## 2.3 OBLIGATIONS OF THE GOVERNMENT OF INDONESIA

The following works should be undertaken by the government of Indonesia on condition that the grant aid by the Government of Japan is extended to the project:

Directorate General of Highways of Ministry of Public Works

- Being responsible to coordinate with the local governments to execute their undertakings as the implementation agency
- Preparing the required documents for the issuance of the environmental compliance certificate
- Management to comply with environmental UKL&UPL.
- Coordinating with the local governments to conduct the public hearing with the PAPs (Project Affected Persons) and confirm the PAPs' consent to this project
- Allocating budget for the banking service on the basis of the Banking Arrangement of the Grant Aid.
- Improvement of road section of the project road (Schedule of the work is shown in Appendix-2)
- To exempt Japanese nationals engaged in the project from customs duties, internal taxes and other fiscal levies, which may be imposed in Indonesia
- To welcome Japanese nationals, whose services may be required in connection with the supply of the products and the services under the verified contract, such facilities as may be necessary for their entry into Indonesia and stay therein for the performance of their work

## Provincial Government of Nusa Tenggara Barat

- Improvement of the project road jointly with Ministry of Public Works
- Construction of bridges excluded from Japan's grant aid along the project road (Schedule of work is shown in Appendix-4)
- Maintenance of the bridges after the final hand-over to the Provincial Government

Sumbawa Regency and Sumbawa Barat Regency

- Land acquisition necessary for the new bridges and their approach roads (The necessary land acquisition areas are shown on Table 2.2-1 in Section 2.2.1.3)
- Relocation of a power pole (at BR-35 Kalbir Bridge)
- Securing area for temporary detour and temporary work yards. (Temporary detour plan is shown in Appendix 9.)

## 2.4 PROJECT OPERATION AND MAINTENANCE PLAN

## (1) Operation and Maintenance System

Maintenance of the project bridges after completion will be undertaken by the Department of Public Works of Nusa Tenggara Barat Provincial Government. Routine maintenance of roads and bridges such as cleaning, inspection and minor repairs are undertaken by own maintenance staff of the Provincial Department of Public Works. While periodic repair and rehabilitation of roads and bridges are undertaken by contractors. The Provincial Department of Public Works has staff and equipments for the road and bridge maintenance.

## (2) Maintenance Work Items

Necessary maintenance works for the project bridges are as follows:

## Routine Maintenance

- Cleaning: Cleaning of bridge deck, drain basin, road side ditches and cutting grass on road shoulders and slope.
- Inspection: Identifying damages / defects such as pavement crack, bridge structure deformation / collapse, slope failure, scouring protection damage / washout, etc.
- Repair: Sealing of pavement cracks, patching on potholes, leveling road shoulders, repairing gabions / riprap.

## Periodic Maintenance

Repairing the identified damages: Repair of bridge structures, repainting, etc.

## (3) Considerations in Maintenance

The maintenance of the Project bridges will be executed as the part of present road and bridge maintenance system. The major items to be considered are as follows:

- It is important that routine maintenance shall be executed in good care and damages shall be repaired immediately before becoming serious because repair cost will becomes higher if damages are neglected for longer time.
- Since revetment is seldom installed at riverbanks in Indonesia, river alignment changes sideways due to riverbank erosions. Before the river alignment change reaches the bridge site, revetment or any other river control structure shall be installed.
- There are many extremely steep sections (steeper than 20%) along the Project road. Such sections should be paved and maintained to keep the road passable safely.
- Frequent watering for the slope sodding is required until it roots down into the ground.

## 2.5 PROJECT COST ESTIMATION

## 2.5.1 Initial Project Cost

### (1) Cost Born by the Government of Japan

The project will be implemented in accordance with the Japan's Grant Aid scheme and the cost will be determined before concluding the Exchange of Note for the project.

### (2) Cost Born by the Government of Indonesia Rp 79.7 Billion

Cost Born b	y Ministry	of Public Works	

- Bank commission	Rp 260 M
- Cost of road improvement	Rp 45,000M
	RP 45,260 M

	·	Cost Born	by Nusa	Tenggara	Barat	Provinc	ial Government
--	---	-----------	---------	----------	-------	---------	----------------

- Cost of road improvement	Rp 17,500 M
- Cost of bridge and culvert construction	Rp 16,740 M
	Rp 34,240 M

Cost Born by Sumbawa Regency Government

- Cost of land acquisition / resettlement	Rp	136 M
- Cost of lease of land for detour	Rp	8 M
- Cost of relocation of utilities	Rp	8 M
-	Rp	152 M

### (3) Conditions in Cost Estimation

-Estimated timing : June, 2008

-Exchange rate : Rp 1.0 = Yen 0.0126

-Others : The project is implemented in accordance with the system of Japan's Grant Aid.

#### 2.5.2 Maintenance Cost

The annual cost for maintenance of 15 Project bridges is Rp 179 M. The breakdown of the maintenance work items and the cost is shown on Table 2.5-1.

