

資料- 3 討議議事録 (M/D)

Minutes of Discussions
on the Preparatory Survey for the Project for
the Project for Rural Infrastructure Development in Local Areas
(Explanation on Draft Preparatory Survey Report)



With reference to the minutes of discussions signed between Ministry of Agriculture, Livestock and Irrigation, Ministry of Construction and the Japan International Cooperation Agency (hereinafter referred to as "JICA") on 21st February, 2019 and in response to the request from the Government of Republic of the Union of Myanmar (hereinafter referred to as "Myanmar") dated 16th March, 2018, JICA has conducted the additional Preparatory Survey, and the survey team (hereinafter referred to as "the Team") explained the Draft Preparatory Survey Report (hereinafter referred to as "the Draft Report") for the Project for the Rural Infrastructure Development in Local Areas (hereinafter referred to as "the Project").

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

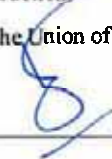
Nay Pyi Taw, 11th December, 2020



Mr. SAKAKURA Noriji
Chief Representative
Myanmar Office
Japan International Cooperation Agency
Japan

U Wunna Zaw
Director General
Department of Rural Road Development
Ministry of Construction
The Republic of the Union of Myanmar



U Khant Zaw
Director General
Department of Rural Development
Ministry of Agriculture, Livestock and Irrigation
The Republic of the Union of Myanmar

ATTACHEMENT

1. Objective of the Project

The objective of the Project is to improve agricultural productivity and living standard in rural areas by construction of roads, bridges and water supply units thereby contributing to the balanced growth between rural and urban areas.

2. Title of the Preparatory Survey

Both sides confirmed the title of the Preparatory Survey as “the Preparatory Survey for the Project for Rural Infrastructure Development in Local Areas”. The Team informed to the Myanmar side that the title of the Project will be “the Project for Basic Infrastructure Development in Rural Areas” following the advice from the Government of Japan. In response to this, the name of the Preparatory Survey Report will be “Report for the Project for Basic Infrastructure Development in Rural Areas”.

3. Project site

Both sides confirmed that the sites of the Project are in Chin State and Ayeyarwady Region, which is shown in Annex 1.

4. Responsible authority for the Project

Both sides confirmed the authorities responsible for the Project are as follows:

4-1. The Department of Rural Road Development (hereinafter referred to as “DRRD”) of the Ministry of Construction (hereinafter referred to as “MOC”) and the Department of Rural Development (hereinafter referred to as “DRD”) of the Ministry of Agriculture, Livestock and Irrigation (hereinafter referred to as “MOALI”) will be the executing agencies for the Project (hereinafter referred to as “the Executing Agencies”) and the respective organization charts are shown in Annex 2-1. The Executing Agencies shall coordinate with all the relevant authorities to ensure smooth implementation of the Project and ensure that the undertakings for the Project shall be managed by relevant authorities properly and on time. The Executing Agencies will form a Project Management Unit (hereinafter referred to as “PMU”) respectively to manage the component in charge. The Myanmar side requested the Team to clarify the each Executing Agency’s responsibility for management and monitoring of the Project, since two Executing Agencies would be involved in one project. The Team responded that they would like to propose and discuss it later.

4-2. The leading Ministry of the Myanmar side is MOC. MOC is the representative of the

Myanmar side for the Project and coordinates all the relevant authorities for smooth implementation of the Project.

- 4-3. In order for overall the Project to manage smoothly, the Project steering committee (hereinafter referred to as “the Steering Committee”) will be established as shown in Annex 2-2. The role of the Steering Committee is to receive reports from the PMUs and the secretariat of the Steering Committee on the progress of the Project and give advice as needed, and the implementation structure will be discussed further.
5. Contents of the Draft Report
After the explanation of the contents of the Draft Report by the Team, the Myanmar side agreed to its contents. JICA will finalize the Preparatory Survey Report based on the confirmed items. The report will be sent to the Myanmar side around March, 2021.
6. Cost estimate
Both sides confirmed that the cost estimate including the contingency explained by the Team is provisional and will be examined further by the Government of Japan for its approval. The contingency would cover the additional cost against natural disaster, unexpected natural conditions, etc.
7. Confidentiality of the cost estimate and technical specifications
Both sides confirmed that the cost estimate and technical specifications of the Project should never be disclosed to any third parties until all the contracts under the Project are concluded.
8. Procedures and Basic Principles of Japanese Grant
The Myanmar side agreed that the procedures and basic principles of Japanese Grant (hereinafter referred to as “the Grant”) as described in Annex 3 shall be applied to the Project. In addition, the Myanmar side agreed to take necessary measures according to the procedures.
9. Timeline for the project implementation
The Team explained to the Myanmar side that the expected timeline for the project implementation is as attached in Annex 4.
10. Expected outcomes and indicators
Both sides agreed that key indicators for expected outcomes are as follows. The

Myanmar side will be responsible for the achievement of agreed key indicators targeted in year 2026 and shall monitor the progress for Ex-Post Evaluation based on those indicators.

[Quantitative indicators]

Sector	Indicator	Project Target Area			Reference Value (2020)	Target Value (2026)
		State/Region	Village Tract	Village		
Roads and river crossing structures	Impassable days per year (days/year)	Chin State	Dolluang	Zo Zang / Zo Nuan Zang	42	0
Water supply	Amount of water supply via public facilities in the dry season (l/person/day)	Ayeyarwady Region	Sit Sali Htone		0	4.5
			Sa Bai Kone		0	4.5
			Tha Kan Wa		0	4.5

[Qualitative indicators]

(1) Roads and river crossing structures

1) Securing of access

Children in the mountain areas of Dolluang Village Tract commute to schools inside the village tract. Residents in these areas use medical care facilities inside the village tract in cases of minor ailments, but they utilize facilities in Tedim Township or Kalay Township, Sagaing Region when they have serious health issues. Through constructing and improving roads and river crossing structures, access to these schools medical facilities, markets, etc. not affected by the weather will be secured all year round. Moreover, the length of time spent on travel will be shortened. Accordingly, since residents will save on travel time and be liberated from various constraints arising from poor conditions of access, it is anticipated that they will be able to earn more cash income.

2) Improvement in access for carrying in agricultural machines

Since there is no bridge over the river at the entrance to Zo Zang Village, it is difficult to transport agricultural machines during the rainy season. Through constructing and improving roads and river crossing structures, it will become possible to transport agricultural machines regardless of the season, thereby making it possible to reduce lost yields arising from manual harvesting and boost yields.

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(2) Water supply

1) Enhancement of awareness regarding maintenance of water supply facilities

Through constructing and improving water supply facilities in Sit Sali Htone, Sa Bai Kone, and Tha Kan Wa Village Tracts in Ayeyarwady Region, residents will become aware of the improvement in water quality and the need for proper maintenance of water supply facilities.

2) Securing of health and quality labour

Through constructing and improving water supply facilities in Sit Sali Htone, Sa Bai Kone, and Tha Kan Wa Village Tracts in Ayeyarwady Region, it will be possible to supply good quality water, and thereby preserve the health of residents and contribute to better quality labour.

11. Ex-Post Evaluation

JICA will conduct ex-post evaluation after three (3) years from the project completion, in principle, with respect to five evaluation criteria (Relevance, Effectiveness, Efficiency, Impact, Sustainability). The result of the evaluation will be publicized. The Myanmar side is required to provide necessary support for the data collection.

12. Undertakings of the Project

Both sides confirmed the undertakings of the Project as described in Annex 5. With regard to exemption of customs duties, internal taxes and other fiscal levies as stipulated in (2)-5 of Annex 5, both sides confirmed that such customs duties, internal taxes and other fiscal levies, which shall be clarified in the bid documents by MOC (and MOALI) during the implementation stage of the Project.

The Myanmar side assured to take the necessary measures and coordination including allocation of the necessary budget which are preconditions of implementation of the Project. The costs that must be borne by Myanmar side are shown in Annex 6. It is further agreed that the costs are indicative, i.e. at Outline Design level. More accurate costs will be calculated at the Detailed Design stage.

The cost for preparation for the construction work and other unpredictable costs in Chin State would be borne by DRRD, and the cost for preparation for the construction work and other unpredictable costs in Ayeyarwady Region would be borne by DRD. The fee to open bank account and the payment commissions for the payment to the consultant would be borne by the leading Ministry (MOC), and the payment commissions for the payment to the contractor(s) will be discussed after the number of the bidding lot is decided. Other unpredictable common costs of the Project are

apportioned between DRD and DRRD according to the ratio of the project costs of roads and bridges, and water supply units.

Both sides also confirmed that the Annex 5 will be used as an attachment of G/A.

13. Monitoring during the implementation

The Project will be monitored by the Executing Agencies and reported to JICA by using the form of Project Monitoring Report (PMR) attached as Annex 7. The timing of submission of the PMR is described in Annex 4.

14. Project completion

Both sides confirmed that the project completes when all the facilities constructed and equipment procured by the Grant are in operation. The completion of the Project will be reported to JICA promptly by the Executing Agency, but in any event not later than six months after completion of the Project.

15. Environmental and Social Considerations

15-1 General Issues

15-1-1 Environmental Guidelines and Environmental Category

The Team explained that 'JICA Guidelines for Environmental and Social Considerations (April 2010)' (hereinafter referred to as "the Guidelines") is applicable for the Project. The Project is categorized as B because the Project does not fall in the sectors, projects that have characteristics liable to cause adverse environmental impacts, and projects located in or near sensitive area.

15-1-2 Environmental Checklist

The environmental and social considerations including major impacts and mitigation measures for the Project are summarized in the Environmental Checklist attached as Annex 8. Both sides confirmed that in case of major modification of the content of the Environmental Checklist, the Myanmar side shall submit the modified version to JICA in a timely manner.

15-2 Environmental Issues

15-2-1 Environmental Permission

Both sides confirmed that the environmental permission has been already issued by the Environmental Conservation Department, Ministry of Natural Resource and Environmental Conservation on 4th February, 2019 based on the Outline Design prepared by the previous Preparatory Survey Team as Annex 9. The Myanmar side

confirmed the environmental permission is valid for the Project, because the change from the previous Preparatory Survey is deletion of some components and nothing is newly added.

15-2-2 Environmental Management Plan and Environmental Monitoring Plan

Both sides confirmed Environmental Management Plan (EMP) and Environmental Monitoring Plan (EMoP) of the Project is as Annex 10, respectively. Both side agreed that environmental mitigation measures and monitoring shall be conducted based on the EMP and EMoP, which may be updated during the detailed design stage.

15-3 Social Issues

15-3-1 Land Acquisition

Both sides confirmed the 460m² of farm land would be aquired due to the implemenation of the Project.

Such land acquisition shall be implemented based on the (Abbreviated) Resettlement Action Plan (RAP) as Annex 11 which was prepared in line with the Guidelines.

The information of the land owners in Annex 11 needs to be updated in the implimentation stage of the Project.

15-3-1 Other specific social issues which need to be confirmed/agreed between the parties

Both sides confirmed that for projects that will result in involuntary suspension of business operations and/ or move (including temporary move), the Myanmar side confirmed to prepare an Action Plan through stakeholders meetings and/or consultations, and make it available to the public. In addition, the Myanmar side confirmed to provide the affected people with sufficient compensation and/or support in accordance with the Action Plan in a timely manner.

15-4 Environmental and Social Monitoring

15-4-1 Environmental Monitoring

Both sides agreed that the Myanmar side will submit results of environmental monitoring to JICA with PMR by using the monitoring form attached as Annex 12. The timing of submission of the monitoring form is described in Annex 4.

15-4-2 Social Monitoring

The Myanmar side and the Team agreed that DRD of MOALI and DRRD of MOC will submit results of social monitoring to JICA with PMR by using the monitoring form attached as Annex 12.

15-4-3 Information Disclosure of Monitoring Results

Both sides confirmed that the Myanmar side will disclose results of environmental and social monitoring to local stakeholders through local broadcasting program and public notice board.

The Myanmar side agreed JICA will disclose results of environmental and social monitoring submitted by the Myanmar side as the monitoring forms attached as Annex 12 on its website.

16. Other Relevant Issues

16-1. Disclosure of Information

Both sides confirmed that the Preparatory Survey Report from which project cost is excluded will be disclosed to the public after completion of the Preparatory Survey. The comprehensive report including the project cost will be disclosed to the public after all the contracts under the Project are concluded.

16-2. Maintenance Cost

The Myanmar side noted to allocate the maintenance cost for roads, bridges and water supply units as shown in the Draft Report for smooth operation after the Project is complete.

16-3. Operation of Water Supply Units

Both sides understood the importance of operation and maintenance for water supply units. The Myanmar side agreed that the Village Development Committees (VDCs) where water supply units are located are responsible for daily operation and maintenance, and the DRD regional offices are responsible for monitoring and necessary assistance to VDCs.

16-4. Travel Permission

The Myanmar side agreed to arrange a permit necessary to travel around the Project sites.

16-5. Safety Measures

The Myanmar side understood the importance of safety measure in construction. The Team explained "The Guidance for the Management of Safety for Construction Works in Japanese ODA Projects", and the Myanmar side explained that they will respect and refer this Guidance in construction management.

16-6. Procurement

The Team explained that the contractor's procurement is likely to be one lot. The Myanmar side proposed JICA to arrange the separate bidding lots: one lot for water supply and one for road and river crossing structure. These activities will be



managed by two different departments from two different ministries. According to the Myanmar budget regulation, the budget plan shall be prepared by respective departments and cross-budget allotment from different ministries is not desirable. Thus, separate tender lot managed by DRD and DRRD is more reasonable and make ease for management perspective.

The Team explained to the Myanmar side that (1) each component's expenses can be clearly separated, (2) the whereabouts of responsibility and management can be clarified, for instance, by minutes, (3) the number of lots needs to be decided in consideration of various factors such as the interests of bidders in addition to the issue of responsibility and management. The Team conveyed that they would continue to collect information and based on that, JICA will make further discussion with the Myanmar side.

17. Signature of this Minutes of Discussions

The parties acknowledge and agree that this Minutes of Discussions may be executed by electronic signature, which is considered as an original signature for all purposes and has the same force and effect as an original signature. "Electronic signature" includes faxed versions of an original signature or electronically scanned and transmitted versions (e.g., via pdf) of an original signature.

