. Hernandez, O/C Highway Division, Bureau of Design

Roger F. David, Engineer. IV, Highway Division, Bureau of Design

Rufind D. Valiente, Engineer IV, Bridge Division, Bureau of Design

オーロラ州 (Provincial Government of Aurora)

Bellaflor J. Angara Castillo, Governor

ケソン州 (Provincial Government of Quezon)

Rafael P. Nantes, Governor

マリア・オーロラ町 (Maria Aurora Municipality)

Ariel S. Bitong, Municipal Mayor

ディンガラン町 (Dingalan Municipality)

Zenaida Padiernos, Municipal Mayor

ジェネラル・ナカール町 (General Nakar Municipality)

Leovigildo R. Ruzol, Municipal Mayor

バザル・バランガイ(Barangay Bazal)

Pedro Supsup, Barangay Captain

マラシン・バランガイ(Barangay Malasin)

Fernando Dumpit, Barangay Captain

ウミライ・バランガイ(ディンガラン) (Barangay Umiray, Dingalan)

Francisco Rivera, Barangay Captain

ウミライ・バランガイ(ジェネラル・ナカール) (Barangay Umiray, General Nakar)

Bernabe Vargas, Barangay Captain

MINUTES OF DISCUSSION FOR THE BASIC DESIGN STUDY ON "THE BRIDGE CONSTRUCTION PROJECT FOR EXPANDED AGRARIAN REFORM COMMUNITIES DEVELOPMENT" IN REPUBLIC OF THE PHILIPPINES

In response to a request from the Government of Republic of the Philippines (hereinafter referred to as "GOP"), the Government of Japan decided to conduct a Basic Design Study on the Bridge Construction Project for Expanded Agrarian Reform Communities Development (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "IICA").

JICA sent to the Philippines the Basic Design Study Team (hereinafter referred to as "the Team"), which is headed by Mr. Satoru Hagiwara, Group Director, Project Management Group III, Grant Aid Management Department, JICA, and is scheduled to stay in the country from 3rd March, 2008 to 18th April, 2008.

The Team held discussions with the concerned officials of the GOP and conducted a field survey at the study area.

In the course of discussions and field survey, both parties confirmed the main items described in the attached sheets. The Team will proceed to further works and prepare the Basic Design Study Report.

Manila, 31st March, 2008

Mr. SATORU HAGIWARA

Team Leader

Basic Design Study Team

Japan International Cooperation Agency

Mr. NASSER C. PANGANDAMAN

Secretary

Department of Agrarian Reform

Republic of the Philippines

ATTACHMENT

1. Name of the Project

The Name of the Project is "The Bridge Construction Project for Expanded Agrarian Reform Communities Development".

2. Objective of the Project

The Objective of the Project is to construct the bridges in order to contribute to the Expanded ARC Development Program by connecting ARCs and markets or other facilities.

3. Project sites

The sites of the Project are located in the Municipality of Maria Aurora, Aurora Province and in the Municipalities of Dingalan, Aurora and General Nakar, Quezon Province in the Philippines as shown in Annex-1.

4. Responsible and Implementing Organization

The Responsible and Implementing Organization is the Department of Agrarian Reform (hereinafter referred to as "DAR"). Organization chart of DAR is shown in Annex-2.

5 Items requested by the GOP/DAR

The GOP/DAR requested components for the proposed Project as described in Annex-3. After discussions with the Team, GOP/DAR agreed that the Team will assess the appropriateness of requests through further study and will make suggestions of the Project.

Both sides agreed that based on results of the study, JICA would evaluate and finalize the components of the Project, then recommend a final proposed Project to the Government of Japan.

Japan's Grant Aid Scheme

6-1. The GOP/DAR understood the Japan's Grant Aid Scheme explained by the Team, as described in Annex-4.

6-2. As a condition for the Japan's Grant Aid to be implemented, the GOP/DAR will take the necessary measures and allocate necessary budget accordingly, as described in Annex-5, for smooth implementation of the Project.

6-3. The Team will clarify the necessary measures and budget to be taken by the GOP, in addition to the general measures described in Annex-5, by further studies.

7. Schedule of the Study

7-1. The consultant members of the Team will conduct further studies in the Philippines until 18th April, 2008.

7-2.JICA will prepare the draft final report of the Study in English and dispatch a

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mission in order to explain its contents around August 2008 at the earliest if some measures described in this document such as land acquisition, environmental and social consideration would be executed properly by the GOP/DAR.

7-3. In the case that the contents of the draft final report are accepted in principal by the GOP/DAR, JICA will complete the final report and send it to the GOP/DAR in around October 2008.

7-4. The GOP/DAR understood that the implementation of the Basic Design Study does not imply nor commit the implementation of the Project.

8. Tax Exemption

The GOP/DAR committed to take full responsibility in allocating the necessary budget for the Value Added Tax (VAT), and any other taxes and duties in the Philippines arising from the Project activities. These taxes would be borne by DAR in accordance with the Implementation schedule.

The Team explained to the GOP/DAR that confirmation of the budget allocation for VAT by the DAR is essential for the Project implementation. Both sides confirmed that these tax-related issues would be one of the preconditions to implement the Project.

9. Other Relevant Issues

9-1. Impacts of the Project

The GOP/DAR explained that the targeted two (2) bridges are considered of the highest priority among thirty four (34) bridges (of which six (6) bridges were already constructed under ARISP) to be constructed in terms of the impact to the Expanded ARC Development Program. The GOP/DAR also explained the expected impact of the Project as enumerated in the following section. The GOP/DAR committed to exert its best effort to source appropriate means to construct these twenty six (26) targeted bridges in order to apply the acquired knowledge through the Project to promote the Extended ARC Program on other areas.

The Team explained to consider the feasibility and relevance of the impacts and report to the Government of Japan.

(Umiray Bridge)

- · greater access between market and farm land
- increased production of rice, coconut, root crops and other agriculture products
- · minimized crop spoilage
- · reduced the cost of hauling and transporting goods and people
- generation of employment
- serve as the emergency exit of the communities during calamity

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(Bazal Bridge)

greater access between market and farm land

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- improved agricultural productivity through dissemination of technology from the Aurora State College of Technology (ASCOT)
- · improved mobility of people in the ARC all year round
- · minimized crop spoilage
- improved access to the elementary school which is on the Bazal side and to the high school which is on the Malasin side
- reduced suspension of classes in ASCOT and other educational institutions during rainy season thereby increasing the enrolment as well
- · improved delivery of health services

9-2. Operation and Maintenance of the Bridge

The GOP/DAR explained that after completion of the proposed bridges, it will turn-over the Umiray Bridge to the Provincial Governments of Aurora and Quezon, and the Bazal Bridge to the Provincial Government of Aurora and the Municipality of Maria Aurora. DAR will enter into Memorandum of Understanding with the concerned Local Government Units (LGUs) for the maintenance and other GOP obligations and requirements for the bridges.

The GOP/DAR committed to submit organization chart and demarcation for the operation and maintenance to the Team by 17th April, 2008.

9-3.Land Acquisition

The GOP/DAR committed to secure the land for proposed bridges, approach road, temporary management office and construction yard. The GOP/DAR also committed to submit to the Team an official letter by 17th April, 2008, which would manifest the LGUs commitment and willingness to take full responsibility and take necessary measures on this issue in accordance with the implementation schedule.

9-4. Social Consideration

Both sides confirmed the necessity of social consideration about land acquisition, involuntary resettlement and dislocation of those who will lose their livelihood due to the Project. The Team explained that for the continuation of the Study, social consideration issues are inevitable and indispensable and must be taken care of by the GOP/DAR in a timely and appropriate manner. The GOP/DAR also committed to submit the Team an official letter by 17th April, 2008, which would manifest the LGUs commitment and willingness to take full responsibility and take necessary measures on this issue in accordance with the implementation schedule.

9-5. Environmental Consideration

The GOP/DAR committed to complete all ECC (Environmental Compliance Certificate) process including approval within the Philippine side by the end of October 2008 based on this Study.

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9-6. Related Infrastructure Construction Plan

Both sides confirmed the importance of approach road connecting to the project sites in order to secure the impacts by constructing two (2) bridges. The GOP/DAR committed to take necessary measures such as river improvement work and concreting related road based on the recommendation by the Team.

9-7. Investment Coordination Committee (ICC)

The GOP/DAR explained that if total cost of the Project (inclusive VAT) exceeds P 500,000,000 (Five Hundred Million Pesos), it shall undertake the necessary coordination with the NEDA to facilitate immediate endorsement to the ICC for the approval of the Project.