			Ince works and A			
Maintenance Work			Frequency	Each Time Cost	Annual Cost	
				(Rp /Time)	(Rp/Year)	
		Bridge deck				
	Cleaning	Drain basin	1 time / yr	15,000,000	15,000,000	
e	Cicaning	Approach road	I time / yi	15,000,000	13,000,000	
Jan		Grass cutting				
Iter		Pavement crack				
air	Increation	Bridge deformation / damage	1 4:000 / 000	10,000,000	10,000,000	
	Inspection	Slope failure	1 time / yr	10,000,000	10,000,000	
Routine Maintenance	.g Gabion/riprap damage/washout		~			
no	Pavement crack seal					
R	Repair	Pavement patching	1 time / 2 rm	80.000.000	40,000,000	
	Gravel surface patching		1 time / 2 yr	80,000,000	40,000,000	
		Repair gabions				
		Macadam re-pavement	1 time /10 yr	500,000,000	50,000,000	
e		Gravel re-surfacing	1 time / 5 yr	200,000,000	40,000,000	
dic	Repair /	Repaining of steel girders	1 time / 50 yr	700,000,000	14,000,000	
Periodic Maintenance	Rehabili-	Bridge member repair	1 time / 50 yr	100,000,000	2,000,000	
Pe lair	tation	Gabion / riprap repair	1 time / 20 yr	100,000,000	5,000,000	
Σ		Ditch repair	1 time / 20 yr	40,000,000	2,000,000	
		Guide post repair	1 time / 20 yr	20,000,000	1,000,000	
		Total			179,000,000	

Table 2.5-1Maintenance Works and Annual Cost

The annual cost required for the routine and periodic maintenance for the 15 project bridges are some 0.7 % of the 2007 total road and bridge maintenance budget of Nusa Tenggara Barat Provincial Government. No financial budgeting problem is expected.

## 2.6 OTHER RELEVANT ISSUES

To implement the Project efficiently, the following matters should be considered:

- The responsible implementation agency, Directorate General of Highways (DGH) of the Ministry of Public Works, is desired to maintain a project management office in the Province of Nusa Tenggara Barat for the management and coordination for the project
- The responsibilities of each party should be executed timely. Especially, land acquisition and relocation/removal of obstructions should be executed by the Regencies after the signing of Exchange of Note but no later than the commencement of the work. Ideally, the Regencies designate a representative from each Regency office to be assigned to coordinate with the consultant and contractor and other Project related parties.
- The construction site is located in the remote area where medical services rarely available. Therefore, it is necessary to secure measures to prevent accidents and disease and to establish an emergency medical system for the cases of accidents occur.
- The Environmental Management Measures (UKL) and Environmental Monitoring Measures (UPL) approved by the BAPEDALDA should be observed in the implementation of the project. Also the measures proposed in this study to mitigate the provable negative environmental impacts should be taken. The above environmental management measures should be managed and reported to the concerned agencies.

## CHAPTER 3 PROJECT EVALUATION AND RECOMMENDATIONS

## **3.1 PROJECT EFFECTS**

## (1) Beneficial Population

The direct beneficiaries of the project are the residents in the southern Sumbawa Island with a population of approximately 120,000 people, whereas the indirect beneficiaries are the people of Sumbawa Island (Approximately 1,200,000).

## (2) Direct Effects

- Presently, common vehicles cannot pass through the Sumbawa South Ring Road due to lack of bridges and bad road condition. It will be passable for common vehicles all throughout the years after the project.
- Presently it takes about 4 hours 30 minutes to drive from Tongoloka to Lunyuk (about 60 km) by a 4-wheel vehicle, it will take only 3 hours after the project.

## (3) Indirect Effects

- People in the southern Sumbawa can travel easily and transport goods effectively with the improvement of the bridges and road. This will activate socio-economic activities in the area that will raise the living standards of the people. In other word, the project will contribute to the socio-economic development of the areas.
- The improvement of the living standards of the transmigrated areas will result the increase of the transmigration and development of the areas. As the result, the project will contribute to the success of the transmigration programs.
- New markets and employment opportunities will be created by the connection of the east and west areas in the southern Sumbawa with the road.
- Service and tourism industries will be enhanced by visit of travelers and tourists.
- When a road is closed by a disaster in the northern area, the traffic can go to the destination by detouring to the south ring road (the project road).

### 3.2 **RECOMMENDATIONS**

Since the project will make significant effects as mentioned above and contribute to the improvement of the residents' living condition, the project will be worth being implemented under the Japan's grant aid.

In order to realize, enlarge and sustain the effects of the Project, responsibilities to be

undertaken by the Indonesian side are as follows:

- To adequately carry out maintenance and repair works to keep the road and bridges in good condition and in order to maximize their serviceable lives.
- To maximize and realize earlier the effect of this project (Phase 2) and Phase 1, it is important to complete the opening of the south ring road by implementing Phase 3. To implement the Phase 3 (construction of 11 bridges in Phase 3 section), improvement of road and construction of small size bridges and culverts of Phase 3 section by Indonesian side as scheduled is necessary.

## **APPENDICIES**

- 1. Member List of the Study Team
- 2. Study Schedule
- 3. List of Parties Concerned in the Republic of Indonesia
- 4. Minutes of Discussions
- 5. References
- 6. Recommendation on UKL&UPL issued by BEPEDALDA
- 7. Minutes of Public Hearing and Stakeholder Meetings
- 8. Traffic Survey Data and Traffic Forecast Data
- 9. Temporary Detour Plan

## 1. Member List of Study Team

## Field Survey Team

Name	Job Title	Occupation
Mr. Kiichi TOMIYA	Leader	Deputy Resident Representative, JICA Indonesia Office
Mr. Hiroshi MURAYAMA	Coordinator	Project Study Division I, Grant Aid and Loan Support Dept., JICA
Mr. Soemu OSHITA	Chief Consultant (Bridge Planner / Management and Maintenance)	Katahira & Engineers International
Mr. Isao IGARASHI	Bridge Designer I	Katahira & Engineers International
Mr. Keiichi MURAKAMI	Bridge Designer II	Katahira & Engineers International
Mr. Takao FUKUMA	Environmental & Social Consideration Analyst	Katahira & Engineers International
Mr. Kunio FUJIWARA	Natural Condition Surveyor (Geology)	Katahira & Engineers International
Mr. Masashi SUZUKI	Natural Condition Surveyor (Topography/Hydrology)	Katahira & Engineers International
Mr. Kazuyuki HIRAOKA	Construction Planner / Cost Estimator	Katahira & Engineers International