Annex 1 Project Site

Annex 2-1 Organization Charts of the Executing Agencies

Annex 2-2 Implementation Structure of the Project

Annex 3 Procedures and Basic Principles of Japanese Grant

Annex 4 Project Implementation Schedule

Annex 5 Major Undertakings to be taken by the Government of Myanmar

Annex 6 Counterpart Cost

Annex 7 Project Monitoring Report (template)

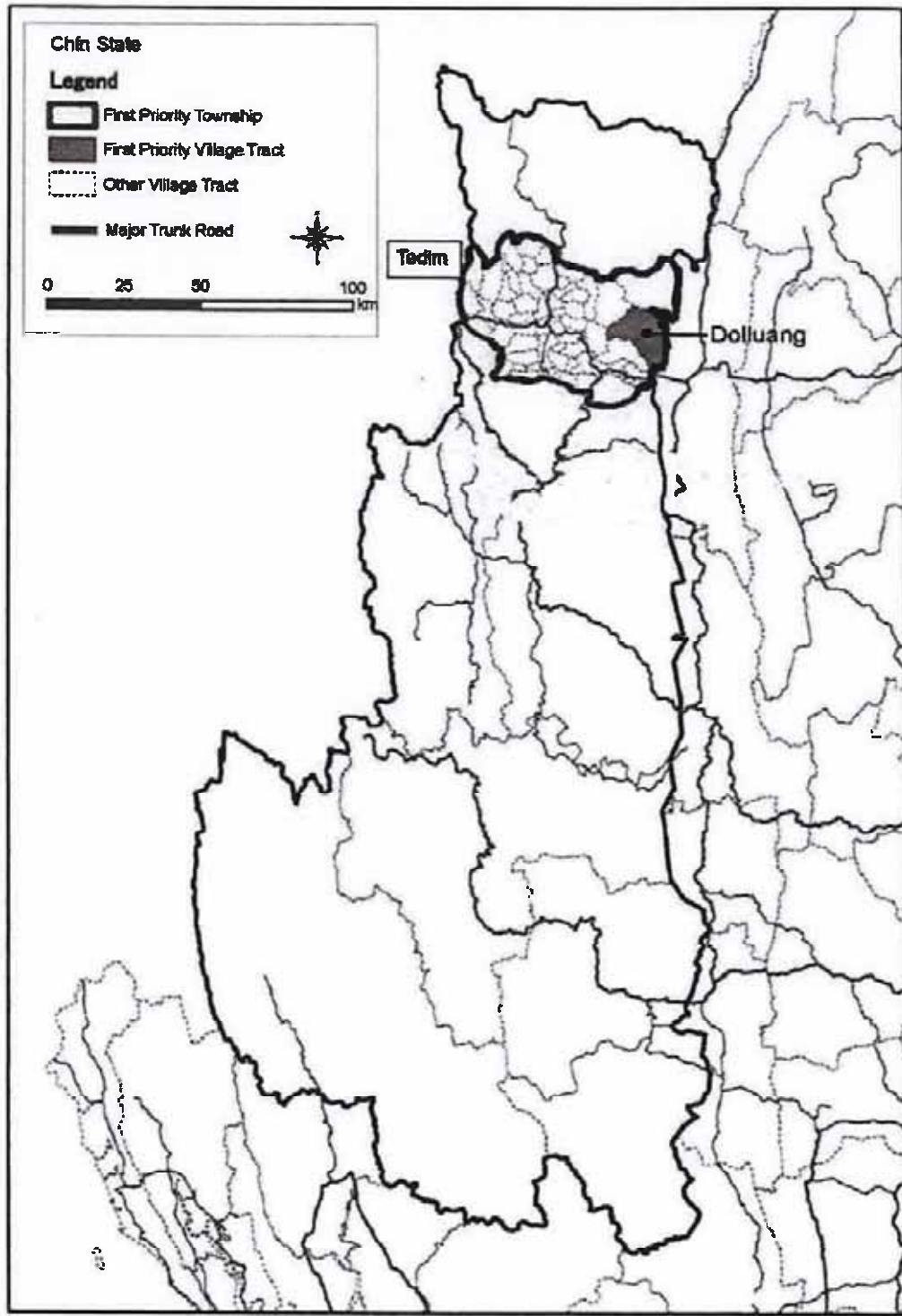
Annex 8 Environmental Check List

Annex 9 Environmental Permission

Annex 10 Environmental Management Plan/Environmental Monitoring Plan

Annex 11 (Abbreviated) Resettlement Action Plan

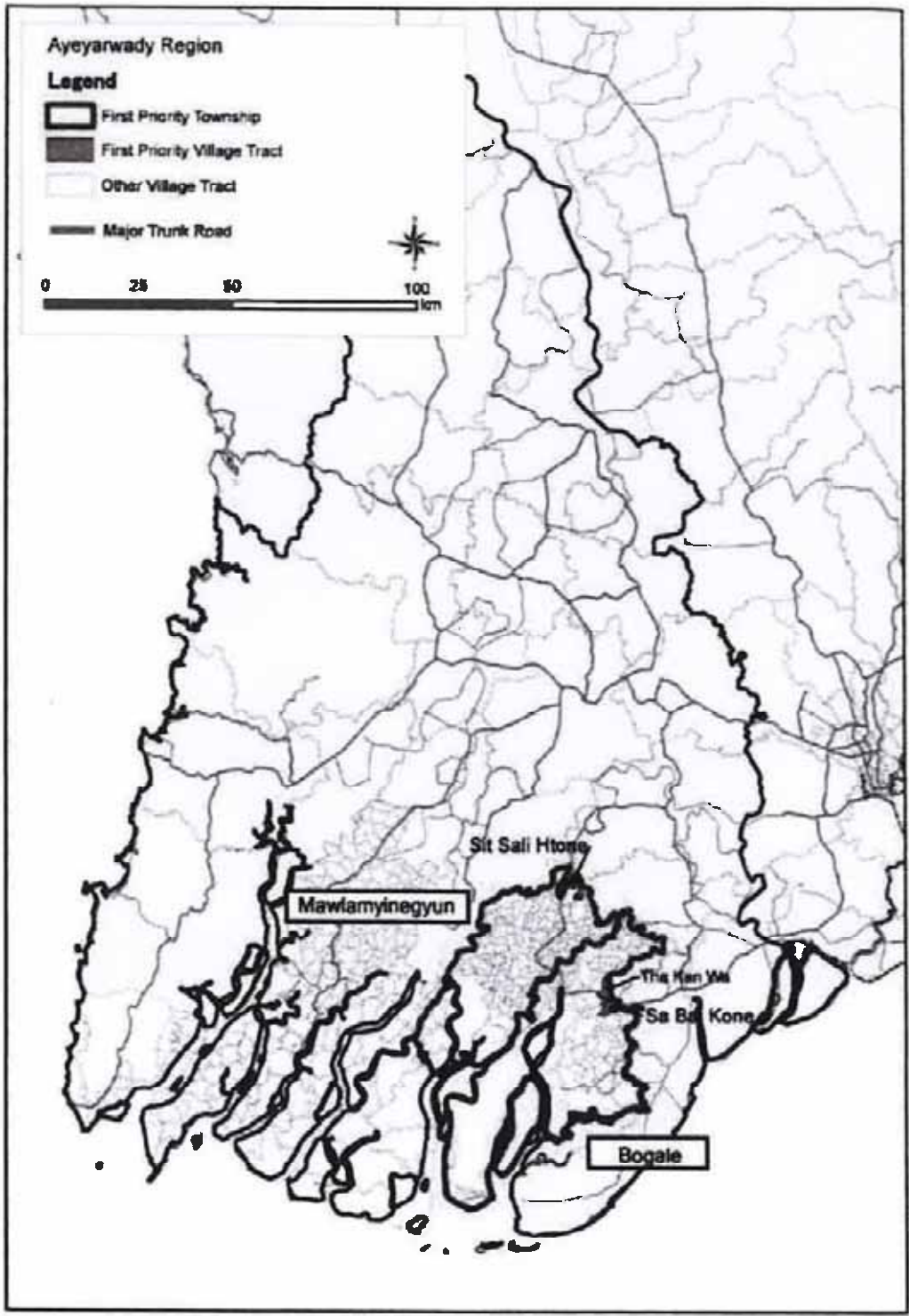
Annex 12 Environmental and Social Monitoring Form



Target Areas in Chin State

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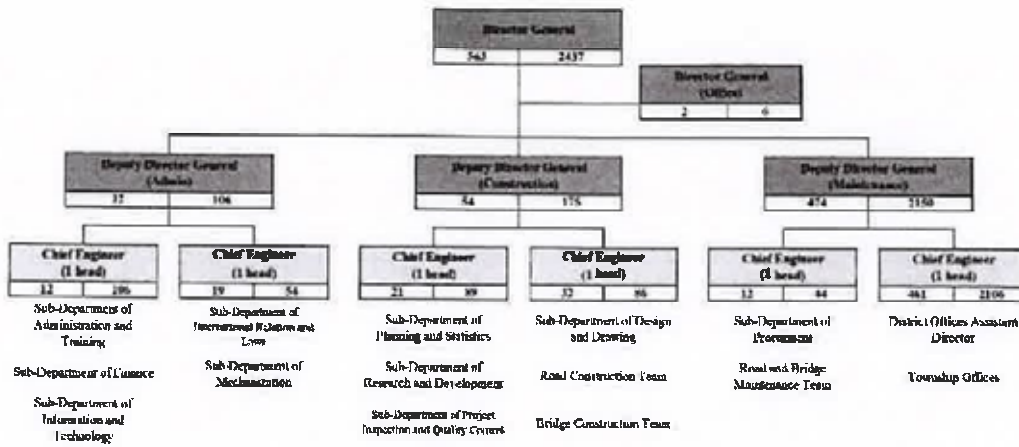
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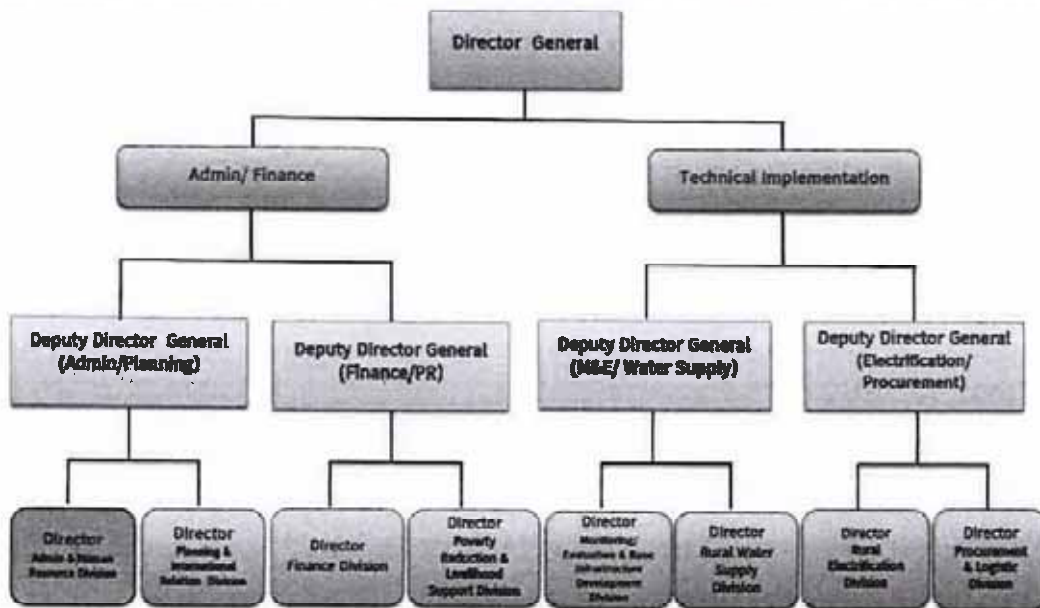
Target Areas in Ayeeyarwady Region

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Organization Chart of DRRD, MOC



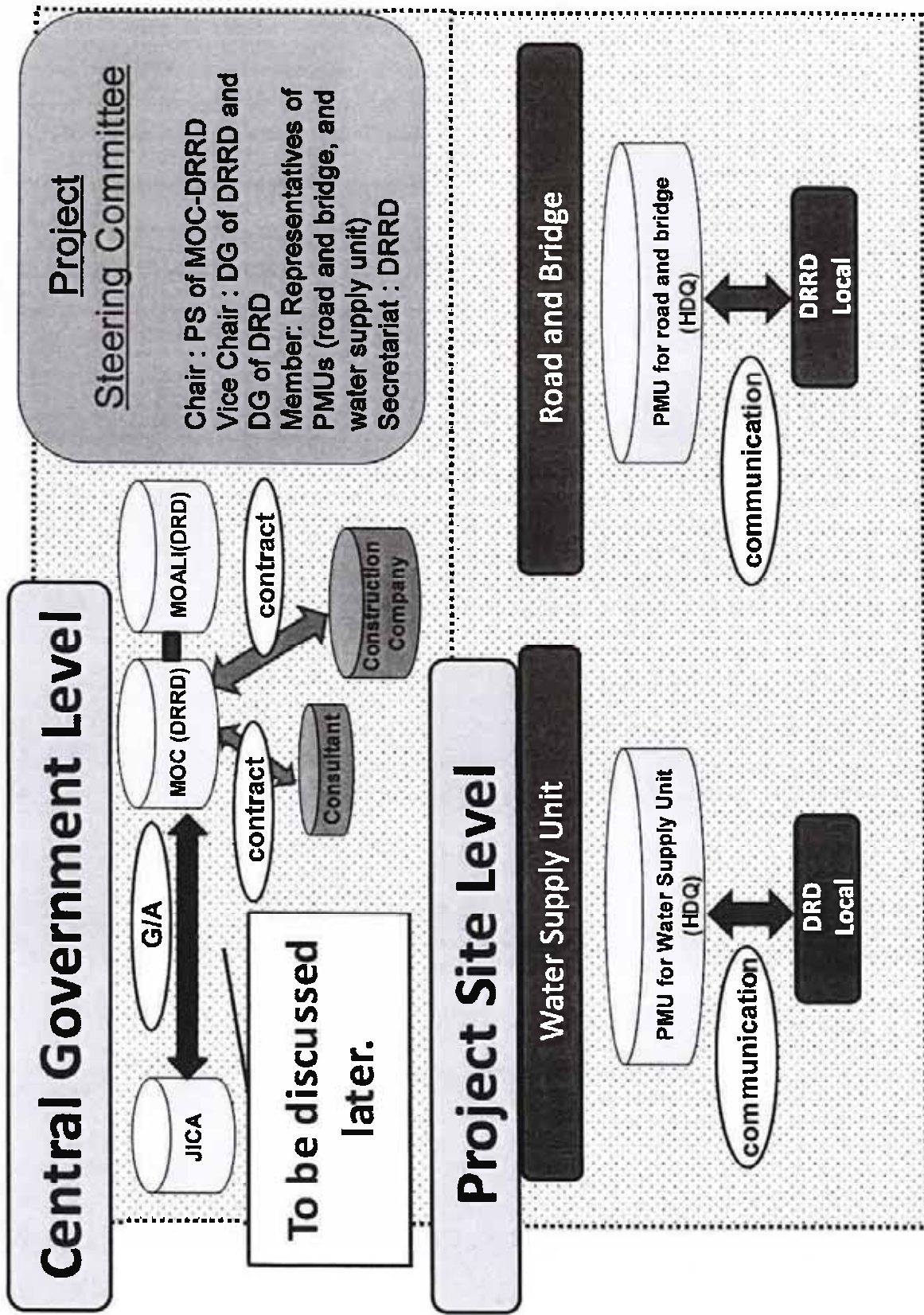
Organization Chart of DRD, MOALI

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Implementation Structure of the Project (Tentative)

Annex 2-2



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JAPANESE GRANT

The Japanese Grant is non-reimbursable fund provided to a recipient country (hereinafter referred to as "the Recipient") to purchase the products and/or services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. Followings are the basic features of the project grants operated by JICA (hereinafter referred to as "Project Grants").

1. Procedures of Project Grants

Project Grants are conducted through following procedures (See "PROCEDURES OF JAPANESE GRANT" for details):

(1) Preparation

- The Preparatory Survey (hereinafter referred to as "the Survey") conducted by JICA

(2) Appraisal

- Appraisal by the government of Japan (hereinafter referred to as "GOJ") and JICA, and Approval by the Japanese Cabinet

(3) Implementation

Exchange of Notes

- The Notes exchanged between the GOJ and the government of the Recipient

Grant Agreement (hereinafter referred to as "the G/A")

- Agreement concluded between JICA and the Recipient

Banking Arrangement (hereinafter referred to as "the B/A")

- Opening of bank account by the Recipient in a bank in Japan (hereinafter referred to as "the Bank") to receive the grant

Construction works/procurement

- Implementation of the project (hereinafter referred to as "the Project") on the basis of the G/A

(4) Ex-post Monitoring and Evaluation

- Monitoring and evaluation at post-implementation stage

2. Preparatory Survey

(1) Contents of the Survey

The aim of the Survey is to provide basic documents necessary for the appraisal of the the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of

relevant agencies of the Recipient necessary for the implementation of the Project.

- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a technical, financial, social and economic point of view.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

The contents of the original request by the Recipient are not necessarily approved in their initial form. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant.

JICA requests the Recipient to take measures necessary to achieve 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 executing agency of the Project. Therefore, the contents of the Project are confirmed by all relevant organizations of the Recipient based on the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA contracts with (a) consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

(3) Result of the Survey

JICA reviews the report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the feasibility of the Project.

3. Basic Principles of Project Grants

(1) Implementation Stage

1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes (hereinafter referred to as "the E/N") will be signed between the GOJ and the Government of the Recipient to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Recipient to define the necessary articles, in accordance with the E/N, to implement the Project, such as conditions of disbursement, responsibilities of the Recipient, and procurement conditions. The terms and conditions generally applicable to the Japanese Grant are stipulated in the "General Terms and Conditions for Japanese Grant (January 2016)."

2) Banking Arrangements (B/A) (See "Financial Flow of Japanese Grant (A/P Type)" for details)

a) The Recipient shall open an account or shall cause its designated authority to open an account under the name of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.

b) The Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA under an Authorization to Pay (A/P) issued by the Recipient.

3) Procurement Procedure

The products and/or services necessary for the implementation of the Project shall be procured in accordance with JICA's procurement guidelines as stipulated in the G/A.

4) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the Recipient to continue to work on the Project's implementation after the E/N and G/A.

5) Eligible source country

In using the Japanese Grant disbursed by JICA for the purchase of products and/or services, the eligible source countries of such products and/or services shall be Japan and/or the Recipient. The Japanese Grant may be used for the purchase of the products and/or services of a third country as eligible, if necessary, taking into account the quality, competitiveness and economic rationality of products and/or services necessary for achieving the objective of the Project. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm, which enter into contracts with the Recipient, are limited to "Japanese nationals", in principle.

6) Contracts and Concurrence by JICA

The Recipient will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be concurred by JICA in order to be verified as eligible for using the Japanese Grant.

7) Monitoring

The Recipient is required to take their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and to regularly report to JICA about its status by using the Project Monitoring Report (PMR).

8) Safety Measures

The Recipient must ensure that the safety is highly observed during the implementation of the Project.

9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the "Meeting") will be held for quality assurance and smooth implementation of the Works at each stage of the Works. The member of the Meeting will be composed by the

Recipient (or executing agency), the Consultant, the Contractor and JICA. The functions of the Meeting are as followings:

- a) Sharing information on the objective, concept and conditions of design from the Contractor, before start of construction.
- b) Discussing the issues affecting the Works such as modification of the design, test, inspection, safety control and the Client's obligation, during of construction.

(2) Ex-post Monitoring and Evaluation Stage

- 1) After the project completion, JICA will continue to keep in close contact with the Recipient in order to monitor that the outputs of the Project is used and maintained properly to attain its expected outcomes.
- 2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

(3) Others

1) Environmental and Social Considerations

The Recipient shall carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the Recipient and JICA Guidelines for Environmental and Social Considerations (April, 2010).

2) Major undertakings to be taken by the Government of the Recipient

For the smooth and proper implementation of the Project, the Recipient is required to undertake necessary measures including land acquisition, and bear an advising commission of the A/P and payment commissions paid to the Bank as agreed with the GOJ and/or JICA. The Government of the Recipient shall ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Recipient with respect to the purchase of the Products and/or the Services be exempted or be borne by its designated authority without using the Grant and its accrued interest, since the grant fund comes from the Japanese taxpayers.

3) Proper Use

The Recipient is required to maintain and use properly and effectively the products and/or services under the Project (including the facilities constructed and the equipment purchased), to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Japanese Grant.

4) Export and Re-export

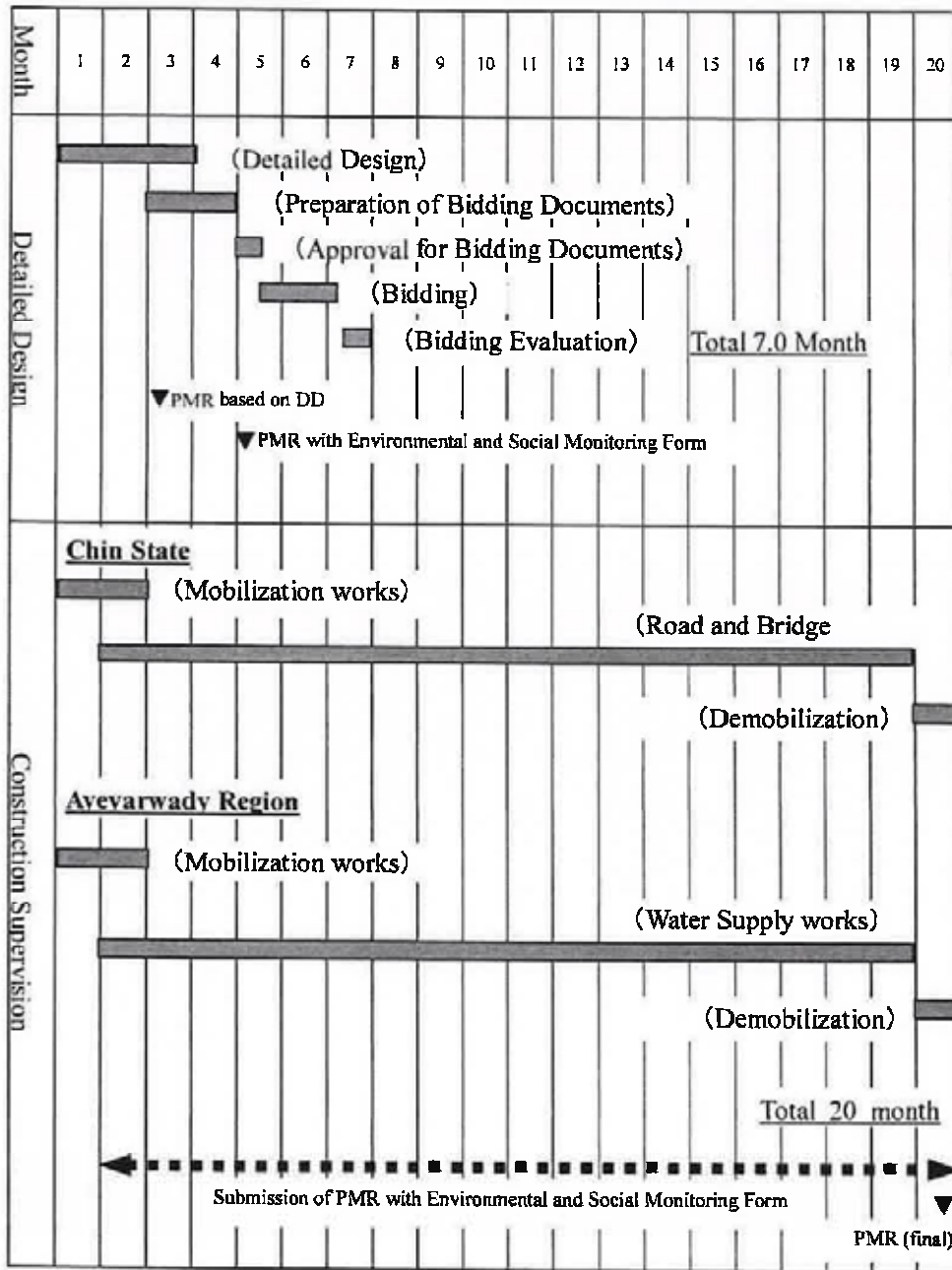
The products purchased under the Japanese Grant should not be exported or re-exported from the Recipient.

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Tentative Project Implementation Schedule



PMR: Project Monitoring Report

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Annex 5

Major Undertakings to be taken by the Government of Myanmar

(* These undertakings are made under the assumption that the bidding lot of the procurement of the contractor(s) is one. If the bidding lots will be two, these undertakings will be revised in consultation with the Myanmar side.)

1. Specific obligations of the Government of Myanmar which will not be funded with the Grant

(1) Before the Bid

NO	Items	Deadline	In charge	Estimated Cost* (USD)	Ref.
1	To open bank account and to issue Authorization to Pay (A/P) for payments under the Japan's Grant	within 2 month after the signing of the G/A	MOPFI/ DRRD	100	
2	To ensure payment commissions for each payment to a bank in Japan for the banking services based upon the Banking Arrangement (B/A)	every payment for consultant	ditto	16,900	
3	To approve IEE/EIA(Conditions of approval should be fulfilled, if any) and secure the necessary budget for implementation	N/A	N/A	N/A	
4	To secure the necessary budget and implement land acquisition and resettlement (including preparation of resettlement sites), and compensation with full replacement cost in accordance with RAP	before notice of the bidding document	MOC (DRRD)		
	1. Chin State <u>DRRD</u> 1) Cost for stakeholder meetings 2) Cost for compensation for acquisition of agricultural fields			1) 200 2) 100	
	2. Ayeyarwady Region <u>DRD</u> 1) Cost for stakeholder meetings	ditto	MOALI (DRD)	1) 200	
5	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report	until land acquisition complete	MOC (DRRD)	N/A	
6	To secure and clear the following lands	before notice of the bidding document	MOC (DRRD)		
	1. Chin State <u>DRRD</u> 1) Cost for temporary facility (Site office) 2) Cost for temporary facility (Construction yard)			1) 1,300 2) 300	
	2. Ayeyarwady Region <u>DRD</u> 1) Cost for temporary facility (Construction yard)		MOALI (DRD)	1) 5,000	

7	To obtain the planning, zoning, building permit	before notice of the bidding document	MOC (DRRD)	N/A	
8	To clear, level and reclaim the following sites 1. Chin State DRRD 1) Cost for removal of obstructions and transfer 2. Ayeyarwady Region N/A	before notice of the bidding document	MOC (DRRD)	1) 2,000	
9	To submit Project Monitoring Report (with the result of Detail Design)	before preparation of bidding documents	DRRD Note: DRRD integrates drafts collected from each department, i.e. DRD and DRRD.	N/A	

(B/A: Banking Arrangement, A/P: Authorization to pay, N/A: Not Applicable)

(MOPFI: Ministry of Planning, Finance and Industry)

(*Estimated Cost is subject to change.)

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(2) During the Project Implementation

NO	Items	Deadline	In charge	Estimated Cost* (USD)	Ref.
1	To issue A/P to a bank in Japan (the Agent Bank) for the payment to the Supplier(s)/ the Contractor(s)	within 2 month after the signing of the contract(s)	MOPFI/ DRRD/ DRD Note: DRRD arranges the integrated budget comprised of each department, i.e. DRD and DRRD.	This cost is included in Item No.2 of above "(1) Before the Bid".	
2	To ensure payment commissions for each payment to a bank in Japan for the banking services based upon the B/A	every payment for the Supplier(s)/the Contractor(s)	ditto		
3	To ensure prompt unloading and customs clearance at ports of disembarkation in recipient country and to assist the Supplier(s) /the Contractor(s) with internal transportation therein	during the Project	MOC (DRRD)/ MOALI (DRD)		
4	To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	during the Project	ditto		
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted;	during the Project	ditto	N/A	
6	To ensure the following items <u>DRD in Ayevarwady Region</u> 1) Installation of fences and gates around water supply facilities 2) Cost for procurement of reagent for residual chlorine meters for first two years after construction	during the Project	MOALI (DRD)	1) 16,000 2) 400	
7	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	during the Project	MOC (DRRD)/ MOALI (DRD)	N/A	
8	To submit Project Monitoring Report	Every month	DRRD Note: DRRD integrates drafts collected from each department, i.e. DRD and DRRD.	N/A	

9	To submit Project Monitoring Report (final)	within one month after signing of Certificate of Completion for the works under the contract(s)	DRRD	N/A	
8	To submit a report concerning completion of the Project	within six months after completion of the Project	ditto	N/A	
10	To construct access roads	3 months before completion of the construction	DRRD / DRD	N/A	
11	1) Outside the site, if any To take necessary measure for safety construction - traffic control - rope off	during the construction	ditto	N/A	
12	To implement EMP and EMoP	during the construction	DRRD / DRD	N/A	
13	To submit results of environmental monitoring to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report	during the construction	DRRD / DRD	N/A	
14	To implement RAP (livelihood restoration program, if needed) in Chin State	during the construction	DRRD	N/A	
15	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of Project Monitoring Report - Period of the monitoring may be extended if affected persons' livelihoods are not sufficiently restored. Extension of the monitoring will be decided based on agreement between MOC and JICA.	- until the end of livelihood restoration program (In case that livelihood restoration program is provided)	MOC (DRRD)/ MOALI (DRD)	N/A	

(*Estimated Cost is subject to change.)

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(3) After the Project

NO	Items	Deadline	In charge	Estimated Cost*	Ref.
1	To implement EMP and EMoP	for a period based on EMP and EMoP	MOC (DRRD)/MOALI (DRD)	N/A	
2	To submit results of environmental monitoring to JICA, by using the monitoring form, semiannually - The period of environmental monitoring may be extended if any significant negative impacts on the environment are found. The extension of environmental monitoring will be decided based on the agreement between MOC and JICA.	for three years after the Project	ditto	N/A	
3	To maintain properly and effectively the constructed facilities provided under the Grant Aid 1) Allocation of maintenance cost 2) Routine check/Periodic inspection	After completion of the construction	ditto	N/A	

(*Estimated Cost is subject to change.)

2. Other obligations of the Government of Myanmar funded with the Grant

NO	Items
1	To construct following facilities: - Roads and bridges in Chin State - Water supply facilities in Ayeyarwady Region
2	To implement detailed design, bidding support and construction supervision (Consulting Service)
3	Contingencies

Annex 6

Table of Counterpart Cost

The costs shown below must be borne by Myanmar side.

Approximately USD 43,800

Items		Cost Amount (USD)	
Preparation for the construction work	Chin State	1) Cost for temporary facility (Site office)	1,300
		2) Cost for temporary facility (Construction yard)	300
		3) Cost for removal of obstructions or transfer	2,000
		4) Cost for stakeholder meetings	200
		5) Cost for compensation for acquisition of agricultural fields	100
	Sub-total		3,900
	Ayeyarwady Region	1) Cost for temporary facility (Site office)	1,300
		2) Cost for temporary facility (Construction yard)	5,000
		3) Installation of fences and gates around water supply facilities	16,000
		4) Cost for procurement of reagent for residual chlorine meters for first two years after construction	400
5) Cost for stakeholder meetings		200	
Sub-total		22,900	
Commissions for payment			
	Banking arrangement	100	
	Payment commission	16,900	
Total		43,800	

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<p><u>Project Monitoring Report</u> on <u>Project Name</u> Grant Agreement No. <u>XXXXXXX</u> 20XX, Month</p>
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Organizational Information

Signer of the G/A (Recipient)	<p>Person in Charge (Designation) _____</p> <p>Contacts Address: _____</p> <p> Phone/FAX: _____</p> <p> Email: _____</p>
Executing Agency	<p>Person in Charge (Designation) _____</p> <p>Contacts Address: _____</p> <p> Phone/FAX: _____</p> <p> Email: _____</p>
Line Ministry	<p>Person in Charge (Designation) _____</p> <p>Contacts Address: _____</p> <p> Phone/FAX: _____</p> <p> Email: _____</p>

General Information:

Project Title	
E/N	Signed date: Duration:
G/A	Signed date: Duration:
Source of Finance	Government of Japan: Not exceeding JPY _____ mil. Government of (_____): _____

1: Project Description

1-1 Project Objective

1-2 Project Rationale

- Higher-level objectives to which the project contributes (national/regional/sectoral policies and strategies)
- Situation of the target groups to which the project addresses

1-3 Indicators for measurement of "Effectiveness"

Quantitative indicators to measure the attainment of project objectives		
Indicators	Original (Yr)	Target (Yr)
Qualitative indicators to measure the attainment of project objectives		

2: Details of the Project

2-1 Location

Components	Original <i>(proposed in the outline design)</i>	Actual
1.		

2-2 Scope of the work

Components	Original* <i>(proposed in the outline design)</i>	Actual*
1.		

Reasons for modification of scope (if any).

(PMR)

2-3 Implementation Schedule

Items	Original		Actual
	<i>(proposed in the outline design)</i>	<i>(at the time of signing the Grant Agreement)</i>	

Reasons for any changes of the schedule, and their effects on the project (if any)

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2-4 Obligations by the Recipient

2-4-1 Progress of Specific Obligations
 See Attachment 2.

2-4-2 Activities
 See Attachment 3.

2-4-3 Report on RD
 See Attachment 11.

2-5 Project Cost

2-5-1 Cost borne by the Grant (Confidential until the Bidding)

Components			Cost (Million Yen)	
	Original <i>(proposed in the outline design)</i>	Actual <i>(in case of any modification)</i>	Original ¹⁾²⁾ <i>(proposed in the outline design)</i>	Actual
1.				
Total				

Note: 1) Date of estimation:
 2) Exchange rate: 1 US Dollar = Yen

2-5-2 Cost borne by the Recipient

Components			Cost (1,000 Taka)	
	Original <i>(proposed in the outline design)</i>	Actual <i>(in case of any modification)</i>	Original ¹⁾²⁾ <i>(proposed in the outline design)</i>	Actual
1.				

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- Note: 1) Date of estimation:
2) Exchange rate: 1 US Dollar =

Reasons for the remarkable gaps between the original and actual cost, and the countermeasures (if any)

(PMR)

2-6 Executing Agency

- Organization's role, financial position, capacity, cost recovery etc,
- Organization Chart including the unit in charge of the implementation and number of employees.