Annex 1: Site Map

Annex 2: Organization chart of responsible agency and implementing agency

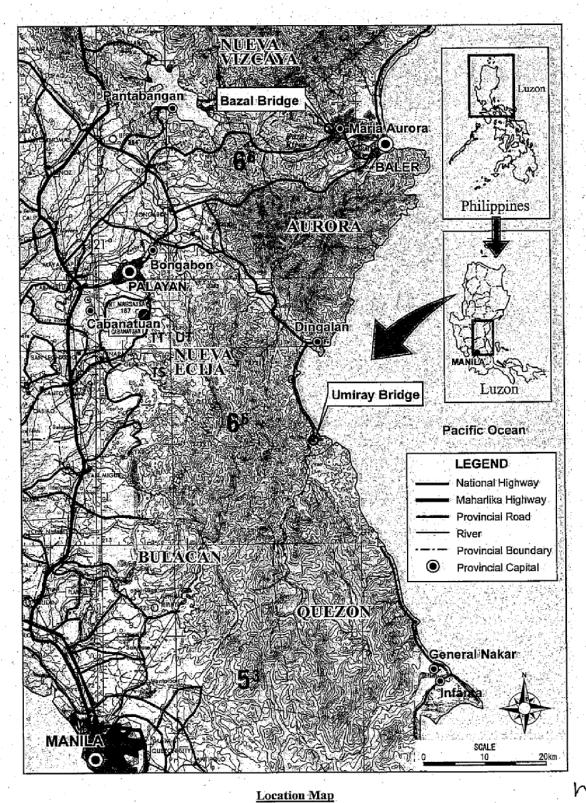
Annex 3: Items requested by the GOP/DAR

Annex 4: Japan's Grant Aid Scheme

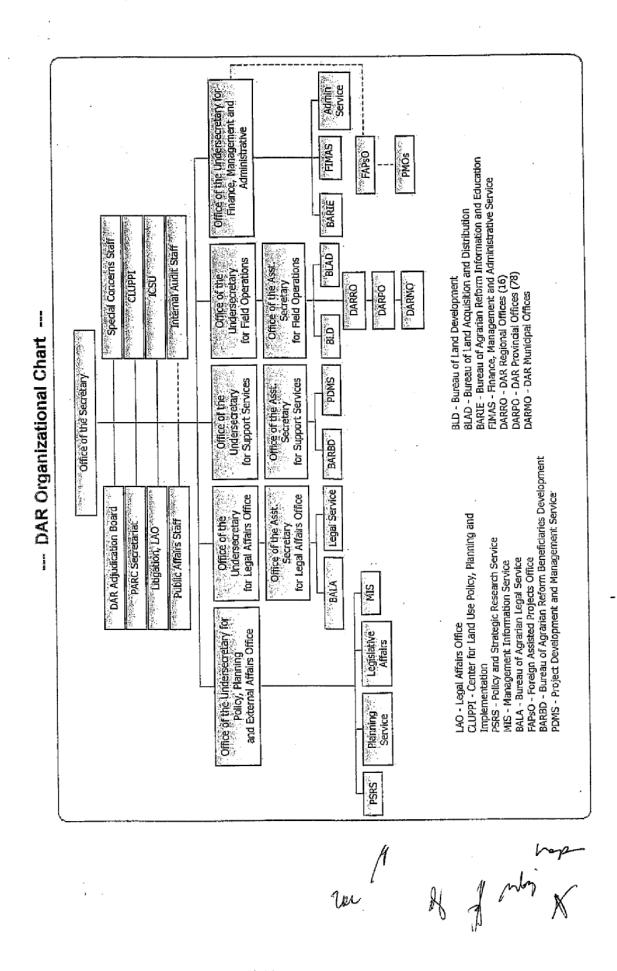
Annex 5: Major Undertakings to be taken by Each Government

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Items requested by the GOP/DAR

The main component of the request made by the GOP is as follows;

(2)	Description	Bazal Bridge	Umiray Bridge
1	Bridge Construction		
	Bridge Length	80 – 150 m	315 – 385 m
ş-4°	Roadway Width	4 – 6 m	4-6 m
411	Bridge Width	5 – 8 m	5 – 8 m
	Foundation	Depend on soil condition	Depend on soil condition
2 - 1 2 - 1	Pier Type	Depend on soil condition	Depend on soil condition
1			
2	Approach Road Construction		
£	Status of Road	Barangay Road	Barangay Road
			(G. Nakar side)
			Provincial Road
			(Dingalan side)
	Length	Depend on bridge height	Depend on bridge height
	Carriageway Width	4 – 6 m	4 – 6 m
	Shoulder Width	1 – 2 m	1 – 2 m
1	Pavement	PCCP 20 - 25 cm,	PCCP20 - 25 cm
		Gravel 30cm	Gravel 30cm
1			
3	Bank Protection Works		
	Revetment Works	Lump Sum	Lump Sum
4.1	Scouring Protection	Gabion/Mortared Riprap	Gabion/Mortared Riprap

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Japan's Grant Aid

The Grant-Aid-scheme-provides a recipient country with non-reimbursable funds to produce the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. The Grant Aid is not supplied through the donation of materials as such.

1. Grant Aid Procedures

Japan's Grant Aid scheme is executed through the following procedures.

Application (Request made by a recipient country)

Study (Basic Design Study conducted by JICA)

Appraisal & Approval (Appraisal by the Government of Japan and Approval by Cabinet)

Determination of Implementation (The Notes exchanged between the Governments of Japan and the

recipient country)

Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for the Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA (Japan International Cooperation Agency) to conduct a study on the request.

Secondly, JICA conducts the study (Basic Design Study), using (a) Japanese consulting firm(s).

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Scheme, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes (E/N) signed by the Governments of Japan and the recipient country.

Finally, for the smooth implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

2. Basic Design Study

1) Contents of the Study

The aim of the Basic Design Study (hereafter referred to as "the Study"), conducted by JICA on a requested project (hereafter referred to as "the Project") is to provide a basic document necessary for the appraisal of the Project by the Government of Japan. The contents of the Study are as follows:

Confirmation of the background, objectives, and benefits of the requested Project and also institutional
capacity of agencies concerned of the recipient country necessary for the Project's implementation.

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- Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view.
- Confirmation of items agreed upon by both parties concerning the basic concept of the Project.
- Preparation of a Basic Design of the Project
- Estimation of cost of the Project

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization in the recipient country

actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

Selection of Consultants

For smooth implementation of the Study, JICA uses (a) registered consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms. The firm(s) selected carry (ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA.

The consulting firm(s) used for the Study is (are) recommended by JICA to the recipient country to also work on the Project's implementation after the Exchange of Notes, in order to maintain technical consistency.

Japan's Grant Aid Scheme

Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

"The period of the Grant Aid" means the one fiscal year which the Cabinet approves the Project for Within the fiscal year, all procedures such as exchanging of the Notes, concluding contracts with (a) consulting firm(s) and (a) contractor(s) and final payment to them must be completed.

However, in case of delays in delivery, installation or construction due to unforeseen factors such as natural disaster, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

3) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the

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products or services of a third country.

However, the prime contractors, namely, consulting constructing and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

4) Necessity of "Verification"

The Government of recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

5) Undertakings required to the Government of the Recipient Country

In the implementation of the Grant Aid project, the recipient country is required to undertake such necessary measures as the following:

- To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the construction.
- To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites,
- To secure buildings prior to the procurement in case the installation of the equipment,
- To ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid,
- To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts,
- To accord Japanese nationals, whose services may be required in connection with the supply of the products and services under the Verified contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.

Proper Use

The recipient country is required to operate and maintain the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.

"Re-export"

The products purchased under the Grant Aid should not be re-exported from the recipient country.

8) Banking Arrangements (B/A)

a) The Government of the recipient country or its designated authority should open an account in

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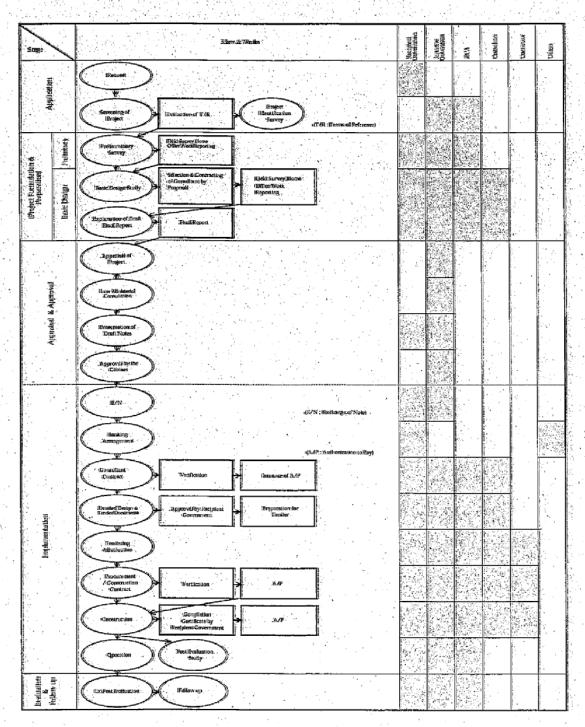
the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the Verified Contracts.

b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay(A/P) issued by the Government of the recipient country or its designated authority.

9) Authorization to Pay (A/P)

The Government of the recipient country should bear an advising commission of an Authorization to Pay and payment commissions to the Bank.