## Draft Final Report Explanation Team

Name	Job Title	Occupation
Mr. Kazumasa SANUI	Leader	Assistant Director, Transportation and ICT Division II, Economic Infrastructure Department, JICA
Mr. Soemu OSHITA	Chief Consultant (Bridge Planner / Management and Maintenance)	Katahira & Engineers International
Mr. Isao IGARASHI	Bridge Designer I	Katahira & Engineers International

## 2. Study Schedule

## Field Survey Schedule

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2	15-May	Thu		urtesy call to JICA, EOJ, MPW, MMT arta → Mataram Maluk						'  /	MTM, MLK		
3	16-May	Fri	Mataram →	Sumbawa	a Bes	ar				Site	Survey		S.B., MLK
4	17-May	Sat	Site survey,	& Sumba	iwa E	Besar → Malu	k			Site	Survey		MLK
5	18-May	Sun	Site survey,	& Maluk	: → N	Aataram		Site survey		Site	Survey		MTM, MLK
6	19-May	Mon	Courtesy ca	ll to BAP	PED	A, NTB Gov.		Site survey		Site	Survey		MTM, MLK
7	20-May	Tue	Mataram $\rightarrow$					Site survey	/	Site	Survey		JKT, MLK
			Discuss wit	h MPW					/	Site	Survey		
8	21-May	Wed	Discuss witl	h MPW, I	Bapp	enas, & Sign (	of M/D	Site survey	TKY →DPS	Site	Survey		JKT, MLK
9	22-May	Thu	Report to E0	DJ, JICA Jakarta	·	Data Correct.		Site survey	$DPS \rightarrow MTM \rightarrow MLK$	Site	Survey	1/	JKT, MLK
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23	5-Jun	Thu				M	eeting with N	ТВ	Site Su	vey		NTB	MLK
24	6-Jun	Fri				NTB	MTM-MLK	NTB	Site Su	vey		NTB	MLK
25	7-Jun	Sat				Reporting	Site survey	Reporting	Site Su	vey		Reporting	MLK
26	8-Jun	Sun				MTM-JKT	Site survey	MTM-JKT	Site Sur	vey		MTM-JKT	JKT, MLK
27	9-Jun	Mon				MPW	MLK-MTM	MPW	Site Su	vey		MPW	JKT, MLK
28	10-Jun	Tue	1			MPW	MTM-JKT	MPW	Site Su	vey		MPW	JKT, MLK
29	11-Jun	Wed				Meeting with JICA, Jakarta		rt to EOJ,	Site Su	vey		Jakarta →	MLK
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TKO:Tokyo, JKT:Jakarta, DPS:Denpasar, MTM:Mataram, MLK:Maluk, S.B.:Sumbawa Besar EOJ:Embassy of Japan, MPW:Ministry of Public Works, MMT:Ministry of Manpower and Transmigration

## Draft Final Report Explanation Schedule

		-	Leader	ChiefConsultant / Bridge Planner / Management & Maintenance	Bridge Design Engineer I			
	Date	e	Kazumasa SANUI	Soemu OSHITA	Isao IGARASHI			
1	19-Oct	Sun	Tokyo → Jakarta					
2	20-Oct	Mon	Courtesy call to JICA	, EOJ, DGH				
3	21-Oct	Tue	Meeting with DGH (E	xplanation of B/D, D	iscuss on M/D)			
4	22-Oct	Wed	Interim report to JICA	, Meeting with JICA	Expert			
5	23-Oct	Thu	Meeting with DGH (discussiong on M/D JKT→MTM draft)					
6	24-Oct	Fri	Preparation of Meeting Material Meeting with NTB MTM→JKT					
7	25-Oct	Sat	Preparation of Meetin	g Material, Meeting	within study team			
8	26-Oct	Sun	Preparation of Meetin	g Material, Meeting	within study team			
9	27-Oct	Mon	Meeting with DGH Technical A ffairs, Finalize M/D draft					
10	28-Oct	Tue	Report to EOJ, JICA JKT $\rightarrow$					
11	29-Oct	Wed	→Tko					
·····			karta, MTM:Mataram		н на			
	· · · · · · · · · · · · · · · · · · ·		an, DGH: Directorate C					
	NTB: Nusa '	Fenggar	a Barat Provincial Gove	ernment				