Original (at the time of outline design) name: role: financial situation: institutional and organizational arrangement (organogram): human resources (number and ability of staff):
Actual (PMR)

2-7 Environmental and Social Impacts

- The results of environmental monitoring based on Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- The results of social monitoring based on in Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- Disclosed information related to results of environmental and social monitoring to local stakeholders (whenever applicable).

3: Operation and Maintenance (O&M)

3-1 Physical Arrangement

- Plan for O&M (number and skills of the staff in the responsible division or section, availability of manuals and guidelines, availability of spareparts, etc.)

Original (at the time of outline design)
Actual (PMR)

3-2 Budgetary Arrangement

- Required O&M cost and actual budget allocation for O&M

Original (at the time of outline design)

Actual (PMR)

4: Potential Risks and Mitigation Measures

- Potential risks which may affect the project implementation, attainment of objectives, sustainability
- Mitigation measures corresponding to the potential risks

Assessment of Potential Risks *(at the time of outline design)*

Potential Risks	Assessment
1. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
2. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
3. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:

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	Contingency Plan (if applicable):
Actual Situation and Countermeasures (PMR)	

5: Evaluation and Monitoring Plan (after the work completion)

5-1 Overall evaluation

Please describe your overall evaluation on the project.

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5-2 Lessons Learnt and Recommendations

Please raise any lessons learned from the project experience, which might be valuable for the future assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

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5-3 Monitoring Plan of the Indicators for Post-Evaluation

Please describe monitoring methods, section(s)/department(s) in charge of monitoring, frequency, the term to monitor the indicators stipulated in 1-3.

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Attachment

1. Project Location Map
2. Specific obligations of the Recipient which will not be funded with the Grant
3. Monthly Report submitted by the Consultant
- Appendix - Photocopy of Contractor's Progress Report (if any)
 - Consultant Member List
 - Contractor's Main Staff List
4. Check list for the Contract (including Record of Amendment of the Contract/ Agreement and Schedule of Payment)
5. Environmental Monitoring Form / Social Monitoring Form
6. Monitoring sheet on price of specified materials (Quarterly)
7. Report on Proportion of Procurement (Recipient Country, Japan and Third Countries) (PMR (final) only)
8. Pictures (by JPEG style by CD-R) (PMR (final) only)
9. Equipment List (PMR (final) only)
10. Drawing (PMR (final) only)
11. Report on RD (After project)

Monitoring sheet on price of specified materials

1. Initial Conditions (Confirmed)

Items of Specified Materials		Initial Volume A	Initial Unit Price (¥) B	Initial total Price C=A×B	1% of Contract Price D	Condition of payment Price (Increased) E=C-D	Price (Increased) F=C+D
1	Item 1	●●t	●	●	●	●	●
2	Item 2	●●t	●	●	●		
3	Item 3						
4	Item 4						
5	Item 5						

2. Monitoring of the Unit Price of Specified Materials

(1) Method of Monitoring : ●●

(2) Result of the Monitoring Survey on Unit Price for each specified materials

Items of Specified Materials		1st month, 2015	2nd month, 2015	3rd month, 2015	4th	5th	6th
1	Item 1	●	●	●			
2	Item 2						
3	Item 3						
4	Item 4						
5	Item 5						

(3) Summary of Discussion with Contractor (if necessary)

105

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Report on Proportion of Procurement (Recipient Country, Japan and Third Countries)
 (Actual Expenditure by Construction and Equipment each)

	Domestic Procurement (Recipient Country) A	Foreign Procurement (Japan) B	Foreign Procurement (Third Countries) C	Total D
Construction Cost	(A/D%)	(B/D%)	(C/D%)	
Direct Construction Cost	(A/D%)	(B/D%)	(C/D%)	
others	(A/D%)	(B/D%)	(C/D%)	
Equipment Cost	(A/D%)	(B/D%)	(C/D%)	
Design and Supervision Cost	(A/D%)	(B/D%)	(C/D%)	
Total	(A/D%)	(B/D%)	(C/D%)	

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1 Road

	Environmental Item	Main Check Items	Yes/ Y No/ N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
1 Permits and Explanation	(1) EIA and Environmental Permits	(a) Have EIA reports been already prepared in official process? (b) Have EIA reports been approved by authorities of the host country's government? (c) Have EIA reports been unconditionally approved? If conditions are imposed on the approval of EIA reports, are the conditions satisfied? (d) In addition to the above approvals, have other required environmental permits been obtained from the appropriate regulatory authorities of the host country's government?	(a)N (b)- (c)- (d)N	(a) Preparation of EIA and IEE is not necessary by the regulation of Myanmar (b) N/A (c) N/A (d) It is necessary to obtain the permission from Forest Department (FD) when trees will be cut before start project
	(2) Explanation to the Local Stakeholders	(a) Have contents of the project and the potential impacts been adequately explained to the Local stakeholders based on appropriate procedures, including information disclosure? Is understanding obtained from the Local stakeholders? (b) Have the comment from the stakeholders (such as local residents) been reflected to the project design?	(a)Y (b)Y	(a) SHM for Road and Bridge project has been conducted at each site on 31th of August 2017 and 1st, 2nd, 4th, 5th September 2017 (b) Participants of SHM at all sites have agreed this project and are willing to do it
	(3) Examination of Alternatives	(a) Have alternative plans of the project been examined with social and environmental considerations?	(a)Y	(a) The projects have been compared and considered including zero option
2 Pollution Control	(1) Air Quality	(a) Is there a possibility that air pollutants emitted from the project related sources, such as vehicles traffic will affect ambient air quality? Does ambient air quality comply with the country's air quality standards? Are any mitigating measures taken? (b) Where industrial areas already exist near the route, is there a possibility that the project will make air pollution worse?	(a)N (b)-	(a) It is expected to increase the traffic volume by road improvement, and it can be considered that also increase pollutant emissions. On the other hand, the target is rural roads, so traffic volume will be less than in urban areas. Therefore it is not expected that the amount of emissions will be over environmental standards. (b) N/A
	(2) Water Quality	(a) Is there a possibility that soil runoff from the bare lands resulting from earthmoving activities, such as cutting and filling will cause water quality degradation in downstream water areas? (b) Is there a possibility that surface runoff from roads will contaminate water sources, such as groundwater? (c) Do effluents from various facilities, such as parking areas/service areas comply with the country's effluent standards and ambient water quality standards? Is there a possibility that the effluents will cause areas not to comply with the country's ambient water quality standards?	(a)N (b)N (c)N	(a) It is expected filling at some area for temporary construction land. But impact by soil runoff is not known at this stage. DRRD will consider to control that amount where expected a large amount of filling if needed. (b) It is not expected contaminate water sources such as groundwater by this project. (c) There are no plan to construct parking area and service area.
	(3) Wastes	(a) Are wastes generated from the project facilities, such as parking areas/service areas, properly treated and disposed of in accordance with the country's regulations?	(a)N	(a) There are no plan to construct parking area and service area.
	(4) Noise and Vibration	(a) Do noise and vibrations from the vehicle and train traffic comply with the country's standards?	(a)N	(a) Target roads locate at rural area, so it seems that level of noise and vibration is not over national standard. DRRD will monitor if comply with Myanmar standards 55dB(7:00-22:00) / 45dB(22:00-7:00) if needed
3 Natural Environment	(1) Protected Areas	(a) Is the project site located in protected areas designated by the country's laws or international treaties and conventions? Is there a possibility that the project will affect the protected areas?	(a)N	(a) All project sites are not located in protected area designated by Myanmar laws and international treaties and conventions
	(2) Ecosystem	(a) Does the project site encompass primeval forests, tropical rain forests, ecologically valuable habitats (e.g., coral reefs, mangroves, or tidal flats)? (b) Does the project site encompass the protected habitats of endangered species designated by the country's laws or international treaties and conventions? (c) If significant ecological impacts are anticipated, are adequate protection measures taken to reduce the impacts on the ecosystem? (d) Are adequate protection measures taken to prevent impacts, such as disruption of migration routes, habitat fragmentation, and traffic accident of wildlife and livestock? (e) Is there a possibility that installation of roads will cause impacts, such as destruction of forest, poaching, desertification, reduction in wetland areas, and disturbance of ecosystems due to introduction of exotic (non-native invasive) species and pests? Are adequate measures for preventing such impacts considered? (f) In cases the project site is located at undeveloped areas, is there a possibility that the new development will result in extensive loss of natural environments?	(a)N (b)N (c)N (d)N (e)N (f)N	(a) Project sites are located at village or village tract, not ecological sensitive area. (b) Protected or valuable species have not been confirmed at project sites. (c) Adverse effects on the ecosystem is not expected. (d) It is not expected disruption of migration route and habitat fragmentation of wildlife and livestock. (e) It is not expected deforestation, desertification and disturbance of ecosystem etc. (f) This project is not at the undeveloped areas.
	(3) Hydrology	(a) Is there a possibility that alteration of topographic features and installation of structures, such as tunnels will adversely affect surface water and groundwater flows?	(a)N	(a) It is not expected a large amount of water use by the project.
	(4) Topography and Geology	(a) Is there any soft ground on the route that may cause slope failures or landslides? Are adequate measures considered to prevent slope failures or landslides, where needed? (b) Is there a possibility that civil works, such as cutting and filling will cause slope failures or landslides? Are adequate measures considered to prevent slope failures or landslides? (c) Is there a possibility that soil runoff will result from cut and fill areas, waste soil disposal sites, and borrow sites? Are adequate measures taken to prevent soil runoff?	(a)N (b)N (c)N	(a) Adequate measurement and methods will be consider during detail design stage. (b) Adequate measurement and methods will be consider to avoid landslides during detail design stage. (c) Adequate measurement will be consider to avoid sediment discharge during design stage.
Environment	(1) Resettlement	(a) Is involuntary resettlement caused by project implementation? If involuntary resettlement is caused, are efforts made to minimize the impacts caused by the resettlement? (b) Is adequate explanation on compensation and resettlement assistance given to affected people prior to resettlement? (c) Is the resettlement plan, including compensation with full replacement costs, restoration of livelihoods and living standards developed based on socioeconomic studies on resettlement? (d) Are the compensations going to be paid prior to the resettlement? (e) Are the compensation policies prepared in document? (f) Does the resettlement plan pay particular attention to vulnerable groups or people, including women, children, the elderly, people below the poverty line, ethnic minorities, and indigenous peoples? (g) Are agreements with the affected people obtained prior to resettlement? (h) Is the organizational framework established to properly implement resettlement? Are the capacity and budget secured to implement the plan? (i) Are any plans developed to monitor the impacts of resettlement? (j) Is the grievance redress mechanism established?	(a)Y (b)Y (c)Y (d)Y (e)Y (f)Y (g)Y (h)Y (i)Y (j)Y	(a) Involuntary resettlement is not expected, but land acquisition (Paddy fields) will be required. Abbreviated Resettlement Action Plan (A-RAP) has been prepared. (b) Compensation and resettlement assistance has been described on A-RAP. (c) Replacement cost and restoration of livelihood has been described on A-RAP. (d) Compensation will be paid before land acquisition. (e) Compensation policies has been described on A-RAP. (f) Vulnerable people will be consider in this project. (g) Agreement will be prepared prior to land acquisition. (h) DRRD and GAD will make implementation plan. DRRD is planning to prepare the budget for compensation. (i) Monitoring plan has been described on A-RAP. (j) Grievance redressing mechanism has been described on A-RAP.

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	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
4 Social	(2) Living and Livelihood	(a) Where roads are newly installed, is there a possibility that the project will affect the existing means of transportation and the associated workers? Is there a possibility that the project will cause significant impacts, such as extensive alteration of existing land uses, changes in sources of livelihood or unemployment? Are adequate measures considered for preventing these impacts? (b) Is there any possibility that the project will adversely affect the living conditions of the inhabitants other than the target population? Are adequate measures considered to reduce the impacts, if necessary? (c) Is there any possibility that diseases, including infectious diseases, such as HIV will be brought due to immigration of workers associated with the project? Are adequate considerations given to public health, if necessary? (d) Is there any possibility that the project will adversely affect road traffic in the surrounding areas (e.g. increase of traffic congestion and traffic accidents)? (e) Is there any possibility that roads will impede the movement of inhabitants? (f) Is there any possibility that structures associated with roads (such as bridges) will cause a sun shading and radio interference?	(a)N (b)N (c)N (d)N (e)N (f)N	(a) Scope of this project is road improvement, not new construction. Significant negative impact is not expected. (b) It is not expected adverse impact to the living conditions. (c) It is not expected immigration of workers from outside by this project because target sites are rural in Myanmar. (d) It is not expected adverse impact such as traffic congestion and accidents. (e) It is not expected adverse impact such as movement of inhabitants during the construction. (f) There are no plan to construct structures associated with roads in this project.
	(3) Heritage	(a) Is there a possibility that the project will damage the local archeological, historical, cultural, and religious heritage? Are adequate measures considered to protect these sites in accordance with the country's laws?	(a)N	(a) There are no heritages at the project site, so it is not expected adverse impact.
5 Social Environment	(4) Landscape	(a) Is there a possibility that the project will adversely affect the local landscape? Are necessary measures taken?	(a)N	(a) It is not expected adverse impact to landscape.
	(5) Ethnic Minorities and Indigenous Peoples	(a) Are considerations given to reduce impacts on the culture and lifestyle of ethnic minorities and indigenous peoples? (b) Are all of the rights of ethnic minorities and indigenous peoples in relation to land and resources to be respected?	(a)Y (b)Y	(a) With this project, it is possible to create jobs for ethnic minorities during construction. So positive impact is expected during construction. (b) The negative impact on the rights to land and resources, etc. are not expected.
	(6) Working Conditions	(a) Is the project proponent not violating any laws and ordinances associated with the working conditions of the country which the project proponent should observe in the project? (b) Are tangible safety considerations in place for individuals involved in the project, such as the installation of safety equipment which prevents industrial accidents, and management of hazardous materials? (c) Are intangible measures being planned and implemented for individuals involved in the project, such as the establishment of a safety and health program, and safety training (including traffic safety and public health) for workers etc.? (d) Are appropriate measures being taken to ensure that security guards involved in the project not to violate safety of other individuals involved, or local residents?	(a)Y (b)Y (c)Y (d)Y	(a) This is a plan in accordance with relevant laws of Myanmar. (b) Measures of safety consideration by the implementing agency (DRRD) and contractor is scheduled to be taken. (c) Implementing agency (DRRD) and contractor will consider to do about planning safety training for workers. (d) Implementing agency (DRRD) and contractor will consider the allocation of appropriate security guard.
5 Others	(1) Impacts during Construction	(a) Are adequate measures considered to reduce impacts during construction (e.g., noise, vibrations, turbid water, dust, exhaust gases, and wastes)? (b) If construction activities adversely affect the natural environment (ecosystem), are adequate measures considered to reduce impacts? (c) If construction activities adversely affect the social environment, are adequate measures considered to reduce impacts?	(a)Y (b)Y (c)Y	(a) Implementing agencies (DRRD) and contractors will take mitigation measure against pollution. (b) It is not expected negative impact for the natural environment so far. DRRD will set adequate measure to reduce impact, if needed. (c) It is not expected negative impact for social environment so far. DRRD will set adequate measure to reduce impact, if needed.
	(2) Monitoring	(a) Does the proponent develop and implement monitoring program for the environmental items that are considered to have potential impacts? (b) What are the items, methods and frequencies of the monitoring program? (c) Does the proponent establish an adequate monitoring framework (organization, personnel, equipment, and adequate budget to sustain the monitoring framework)? (d) Are any regulatory requirements pertaining to the monitoring report system identified, such as the format and frequency of reports from the proponent to the regulatory authorities?	(a)Y (b)Y (c)Y (d)Y	(a) Implementing agency (DRRD), GAD and contractors will consider about monitoring plan before start construction. (b) Implementing agency (DRRD), GAD and contractors will consider about monitoring plan whether the monitoring item will be appropriate or no. (c) Implementing agency (DRRD), GAD and contractors will establish the monitoring system before start construction. (d) Reporting of the method, frequency, etc. will be decided before start construction.
6 Note	Reference to Checklist of Other Sectors	(a) Where necessary, pertinent items described in the Forestry Projects checklist should also be checked (e.g., projects including large areas of deforestation). (b) Where necessary, pertinent items described in the Power Transmission and Distribution Lines checklist should also be checked (e.g., projects including installation of power transmission lines and/or electric distribution facilities).	(a)- (b)-	(a)N/A (b)N/A
	Note on Using Environmental Checklist	(a) If necessary, the impacts to transboundary or global issues should be confirmed, if necessary (e.g., the project includes factors that may cause problems, such as transboundary waste treatment, acid rain, destruction of the ozone layer, or global warming).	(a)-	(a)N/A