Flow Chart of Japan's Grant Aid Procedures



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Major Undertakings to be taken by Each Government

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
1	To secure land		•
2: .	To clear, level and reclaim the site when needed		
3	To constructed gates and fences in and around the site		
4	To bear the following commissions to a bank of Japan for the bank	ding services base	ed upon the B/A
ţ.,,,	1) Advising commission of A/P		
	2) Payment commission	there is not	
5	To ensure unloading and customs clearance at the port of disemb	arkation in recipie	ent country
	Marine (Air) transportation of the products from Japan to the recipient country	•	
	Tax exemption and customs clearance of the products at the port of disembarkation.		
	Internal transportation from the port of disembarkation to the project site	•	
6	To accord Japanese nationals whose service may be required in connection with the supply of the products and the services under	12 10 10	•
	the verified contact, such facilities as may be necessary for their entry into the recipient country and stay therein for the		
	performance of their work		
7	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts.		
8	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid		•
9	To bear all the expenses, other than those to be borne by the Grant Aid, necessary for construction of the facilities as well as for the transportation and installation of the equipment		

(B/A: Banking Arrangement, A/P: Authorization to Pay)

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TECHNICAL NOTE

A joint meeting was held on 31 March 2008 among the Department of Agrarian Reform (DAR), the Department of Public Works and Highways (DPWH) and the Basic Design Study Team (the Team) to discuss basic conditions for the design of two study bridges (Bazal Bridge and Umiray Bridge). A list of attendance is shown in Attachment 1. The following design conditions set based on the joint meeting were reconfirmed between DAR and the Team.

The Team stated that the agreed design conditions are tentative and that the final decision shall be made after further analysis in Japan and consultation with JICA and concerned parties in Japan, and DAR understood it.

DESIGN CONDITIONS AGREED BETWEEN DAR AND THE TEAM

1. Location of Bridge

Bazal Bridge : As shown in Attachment 2, Sheet No.1
Umiray Bridge : As shown in Attachment 2, Sheet No.2

2. Basic Design Conditions

1) Width

Bazal Bridge: Carriageway 4.0 m, Walkway 0.35 m x 2, Railing 0.35m x 2 (Attachment 2, Sheet No.3)

Approach Road of Bazal Bridge: Carriageway 4.0 m, Shoulder 1.00 m x 2 (Attachment 2, Sheet No.3)

Umiray Bridge: Carriageway 5.5 m, Walkway 0.35 m x 2, Railing 0.35m x 2 (Attachment 2, Sheet No.4)

Approach Road of Umiray Bridge: Carriageway 5.5 m, Shoulder 1.00 m x 2 (Attachment 2, Sheet No.4)

(Note: Although the 5.5m of carriageway width of Umiray Bridge was agreed upon due to cost consideration, the GOP/DAR is recommending a standard width of 6.1m for provincial bridges.)

2) Design Loads

Live Load: AASHTO HS 15-44 for Bazal Bridge AASHTO HS 20-44 for Umiray Bridge

Seismic Load: NSCP Acceleration Coefficient=0.4 for both bridges Temperature Change: 20°C~40°C for concrete for both bridges

3) Design Speed

Bazal Bridge : 30 km/h Umiray Bridge : 30 km/h

4) Freeboard

1.5 m for both bridges

5) Minimum Span Length

Bazal Bridge : 22.8 m Umiray Bridge : 33.5 m

3. Pavement Structure of Approach Roads

PCCP: t=20 cm for both bridges (Attachment 2, Sheet No.3 & 4)

Sub-base Course: t=20 cm for both bridges (Attachment 2, Sheet No.3 & 4)

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4. Structure of Slope Protection of Approach Roads

As shown in Attachment 2, Sheet No.5 for both bridges.

5. Drainage Structure

As shown in Attachment 2, Sheet No.5 for both bridges.

Manila, 14 April 2008

Ms. Herminia Fe B. San Juan

Director, Project Development & Management

Department of Agrarian Reform

Mr. Kunihiko Sawano

Chief Engineer

Basic Design Study Team

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Attachment 1

LIST OF ATTENDANCE AT THE JOINT MEETING ON 31 MARCH 2008 ON THE DESIGN CONDITIONS

1. Department of Agrarian Reform, Central Office

Ma. Cristina C. Dagdag Project Development Officer IV

Imelda G Lamboon Project Development Officer III

2. Department of Public Works and Highways, Bureau of Design

Rogelio A. Hernandez O/C, Highways Division

Roger F. David Engineer IV, Highways Division

Rufino D. Valiente Engineer IV, Bridge Division

3. Department of Public Works and Highways, PMO-Rural Water Supply

Manny Bulusan Engineer II

4. Basic Design Study Team

Kunihiko Sawano Chief Engineer

Hidetaka Sagara Bridge Engineer

Takayuki Tsuchida Natural Condition Surveyor

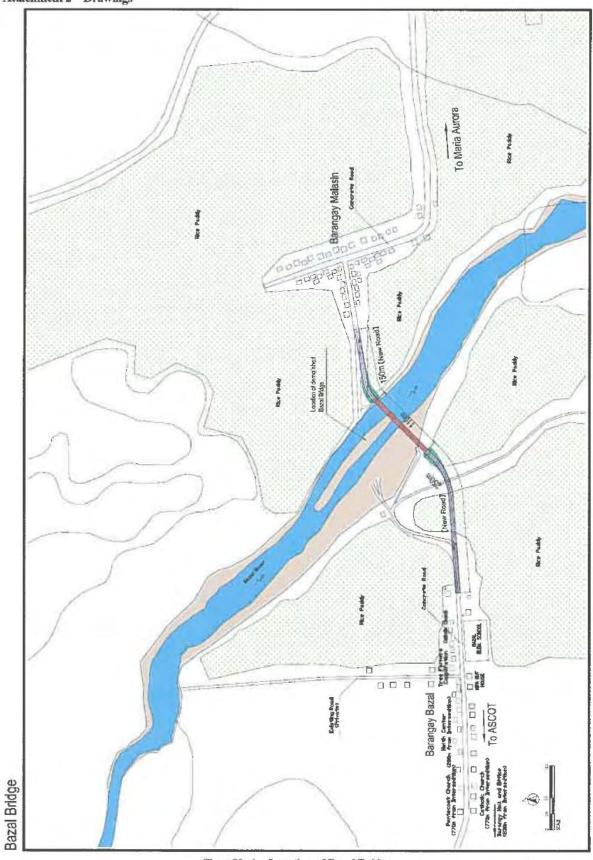
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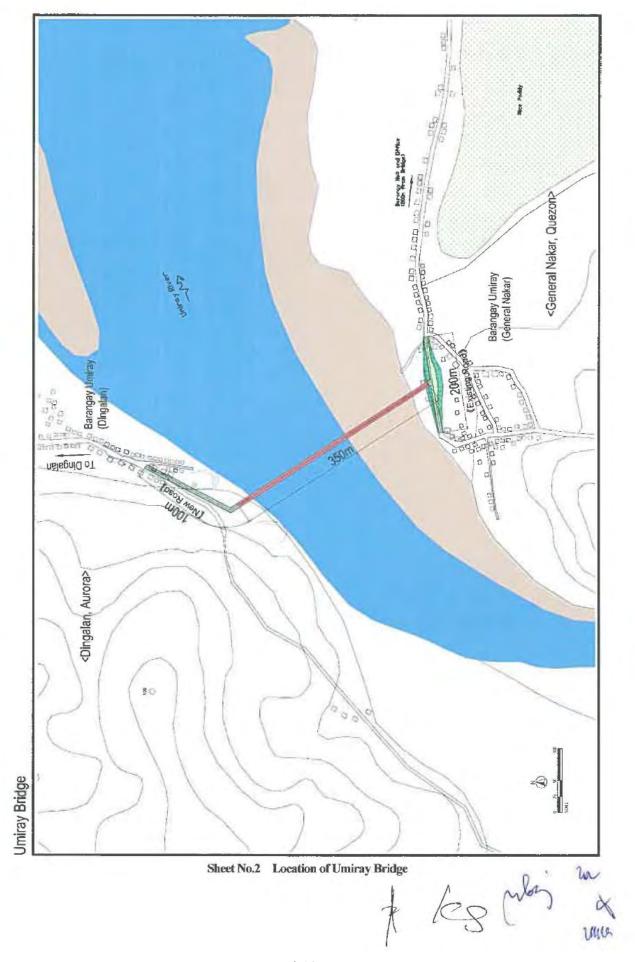
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Attachment 2 Drawings