3.	List of Parties	Concerned in	the Republic	of Indonesia

Directorate General of Highway, Ministr	v of Public Works
Mr. Hermanto Dardak	Director General
Mr. Mohamad Irian	Secretary General
Mr. Taufik Widjojono	Director, Directorate of Planning
Mr. Max Antameng	Chief of sub-Directorate of General Planning
Mr. Fajar Eko Antono, ST	Sub-Directorate of General Planning
Mr. Rindy Farrah	
	Sub-Directorate of General Planning
Mr. Danis Sumadilaga	Director, Directorate of Technical Affairs
Mr. Herry Basa	Head of Sub-Directorate of Bridge
Mr. Monan Reynold	Sub-Directorate of Bridge
Ibu Jany Agustin	Sub-Directorate of Environment
Mr. Subagyo	Directorate of Eastern Road and Bridges
Mr. Nobuyuki Tsuneoka	JICA Expert on Road Policy
Ministry of Manpower and Transmigrati	
Mr. Djoko Sidik Pramono	Directorate of Community Development and
	Transmigration Area
Mr. Yultido Ichwan	Chief of sub-Directorate of PSPK
Mr. Eddy Supriadi	Chief of Transmigration Agency-NTB
Mr. John Tolla	Chief of Area Development (PK) Division
Nusa Tenggara Barat Provincial Governi	ment
Mr. Zainul Majdi	Governor
Mr. H. L. Srinata	Governor
Mr. Chaerul Taher	Directorate of Public Works
Mr. Djajadi Sofyan	Chief of Public Works
Mr. Made Dresta	Public Works
Mr. Susakit Alius	Chief of Center of Roads and Bridges
Mr. Azhar	Chief of Road Infrastructure Division- Regional
	Settlements and Infrastructure
Mr. Daramawan	Chief of Working Unit (Kasatker)-Development
	Division
Mr. Ibnu Salim	Chief of Community Relations
Mr. Sukawadjia	Chief of Transportation
Nusa Tenggara Barat Regional Developm	
Mr. H. Lalu Fathurrachman	
	Representative
Mr. Moch Machfuds	Chief of Division
Mr. Azhar	Chief of Regional Settlement and Infrastructure
Mr. Otto Andamulia	Project of Road and Bridge Construction
Mr. I. Gede rai	Chief of Division
Sumbawa Regency Local Government	
Mr. Jamaluddin Malik	Mayor
Mr. Anasy Muhkar	Assistant Major
Mr. Suparma Jufry	Assistant Major
Mr. Muhammadin	Chief of Bappeda
Mr. Mokhlis	Chief of Environmental Management
Mr. M. Guntur	Chief of Devision of Public Workss
Sumbawa Barat Local Government	
Mr. Zulkifli Muhdli	Mayor
Mr. Djoko AT	Public Works
Mr. Nurmala	Sub-Directorate of Environment
Mr. Armen Ade Kristi	Sub-Directorate of Bridge
Embassy of Japan in Indonesia	
Mr. Takeshi Muronaga	Second Secretary Economic Section
JICA Indonesia Office	
Mr. Kiichi Tomiya	Deputy Resident Representativo
Mr. Kozo Nagami	Deputy Resident Representative Assistant Resident Representative
IVII. INOLO INAGAIIII	rissistant Resident Representative
Mr. Tomoyuki Yamada	Assistant Resident Representative

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#### 4. Minutes of Discussions

#### **Minutes of Discussions on Field Survey**

Minutes of Discussions on the Basic Design Study on the Project for Construction of Bridges in the Province of Nusa Tenggara Barat, Phase 2 in the Republic of Indonesia

Based on the results of the Preliminary Study, the Government of Japan decided to conduct a Basic Design Study on the Project for Construction of Bridges in the Province of Nusa Tenggara Barat, Phase 2 in the Republic of Indonesia (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Indonesia the Basic Design Study Team (hereinafter referred to as "the Team"), which is headed by Mr. Kiichi Tomiya, Deputy Resident Representative, JICA Indonesia Office, and is scheduled to stay in the country from 14th May to 4th July, 2008.

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

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

Jakarta, 23rd May, 2008

Mr. Kiichi Tomiya Leader Basic Design Study Team Japan International Cooperation Agency

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Dr. Hermanto Dardak Director General of Highways Ministry of Public Works Republic of Indonesia

#### ATTACHMENT

#### 1. Objective

The objective of the Project is to construct bridges from the end point of the Phase I project (Tongoloka River) to Lunyuk section in Sumbawa Island in the West Nusa Tenggara Province (NTB).

#### 2. Project Site

The site of the Project is shown in Annex-1.

#### 3. Responsible and Implementing Organizations

- (1) The Responsible Ministry is the Ministry of Public Works (MPW).
- (2) The Implementing Agency is the Directorate General of Highways (DGH) and responsible for the facilitation with the Indonesian organizations concerned.
- (3) The organization chart of Implementing Agency is shown in Annex-2.

#### 4. Items Requested by the Government of Indonesia

- 4.1 After discussions with the Team, the Indonesian side finally requested <u>21</u> candidate bridges described in Annex 3. Those candidate bridges will be covered in further study. JICA will assess the appropriateness of the request and will report the findings to the Government of Japan.
- 4.2 JICA will examine carefully and may reduce the number of bridges by the criteria below during the basic design study and inform the result not later than October 2008.
- (1) Bridges less than 15m length are in principle excluded from the Grant Aid component.
- (2) Bridges included in the construction plan by Indonesian budget are excluded from the Grant Aid component.
- (3) Road access to the bridge construction site is secured in a timely manner by Indonesian side to propose the consistent construction plan for the Grant Aid project.

#### 5. Japan's Grant Aid Scheme

The Indonesian side has shown a full understanding of the Japan's Grant Aid scheme and the necessary measures to be taken by the Indonesian side as explained by the Preliminary Study Team and described in the Annex-4, 5 and 6 of the Minutes of Discussions signed by both sides on 19<sup>th</sup> December, 2007.

#### 6. Schedule of the Study

- 6.1 JICA will prepare the draft report and dispatch a mission to Indonesia in order to explain its contents around the middle of October 2008.
- 6.2 When the contents of the report are accepted in principle by the Government of Indonesia, JICA will complete the final report and send it to the Government of Indonesia by December 2008.