2 Bridge

Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
1 Permits and Explanation	(1) EIA and Environmental Permits	(a) N (b) - (c) - (d) N	(a) Preparation of EIA and IEE is not necessary by the regulation of Myanmar (b) N/A (c) N/A (d) It is necessary to obtain the permission from Forest Department (FD) when trees will be cut before start project
	(2) Explanation to the Local Stakeholders	(a) Y (b) Y	(a) SFM for Road and Bridge project has been conducted at each site on 31th of August 2017 and 1st, 2nd, 4th, 5th September 2017 (b) Participants of SFM at all sites have agreed this project and are willing to do it
	(3) Examination of Alternatives	(a) Y	(a) The projects have been compared and considered including zero option
2 Pollution Control	(1) Air Quality	(a) N (b) -	(a) It is expected to increase the traffic volume by bridge project, and it can be considered that also increase pollutant emissions. On the other hand, the target is rural bridges, so traffic volume will be less than in urban areas. Therefore it is not expected that the amount of emissions will be over environmental standards (b) N/A
	(2) Water Quality	(a) N (b) N (c) N	(a) It is expected cutting earth at some area. But impact by soil runoff is not known at this stage. DRRD will consider to control that slope where expected a large amount of cutting earth (if needed) (b) It is not expected contaminate water sources, such as groundwater by this project (c) There are no plan to construct parking area and service area
	(3) Wastes	(a) N	(a) There are no plan to construct parking area and service area
	(4) Noise and Vibration	(a) N	(a) Target roads locate at rural area, so it seems that level of noise and vibration is not over national standard. DRRD will monitor if comply with Myanmar standards (55dB(7:00-22:00) / 45dB(22:00-7:00)) if needed
3 Natural Environment	(1) Protected Areas	(a) N	(a) All project sites are not located in protected area designated by Myanmar laws and international treaties and conventions
	(2) Ecosystem	(a) N (b) N (c) N (d) N (e) N (f) N	(a) Project sites are located at village or village tract, not ecological sensitive area (b) Protected or valuable species have not been confirmed at project sites (c) Adverse effects on the ecosystem is not expected (d) It is not expected disruption of migration route and habitat fragmentation of wildlife and livestock (e) It is not expected deforestation, desertification and disturbance of ecosystem etc. (f) This project is not at the undeveloped areas
	(3) Hydrology	(a) N	(a) It is not expected a large amount of water use by the project
	(4) Topography and Geology	(a) N (b) N (c) N	(a) Adequate measurement and methods will be consider during detail design stage (b) Adequate measurement and methods will be consider to avoid landslides during detail design stage (c) Adequate measurement will be consider to avoid sediment discharge during design stage

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Environmental Item	Main Check Items	Yes Y No N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
4 Social Environment	(1) Resettlement	(a) Y (b) Y (c) Y (d) Y (e) Y (f) Y (g) Y (h) Y (i) Y (j) Y	(a) Involuntary resettlement will be required around "TK-BR2 (Tha Kan Wa VT in Ayeyarwady Region) Abbreviated Resettlement Action Plan (A-RAP) has been prepared. (b) Compensation and resettlement assistance has been described on A-RAP (c) Replacement cost and restoration of livelihood has been described on A-RAP (d) Compensation will be paid before land acquisition (e) Compensation policies has been described on A-RAP (f) Vulnerable people will be consider in this project (g) Agreement will be prepared prior to land acquisition (h) DRRD and GAD will make implementation plan. DRRD is planning to prepare the budget for compensation (i) Monitoring plan has been described on A-RAP (j) Grievance redressing mechanism has been described on A-RAP
	(2) Living and Livelihood	(a) N (b) N (c) N (d) N (e) N (f) N	(a) Scope of this project is small bridge construction or improvement. Significant negative impact is not expected. (b) It is not expected adverse impact to the living conditions (c) It is not expected immigration of workers from outside by this project because target sites are rural in Myanmar (d) It is not expected adverse impact such as traffic congestion and accidents (e) It is not expected adverse impact such as movement of inhabitants during the construction (f) There are no plan to construct structures associated with roads in this project
4 Social Environment	(3) Heritage	(a) N	(a) There are no heritages at the project site, so it is not expected adverse impact
	(4) Landscape	(a) N	(a) It is not expected adverse impact to landscape
	(5) Ethnic Minorities and Indigenous Peoples	(a) Y (b) N	(a) With the project, it is possible to create jobs for ethnic minorities during construction. So positive impact is expected during construction (b) The negative impact on the rights to land and resources, etc. are not expected
5 Others	(6) Working Conditions	(a) Y (b) Y (c) Y (d) Y	(a) This is a plan in accordance with relevant laws of Myanmar (b) Measures of safety consideration by the implementing agency (DRRD) and contractor is scheduled to be taken (c) Implementing agency (DRRD) and contractor will consider to do about planning safety training for workers (d) Implementing agency (DRRD) and contractor will consider the allocation of appropriate security guard
	(7) Impacts during Construction	(a) Y (b) Y (c) Y	(a) Implementing agencies (DRRD) and contractors will take mitigation measure against pollution (b) It is not expected negative impact for the natural environment so far. DRRD will set adequate measure to reduce impact, if needed. (c) It is not expected negative impact for social environment so far. DRRD will set adequate measure to reduce impact, if needed
5 Others	(8) Monitoring	(a) Y (b) Y (c) Y (d) Y	(a) Implementing agency (DRRD), GAD and contractors will consider about monitoring plan before start construction (b) Implementing agency (DRRD), GAD and contractors will consider about monitoring plan whether the monitoring item will be appropriate or no (c) Implementing agency (DRRD), GAD and contractors will establish the monitoring system before start construction (d) Reporting of the method, frequency, etc. will be decided before start construction
	Reference to Checklist of Other Sectors	(a)- (b)-	(a) N/A (b) N/A
Note on Using Environmental Checklist	(a) If necessary, the impacts to transboundary or global issues should be confirmed, if necessary (e.g., the project includes factors that may cause problems, such as transboundary waste treatment, acid rain, destruction of the ozone layer, or global warming)	(a)-	(a) N/A

3 Water

	Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
1 Permits and Explanation	(1) EIA and Environmental Permits	(a) Have EIA reports been already prepared in official process? (b) Have EIA reports been approved by authorities of the host country's government? (c) Have EIA reports been unconditionally approved? If conditions are imposed on the approval of EIA reports, are the conditions satisfied? (d) In addition to the above approvals, have other required environmental permits been obtained from the appropriate regulatory authorities of the host country's government?	(a)N (b)- (c)- (d)N	(a) Preparation of EIA and IEE is not necessary by the regulation of Myanmar. (b) N/A (c) N/A (d) It is necessary to obtain the permission from Forest Department (FD) when trees will be cut before start project.
	(2) Explanation to the Local Stakeholders	(a) Have contents of the project and the potential impacts been adequately explained to the Local stakeholders based on appropriate procedures, including information disclosure? Is understanding obtained from the Local stakeholders? (b) Have the comment from the stakeholders (such as local residents) been reflected to the project design?	(a)Y (b)Y	(a) SHM (in Road and Bridge project) has been conducted at each site on 31st of August 2017 and 1st, 2nd, 4th, 5th September 2017 (b) Participants of SHM at all sites have agreed this project and are willing to do it.
	(3) Examination of Alternatives	(a) Have alternative plans of the project been examined with social and environmental considerations?	(a)Y	(a) The projects have been compared and considered including zero option.
2 Pollution Control	(1) Air Quality	(a) Is there a possibility that chlorine from chlorine storage facilities and chlorine injection facilities will cause air pollution? Are any mitigating measures taken? (b) Do chlorine concentrations within the working environments comply with the country's occupational health and safety standards?	(a)N (b)Y	(a) Since this projects are to install the rain water tank and treated water tank, air pollution by chlorine storage facilities etc is not expected. (b) DRD will follow the occupational safety standards of Myanmar.
	(2) Water Quality	(a) Do pollutants, such as SS, BOD, COD contained in effluents discharged by the facility operations comply with the country's effluent standards?	(a)Y	(a) It has been planned so that it is consistent with the actual country of effluent standards.
	(3) Wastes	(a) Are wastes, such as sludge generated by the facility operations properly treated and disposed in accordance with the country's regulations?	(a)Y	(a) It is not expected generation of waste such as sludge by this project. As for other waste, DRD will follow the waste management standard of Myanmar.
	(4) Noise and Vibration	(a) Do noise and vibrations generated from the facilities, such as pumping stations comply with the country's standards?	(a)-	(a) N/A
	(5) Subsidence	(a) In the case of extraction of a large volume of groundwater, is there a possibility that the extraction of groundwater will cause subsidence?	(a)-	(a) N/A
	(1) Protected Areas	(a) Is the project site or discharge area located in protected areas designated by the country's laws or international treaties and conventions? Is there a possibility that the project will affect the protected areas?	(a)N	(a) All project sites are not located in protected area designated by Myanmar laws and international treaties and conventions.
3 Natural Environment	(2) Ecosystem	(a) Does the project site encompass primeval forests, tropical rain forests, ecologically valuable habitats (e.g., coral reefs, mangroves, or tidal flats)? (b) Does the project site or discharge area encompass the protected habitats of endangered species designated by the country's laws or international treaties and conventions? (c) If significant ecological impacts are anticipated, are adequate protection measures taken to reduce the impacts on the ecosystem? (d) Is there a possibility that the amount of water used (e.g., surface water, groundwater) by project will adversely affect aquatic environments, such as rivers? Are adequate measures taken to reduce the impacts on aquatic environments, such as aquatic organisms?	(a)N (b)N (c)- (d)-	(a) Project sites are located at village or village tract, not ecological sensitive area. (b) Protected or valuable species have not been confirmed at project sites. (c) N/A (d) N/A
	(3) Hydrology	(a) Is there a possibility that the amount of water used (e.g., surface water, groundwater) by the project will adversely affect surface water and groundwater flows?	(a)-	(a) N/A
4 Social Environment	(1) Resettlement	(a) Is involuntary resettlement caused by project implementation? If involuntary resettlement is caused, are efforts made to minimize the impacts caused by the resettlement? (b) Is adequate explanation on compensation and resettlement assistance given to affected people prior to resettlement? (c) Is the resettlement plan, including compensation with full replacement costs, restoration of livelihoods and living standards developed based on socioeconomic studies on resettlement? (d) Is the compensations going to be paid prior to the resettlement? (e) Is the compensation policies prepared in document? (f) Does the resettlement plan pay particular attention to vulnerable groups or people, including women, children, the elderly, people below the poverty line, ethnic minorities, and indigenous peoples? (g) Are agreements with the affected people obtained prior to resettlement? (h) Is the organizational framework established to properly implement resettlement? Are the capacity and budget secured to implement the plan? (i) Are any plans developed to monitor the impacts of resettlement? (j) Is the grievance redress mechanism established?	(a)N (b)- (c)- (d)- (e)- (f)- (g)- (h)- (i)- (j)Y	(a) Involuntary resettlement is not expected, and land acquisition will not also be required. (b) N/A (c) N/A (d) N/A (e) N/A (f) N/A (g) N/A (h) N/A (i) N/A (j) Grievance redressing mechanism has been described in this project.

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Environmental Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)	
4 Social Environment	(2) Living and Livelihood	(a)Y (b)N	(a) It is not expected adverse impact of their livelihood. After construction, positive impact will be expected. Water resource and right have been confirmed. And agreement between owner and DRD will be prepared prior to the construction. (b) It is not expected adverse impact to existing water use and water area.	
	(3) Heritage	(a)N	(a) There are no heritages at the project site, so it is not expected adverse impact.	
	(4) Landscape	(a)N	(a) It is not expected adverse impact to landscape.	
	(5) Ethnic Minorities and Indigenous Peoples	(a)Y (b)Y	(a) With the project, it is possible to create jobs for ethnic minorities during construction. So positive impact is expected during construction. (b) The negative impact on the rights to land and resources, etc. are not expected.	
	(6) Working Conditions	(a) Is there a possibility that the project will adversely affect the living conditions of inhabitants? Are adequate measures considered to reduce the impacts, if necessary?	(a)Y (b)Y (c)Y (d)Y	(a) This is a plan in accordance with relevant laws of Myanmar. (b) Measures of safety consideration by the implementing agency (DRD) and contractor is scheduled to be taken. (c) Implementing agency (DRD) and contractor will consider to do about planning safety training for workers. (d) Implementing agency (DRD) and contractor will consider the allocation of appropriate security guard.
		(b) Are tangible safety considerations in place for individuals involved in the project, such as the installation of safety equipment which prevents industrial accidents and management of hazardous materials? (c) Are intangible measures being planned and implemented for individuals involved in the project, such as the establishment of a safety and health program, and safety training (including traffic safety and public health) for workers etc? (d) Are appropriate measures taken to ensure that security guards involved in the project not to violate safety of other individuals involved, or local residents?		
5 Others	(1) Impacts during Construction	(a)Y (b)Y (c)Y (d)Y	(a) Implementing agencies (DRD) and contractors will take mitigation measure against pollution. (b) The scale of this project is small, so it is not expected negative impact for the natural environment. (c) It is not expected negative impact for social environment. (d) It is not expected heavy traffic congestion by this project.	
	(2) Monitoring	(a)Y (b)Y (c)Y (d)Y	(a) Implementing agency (DRD), GAD and contractors will consider about monitoring plan before start construction. (b) Implementing agency (DRD), GAD and contractors will consider about monitoring plan whether the monitoring item will be appropriate or no. (c) Implementing agency (DRD), GAD and contractors will establish the monitoring system before start construction. (d) Reporting of the method, frequency, etc. will be decided before start construction.	
6 Note	Reference to Checklist of Other Sectors	(a)-	(a)N/A	
	Note on Using Environmental Checklist	(a)-	(a)N/A	

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Republic of the Union of Myanmar
Ministry of Natural Resource and Environmental Conservation
Environmental Conservation Department
Officer No. 53, Nay Pyi Taw



Letter Number- EIA-1/7 (257/2019)

Date - 4th February, 2019

To

Director General
Department of Rural Road Development
Ministry of Construction

Director General
Irrigation & Water Utilization Management Department
Ministry of Agriculture, Livestock & Irrigation

Subject: Informing back remark regarding with submitted letter "Request for Evaluation of the Project Proposal"

References

- (1) Letter of Irrigation and Water Utilization Management Department with date on 4th Dec, 2018
- (2) Letter of Department of Rural Road Development with date on 5th Dec, 2018
- (3) Letter No. (Forest) 3(2)/16(D) (330/2019) of Union Minister Office, Ministry of Natural Recourse and Environmental Conservation with date on 24th Jan, 2019

1. Regarding with the preceding subject, letter of reference (1) from Irrigation and Water Utilization Management Department (IWUMD), Ministry of Agriculture, Livestock and Irrigation (MOALI) and letter of reference (2) from Department of Rural Road Development (DRRD), Ministry of Construction (MOC) submitted to Union Minister Office of Ministry Natural Resource and Environmental Conservation. Therefore, Union Minister Office reply their remark with letter of reference (3) in respect of the Project of 'Rural Infrastructure Development in Local Areas which will implement in Ayeyarwady Region and Chin State.
2. In submitted letter of references (1) and (2), observations/surveys were conducted with Japan International Cooperation Agency (JICA) starting since about last one year ago. It is already noted to get suggestions on project proposal submitted to Department of Environmental Conservation under Ministry of Recourse and Environmental Conservation in accordance with Environmental Impact Assessment (EIA) procedures concerned with environmental and social issues when implementing. It is the mentions in project proposal attachment to reply remarks which is concerned environment for the following functions.