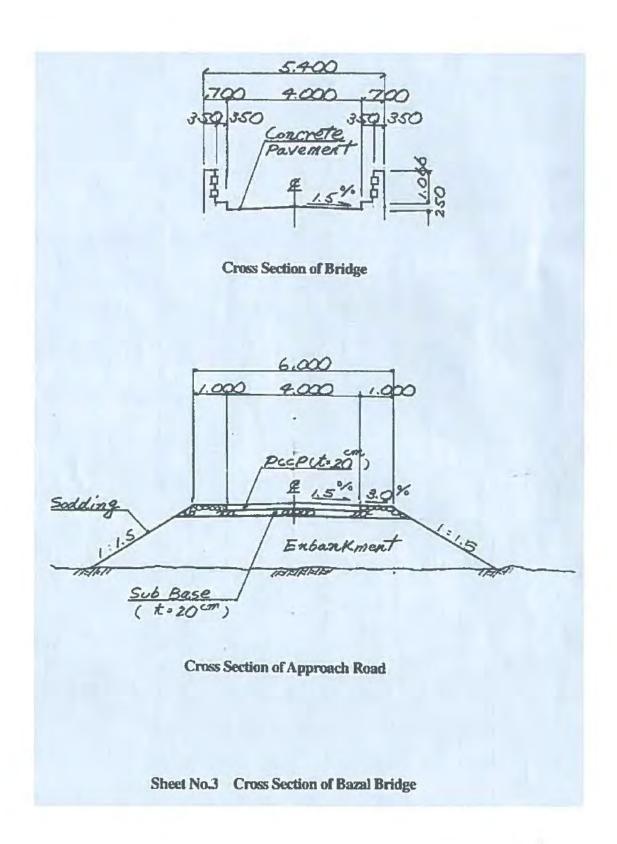


Sheet No.1 Location of Bazal Bridge

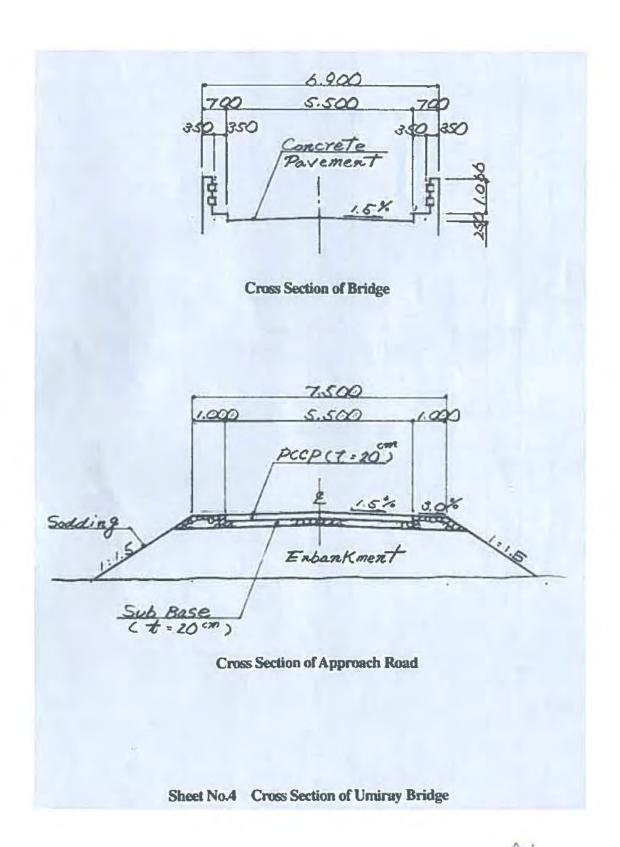
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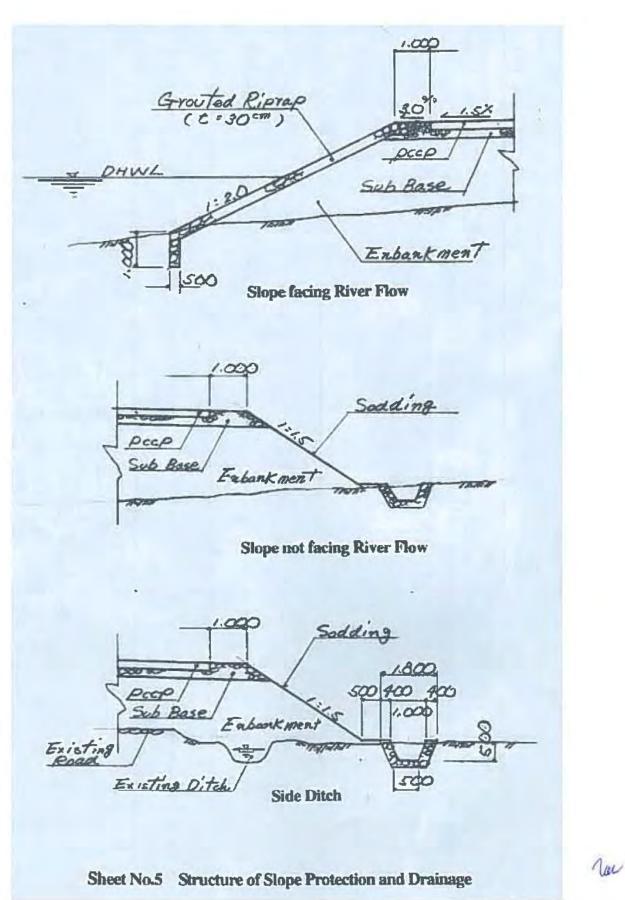
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MINUTES OF DISCUSSIONS ON THE BASIC DESIGN STUDY

ON

"THE BRIDGE CONSTRUCTION PROJECT FOR EXPANDED AGRARIAN REFORM COMMUNITIES DEVELOPMENT" (EXPLANATION OF DRAFT FINAL REPORT)

In March 2008, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Basic Design Study Team on the Bridge Construction Project for Expanded Agrarian Reform Communities Development (hereinafter referred to as "the Project") to the Republic of the Philippines (hereinafter referred to as "the Philippines"), and through discussion, field survey, and technical examination in Japan, JICA prepared a draft final report of the study.

In order to explain and to discuss with officials of the Government of the Philippines (hereinafter referred to as "GOP") on the components of the draft final report, JICA sent to the Philippines the Draft Report Explanation Team (hereinafter referred to as "the Team"), headed by Ms. Harumi KITABAYASHI, Deputy Resident Representative, JICA Philippine Office from 12th to 26th September 2008.

As a result of discussion, both parties confirmed the items described on the attached sheets.

Manila, 24th September 2008

北林 春美 Ms. KITABAYASHI Harumi

Team Leader

Basic Design Study Team

Japan International Cooperation Agency

Mr. NASSER C. PANGANDAMAN

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Secretary

Department of Agrarian Reform

Republic of the Philippines

ATTACHMENT

1. Components of the Draft Report

The Department of Agrarian Reform of the Philippines (hereinafter referred to as "the GOP/DAR") agreed and accepted in principle the components of the draft report explained by the Team.

2. Japan's Grant Aid scheme

The GOP/DAR understood the Japan's Grant Aid Scheme and the necessary measures to be taken by the GOP/DAR as explained by the Team and described in Annex-4 and Annex-5 of the Minutes of Discussions signed by both parties on 31st March 2008.

3. Schedule of the Study

JICA will complete the final report in accordance with the confirmed items and send it to the GOP/DAR by the end of December 2008.

4. Implementation Schedule

In view of several issues and concerns regarding the implementation of the Umiray Bridge, the Team has recommended to consider the immediate implementation of the Bazal Bridge. Hence, both sides agreed that construction of Bazal Bridge and Umiray Bridge would be independent projects and proposed to be constructed in accordance with the schedule as described in Annex-1. Accordingly, DAR will inform NEDA of the results of the Basic Design Study and will submit the revised proposal for Bazal Bridge by October 2008 and for Umiray Bridge by January 2009.

5. Confidentiality of the Project Cost Estimation

The Team explained the initial cost estimate of the Project as described in Annex-2. The GOP/DAR understood that the Project Cost Estimate attached as Annex-2 is not final and is subject to change. Both sides agreed that the Project Cost Estimate should be used only for official purposes and should not be duplicated or released to any outside parties before signing of all the Contract(s) for the Project.

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6. Other relevant issues

The Team explained that items described in 1) to 7) will be preconditions for the commencement of the bridge construction and if GOP/DAR cannot complete the procedure by each deadline, the commencement of the Project might be delayed:

For both bridges:

- 1) To secure Environmental Compliance Certificate (ECC) before the commencement of detailed designs for each project, i.e. by the end of November 2008 in the case of Bazal bridge.
- 2) To submit detailed operation and maintenance plan for each project, including Memorandum of Agreement (MOA) with the concerned Local Government Units (LGUs) by the end of March 2009.
- 3) To secure the right of way (ROW) for proposed bridges and approach roads, certificate for temporary use for the construction works, and to facilitate the issuance of permits for the quarry and borrow pit sites by the Provincial/Municipal LGUs by the end of March 2009 in the case of Bazal bridge and by the end of November 2009 in the case of Umiray bridge.
- 4) To undertake the necessary social consideration measures for stakeholders including the resettlement of affected households by the end of March 2009 in the case of Bazal bridge and by the end of November 2009 in the case of Umiray bridge.

For Bazal bridge:

 To secure the NEDA Investment Coordination Committee (ICC) notation by the end of November 2008.

For Umiray bridge:

- 6) To secure NEDA-ICC approval for Umiray bridge construction before the commencement of the detailed design.
- 7) To complete all the improvement works on the access road between Dingalan and Umiray bridge based on the proposal from the Team (which is shown in Annex-3), before the commencement of the detailed design.

The GOP/DAR agreed to implement the above said arrangements in accordance with the schedule of the Project in Annex-1.

Annex -1 Tentative Implementation Schedule

Annex -2 Initial Cost Estimate of the Project

Annex -3 Proposal from the Team on Improvement Plan of the Access Road to Umiray Bridge

Tentative Implementation Schedule

Project Implementation Schedule (Bazal Bridge)

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Project Implementation Schedule (Umiray Bridge)

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Initial Cost Estimate of the Project

1. Initial Cost Estimate

The total cost of the Project which will be implemented with Japanese grant aid and the Philippines contribution will be approximately \(\frac{\pmathbf{4}}{1,813}\) million. The cost breakdown based on the division of work between the two countries, is mentioned below using the estimation conditions described in item (3).

However, this estimated project cost is a provisional figure and does not necessarily mean the upper limit for the grant referred to in the E/N and will be further examined when the implementation of the requested Japanese assistance is examined in a concrete manner.