#### 7. Environmental and Social Considerations

7.1 The Indonesian side shall complete the necessary procedures concerning the Environmental and Social Considerations including the acquisition of land and involuntary relocations in accordance with the laws and regulations of the Indonesia.

7.2 The Indonesian side shall obtain basic agreement for the Project and the relocation from the Project Affected Persons (PAPs) by means of stakeholder meetings.

7.3 The Indonesian side shall obtain Environmental Compliance Certificate and report the result to the Japanese side before the dispatch of the next mission scheduled in October 2008.

7.4 The Indonesian side shall arrange the budget allocation for resettlement and compensation for PAPs as the condition for the commencement of construction.

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#### 8. Other Relevant Issues

- 8.1 The Indonesian side shall provide necessary numbers of counterpart personnel to the Team during the period of their studies in Indonesia
- 8.2 The Indonesian side shall submit answers in English to the Questionnaire with relevant documents, which the Team handed to the Indonesian side, by <u>the end of May</u>, 2007.

8.3 The Indonesian side confirmed that the following undertakings should be taken by Indonesian expenses.

- (1) Relocation and/or removal of existing utilities (power lines, water lines, etc.) from the Project site, if necessary.
- (2) Securing and clearance of the temporary work yard,
- (3) Necessary arrangement for the tax exemption of imported equipment and materials.
- (4) Budget allocation for the commissions for the banking services based upon banking arrangement (B/A).

8.4 The Indonesian side reported the progress of construction work implemented by the Indonesian side and the road construction of 17km length from Tongoloka to Tatar section has already started. The team requested to continue the construction of roads, small bridges (less than 15m length) and culverts in the remaining 43km section from Tatar to Lunyuk enough to secure the access to the bridge construction site for the smooth implementation of the Grant Aid project. The Indonesian side agreed to this point and promised to complete the work before the commencement of the construction work.

8.5 The Team requested the Indonesian side to provide detailed information regarding the construction and maintenance schedule as attached before 10th June 2008. The Team will monitor the progress and will decide the implementation plan of the Grant Aid Project accordingly.

- Annex-1 Project Site Map
- Annex-2 Organization Chart
- Annex-3 Requested Items

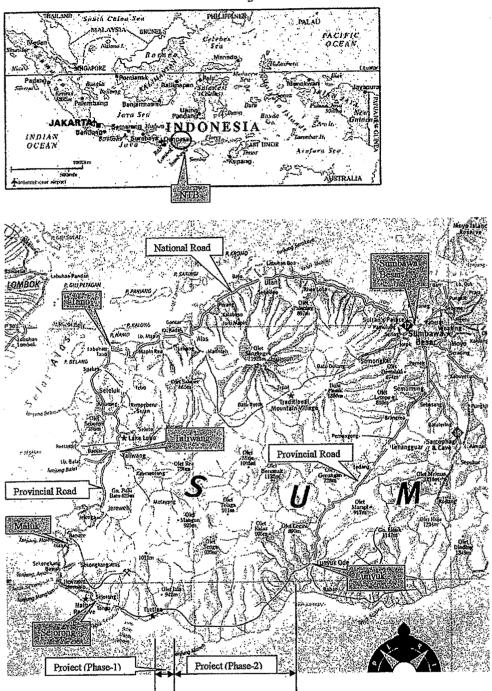
Annex-4 Japan's Grant Aid Scheme

- Annex-5 Major Undertakings to be taken by Each Government
- Annex-6 Flow Chart of Japan's Grant Aid Procedures