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- a) Repairing and upgrading the rural road & bridge, and carrying out the processes of water distribution at villages in Bogale Township and Mawlamyinegyun Township, Ayeyarwady Region.
- b) Repairing and upgrading the rural road & bridge, and carrying out the processes of water distribution at villages in Falam Township and Tedim Township, Chin State.
3. Regarding with processes of Rural Infrastructure Development in Ayeyarwady Region and Chin State, the followings are inspected and found out.
- a) In Bogale Township and Mawlamyinegyun Township, Ayeyarwady Region, the following functions will be conducted.
- Upgrading total (3) numbers of rural road sections; (2) numbers of 4.2-kilometer long road section and (1) number of 4.2-kilometer long road section.
 - Upgrading total (8) bridges; (2) bridges which 60-meter long, (1) bridge which is 30-meter long, (4) bridges which is 20-meter long, and (1) bridge which is 15-meter long.
 - Constructing (17) purified water tanks, water filtering lakes and rainwater collected lakes which have the capacity of 40,000 to 130,000 gallons in volume.
 - Newly Constructing (2) water control gates; water control gate (1) which is 2 m wide and 2.2 m height and water control gate (2) which is 2 m wide and 1.5 m height.
- b) The following activities would be implemented in Falam and Tedim Townships in Chin State.
- Upgrading total (5) numbers of rural road sections; (1) number of 0.3 kilometer long road section, (1) number of 0.4-kilometer long road section, (1) number of 4.1-kilometer long road section, (1) number of 2.2-kilometer long road section and (1) number of 3.7-kilometer long road section.
 - Total (8) bridges will be upgraded and newly constructed; upgrading (1) bridge which is 10-meter long, and newly constructing - (1) bridges which is 10-meter long, (3) bridges which is 20-meter long, (1) bridge which is 30-meter long and (1) bridge which is 160-meter long.
 - Upgrading distribution infrastructure (Head Work 1) which is 13.5-meter broad and 1.9-meter high water and 30.0-meter broad and water distribution infrastructure (Head Work 2) which is 2.2-meter high after renovating both kinds.
4. Regarding No. (126) of appendix (A) in Environmental Impact Assessment (EIA) Procedures, it is prescribed that initial environmental assessment has to be conducted if the length of constructing bridges, river-crossing bridges and arch bridge which is over 200 m and lower than 2 km. And, if the length is over 2 km, environmental impact assessment (EIA) is necessary to be carried out. Then, it is stated that initial environmental assessment has to be conducted if the length of upgrading roads is over 50 meters regarding with no. (131).
5. It has been verified that the activities which will implement in the project are less than the limitations included in appendix (A) in Environmental Impact Assessment (EIA) Procedures, upgrading and renovating water distribution infrastructures, roads and bridges which are indeed necessary for rural development, and it is found out that there will be no obvious adverse impacts on environment and society according to the project size.
6. Therefore, the remark is that "there is no objection concerning with upon the Project of 'Rural Infrastructure Development in Local Areas' with the assistance by JICA and the followings are necessary to obey and follow not to have the environmental and social impacts".
- To implement the methods which will be minimized for environmental impacts when implementing the project after well preparing in advance the work procedures in order to minimize and avoid environmental and social impacts which could occur due to project activities.
 - To dispose wastes materials, disposal liquids, smell and powders generated from the project in accordance with the designated standards.
 - To implement not to damage natural valleys and water outlets due to blocking when implementing soil excavating and refilling in the project area.

- iv. To implement systematically disposing wasted materials, garbage and water generated from project site and retreating works.
- v. To conduct and design the working procedures systematically in order to avoid accidents and to be safety in working place for workers.
- vi. To acquire the approvals, desires and attitudes of respective region/state governments and residents living near the project site.
- vii. To comply in accordance with the prescribed environmental conversation law, principles, procedures and instructions.

Director General (behalf)
(Soe Naing, Director)

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Environmental Management Plan / Environmental Monitoring Plan

1) Environmental Management Plan

(a) Road and Bridge

(b) Water Supply

2) Environmental Monitoring Plan

(a) Road and Bridge

(b) Water Supply

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1) Environmental Management Plan

(a) Road and Bridge

	No	Item	Environmental Management Plan		Organization	
			During Works	In service	Implementing Agency	Responsible Agency
Pollution Control	1	Air pollution	[Exhaust gases] ✓ Ample maintenance ✓ Use of low-exhaust construction machinery [Particulates] ✓ Periodic sprinkling of water in and around residential areas ✓ Imposition of a speed limit (20km/h) on construction vehicles in and around residential areas	Not necessary	[During works] Contractor	DRRD
	2	Water pollution	[Muddying of water] ✓ Implementation of drainage through sedimentation tanks and filters ✓ Installation of basic toilets for labourers ✓ Appropriate management of construction equipment ✓ If there are impacts on rivers, ponds and so on, explanations to fishermen, etc. as needed	Not necessary	[During works] Contractor	DRRD
	3	Waste	[Construction waste materials (timber and residual earth)] ✓ Examine whether construction waste materials can be recycled in advance (recycling in public works, free donation to local residents, etc.) [Garbage from works dormitories] ✓ Transportation of garbage and waste oil from dormitories to disposal sites or treatment facilities [Night soil] ✓ Installation of basic toilets in works dormitories ✓ Disposal in specified sites only upon checking with and obtaining permission from the forestry department	Not necessary	[During works] Contractor	DRRD
	5	Noise and vibration	[Noise during construction] ✓ Installation of silencers and selection of low-noise equipment ✓ Avoid using heavy machinery at night ✓ Explanation of construction schedule to local residents and securing of their consent	Not necessary	[During works] Contractor	DRRD
Natural	10	Ecosystem	✓ Prohibition of entry to areas outside of construction sites ✓ Appropriate storage of hazardous wastes before final disposal ✓ Replanting of trees, plants, lawns, etc. in public areas ✓ Installation of silt fences and basic toilets	Not necessary	[During works] Contractor	DRRD
Environment and Social	13	Involuntary resettlement	✓ Appropriate compensation and social assistance based on basic resettlement plans	Not necessary	[During works] SLRD DRRD GAD	DRRD
	16	Local economy such as employment and livelihood	✓ Compensation in accordance with based on basic resettlement plans	Not necessary	[During works] SLRD DRRD GAD	DRRD

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	Nb	Item	Environmental Management Plan		Organization	
			During Works	In service	Implementing Agency	Responsible Agency
	17	Land use and utilization of local resources	✓ Appropriate land expropriation and compensation regarding farmland that is negatively impacted by works	Not necessary	[During works] SLRD DRRD	DRRD
	19	Existing social infrastructures and services	✓ Construction of detours and connection of them to existing community roads	Not necessary	[During works] Contractor	DRRD
	28	Labor environment	✓ Preparation of appropriate construction plans (construction schedule, assigned numbers of labourers) ✓	Not necessary	[During works] Contractor	DRRD
Others	29	Accidents	<ul style="list-style-type: none"> ✓ Placement of traffic controllers in places used by construction vehicles ✓ Installation of safety signs ✓ Installation of fences to stop children from entering construction sites ✓ Installation of electric lights when conducting nighttime work ✓ Provision of parking spaces for construction vehicles ✓ Limiting of speed inside construction facilities ✓ Provision of safety education for labourers ✓ Safety patrols by supervisors in construction sites 	Not necessary	[During works] Contractor	DRRD

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(b) Water Supply

	No	Item	Environmental Management Plan		Organization	
			During Works	In service	Implementing Agency	Responsible Agency
Pollution Control	1	Air pollution	[Exhaust gases] ✓ Ample maintenance ✓ Use of low-exhaust construction machinery [Particulates] ✓ Periodic sprinkling of water in and around residential areas	Not necessary	[During works] Contractor	DRD
	3	Waste	[Construction waste materials (timber and residual earth)] ✓ Examine whether construction waste materials can be recycled in advance (recycling in public works, free donation to local residents, etc.) [Garbage from works dormitories] ✓ Transportation of garbage and waste oil from dormitories to disposal sites or treatment facilities [Night soil] ✓ Installation of basic toilets in works dormitories ✓ Disposal in specified sites only upon checking with and obtaining permission from the forestry department	Not necessary	[During works] Contractor	DRD
	5	Noise and vibration	[Noise during construction] ✓ Installation of silencers and selection of low-noise equipment ✓ Avoid using heavy machinery at night ✓ Explanation of construction schedule to local residents and securing of their consent	Not necessary	[During works] Contractor	DRD
Social and Environmental	13	Involuntary resettlement	✓ Appropriate compensation and social assistance based on basic resettlement plans	Not necessary	[During works] SLRD DRD GAD	DRD
	17	Land use and utilization of local resources	✓ Appropriate land expropriation and compensation regarding farmland that is negatively impacted by works	Not necessary	[During works] SLRD DRD	DRD
	19	Existing social infrastructures and services	✓ Construction of detours and connection of them to existing community roads	Not necessary	[During works] Contractor	DRD
	28	Labor environment	✓ Preparation of appropriate construction plans (construction schedule, assigned numbers of labourers) ✓ Safety training of laborers	Not necessary	[During works] Contractor	DRD

	No	Item	Environmental Management Plan		Organization	
			During Works	In service	Implementing Agency	Responsible Agency
Others	29	Accidents	<ul style="list-style-type: none"> ✓ Placement of traffic controllers in places used by construction vehicles ✓ Installation of safety signs ✓ Installation of fences to stop children from entering construction sites ✓ Installation of electric lights when conducting nighttime work ✓ Provision of parking spaces for construction vehicles ✓ Limiting of speed inside construction facilities ✓ Provision of safety education for labourers ✓ Safety patrols by supervisors in construction sites 	Not necessary	[During works] Contractor	DRD

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2) Environmental Monitoring Plan

(a) Road and Bridge

Category	Item	Method	Location	Frequency	Standard and Regulation	Executing Agency	Responsible organization	Cost borne by
(I) Before execution								
1) Approval and Permission	Permission for project implementation, and environmental authorization	1) Project permission procedures 2) Environmental authorization from the Ministry of Environment	DRRD Ministry of Natural Resources and Environmental Protection	Before the start of works	1) Environmental Conservation Act (2012), 2) Environmental Conservation Regulations (2015)	DRRD	DRRD Ministry of Natural Resources and Environmental Protection	DRRD
	Compensation for residents whose lives or livelihoods are impacted	Interview survey	Places where land needs to be secured	Before the start of works	1) Land legislation in Myanmar 2) JICA environmental and social consideration guidelines	DRRD	GAD	DRRD
2) Social and Environment	Securing of the necessary land	Site survey	Land that needs to be secured	Before the start of works	Land legislation in Myanmar	DRRD	GAD	DRRD
	Stakeholder discussions and information disclosure	Project explanation and opinions, proposals and requests from residents	All Project sites	Before the start of works	1) Environmental Conservation Regulations (2015) 2) JICA environmental and social consideration guidelines	DRRD	DRRD Ministry of Construction	DRRD
(II) During execution								
1) Social and Environment	Traffic congestion and hindering of access to public facilities	1) Gathering of complaints 2) Confirmation of traffic conditions 3) Hearings with residents 4) Display of warning signs	Construction sites and surrounding areas	Every day	Not applicable	Contractor	Contractor DRRD GAD	Contractor
	Safety and public health	1) Appointment of personnel in charge 2) Safety planning, fire prevention planning, control of hazardous substances 3) Display of warning signs	Construction sites and surrounding areas	Decide according to symptoms among labourers and nearby residents	Welfare Act, Labour Safety Act	Contractor	Contractor DRRD GAD	Contractor

Category	Item	Method	Location	Frequency	Standard and Regulation	Executing Agency	Responsible organization	Cost borne by
		4) Management of toilets, waste receptacles, and wastewater, and waste management in dormitories						
	Labour environment	1) Workers' health checks 2) First aid boxes	Construction sites and surrounding areas	According to necessity	Labour Safety Act	Contractor	Contractor DRRD GAD	Contractor
	Natural disasters	Record of natural disasters and risks that occur in the Project area	Construction sites and surrounding areas	When incidents occur	Disaster Prevention Act	Contractor	Contractor DRRD GAD	Contractor
	Accidents	Record of accidents that occur in the Project area	Construction sites and surrounding areas	When incidents occur	Labour Act, Labour Safety Act	Contractor	Contractor DRRD GAD	Contractor
	Social issues	1) Gathering of complaints and demands 2) Hearings	Construction sites and surrounding areas	According to necessity	Not applicable	Contractor	Contractor DRRD GAD	Contractor
2) Natural Environment	Felled trees	1) Onsite observation 2) Hearings	Construction sites and surrounding areas	According to necessity	Not applicable	Contractor	Contractor DRRD GAD	Contractor
	Air pollution	1) Gathering of complaints 2) Onsite observation 3) particulate control 4) Atmospheric concentration measurements (SO ₂ , NO ₂ , PM10)	1) 2) 3) 4) Works sites and surrounding areas	1) When complaints occur 2) Everyday 3) According to necessity 4) According to necessity	Community participation	Contractor DRRD	Contractor DRRD GAD	Contractor
3) Pollution	Water pollution	1) Gathering of complaints 2) Onsite observation 3) Water quality analysis (pH, BOD, COD, TS, SS)	1) & 2) Works sites and surrounding areas; 3) Important locations	1) When complaints occur 2) Everyday 3) According to necessity	Community participation	Contractor DRRD	Contractor DRRD GAD	Contractor
	Waste issues	Waste transportation and collection records	Construction sites and surrounding areas	When waste transportation and collection arises	Community participation	Contractor	Contractor DRRD GAD	Contractor
	Noise	1) Gathering of complaints 2) Onsite observation 3) Noise measurement	1) & 2) Works sites and surrounding areas 3) Places where noise damage is expected	1) When complaints occur 2) Everyday 3) According to necessity	Community participation	Contractor	Contractor DRRD GAD	Contractor

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Category	Item	Method	Location	Frequency	Standard and Regulation	Executing Agency	Responsible organization	Cost borne by
(III) In service								
1) Pollution	Air pollution	1) Gathering of complaints 2) Hearings 3) Atmospheric concentration measurements (SO2, NO2, PM10)	1)2)3) Works sites and surrounding areas	1)2)3) According to conditions	Disaster Prevention Act	DRRD	DRRD	DRRD

105

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51

(b) Water Supply

Category	Item	Method	Location	Frequency	Standard and Regulation	Executing Agency	Responsible organization	Cost borne by
(I) Before execution								
1) Approval and Permission	Permission for project implementation, and environmental authorization	1) Project permission procedures 2) Environmental authorization from the Ministry of Natural Resources and Environmental Protection	Not applicable	Before the start of works	1) Environmental Conservation Act (2012), 2) Environmental Conservation Regulations (2015)	DRD	DRD Ministry of Natural Resources and Environmental Protection	DRD
	2) Social and Environment	Compensation for residents whose lives or livelihoods are impacted Securing of the necessary land Stakeholder discussions and information disclosure	Places where land needs to be secured Land that needs to be secured All Project sites	Before the start of works Before the start of works	1) Land legislation in Myanmar 2) JICA environmental and social consideration guidelines 1) Land legislation in Myanmar 2) WB Guideline 1) Environmental Conservation Act(2012), 2) Environmental Conservation Regulations (2015) 3) JICA environmental and social consideration guidelines	DRD DRD DRD	DRD GAD DRD GAD DRD	DRD DRD DRD
(II) During execution								
1) Social and Environment	Safety and public health	1) Appointment of personnel in charge 2) Safety planning, fire prevention planning, control of hazardous substances 3) Display of warning signs 4) Management of toilets, waste receptacles, and wastewater, and waste management in dormitories	Works sites and surrounding areas	Decide according to symptoms among labourers and nearby residents	Welfare Act, Labour Safety Act	Contractor	Contractor DRD GAD	Contractor
	Labour environment	1) Workers' health checks 2) First aid boxes	Works sites and surrounding areas	According to necessity	Labourer Safety Act	Contractor	Contractor DRD GAD	Contractor
	Natural disasters	Record of natural disasters and risks that occur in the Project area	Works sites and surrounding areas	When incidents occur	Disaster Prevention Act	Contractor	Contractor DRD GAD	Contractor

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Category	Item	Method	Location	Frequency	Standard and Regulation	Executing Agency	Responsible organization	Cost borne by
	Accidents	Record of accidents that occur in the Project area	Works sites and surrounding areas	When incidents occur	Labour Act, Labour Safety Act	Contractor	Contractor DRD GAD	Contractor
	Social issues	1) Gathering of complaints and demands 2) Hearings	Works sites and surrounding areas	According to necessity	Not applicable	Contractor	Contractor DRD GAD	Contractor
2) Natural Environment	Felled trees	1) Onsite observation 2) Hearings	Works sites and surrounding areas	According to necessity	Not applicable	Contractor	Contractor DRD GAD	Contractor
3) Pollution	Air pollution	1) Gathering of complaints and demands 2) Onsite observation 3) particulate control 4) Atmospheric concentration measurements (SO ₂ , NO _x , PM10)	Works sites and surrounding areas	1) & 2) Every day, 3) & 4) According to necessity	Community participation	Contractor DRD	Contractor DRD GAD	Contractor
	Waste treatment	Waste transportation and collection records	Works sites and surrounding areas	When waste transportation and collection arises	Community participation	Contractor	Contractor DRD GAD	Contractor
	Noise	1) Gathering of complaints 2) Onsite observation 3) Noise measurement	Works sites and surrounding areas	1) When complaints occur 2) Every day 3) According to necessity	Community participation	Contractor	Contractor DRD GAD	Contractor
(III) In service								
1) Social and environment	Proper and efficient water supply	1) Opinions of stakeholders and water use 2) Water quality inspection (pH, BOD, COD, SS, TS)	Inside rainwater tanks	1) Twice a year 2) According to necessity	Community participation	DRD	DRD	DRD

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Abbreviated Resettlement Action Plan (Draft)

The Draft Final Report includes the above-captioned Plan as follows:

Chapter 2 Environmental and Social Considerations

2-1 Basic Resident Resettlement Plan

According to the JICA environmental and social consideration guidelines (April 2010), in cases where involuntary resettlement of residents and land expropriation are forecast, depending on the number of impacted persons that need to be resettled, the project implementing agency must compile a resident resettlement plan or basic resident resettlement plan.