(1) Japanese Contribution

Estimated Total Cost: approx. 640 million PHPs (1,766 million JPY)

Bazal Bridge: 215 million PHPs (594 million JPY) Umiray Bridge: 425 million PHPs (1,172 million JPY)

(2) Philippines Contribution

Estimated Total Cost: approx. 17.167 million PHPs (47.380 million JPY)

According to the cost estimation by the Japanese side, the Philippines side is expected to fund the following costs amongst others excluding value added tax (VAT) institutional development and operating costs.

		Bazal Bridge	Umiray Bridge	Total
Ф	Advising commission (Bank Charges)	0.172 (0.475)	0.340 (0.938)	0.512 (1.413)
2	Payment commission (Bank Charges)	0.339 (0.935)	0.590 (1.628)	0.929 (2.563)
3	Land acquisition and relocation of houses	3.476 (9.594)	2.850 (7.866)	6.326 (17.460)
4	Relocation of electric poles	0.120 (0.331)	0.000 (0.000)	0.120 (0.331)
(5)	Improvement of access roads	0.000 (0.000)	9.280 (25.613)	9.280 (25.613)
	Total	4.107 (11.335)	13.060 (36.045)	17.167 (47.380)

Million Peso (Million Yen)

(3) Conditions of Estimation

① Time of Estimation : April, 2008

© Currency exchange : US\$1.00=¥110.35 (Exchange rate of Japanese Yen against

rate American dollar)

PHP1.00= \(\frac{4}{2}\).76 (Exchange rate of Japanese Yen against

Philippine Peso)

The foreign currency exchange rate is an average market value (TTS rate) of past 6 months starting from the end of March

2008.

3) Construction period: The detailed design and the required period for construction are

shown in the schedule of implementation

Others : Estimation is conducted based on the system of the Japanese

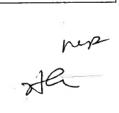
grant aid excluding price escalation.

nge K

Proposal from the Team on Improvement Plan of the Access Road to Umiray Bridge

Umiray Bridge (From Umiray Bridge to Dingalan, Total Length L=23.0km)

	Omn	ly Bridge (From Omiray	bilage to	Dimbaran, Th	IIII HAIRBIT TO TAIN WILL
No.	Location (Distance in kilometer from Umiray Bridge)	Existing Contition	Rating	Ability of Transportation	Proposed Scheme
1	0.4	Box Culvert (2.9m x 2/3.0m)	Good	Available	Not Required
2	2.3	Crossing on Riverbed (Malacauyaan River)	No Good	Not Available	Improvement Schem-2 (Spillway Type)
3	2.6	Crossing on Riverbed	No Good	Not Available	Improvement Schem-1 (Drift Type)
4	3.6	Crossing on Riverbed	No Good	Not Available	Improvement Schem-1 (Drift Type)
5	4.5	Crossing on Riverbed	No Good	Not Available	Improvement Schem-2 (Spillway Type)
6	4.8	Crossing on Riverbed	No Good	Not Available	Improvement Schem-1 (Drift Type)
7	5.6	Crossing on Riverbed	No Good	Not Available	Improvement Schem-2 (Spillway Type)
8	6.0	Crossing on Riverbed	No Good	Not Available	Improvement Schem-1 (Drift Type)
9	6.6	Crossing on Riverbed	No Good	Not Available	Improvement Schem-1 (Drift Type)
10	6.8	Crossing on Riverbed	No Good	Not Available	Improvement Schem-2 (Spillway Type)
11	9.3	Driftway (Ibona River)	Good	Available	Not Required
12	9.3	Crossing on Riverbed (Ibona River)	No Good	Not Available	Improvement Schem-2 (Spillway Type)
13	9.3	Crossing on Riverbed (Ibona River)	No Good	Not Available	Improvement Schem-2 (Spillway Type)
14	11.7	Box Culvert (3.5m x 2/3.5m)	Good	Available	Not Required
15	12.3	Spillway (\phi0.9m)	Good	Available	Not Required
16	13.1	Crossing on Riverbed	No Good	Not Available	Improvement Schem-1 (Drift Type)
17	13.8	Box Culvert (3.0m x 2/2.0m)	Good	Available	Not Required
18	14.8	Crossing on Riverbed	No Good	Not Available	Improvement Schem-1 (Drift Type)
19	15.7	Crossing on Riverbed	No Good	Not Available	Improvement Schem-1 (Drift Type)
20	15.9	Crossing on Riverbed	No Good	Not Available	Improvement Schem-2 (Spillway Type)
21	16.8	Sharp Curve (Road Width=4.0m)	No Good	Not Available	Improvement of Road Alignment, Widening with Enbankment
22	17.6	Crossing on Riverbed (AmtangRiver)	No Good	Not Available	Improvement Schem-2 (Spillway Type: 2-Location)
23	20.2	Drift Type	Good	Available	Not Required
24	20.5	Steep Slope (Gradiant=20%)	No Good	Not Available	Improvement of Gradient with Enbankment, Proposed Gradient=12.5%)
25	21.2	Box Culvert (2.4m x 2/2.9m)	Good	Available	Not Required
26	22.3	Steel H-Beam Bridge (Dingalan River: Bridge Length=32.0m)	Good	Available	Not Required
27	22.7	Box Culvert (3.5m/3.2)	Good	Available	Not Required
	23.0	Dingalan			



5. 事業事前計画表(基本設計時)

事業事前計画表(基本設計時)

【バザル橋】

1. 案件名

フィリピン共和国 第一次農地改革地域橋梁整備計画

2. 要請の背景(協力の必要性・位置付け)

フィリピン国(以下、「フィ」国)の中期国家開発計画(2004~2010年)では、貧困層の大半を占める農民への貧困対策が重点課題として挙げらている。200万へクタールの新規農地改革を行うことにより、年間 100万人の雇用創出を図るとともに、生産性の向上及び農民の収入の向上を果たすことが、貧困削減のための主要戦略として掲げられている。そのために 1987年に発足した総合農地改革プログラム(Comprehensive Agrarian Reform Program: CARP)を更に推進し、広域 ARC 開発地域の貧困緩和と格差の是正を図ることを目標としている。

CARP の主管官庁である農地改革省 (Department of Agrarian Reform: DAR) は、「土地保有条件の改善」と「土地の配分を受けた農民に対するプログラム受益者開発 (Program Beneficiaries Development: PBD)」という2つの主要プログラムを実施している。土地の配分については、目標の810万haに対して73% (590万ha) の達成率となっており、既配分農地における持続的な農業発展のための農地改革受益者支援に政策の重点が置かれつつある。

我が国は、有償資金協力により、全国約 220 の農地改革コミュニティ(Agrarian Reform Community: ARC)を対象として、農地改革インフラ整備事業(Agrarian Reform Infrastructure Support Project: ARISP)を実施している。ARISPによってARC域内の農業インフラ整備が進められてきたものの、ARC域外は協力の対象外であり、河川に橋梁がないなど、対象地区の内外への劣悪な交通アクセスが依然として多く存在している。

そのため、農業投入資材や生産物の搬出入、農業ビジネスの展開等、農業開発の阻害要因となっているばかりではなく、洪水時に甚大な被害を被っている。さらには、生活必需品の運搬、行政サービスへのアクセス、通学・通勤、急病患者の搬送等、社会生活にも支障をきたしている。このように、ARC 開発の観点のみならず、ライフライン確保の面からも橋梁建設の期待が高まっている。

3. プロジェクト全体計画概要

(1) プロジェクト全体計画の目標(裨益対象の範囲及び規模)

バザル地域の通年の交通を実現させるとともに、広域農地改革コミュニティにおける交通アクセスが改善される。

直接裨益対象の範囲及び規模:バザル橋周辺の住民約2,000人(「フィ」国オーロラ州マリア・オーロラ町バザル・バランガイ住民:1,288人、同マラシン・バランガイ住民:564人、オーロラ州立技術大学(Aurora State College of Technology: ASCOT)分校関係者:150人)

間接裨益対象の範囲及び規模: オーロラ州中部の住民約94,000人(バレル町:約34,492人、マリア・オーロラ町:約35,289人、サン・ルイス町:約23,766人)

(2) プロジェクト全体計画の成果

ア バザル橋及び取付道路が建設される

イ 適切な運営・維持管理が成されることにより、広域農地改革コミュニティにおける交通ア クセスが改善される

(3) プロジェクト全体計画の主要活動

ア バザル橋及び取付道路を建設する

イ 上記施設を適切に運営・維持管理し、安全な通年交通を確保する

(4) 投入

ア 日本側:無償資金協力 6.60 億円

イ 相手国側

- (ア) 必要な人員:維持管理要員88人/年
- (イ) 建設資機材:小型トラック、スコップ、ハンマー、草刈機等
- (ウ) 施設の運営・維持管理に係る経費:273千ペソ/年

(5) 実施体制

主管官庁及び実施機関:農地改革省

4. 無償資金協力案件の内容

(1) サイト

「フィ」国オーロラ州マリア・オーロラ町バザル・バランガイ及びマラシン・バランガイ

(2) 概要

バザル橋 (橋長 110m、取付道路延長 424m) の建設

(3) 相手国側負担事項

①建設用地の確保、②建設のための仮設用地(仮設ヤード、資材置場、現場事務所、迂回路等)の用地確保、③工事に必要な接続道路の整備、④工事の支障となる電柱、水道管の移設