Annex-7 Schedule of Road Construction by Central and Local Budget

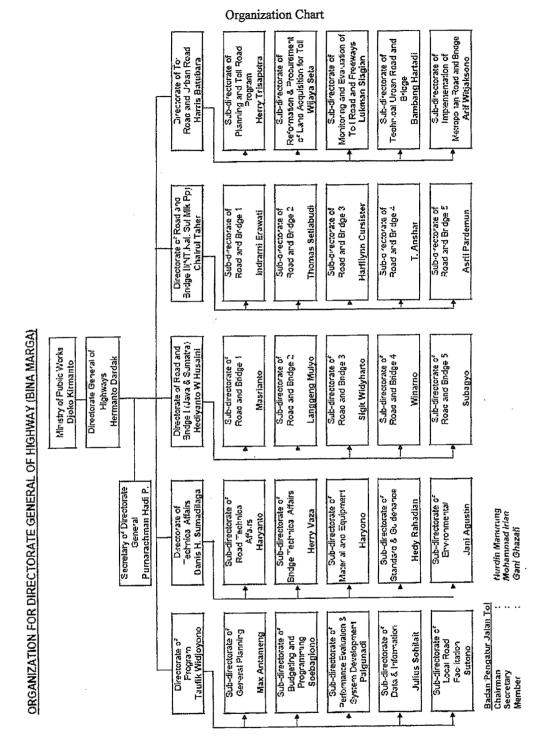
The Project Site

Annex-1



Location of Project Site

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Bride	Bridge List in the Request Form	st Form	Result of Reconnaissance by JICA Preliminary Study Team	se by JICA Pre-	liminary Stuc	Iv Team		
- -		Estimated		Recommendation	ndation	Fund	Covered	
Bnage No.	Bridge Name	Length of Bridge (m)	Existing Structure	Structure	Bridge	Expected *	in BD Study	Remarks
┭	• • • • •				I Tranga (m)			
	Air Keruh [	8	30 Gabion	Bridge	2	<u></u>	0	
BR-2	Air Keruh II	8		Bridge	30	ь	0	
BR-3	Negenel	25	25 Gabion (Damaged)	Bridge	30	Ċ	•	
BR-4	Negene II		Gabion	Box Culvert	1	I		
BR-5	Tatar	100		1	0	I		Alignment Improvement of Cut Stretch
BR-6	Tatar II		2	(missing)	0	•		Small water stream exists
1	Tatar III		Rock Placing	Box Culvert	1	I		
	Tatar Loka	60	Gabion	Bridge	50	υ	0	
BR-9	Tatar Bodo	25	Gabion	Bridge	25	Ġ	0	
BR-10	Labihe	20	20 Gabion	Box Culvert		Ċ	0	
BR-11	Labihe I	20	20 Gabion (Damaged)	Bridge	20	ტ	o	
BR-12	Labihe III	20	20 Gabion	Bridge	25	ი	0	
BR-13	Mone I	20	-10	(Missing)	0	ı	*	Water stream exists
BR-14	Mone II		1	(Missing)	0	ŝ		(Gabion (Damaged)
BR-15	Mone III		1	(Missing)	0	•		Box Culvert completed
	Telonang	30	Concrete Cause Way	Bridge	30	¢	0	
	Telonang 1		Wooden Bridge (Damaged) Bridge	Bridge	10	I		Remaining of Both Abutments
BR-18	Telonang III		Wooden Bridge (Damaged) Bridge	Bridge	10	I		Decay of Wooden Parts
BR-19	Sepang	40	40 Concrete Cause Way	Bridge	35	ტ	٥	
BR-20	Bontong	20	naged)	Bridge	20	ъ	0	Collapse of Old Bridge
BR-21	Bon Jati		Wooden Bridge (Damaged) Bridge	Bridge	10	I		Collapse of Old Bridge
BR-22	Blengkon	20		(missing)	0	•	0	Water stream exists
BR-23	Tebil	20		Bridge	20	G	0	Crossing at Shallow Water Stream
BR-24	Momil			Box Culvert		Ι		Box Culvert exists
BR-25	Momil II	30	30 RC Bridge (New)		-			Bridge Construction Completed
BR-26	Krikit		Under Construction	-	-	Ι		Small water stream exists
	Lamar	40	40 Concrete Cause Way	Bridge	40	Ċ	٥	
BR-28	Aikmad			Box Culvert	'	I		Box Culvert completed
BR-29	Liang Bagik	20	O Concrete Cause Way	Bridge	20	ტ	٥	
BR-30	Petain I		Concrete Cause Way	Bridge	20	Ġ	0	
BR-31	Petain II		Concrete Cause Way	Bridge	15	. I		Box Culvert completed
BR-32	Petain III	20	- 10	(Missing)	0	,	•	Water stream exists
BR-33	Molong			(Missing)	0	ı	0	Water stream exists
BR-34	Emang	Э	O Concrete Cause Way	Bridge	30	Ģ	0	
BR-35 Kalbir	Kalbir	30	20 Concrete Cause Way	Bridge	20	Ċ	٥	
Nos. of	Nos. of Bridge : 35			Nos. of Bridge : 20	e ; 20		o Places a	<ul> <li>Places as adopted as candidate in the Preliminary Study (17)</li> </ul>
Nos. of	Nos. of Bridge (≥ 20m) : 21			Nos. of Bridge (≥ 20m) : 16 (+1 culvert	e ( <u>≥</u> 20m) : 1	6 (+1 culvert	•	Added to the coverage in basic design study as candidate (4)
					Y	!`9,, *	Requested to	"G"; Requested to be covered by Grant Aid.
					>	L'als	o he maintai	"1". To be maintained by Indonesian Side

## **Requested Items**

Annex-3

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#### Japan's Grant Aid Scheme for General Project

The Grant Aid scheme provides a recipient country with non-reimbursable funds to procure 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	(The Notes exchanged between the Governments of Japan
Implementation	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 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 Japanese consulting firms.

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 (hereinafter referred to as "the Study"), conducted by JICA on a requested project (hereinafter 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 Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation.
- 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.

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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 through 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.

#### 2) Selection of Consultants

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

The consulting firms used for the Study 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.

## 3. Japan's Grant Aid Scheme

1) 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.

2) "The period of the Grant Aid" means the one fiscal year which the Cabinet approves the project for. Within the fiscal year, all procedure such as exchanging of the Notes, concluding contracts with consulting firms and contractors 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 products or services of a third country.

However, the prime contractors, namely consulting, contracting 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 the 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 of 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:

- a) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the Project,
- b) To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites,

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c) To secure buildings prior to the procurement in case the installation of the equipment,

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- d) To ensure all the expense and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid,
- e) 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,
- f) To accord Japanese nationals, whose services may be required in connection with 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.