Based on the preliminary survey, the number of anticipated PAPs to be resettled is less than 200. Therefore, the Project proponent is required to prepare an A-RAP. The A-RAP should be prepared for the resettlement activities implemented by DRRD, DRD and concerned local governments under the existing laws and regulations in Myanmar.

Objectives of the A-RAP are summarized as follows:

- To protect communities and people from possible losses and other disadvantages caused by the Project
- To establish compensation policies for the sake of PAPs based on their existing socio-economic conditions
- To arrange necessary budget of each executing agency for the resettlement and other associated activities
- To provide guidance with PAPs and the concerned local governments in arranging the resettlement, helping the execution of a series of necessary treating the PAPs in a fair and facilitated manner with transparency

2-1-1 Necessity of Land Acquisition and Resettlement

2-1-1-1 Anticipated Land Acquisition and Resettlement

According to the road and bridge execution plan, approximately 460 m² of farmland will need to be acquired, and one item of movable property (memorial stone) will need to be moved. If buildings or property are lost or livelihoods are impacted, it will be necessary to pay appropriate compensation for the losses and give support to affected persons. For the owners of farmland that will be lost, it will be necessary to consider appropriate compensation and livelihood recovery measures. As for the owner of the memorial stone, it will be necessary to compensate the relocation costs or restore the stone to its original condition.

Concerning three village tracts in Ayeyarwady Region, because existing roads are narrow, farmland will be temporarily occupied in order to make equipment and materials storage areas and works yards. These temporary sites are currently used as farmland, however, the impacted persons have consented to providing farmland free of charge for the sake of public works, and the land is situated inside the right of way of DRRD-owned roads. The amount of farmland lost per household is approximately 500~700 m². As a result of conducting hearings, however, it is desirable that livelihood recovery measures, etc. be considered.

Table 2-1-1.1 Outline of land acquisition for the road and bridge sector

	Chin State	
	Zozang village	Zo Nuan Zang village
Farmland	2HHs Approx. 400 m ²	1 HHs Approx. 60 m ²
Movable property (memorial stone)	1 HHs 1 piece	-

Source: Prepared by the Survey Team

According to the irrigation execution plan, there will be some felling of trees, however, there will be no land acquisition or resettlement of residents. According to the water supply execution plan, although the rainwater tanks will be installed in schools, religious facilities and private gardens, there will be no resettlement of residents. The landowners have agreed to donate land for installation of the rainwater tanks free of charge. Moreover, farmland will be temporarily occupied in order to make equipment and materials storage areas and works yards. The temporarily occupied farmland will be restored to its original condition following execution of the works.

2-1-1-2 Initial Efforts to avoid or minimize resettlement and land acquisition

To avoid and minimize involuntary resettlement and land acquisition, DRRD, DRD are considering the following measures:

- DRRD, which will oversee the road and bridge plan, will consider reducing the width of roads in cases where numerous land acquisitions or resettlement of many residents are forecast.
- DRD, which will oversee the water supply plan, will examine the feasibility of having land donated for public uses. If use of public land is difficult, it will consider use of private land including payment of compensation.

If an owner doesn't agree to sell his/her private land for the Project, DRD and DRRD will keep negotiating until the owners agree to sell it or start to consider discontinuing the Project.

2-1-2 Legal and Policy Framework for Land Acquisition and Resettlement in Myanmar

2-1-2-1 Laws and Regulation related to Land Acquisition and Resettlement

There are many significant laws which govern land issues, land administration and land ownership in Myanmar such as Land Nationalization Act (1953), Disposal of Tenancies Law (1963), Land Acquisition Act (1894), Forest Law (1992), Farm Land Law (2012), and so on. Among them, the Land Acquisition Act (1894) is the core law of land acquisition.

The Land Acquisition Act 1894 promulgated in the British Colonial Era is still the core law for land acquisition and resettlement in Myanmar. A new effectual system has not been established as of August 2018. MoHA, SLRD and Forest Department are expected to update a better system in near future. The flow of land acquisition under Myanmar legislation is shown in Figure 2-1-2.1. The process is summarized in the following 5 steps:

(1) Preliminary investigation

A notification is publicized in gazette and the substance of public notice is given at convenient places. Preliminary investigations are conducted, which include surveys, digging/boring, delineation of the

land boundaries.

(2) Hearing about objections

Objections to land acquisition are collected in writing within 30 days from the notification. The Collector 1 examines the objections and makes consensus over the issue. A report containing recommendations on the objections is submitted to the president of union for the decision, if the collector finds necessary to do so.

(3) Declaration of intended acquisition

The declaration of land acquisition is publicized in the gazette, and stated at the district or other territorial division in which the land situates. The declaration includes the purposes, approximate size of the area, location and plan.

(4) Enquiry into measurements, value and claims, and award by the collector

1) Public Notice

The collector marks out and measures the land, and give the public notice at convenient places near the land. The notice is also provided to persons known or believed to be interested in the land.

2) Examination of Award (Area of Land and Compensation)

The collector proceeds to inquire into objections to the measurement, the value of the land at the date of the publication of the notification, the respective eligibilities to claim the compensation and examines each award. The award is examined based on the area of the land, compensation including opinions of PAPs and the apportionment of compensation among PAPs. The award is filed for conclusive evidence between the collector and the persons interested in the land. The collector immediately notifies the awards to the persons who are not present or their representatives when the awards are made. The collector makes efforts to address the enquiry.

3) Grievance

If deliberation reaches agreement, Award Committee issues the decision concerning the type and amount of compensation. The deliberation is continued until agreement is reached between the affected people and Award Committee, but GAD can mediate in case they cannot conclude alone.

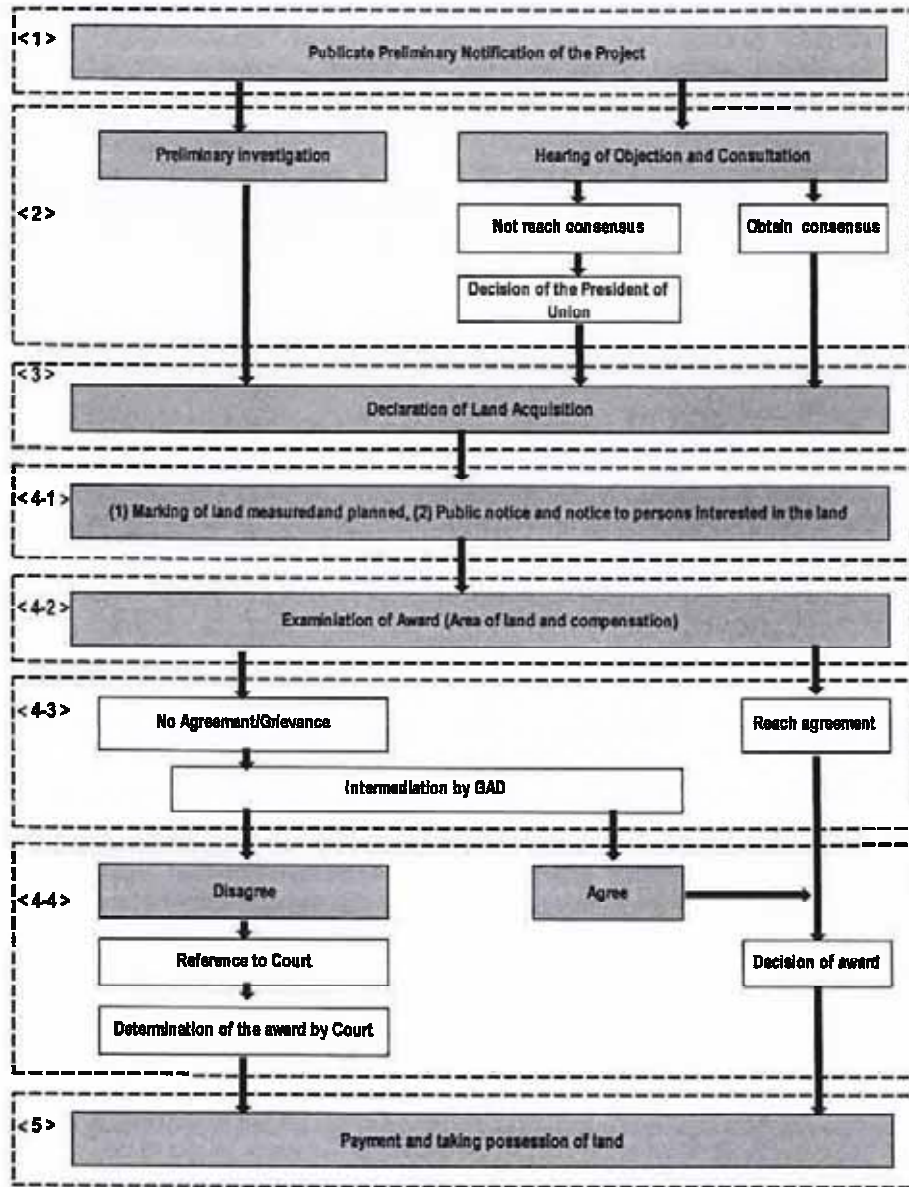
4) Reference to Court

Any person interested in the land who do not accept the award can require that the matter be referred by the Collector to the court to decide on whether the objection to the measurement of the land, the amount of the compensation, the person to whom it is payable, or the apportionment of the compensation among the persons interested are appropriate. If the persons agree to the compensation, the details are specified in the award for the conclusive evidence. If any dispute arises, the collector may refer the disputes to the court for decision.

¹ The expression "Collector" includes any officer specially appointed by the President of the Union to perform the functions of a Collector under this Act (Part I: Preliminary, Land Acquisition Act 1894)

(5) Payment and taking possession of land

The collector pays compensation and takes possession of the land. The collector gives the persons sufficient time to remove their property without inconvenience before taking possession.



Source: Flow of Land Acquisition under Myanmar Legislation

Figure 2-1-2.1 Basic Flow of Land Acquisition in Myanmar

2-1-2-2 JICA Guideline Policy

According to JICA Guidelines, the key principles of JICA’s policy on involuntary resettlement and land acquisition are as follows:

- (a) Involuntary resettlement and loss of means of livelihood are to be avoided when feasible by

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exploring all viable alternatives.

- (b) When, population displacement is unavoidable, effective measures to minimize the impact and to compensate for losses should be taken
- (c) People who must be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported, so that they can improve or at least restore their standard of living, income opportunities and production levels to pre-project levels.
- (d) Compensation must be based on the full replacement cost as much as possible.
- (e) Compensation and other kinds of assistance must be provided prior to displacement.
- (f) For projects that entail large-scale involuntary resettlement, resettlement action plans must be prepared and made available to the public. It is desirable that the resettlement action plan include elements laid out in the World Bank Safeguard Policy, OP 4.12, Annex A.
- (g) In preparing a resettlement action plan, consultations must be held with the affected people and their communities based on sufficient information made available to them in advance. When consultations are held, explanations must be given in a form, manner, and language that are understandable to the affected people.
- (h) Appropriate participation of affected people must be promoted in planning, implementation, and monitoring of resettlement action plans.
- (i) Appropriate and accessible complaint mechanisms must be established for the affected people and their communities.
- (j) Affected people are to be identified and recorded as early as possible in order to establish their eligibility through an initial baseline survey (including population census that serves as an eligibility cut-off date, asset inventory, and socioeconomic survey), preferably at the project identification stage, to prevent a subsequent influx of encroachers or others who wish to take advance of such benefits.
- (k) Eligibility of Benefits include, the PAPs who have formal legal rights to land (including customary and traditional land rights recognized under law), the PAPs who don't have formal legal rights to land at the time of census but have a claim to such land or assets and the PAPs who have no recognizable legal right to the land they are occupying.
- (l) Preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based.
- (m) Provide support for the transition period (between displacement and livelihood restoration.
- (n) Particular attention must be paid to the needs of the vulnerable groups among those displaced, especially those below the poverty line, landless, elderly, women and children, ethnic minorities etc.
- (o) For projects that entail land acquisition or involuntary resettlement of fewer than 200 people, abbreviated resettlement plan is to be prepared.

In addition to the core principles above, JICA's guideline also lays emphasis on a detailed resettlement policy inclusive of all the following points: Project specific resettlement plan; institutional framework for implementation; monitoring and evaluation mechanism; time schedule for implementation and detailed financial plan, etc.

2-1-2-3 Comparison of JICA Guidelines and Myanmar Legislation

Table 2-1-2.1 shows the comparison of the JICA guidelines and Myanmar legislation and measures for gaps.

Table 2-1-2.1 Comparison of the JICA guidelines and Myanmar Legislation

No	JICA Guidelines	Laws and Guidelines in Myanmar	Gap relative to JICA GL	Project Policy
1	Involuntary resettlement and loss of means of livelihood are to be avoided when feasible by exploring all viable alternatives. (JICA GL)	Not applicable	There is no regulation which mentions or requests to avoid or minimize involuntary resettlement and loss of livelihood means.	Follow JICA GL
2	When, population displacement is unavoidable, effective measures to minimize impact and to compensate for losses should be taken. (JICA GL)	Compensation or indemnity is provided for farmland acquisition for the interest of the State or public (Farmland Law (2012) Art. 26, Farmland Rules (2012) Art. 64).	There is no difference.	Same as JICA GL
3	People who must be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported, so that they can improve or at least restore their standard of living, income opportunities and production levels to pre-project levels. (JICA GL)	Damages to standing crops/trees, lands, movable/immovable properties, relocation cost, economic activities are requested to compensate. (Land Acquisition Act (1894) Art. 23, Farmland Rules (2012) Art. 67)	There is no stipulation of improving or at least restoring living standard, income opportunities, and production levels to pre-project levels in the Myanmar legal framework.	The project considers the assistance to improve or restore the livelihood.
4	Compensation must be based on the full replacement cost as much as possible. (JICA GL)	Compensation at three times of the value calculated based on the average production of crops in the current market price of that area is provided. (Farmland Rules (2012) Art. 67)	There is no significant difference.	Same as JICA GL
5	Compensation and other kinds of assistance must be provided prior to displacement. (JICA GL)	When compensation is not paid on or before land acquisition, compensation amount awarded with interest rate must be paid.	There is no clear indication about timing of compensation payment in the Myanmar legal framework.	The project supports the compensation process so that the compensation and other kinds of assistance to be provided prior to displacement.
6	For projects that entail large-scale involuntary resettlement, resettlement	Not applicable	There is no regulation requesting to prepare resettlement action	The project prepares abbreviated resettlement action

No	JICA Guidelines	Laws and Guidelines in Myanmar	Gap relative to JICA GL	Project Policy
	action plans must be prepared and made available to the public. (JICA GL)		plan.	plan and make available to the public.
7	In preparing a resettlement action plan, consultations must be held with the affected people and their communities based on sufficient information made available to them in advance. (JICA GL)	Not applicable	There is no regulation requesting to organize consultations with PAPs.	The project holds the consultations with the affected people and their communities on sufficient information made available to them in advance.
8	When consultations are held, explanations must be given in a form, manner, and language that are understandable to the affected people. (JICA GL)	Not applicable	Ditto	The project considers appropriate explanation when consultations are holds.
9	Appropriate participation of affected people must be promoted in planning, implementation, and monitoring of resettlement action plans. (JICA GL)	Not applicable	There is no regulation requesting participation of PAPs into planning, implementation, and monitoring of resettlement action plans.	The project considers the appropriate participation of affected people.
10	Appropriate and accessible complaint mechanisms must be established for the affected people and their communities. (JICA GL)	1) Notice of compensation amount to PAPs directly: appeal to the court within 6 weeks from the date of compensation award 2) Notice of compensation amount to representatives of PAPs: i) within 6 weeks of receipt of compensation notice, or ii) within 6 months from the from the date of compensation award, whichever period shall be first expired (Land Acquisition Act (1894) Art.18)	The procedure of complaint in the Myanmar context is direct settlement at the court, which is not necessarily easy or accessible to PAPs	The project considers the complaint redress mechanism by utilizing the existing administration system to be convenient for PAPs.
11	Affected people are to be identified and recorded as early as possible in order to establish their eligibility through an initial baseline survey (including population census that serves as an eligibility cut-off date, asset inventory, and socioeconomic survey), preferably at the project identification stage, to prevent a subsequent influx of encroachers of others who wish to take advance of such benefits. (WB OP 4.12 Para.	A notification of land acquisition or public purposes is published in the Gazette, which is also published at the convenient place in the concerned municipality. (Land Acquisition Act (1894) Article 4)	There is no specific description of identifying affected people as early as possible in the national law.	The project identifies and records the affected people at the project identification stage.