(4) 概算事業費

概算事業費 6.71 億円 (無償資金協力 6.60 億円、「フィ」国側負担 0.11 億円)

(5) 工期

詳細設計・入札期間を含め約27ヶ月(予定)

(6) 貧困、ジェンダー、環境及び社会面の配慮

住民移転が発生しないルートを選定することにより、社会環境へ与える負の影響を最小とした。

5. 外部要因リスク (プロジェクト全体計画の目標の達成に関するもの)

特になし。

6. 過去の類似案件からの教訓の活用

特になし。

7. プロジェクト全体計画の事後評価に係る提案

(1) プロジェクト全体計画の目標達成を示す成果指標

現状と問題点	現状の数値 (2008 年)	目標年における計画値 (目標年:2011年)
1. 年間交通途絶日数 増水時には、通常の河川横断手段での渡河が困難であり、洪水による災害時には避難経路が完全に途絶される状況にある。農業資材運搬や生活必需品の運搬、行政サービスへのアクセス、通学・通勤、急病患者の搬送等、社会生活にも支障をきたしている。		0 日/年
2. 平均渡河時間 現在橋梁がないために、河川を横断する のに著しく時間がかかり、農業資材・農 産物及び生活物資の運搬に支障をきたし ている。また、渡河時間が長いため、車 両が使用する燃料・油脂の消費、タイヤ 消耗が大きい。	6.1分	約 16 秒 (平均速度 25km/時)

(2) その他の成果指標

(農産物の増産)

- ① 農薬等の農業投入資材運搬及び適切な栽培技術の指導により、農産物単位収量(籾の単位収量、現状 3.75t/ha)の向上に寄与する。
- ② 耕作地の新規農地造成、灌漑施設建設等の農業インフラ整備に係る建設機材搬入、また農業の機械化技術導入により、作付面積(稲、現状 396ha)の拡大に寄与する。
- ③ 年間農業技術研修活動実施日数 (ASCOT による農業技術研修、現状 27 日) の増加が期待できる。

(組合活動の活性化)

- ④ 組合活動の活性化及び組合規模の拡大により、組合員数(女性組合、現状 75 人)の増大が期待できる。
- ⑤ 組合活動の資本(現状では、バザル・バランガイの女性組合は資本金なし)の増大に寄与する。

(農家収入の増加)

⑥ 生産性向上のほか、農業資材流通、農産物処理・貯蔵施設等の農業インフラ整備や金融機関へのアクセス向上により、農家年間平均所得(現状 5,000 ペソ/年)の増加が期待できる。

(教育へのアクセス向上)

⑦ 増水時に通学・通勤困難な生徒・学校関係者数(小学校 39 人、中・高等学校 96 人、大学 135 人)の解消が期待できる。

(その他)

⑧ 人的交流・物流が確保により周辺 ARC との連携が促進され、より多くの農民が ARC 成果及び行政サービスの享受できる可能性が拡大する。

(3) 評価のタイミング

2011年(施設完成後1年経過後)

1. 案件名

フィリピン共和国 第二次農地改革地域橋梁整備計画

2. 要請の背景(協力の必要性・位置付け)

フィリピン国(以下、「フィ」国)の中期国家開発計画(2004~2010年)では、貧困層の大半を占める農民への貧困対策が重点課題として挙げらている。200万へクタールの新規農地改革を行うことにより、年間100万人の雇用創出を図るとともに、生産性の向上及び農民の収入の向上を果たすことが、貧困削減のための主要戦略として掲げられている。そのために1987年に発足した総合農地改革プログラム(Comprehensive Agrarian Reform Program: CARP)を更に推進し、広域ARC開発地域の貧困緩和と格差の是正を図ることを目標としている。

CARP の主管官庁である農地改革省 (Department of Agrarian Reform: DAR) は、「土地保有条件の改善」と「土地の配分を受けた農民に対するプログラム受益者開発 (Program Beneficiaries Development: PBD)」という2つの主要プログラムを実施している。土地の配分については、目標の810万haに対して73% (590万ha) の達成率となっており、既配分農地における持続的な農業発展のための農地改革受益者支援に政策の重点が置かれつつある。

我が国は、有償資金協力により、全国約 220 の農地改革コミュニティ(Agrarian Reform Community: ARC)を対象として、農地改革インフラ整備事業(Agrarian Reform Infrastructure Support Project: ARISP)を実施している。ARISPによってARC域内の農業インフラ整備が進められてきたものの、ARC域外は協力の対象外であり、河川に橋梁がないなど、対象地区の内外への劣悪な交通アクセスが依然として多く存在している。

そのため、農業投入資材や生産物の搬出入、農業ビジネスの展開等、農業開発の阻害要因となっているばかりではなく、洪水時に甚大な被害を被っている。さらには、生活必需品の運搬、行政サービスへのアクセス、通学・通勤、急病患者の搬送等、社会生活にも支障をきたしている。このように、ARC 開発の観点のみならず、ライフライン確保の面からも橋梁建設の期待が高まっている。

3. プロジェクト全体計画概要

(1) プロジェクト全体計画の目標(裨益対象の範囲及び規模)

ウミライ地域の通年の交通を実現させるとともに、広域農地改革コミュニティにおける交通 アクセスが改善される。

直接裨益対象の範囲及び規模:ウミライ橋周辺の住民約 10,170 人(「フィ」国オーロラ州ディンガラン町ウミライ・バランガイ住民:5,071 人、ケソン州ジェネラル・ナカール町ウミライ・バランガイ住民:5,099 人)

間接裨益対象の範囲及び規模:ディンガラン町およびジェネラル・ナカール町の住民約 43,900人(オーロラ州ディンガラン町住民:約 20,200人、ケソン州ジェネラル・ナカール町住民:約 23,700人)

(2) プロジェクト全体計画の成果

ア ウミライ橋及び取付道路が建設される

イ 適切な運営・維持管理が成されることにより、広域農地改革コミュニティにおける交通ア クセスが改善される

(3) プロジェクト全体計画の主要活動

ア ウミライ橋及び取付道路を建設する

イ 上記施設を適切に運営・維持管理し、安全な通年交通を確保する

(4) 投入

ア 日本側:無償資金協力14.69億円

イ 相手国側

- (ア) 必要な人員:維持管理要員88人/年
- (イ) 建設資機材:小型トラック、スコップ、ハンマー、草刈機等
- (ウ) 施設の運営・維持管理に係る経費:273千ペソ/年

(5) 実施体制

主管官庁及び実施機関:農地改革省

4. 無償資金協力案件の内容

(1) サイト

「フィ」国オーロラ州ディンガラン町ウミライ・バランガイ及びケソン州ジェネラル・ナカー ル町ウミライ・バランガイ

(2) 概要

ウミライ橋(橋長358m、取付道路延長272m)の建設

(3) 相手国側負担事項

①建設用地の確保、②建設のための仮設用地(仮設ヤード、資材置場、現場事務所、迂回路等)の用地確保、③工事に必要な接続道路の整備

(4) 概算事業費

概算事業費 15.06 億円 (無償資金協力 14.69 億円、「フィ」国側負担 0.37 億円)

(5) 工期

詳細設計・入札期間を含め約30ヶ月(予定)

(6) 貧困、ジェンダー、環境及び社会面の配慮

住民移転が発生しないルートを選定することにより、社会環境へ与える負の影響を最小とした。

5. 外部要因リスク (プロジェクト全体計画の目標の達成に関するもの)

特になし。

6. 過去の類似案件からの教訓の活用

特になし。

7. プロジェクト全体計画の事後評価に係る提案

(1) プロジェクト全体計画の目標達成を示す成果指標

現状と問題点	現状の数値 (2008 年)	目標年における計画値 (目標年:2013年)
1. 年間交通途絶日数 増水時には、通常の河川横断手段での渡河が困難であり、洪水による災害時には 避難経路が完全に途絶される状況にあ る。農業資材運搬や生活必需品の運搬、 行政サービスへのアクセス、通学・通勤、 急病患者の搬送等、社会生活にも支障を きたしている。	, , , , ,	0 日/年
2. 平均渡河時間 現在橋梁がないために、河川を横断するのに著しく時間がかかり、農業資材・農産物及び生活物資の運搬に支障をきたしている。また、渡河時間が長いため、車両が使用する燃料・油脂の消費、タイヤ消耗が大きい。	25.0分	約 52 秒 (平均速度 25km/時)

(2) その他の成果指標

(農産物の増産)

- ① 農薬等の農業投入資材運搬及び適切な栽培技術の指導により、農産物単位収量(籾の単位収量、現状 3.3t/ha)の向上に寄与する。
- ② 耕作地の新規農地造成、灌漑施設建設等の農業インフラ整備に係る建設機材搬入、また農業の機械化技術導入により、作付面積(稲、現状 200ha)の拡大に寄与する。

(組合活動の活性化)

- ③ 組合活動の活性化及び組合規模の拡大により、組合員数 (ARC 組合 369 人) の増大が期待できる。
- ④ 組合活動の資本(現状では、ウミライ・バランガイ ARC 組合の資本金は 310,985 ペソ)の増大に寄与する。