## 6) "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.

7) "Re-export"

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

## 8) Banking Arrangement (B/A)

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

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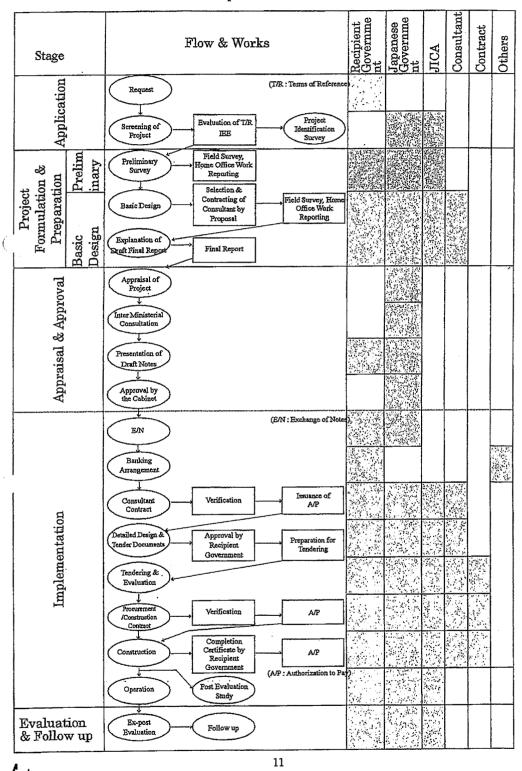
No.	Items	To be covered by Grant Aid	To be covered by Recipient Party
1	To secure land		٠
2	To clear, level and reclaim the site when needed		۲
3	To construct gates and fences in and around the site	(•)	(•)
4	To construct roads		
	1) Within the site	٠	
	2) Outside the site when needed		٠
5	To bear the following commission to the Japanese bank for the banking services based upon the B/A		
	1) Advising commission of A/P		9
	2) Payment commission		
6	To ensure prompt unloading and customs clearance at port of disembarkation in recipient country		
	1) Marine (Air) transportation of the products from Japan to the recipient country	8	
	2) Tax exemption and custom clearance of the products at the port of disembarkation		¢
	3) Internal transportation from the port of disembarkation to the project site	ø	
7	To accord Japanese nationals, whose services may be required in connection with the supply of the products and the services under the verified contract, such facilities as may be necessary for their entry into Indonesia and stay therein for the performance of their works		6
8	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in Indonesia with respect to the supply of the products and services under the verified contracts		•
9	To maintain and use properly and effectively the facilities constructed and equipment provided under the Japan's Grant		
10	To bear all the expenses, other than those to be borne by the Japan's Grant, necessary for construction of the facilities		٠

## Major Undertakings to be taken by Each Government

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

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#### Flow Chart of Japan's Grant Aid Procedures



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Schedule of Road Construction by Central and Local Government Budget

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## MINUTES OF DISCUSSIONS ON THE BASIC DESIGN STUDY ON THE PROJECT FOR CONSTRUCTION OF BRIDGES IN THE PROVINCE OF NUSA TENGGARA BARAT, PHASE 2 IN THE REPUBLIC OF INDONESIA (EXPLANATION ON DRAFT REPORT)

In May 2008, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Basic Design Study Team on "The Project for Construction of Bridges in the Province of Nusa Tenggara Barat, Phase-2" (hereinafter referred to as "the Project") to the Republic of Indonesia, and through discussions with Indonesian side, field survey, and technical examination of the results in Japan, JICA prepared the draft report of the study.

In order to explain and to consult with the officials concerned of the Government of Indonesia on the components of the draft report, JICA sent to Indonesia the Basic Design Explanation Team (hereinafter referred to as "the Team"), which was headed by Kazumasa Sanui, Assistant Director of Economic Infrastructure Department, JICA, from October 19 to 28, 2008.

As a result of discussions, both sides confirmed the main items described in the attached sheets.

Jakarta, TNOVEMber, 2008

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Mr. Kazumasa Sanui Leader Basic Design Explanation Team Japan International Cooperation Agency Japan

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Dr. Hermanto Dardak Director General of Highways Ministry of Public Works Republic of Indonesia

#### ATTACHMENT

#### 1. Components of the Draft Report

- 1.1. Both Indonesian side and Japanese side agreed and accepted in principle the contents of the draft report of the Basic Design Study explained by the Team. As the result of the Study, 15 bridges shown in Annex-1 are covered for the Project.
- 1.2. While the width of traffic lane of the Provincial Road is 6.00 meter according to Indonesian Standards, both sides agreed that 4.50 meter lane is applicable only for the bridges in mountainous section (BR-1, 2, 3, 8, 13, 16, 19, 20 and 22). To accommodate the possibilities of widening, the Japanese side is to construct foundations corresponding to 6.00m wide lane in case of necessity. Indonesian side shall construct the rest of widening structures at its own expense.

#### 2. Japan's Grant Aid Scheme

Indonesian side understood the Japan's Grant Aid scheme and the necessary measures to be taken by the Government of Indonesia as described in Minutes of Discussions signed on May 23, 2008.

3. Schedule of the Study

JICA will complete the Final Report in accordance with the confirmed items and send it to the Government of Indonesia by December, 2008.

- 4. Other Relevant Issues
- 4.1. The Project Cost Estimation, as attached in Annex-2, is confidential and should never be duplicated or disclosed to any outside parties before the signing of all the contracts for the Project.
- 4.2. Directorate General of Highways (hereinafter referred to as "DGH"), Ministry of Public Works (hereinafter referred to as "MPW") shall obtain Environmental Compliance Certificate for implementation of the Project and submit to JICA Indonesia Office by the end of November, 2008
- 4.3. The Sumbawa Regency Government shall hold stakeholder meetings in connection with land acquisition at each construction site of BR-29(Liang Bagik), BR-32(Petain III), BR-33(Molong), BR-34(Emang) and BR-35(Kalbir) and submit to JICA Indonesia Office by the end of November the result of the meetings including the agreement of stakeholders on land acquisition for both of permanent use of the bridges and temporary use during the construction. MPW shall monitor the progress of the procedures as the Responsible Ministry. Indonesian side shall complete the land acquisition and involuntary relocations before the commencement of the construction work.

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4.4. The following undertakings should be taken by Indonesian side at its own expenses.

- (1) Indonesian side shall complete the construction of the road including the structures as shown in Annex-3 according to the schedule as shown in Annex-4.
- (2) Indonesian side shall bear the banking commissions as a condition for the Japan's Grant Aid to be implemented. MPW and Ministry of Finance should secure the sufficient budget to cover the following cost.
  - 1) The commissions for the banking services based upon Banking Arrangement (B/A)
  - 2) The advising commission of the Authorization to Pay (A/P).
- 4.5. Indonesian side shall secure enough budget and personnel necessary for maintenance of the bridges constructed by the Project.

Annex-1: Covered Bridges for the Project Annex-2: Project Cost to be borne by Japan's Grant Aid Annex-3: List of Structures to be constructed by Indonesian Side Annex-4: Schedule of Construction by Indonesian Side

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END

## **Covered Bridges for the Project**

Bridge No.	Bridge Name	Existing Structure	Proposed Bridge Length (m)	Remarks
BR-1	Air Keruh I	Gabion	20	
BR-2	Air Keruh II	Gabion	20	
BR-3	Negen I	Gabion (Damaged)	35	
BR-8	Tatar Loka	Gabion	55	
BR-13	Mone I	-	20	Water stream exists
BR-16	Telonang I	Concrete Cause Way	50	
BR-19	Sepang	Concrete Cause Way	40	
BR-20	Bontong	Wooden Bridge (Damaged)	20	Collapse of Old Bridge
BR-22	Blengkon	-	20	Water stream exists
BR-27	Lamar	Concrete Cause Way	55	
B <b>R-2</b> 9	Liang Bagik	Concrete Cause Way	20	
BR-32	Petain III	-	20	Water stream exists
BR-33	Molong	-	20	Water stream exists
8R-34	Emang	Concrete Cause Way	45	
BR-35	Kalbir	Concrete Cause Way	25	
No. of Bridg	e:15			•

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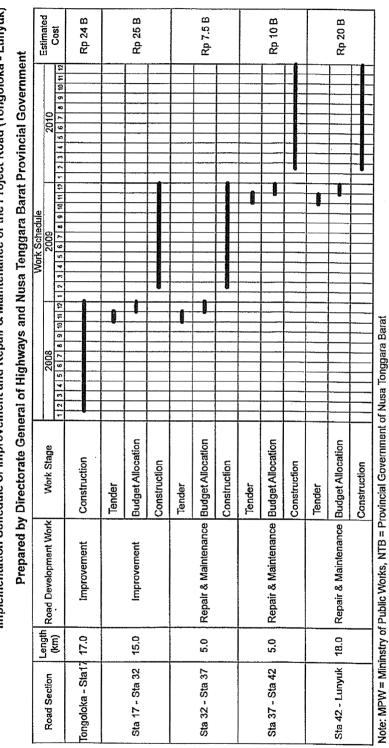
# List of Structures to be constructed by Indonesian Side

No.	Bridge	Bridge Name	Bridge	Structure	Year 2008	Year 2009	Voor 2010
	No.	Bridge Hame	Length (m)	Туре	Teal 2000	16al 2009	Year 2010
1	BR-4	Negene II	10.0	Box Culvert			0
2	BR-5	Tatar I		Pipe Cuvert			
3	BR-6	Tatar II		Pipe Cuvert			
4	BR-7	Tatar III	10.0	Box Culvert			0
5	BR-9	Tatar Bodo	12.0	Bridge			٥
6	BR-10	Labihe I	15.0	Bridge			٥
7	BR-11	Labihe II	10.0	Bridge			0
8	BR-12	Labihe III	10.0	Bridge			o
9	BR-14	Mone II	10.0	Bridge			o
10	BR-15	Mone III	10.0	Brîdge			0
11	BR-17	Telonang II	8.4	Bridge		o	
12	BR-18	Telonang III	7.0	Bridge		0	
13	BR-21	Bon Jati	8.6	Bridge		o	
14	BR-23	Tebil	15.0	Bridge		o	
15	BR-24	Momil I	10.0	Box Culvert		o	
16	BR-25	Momil II		Pipe Cuvert			
17	BR-26	Krikit		Pipe Cuvert			
18	BR-28	Aikmad	15.0	Box Culvert		0	
19	BR-30	Petain I	8.0	Bridge	0		
20	BR-31	Petain II	10.0	Bridge		0	

(Budget Resources Local Government - NTB)

Source: Nusa Tenggara Barat Provincial Government

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Schedule of Construction by Indonesian Side

Implementation Schedule of Improvement and Repair & Maintenance of the Project Road (Tongoloka - Lunyuk)

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## 5. References

No.	Title	Issued by	Year
1	ATLAS Indonesia Dan Dunia	Pustaka Sandro Jakarta	
2	Kechamatan Lunyuk Dalam Angka Lunyuk District in Figures	Dappeda Kabupaten Sumbawa	2006
3	Kechamatan Sekongkang Dalam Angka Sekongkang District in Figures	Dappeda Kabupaten Sumbawa	2006
4	Sekilas Tentang Penyelenggaraan Transmigrasi Di Provinsi NTB	Dinas Transmigrasi Provinsi NTB	2008
5	Indikator Ekonomi	Badan Pusat Statistik	2007
6	Indeks Harga Perdagangan Besar Indonesia	Badan Pusat Statistik	2007
7	Indeks Harga Perdagangan Besar Indonesia	Badan Pusat Statistik	2006
8	Tata Cara Perencanaan Geometrik Jalan Antar Kota	Directorat Jenderal Bana Marga	1997