(農家収入の増加)

⑤ 生産性向上のほか、農業資材流通、農産物処理・貯蔵施設等の農業インフラ整備や金融機関へのアクセス向上により、農家年間平均所得(現状 14,470 ペソ/年)の増加が期待できる。

(教育へのアクセス向上)

⑥ 増水時に通学・通勤困難な生徒・学校関係者数(小学校5人、中・高等学校1人)の解消が期待できる。

(その他)

⑦ 人的交流・物流が確保により周辺 ARC との連携が促進され、より多くの農民が ARC 成果及び行政サービスの享受できる可能性が拡大する。

(3) 評価のタイミング

2013年(施設完成後1年経過後)

6. 参考資料/入手資料リスト

調査名 フィリピン国農地改革地域橋梁整備計画基本設計調査

(1/8)

番号	名 称	形態 (図書・ビデオ・ 地図・写真等)	オリジナル・コピー	発行機関	発行年
	質問票の回答				
回答	Questionnaire and Answer	印刷	オリジナル	Department of Agrarian Reform	2008
Annex-A	Medium Term Public Investment Program (MTPIP) 2006-2010	印刷	コピー	National Economic and Development Authority (NEDA), Director General	2006
Annex-B	Region III: Central Luzon-Medium Term Regional Development Plan (2004-2010)	印刷	コピー	Region III	-
Annex-C	Region IV-A: CALABARZON Development Plan (2004-2010)	印刷	コピー	National Economic and Development Authority (NEDA)	2004
Annex-D	Bridge Construction Project in Expanded ARC Development	印刷	コピー	ARC Umiray, General Nakar, Quezon	-
Annex-E	Evaluation Report (ARISP I for Sustainable Development of Phil. Agriculture by Katzumi Nozawa, Evaluation of Three Selected ARISP ARCs by Blanquita Pantoja)	印刷	コピー	-	-
Annex-F	Impact Evaluation of Policy-Based Credit for Agriculture on Agrarian Reform-The Case of the Philippines (Evaluation of RASCP) Final Report	印刷	コピー	University of the Philippines, Los Banos Foundation, Inc.	2005
Annex-G	ARISP II, Results Monitoring and Evaluation Study (Final Report)	印刷	コピー	Urbis Philippines, Inc.	2006
Annex-H	ODA Loan & The Philippines-Agrarian Reform for Poverty Reduction	印刷	オリジナル	Japan Bank for International Cooperation/ International Development Journal	2005
Annex-I	Case Study-ARISP: Making Agrarian Reform Work –the case of the Philippines	印刷	オリジナル	Japan Bank for International Cooperation	-
Annex-J	Japan's ODA Loans for Agriculture and Irrigation Development Projects, Effective Use of Water by Participatory Irrigation Develop- ment Approach	印刷	オリジナル	Japan Bank for International Cooperation	-
Annex-K	List of Bridges Required for ARCs Related to ARISP	印刷	コピー	-	-
Annex-L	Profile of Foreign-Assisted Projects (JBIC/JICA) as of December 2007	印刷	コピー	Department of Agrarian Reform	2007
Annex-M	Profile of Foreign-Assisted Projects as of December 2007	印刷	コピー	Department of Agrarian Reform	2007

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番号	名 称	形態 (図書・ビデオ・ 地図・写真等)	オリジナル・コピー	発行機関	発行年
	共通資料				
A-1	Philippine Yearbook 2006	CD	オリジナル	National Statistics Office	2006
A-2	An assessment of the Impact of the Belgian Integrated Agrarian Reform Supported Programme (BIARSP)	印刷	コピー	Statistical Research and Training Center, Quezon City, Philippines	2007
A-3	Impact Assessment Study of the Agrarian Reform Communities Development Project (ARCDP), Integrative Report	印刷	コピー	Agrarian Reform Communities Development Project (ARCDP), Department of Agrarian Reform	2004
A-4	Nominal Minimum Wage Rates by Regions, Province and Sector	印刷	コピー	-	2003
A-5	Organizational Structure, Project Implementation	印刷	コピー	Department of Agrarian Reform	-
A-6	Briefing on the Tax related Provisions of the Exchange of Notes for Japanese Loan Packages	印刷	コピー	Department of Finance	2000
A-7	Proclamation No.233 (Special Economic Zone)	印刷	コピー	The President of the Philippines	2000
A-8	Proclamation No. 402 (Bazal River Watershed Forest Reserve)	印刷	コピー	The President of the Philippines	1994
A-9	P.D. 705, Revised Forestry Code	印刷	コピー	DENR	-
A-10	DENR-FMB, Questions and Answers	印刷	コピー	-	-
A-11	Legal Basis in Declaring the MESA Watershed as a Watershed Reserva- tion	印刷	コピー	-	-
A-12	Definition of terms (DENR-FMB)	印刷	コピー	-	-
A-13	ALDA Manual	印刷	コピー	-	-

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番号	名 称	形態 (図書・ビデオ・ 地図・写真等)	オリジナル・コピー	発行機関	発行年
	ケソン州関連資料				
B-1	Flood damages at Barangay Umiray	印刷	コピー	Municipality of General Nakar	-
B-2	Organizational Chart (Municipality of General Nakar)	印刷	コピー	Municipality of General Nakar	-
B-3	Municipal Organizational Structure (Municipality of General Nakar, Quezon)	印刷	コピー	Municipality of General Nakar	-
B-4	Municipal Map of General Nakar (ウミライ〜ジェネラルナカール間道路改修計画)	印刷	コピー	Municipality of General Nakar	-
B-5	Bridge under the Responsibility of the Municipality of General Nakar	印刷	コピー	Municipality of General Nakar	-
B-6	Kinds of Maintenance Equipment	印刷	コピー	Municipality of General Nakar	-
B-7	ARC Development Plan of Umiray ARC, General Nakar, Quezon, 2008-2012	印刷	コピー	Umiray ARC, General Nakar, Quezon	-
B-8	Municipal Medium Term Agrarian Reform Development Plan-General Nakar, 2006-2010	印刷	コピー	General Nakar, Quezon	-
B-9	Bridge Construction Project in Expanded ARC Development	印刷	コピー	ARC Umiray, General Nakar, Quezon	-
B-10	Medium Term Philippine Development Plan (2004-2010)	印刷	コピー	Secretary of Socioeconomic Planning	2004
B-11	Municipal Socio-Economic Profile 2007	印刷	コピー	Municipality of General Nakar	2007
B-12	Organizational and Functional Chart, Service Vehicles, Equipment Inventory and etc. (Quezon Province)	印刷	コピー	Office of the Provincial	-
B-13a	General Nakar Rehabilitation Plan	印刷	コピー	Municipality of General Nakar	-
B-13b	Relief and Rehabilitation Plan	印刷	コピー	Municipality of General Nakar	-
B-13c	Comprehensive, Integrated Rehabilitation Plan of General Nakar	印刷	コピー	Province of Quezon	-
B-14	REINA, revisited, The Rehabilitation Plan, Project Status-ARISP2-, ARC Profiles	印刷	コピー	-	-
B-15	ARISP III Rationale / Concepts and Objectives	CD	オリジナル	-	-
B-16	Brief Description of the 2004 typhoon disaster1	CD	オリジナル	-	-

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番号	名 称	形態 (図書・ビデオ・ 地図・写真等)	オリジナル ・コピー	発行機関	発行年
B-17	Complementary Data for Umiray ARC, General Nakar, Quezon	CD	オリジナル	-	-
B-18	National Status of the rice demand and supply	CD	オリジナル	-	-
B-19	The National Calamities and Preparedness Plan (NCDPP)	CD	オリジナル	-	-
B-20	ARC Development Plan, UMIRAY ARC	印刷	コピー	-	-
B-21	ARC Development Plan	印刷	コピー	UMIRAY ARC, General Nakar, Quezon, 2008-2012	-
B-22	Bridge Construction Project in Expanded ARC Development	印刷	コピー	ARC Umiray, General Nakar, Quezon	-
B-23a	Barangay Canaway Profile (in Tagalog)	印刷	コピー	-	2007
B-23b	Barangay Maligaya Profile (in Tagalog)	印刷	コピー	-	2007
B-23c	Barangay Sablang Profile (in Tagalog)	印刷	コピー	-	2007
B-23d	Barabgay Profile (in English)	印刷	コピー	-	2007
B-24	Barangay Umiray Profile, Quezon, 2007	印刷	コピー	-	2007
B-25	Respondent Profile on Stakeholder Meeting in Umiray, General Nakar, Quezon	印刷	コピー	Department of Agrarian Report	2008
B-26	Information of Schools in Umiray-General Nakar	印刷	コピー	-	-
B-27	Calamity Damage in General Nakar	印刷	コピー	Municipal Social Welfare and Development Office, General Nakar	2005
B-28	REINA Area Planning Matrix (Damage of Calamity)	印刷	コピー	General Nakar	-
B-29	Resolution No. 2008-192 (Resolution Supporting the construction of a provincial bridge across te Umiray River)	印刷	コピー	Quezon Province	2008
B-30	Organizational Structure of Quezon Province	印刷	コピー	Quezon Province	-

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番号	名 称	形態 (図書・ビデオ・ 地図・写真等)	オリジナル ・コピー	発行機関	発行年
	オーロラ州関連資料				
C-1	Appropriated Funds for Various Projects 2002-2007	印刷	コピー	Municipal Mayor, Maria Aurora	-
C-2a	ARC Development Plan (Wenceslao/ Sto Tomas/ Diome) (ARCDP) of all ARCs in Dingalan, Wenceslao ARC and Cadavakan/Bavanihan ARC	印刷	コピー	-	-
C-2b	Agrarian Reform Community Development Plan, Bayanihan/ Cadaya-kan ARC (2007-2009)	印刷	コピー	-	-
C-2c	Agrarian Reform Community Development Plan, Ibona ARC (2007-2009)	印刷	コピー	-	-
C-2d	Matawe Agrarian Reform Community Development Plan (2007-2009)	印刷	コピー	-	-
C-2e	ARC Development Plan, Umiray ARC	印刷	コピー	-	-
C-3a	Aurora Provincial Profile, CY2000-2003	印刷	コピー	-	-
C-3b	Socio-economic Profile of Maria Aurora, Aurora Province	印刷	コピー	-	-
C-3c	Socio-economic Profile of Dingalan, Aurora Province	印刷	コピー	-	-
C-3d	Brief Profile of the Project Area	印刷	コピー	-	-
C-3e	Status of Cooperatives in ARC	印刷	コピー	-	-
C-4	Aurora Statfacts	印刷	コピー	NSO Aurora	-
C-5	Typhoon Damage Report, Typhoon "Reming", "Quennie" and "Harurot"	印刷	コピー	-	-
C-6	List of ARISP I and II Project Funded Under the Japan Bank for International Cooperation (JBIC) Fund	印刷	コピー	-	-
C-7a	Solar Power Technology Support (SPOTS) Project, List of On-going Projects	印刷	コピー	DAR-SPOTS	2008
C-7b	Foreign Funded-European Union Thru Aurora Integrated Area-Development Project (AIADP) Phase II, Year of Implementation 1999	印刷	コピー	-	-
C-8	Provincial Organizational Structure of DAR-Aurora	印刷	コピー	DAR-Aurora	-

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番号	名 称	形態 (図書・ビデオ・ 地図・写真等)	オリジナル ・コピー	発行機関	発行年
C-9a	Organizational Structure	印刷	コピー	Provincial Government of Aurora	-
C-9b	Organizational Structure (Office of the Provincial Engineer)	印刷	コピー	Office of the Provincial Engineer of Provincial Government of Aurora	-
C-10	Annual Operation and Maintenance Work plan	印刷	コピー	Office of Provincial Engineer, Aurora Province	2008
C-11	Maintenance of Various Provincial Roads (Number of Staff In-charge of Maintenance Work)	印刷	コピー	Office of Provincial Engineer, Aurora Province	-
C-12	List of Equipments Used for Maintenance Works	印刷	コピー	Office of Provincial Engineer, Aurora Province	-
C-13	The Budget for Operation and Maintenance For the Last 5 Years	印刷	コピー	Office of Provincial Engineer, Aurora Province	-
C-14	Inventory of Various Provincial Roads	印刷	コピー	Office of Provincial Engineer, Aurora Province	-
C-15	Motor Vehicle User's Charge (MVUC), Inventory of Dingalan-Umiray Provincial Road 2007	印刷	コピー	Office of Provincial Engineer, Aurora Province	2007
C-16	Organizational Set-Up	印刷	コピー	Municipal Government of Maria Aurora	-
C-17	Municipal Equipment Utilization, Maintenance of Municipal and Barangay Roads and Flood Program	印刷	コピー	Office of the Municipal Mayor, Maria Aurora	-
C-18	Type of Road (Maria Aurora)	印刷	コピー	Maria Aurora	-
C-19	Number of Bridges by Type (Maria Aurora)	印刷	コピー	Maria Aurora	-
C-20	Project Brief (Proposed Concreting of Farm-to-Market Road for Barangay Malasin to Bray. Bazal and Barangay Bazal to ASCOT)	印刷	コピー	Office of Municipal Engineer, Municipality of Maria Aurora	-
C-21a	Resolution No. 29 (Maria Aurora Sanaauniang Bavan Resolutions)	印刷	オリジナル	Office of the Sangguniang Bayan, Municipality of Maria Aurora	2008
C-21b	Kapasyahan Blg. 02 (Barangay Bazal and Malasin) (in Tagalog)	印刷	オリジナル	Municipality of Maria Aurora	2008
C-22	Organizational Structure (Municipality Dingalan, Aurora)	印刷	コピー	Dingalan, Aurora	-
C-23	Maintenance of Municipal Roads (Plan and Budget 2007, Dingalan, Aurora)	印刷	コピー	Dingalan, Aurora	2007
C-24	Municipal Record on disaster in Dingalan, as of January 17, 2005)	印刷	コピー	Municipal Disaster Coordinating Council Operation Center, Municipality of Dingalan	2005
C-25	ARC Cluster Profile (Maria Aurora ARC Connectivity)	印刷	コピー	-	-
C-26	Central Aurora KALAHI AR Zone Development Plan 2004-2008	印刷	コピー	Province of Aurora, Region III	-
C-27	Maria Aurora Profile	印刷	コピー	-	-
C-28	Attendance List, Aurora	印刷	コピー	-	-

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番号	名 称	形態 (図書・ビデオ・ 地図・写真等)	オリジナル ・コピー	発行機関	発行年
C-29	Municipal Medium Term Agrarian Reform Development Plan of Dingalan	印刷	コピー	-	-
C-30	List of LIKAS-SAKA Members (Federation member) in Aurora	印刷	コピー	Department of Agrarian Reform	-
C-31	Barangay Profile, Aurora Province, Region III	印刷	コピー	-	-
C-32	Northern Aurora KALAHI AR Zone Development Plan 2004-2008	印刷	コピー	Province of Aurora, Region III	-
C-33	Barangay Profile (Umiray, Ibuna and Matawe),	印刷	コピー	Aurora Province	2008
C-34	Municipal Medium Term Agrarian Reform Development Plan (MMTARDP)	印刷	コピー	Municipality of Maria Aurora, Province of Aurora, Region III	-
C-35	National High School Information (Maria Aurora National High School)	印刷	コピー	Maria Aurora National High School	2008
C-36	The Indigenous Cultural Communities/Indigenous Peoples of Aurora this Millennium	印刷	コピー	National Commission on Indigenous Peoples	-
C-37	LGU-Urban Water Supply and Sanitation Project, PH-PE-39022 (Figures)	印刷	コピー	Municipality of Maria Aurora	-
C-38	Aurora State College of Technology (ASCOT) Information (not including the overview)	印刷	コピー	Aurora State College of Technology (ASCOT)	2008
C-39	Approved Budget (PARO, Aurora)	印刷	コピー	Department of Agrarian Reform	2007
C-40	Budget for Operation and maintenance for the last 5 years	印刷	コピー	Provincial Engineering Office, Province of Aurora	2008
C-41	Relevant Maps (Bazal River Watershed Forest Reserve)	印刷	コピー	-	-
C-42	Bazal River Watershed Forest Reserve	印刷	コピー	Municipality of Maria Aurora	1994
C-43	Brief Profile of Philippine-Korea Modern Integrated Rice Processing and Milling Complex	印刷	コピー	Korea International Cooperation Agency	-
C-44	Environmental Compliance Certificate (ECC) for Umiray Bridge	印刷	コピー	Department of Environment and Natural Resources, Regional Office IV	2008
C-45	Data needrd on Proposed on Bazal Bridge Project	印刷	コピー	Department of Education Region III, Bazal Elementary School	-
C-46	List of Cooperatives	印刷	コピー	-	2008
C-47	Aurora State College of Technoligy (ASCOT) Brief Historical Development 1997-2005	印刷	コピー	Aurora State College of Technoligy (ASCOT)	-
C-48	Proposed Concreting of Farm-to-market road (Barangay Malasin – Barangay Bazal – ASCOT)	印刷	コピー	Municipality of Maria Aurora, Office of the Municipal Engineer	2008

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番号	名 称	形態	オリジナル	発行機関	発行年
		(図書・ビデオ・	・コピー		
		地図・写真等)			
	環境関連資料				
D-1	Questionnaires on Environmental and Social Considerations	印刷	コピー	-	-
D-2	DAR-DENR MOA dated May 21, 2003	印刷	コピー	DAR-DENR	2003
D-3	Memorandum Circular # 03, Series of 2006, Intensified Rural Development Through Agrarian Reform Communities (ARCs) Connectivity	印刷	コピー	DAR	2006
D-4	Questionnaire in Environmental and Social Considerations	印刷	コピー	-	-
D-5	Revised Procedural Manual for DAO 2003-30	印刷	コピー	-	-
D-6	Revised Procedural Manual for DENR Administrative Order No. 30 Series of 2003 (DAO 03-30), Implementing Rules and Regulations of Presidential Decree No. 1586, Establishing the Philippine Environ- mental Impact Statement System)	印刷	コピー	-	2007
D-7	Normal Rainfall (1971-2000)	印刷	コピー	-	-
D-8	Matrix for Scoping (Umiray and Bazal Bridge)	印刷	コピー	-	-
D-9	Result of Consultation Meeting	印刷	コピー	-	-