No	JICA Guidelines	Laws and Guidelines in Myanmar	Gap relative to JICA GL	Project Policy
	6)			
12	Eligibility of benefits includes, the PAPs who have formal legal rights to land (including customary and traditional land rights recognized under law), the PAPs who don't have formal legal rights to land at the time of census but have a claim to such land or assets and the PAPs who have no recognizable legal right to the land they are occupying. (WB OP 4.12 Para. 15)	Occupiers/stakeholders of lands to be acquired are explained about acquisition and claims to compensations. (Land Acquisition Act (1894) Article 9)	Detail procedures as well as eligibility criteria are not clearly defined. Also, there is no specific indication about displaced persons without titles.	The project considers eligibility for assistance to all households whose income sources or assets are confirmed as affected due to project implementation.
13	Preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based. (WB OP 4.12 Para. 11)	Not Applicable	There is no regulation stipulating to give land-based resettlement strategies.	The project considers the land-based resettlement strategies.
14	Provide support for the transition period (between displacement and livelihood restoration). (WB OP 4.12, para.6)	Not Applicable	There is no regulation stipulating to provide support for the transition period.	The project considers the support for the transition period.
15	Particular attention must be paid to the needs of the vulnerable groups among those displaced, especially those below the poverty line, landless, elderly, women and children, ethnic minorities etc. (WB OP 4.12 Para. 8)	Not Applicable	There is no regulation stipulating to provide particular attention to the vulnerable groups.	The project pays particular attention to vulnerable groups if needed.
16	For projects that entail land acquisition or involuntary resettlement of fewer than 200 people, abbreviated resettlement plan is to be prepared. (WB OP4.12 Para.25)	Not Applicable	There is no regulation stipulating to develop an A-RAP for a project with involuntary resettlement of fewer than 200 people.	Same as JICA Guideline

Source: Land Acquisition Act (1894), Farmland Rules (2012), Farm Land Law (2012), JICA Guidelines (2010.4) and World Bank OP 4.12

2-1-2-4 Institutional Framework for Land Acquisition and Resettlement

In general, issues of land acquisition and resettlement are complicated in Myanmar due to the issues such as entangled legislation and divided administrative structures. The roles and functions of organizations for implementing land acquisition and resettlement are shown in Table 2-2-2.2.

Table 2-1-2.2 Role of Organization for Implementing Land Acquisition and Resettlement

Organization	Role and Function
Land Administration	1) For non-agricultural land, LAD at Township level investigates land use, area size, landownership and tenant, and prepares necessary documents and maps for land

Organization	Role and Function
Department (LAD)	acquisition. 2) The LAD routinely handles transfer of land titles or subdivisions of plots, etc. and prepares land lease certificates.
SLRD	1) For agricultural lands, the SLRD under the MoALI at Township level investigates area size and land ownership, prepares necessary documents and maps for land acquisition. 2) The SLRD surveys market prices of lands, buildings, crops and trees for compensation.
Award Committee	The Award Committee chaired by the respective Township Administrators is established to examine the award (entitlement, amount of compensation).
District Administrator	The District Administrator issues land lease grant for land not exceeding one (1) acre (The Lower Burma Town and Village Lands Manual, 1899).
GAD, MoHA	The GAD issues land lease grant for land exceeding one (1) acres (The Lower Burma Town and Village Lands Manual, 1899)

Source: Prepared by the Survey Team

2-1-2-5 Resettlement Policy

(1) General Considerations

The policy regarding the replacement of structures and resettlement caused by the Project implementation needs to take both the JICA guidelines and the Myanmar legislation into consideration. There are gaps between the JICA guidelines and Myanmar legislation, this plan is mainly based on the JICA guidelines since its content is relatively comprehensive.

(2) Replacement Costs

PAPs negatively impacted by the Project are entitled to compensation. Amount of the compensation is calculated based on the following principles. The confirmation and calculation of the market price is calculated promptly by the Committee after the establishment of the Compensation Committee. The amount of compensation necessary for the transfer of assets is calculated before relocation/transfer without taking depreciation into consideration. At the time of final payment of compensation, expenses such as various taxes, registration fee etc. generated by this plan are also included.

- (a) Productive Land (agricultural, aquaculture, garden and forest): Based on the actual current market prices that reflect recent land sales in the area, and in the absence of such recent sales, based on the recent sales in comparable locations with comparable attributes; fees and taxes; or in the absence of such sales, based on the productive value.
- (b) Residential Land: Based on the actual current market prices that reflect recent land sales, and in the absence of such recent land sales, based on the prices of recent sales in comparable locations with comparable attributes; fees and taxes.
- (c) Existing regulations of local government regarding the calculation of compensation for building, crops and trees shall be used wherever available.
- (d) Houses and other related structures: Based on the actual current market prices of affected materials.
- (e) Annual crops: Cash compensation for the replacement should be in line with local government regulations if available or equivalent to the current market value of crops at the time of compensation.

- (f) Perennial crops: Cash compensation for the replacement should be in line with local government regulations if available, or equivalent to the current market value of crops at the time of compensation
- (g) For timber trees: Cash compensation for the replacement should be in line with local government regulations if available, or equivalent to the current market value. Value is decided by type, age and relevant productive value at the time of compensation based on the diameter at breast height of each tree.

(3) Measurement for Recovering Living (proposal)

In line with the road and bridge execution plan, acquisition of farmland, and transfer or restoration to original state of a memorial stone will arise. Basically, in cases where land acquisition or resettlement of residents arises, ample compensation will be paid based on the reacquisition price, and livelihood support will be offered according to necessity. It is vital that livelihood support will be offered to ensure that impacted persons have equal or better livelihood than they did before the Project was implemented. Livelihood support measures for residents who have to be resettled or lose their

As a result of consultation, DRRD, the executing agency, plans to compensate for owners who permanently lose their farmland. DRRD will compensate with the equivalent to three times of the annual harvest. In addition, DRRD will arrange necessary training program by AMD for agricultural guidance (efficient agricultural instruction and how to use large agricultural machinery in the rainy season, etc.), so that revenue increase can be achieved than the present income level. In addition, DRRD will provide priority employment opportunities to the day and light labor workers for the construction of the planned road / bridge projects.

(4) Eligible Criteria and Cut-Off Date

A cut-off date is set to identify and differentiate genuine eligible PAPs from non-eligible people. Households entering the target areas after the cut-off date will not be eligible for compensation. The environmental and social survey for the Project was implemented in September 2017 and over the period from November to December 2018, and explanations were given on basic environmental and social conditions (land use, socioeconomic conditions, wildlife, nearby protected areas, vulnerable places, etc.). As a result of holding discussions with the implementing agencies, the cut-off dates were set as shown in Table 2-1-2.3. The cut-off date were notified from the implementing agencies through the heads of villages and village tracts.

Table 2-1-2.3 Cut-off Date for Compensation in the Project

Site	Cut-off date
Chin State (Zozang Village, Zo Nun Zang Village)	December 8, 2018
Ayeyarwady Region (Sit Sali Htone Village Tract, Sa Bain Kone Village Tract, Tha Kan Wa Village Tract)	December 5, 2018

Source: Prepared by the Survey Team

2-1-3 Scale and Area of Land Acquisition and Resettlement

2-1-3-1 Initial Information of Land Owners

Landowners in the Project are as shown in Table 2-1-3.1. The basic resident resettlement plan survey (survey of assets, socioeconomic conditions, etc.) was implemented for plans that entail acquisition of privately-owned land. Also, concerning plans in which it is expected that owners or villages will donate land, the current conditions were confirmed based on the World Bank's operational policy.

Table 2-1-3.1 Initial Information of Land Owners

	No.	State and Region	Village / Village Tract	Condition and owner
Road and Bridge	Route ZZ	Chin	Zozang Village	Agricultural land acquisition / No resettlement
	Route ZZ –BR	Chin	Zozang Village	Agricultural land (4 paddies) acquisition , property (memorial stone) acquisition. / No resettlement
	Route ZN	Chin	Zo Nun Zang Village	Agricultural land acquisition / No resettlement
	Route ZN –BC7	Chin	Zo Nun Zang Village	Agricultural land (1 paddy) acquisition / No resettlement
Water Supply	SST-1	Ayeyarwady	Sit Sali Htone Village Tract	Affected land (Private garden 1) << Donation >>
	SST-2	Ayeyarwady	Sit Sali Htone Village Tract	Affected land (Private garden 1) << Donation >>
	SST-3	Ayeyarwady	Sit Sali Htone Village Tract	Affected land (Private garden 1) << Donation >>
	SST-4	Ayeyarwady	Sit Sali Htone Village Tract	Affected land (Private garden 1) << Donation >>
	SST-5	Ayeyarwady	Sit Sali Htone Village Tract	Affected land (Private garden 1) << Donation >>
	SST-6	Ayeyarwady	Sit Sali Htone Village Tract	Affected land (Private garden 1) << Donation >>
	SBK-1	Ayeyarwady	Sa Bain Kone Village Tract	Affected land (Private garden 1) << Donation >>
	SBK-1	Ayeyarwady	Sa Bain Kone Village Tract	Affected land (Private garden 1) << Donation >>
	SBK-2	Ayeyarwady	Sa Bain Kone Village Tract	Affected land (Private garden 1) << Donation >>
	SBK-3	Ayeyarwady	Sa Bain Kone Village Tract	Affected land (School 1) << Donation >>
	SBK-4	Ayeyarwady	Sa Bain Kone Village Tract	Affected land (Religious facility 1) << Donation >>
	SBK-5	Ayeyarwady	Sa Bain Kone Village Tract	Affected land (Private garden 1) << Donation >>
	SBK-6	Ayeyarwady	Sa Bain Kone Village Tract	Affected land (School 1) << Donation >>
	SBK-7	Ayeyarwady	Sa Bain Kone Village Tract	Affected land (Religious facility 1) << Donation >>
	TKW-1	Ayeyarwady	Tha Kan Wa Village Tract	Affected land (Private garden 1) << Donation >>
TKW-2	Ayeyarwady	Tha Kan Wa Village Tract	Affected land (Private garden 1) << Donation >>	
TKW-3	Ayeyarwady	Tha Kan Wa Village Tract	Affected land (Private garden 1) << Donation >>	
TKW-4	Ayeyarwady	Tha Kan Wa Village Tract	Affected land (Private garden 1) << Donation >>	
TKW-5	Ayeyarwady	Tha Kan Wa Village Tract	Affected land (School 1) << Donation >>	

Note: SST2 and TKW2 are owned by same person

Source: Prepared by the Survey Team

2-1-3-2 Project Affected Persons (PAPs) and Project Affected Unit (PAU)

Table 2-1-3.2 summarizes the Project Affected Persons (PAPs) and Project Affected Unit (PAU). Totally 16 households will be affected.

Table 2-1-3.2 Expected Project Affected Persons (PAPs) and Project Affected Unit (PAU)

Sector	PAPs	PAUs				
		Household	Building	Land	Dimensions (m ²)	Tree
Road and Bridge	31	4	4	0	460	0
Water Supply	57	12	0	18	6,135	55

Source: Prepared by the Survey Team

The numbers of impacted residents were counted in the socioeconomic survey conducted in

September 2017. Tree felling will arise on a number of the Project sites. The Project implementing agencies (DRRD, IWUMD, and DRD) will need to obtain Forest Clearance to cut trees from the Forest Department of the Ministry of Natural Resources and Environmental Protection before execution. Moreover, since it will take around 5.5 months to obtain the said clearance. The following table shows the procedures that need to be conducted with the Forest Department.

Table 2-1-3.3 Procedure of Forest Clearance

Period	Detail
—	The implementing agencies request the forest ministry to ascertain the trees that may be impacted inside the Project sites.
Approx. 2.5 months (Approx. 4 times)	The impacted trees will be confirmed in site reconnaissance conducted by the implementing agencies, consultants, and Forest Department in the presence of the Project land owners.
Approx. 1 months	Based on the results of the site reconnaissance, the Forest Department calculates the amount of compensation regarding the impacted trees.
Approx. 0.5 months	The Forest Department conveys the amount of compensation for the impacted trees to the implementing agencies.
Approx. 0.5 months	The implementing agencies discuss the compensation, etc. for the impacted trees with the landowners.
Approx. 0.5 months	The implementing agencies pay the necessary compensation to the landowners.
Approx. 0.5 months	The Forest Department issues Forest Clearance to the implementing agencies.

Source: Prepared by Preparatory Survey team based on the interview for Forest Department

Table 2-1-3.4 and Table 2-1-3.5 describe outline of the PAPs and PAUs for each sector.

Table 2-1-3.4 PAPs and PAUs for Road and Bridge Sector

No.	Plan No.	State / region Village / Village tract	Longitude, Latitude		PAPs	Building	Affected Area (m ²)	Owned Area (m ²)
			Longitude	Latitude				
1	ZZ-BR1	Chin Zozang	23°20'08.73"N	94°00'19.23"E	U Tuam Kham Kap	memorial stone 1	—	—
2	ZZ-BR1	Chin Zozang	23°20'08.73"N	94°00'19.23"E	U Piang Zun	Paddies 1	100	12,947
3	ZZ-BR1	Chin Zozang	23°20'08.73"N	94°00'19.23"E	U Piang Zun	Paddies 1	100	12,947
4	ZZ-BR1	Chin Zozang	23°20'08.73"N	94°00'19.23"E	U Lian Sang	Paddies 1	100	12,947
5	ZZ-BR1	Chin Zozang	23°20'08.73"N	94°00'19.23"E	U Lian Sang	Paddies 1	100	12,947
6	ZN-BC7	Chin Zo Num Zang	23°21'56.31"N	94°00'00.74"E	U Thawng Suin	Paddies 1	60	12,138

Source: Prepared by the Survey Team

Table 2-1-3.5 PAPs and PAUs for Water Supply Sector

No.	Plan No.	State / region and Village tract	Longitude, Latitude		PAPs	Building	Affected Area (m ²)	Owned Area (m ²)
			Longitude	Latitude				
1	SST-1	Ayeyarwady Sit Sali Htone	16°33'02.50"N	95°25'56.40"E	U Saw Kwal Ntoo	Garden 1	400	32,375
2	SST-2	Ayeyarwady Sit Sali Htone	16°32'32.58"N	95°26'27.29"E	U Saw Hto Be Bae	Garden 1	400	40,469
3	SST-3	Ayeyarwady Sit Sali Htone	16°30'55.33"N	95°25'28.77"E	U Saw Ba Gae	Garden 1	400	101,171
4	SST-4	Ayeyarwady Sit Sali Htone	16°30'53.70"N	95°25'51.93"E	U Gale Crack	Garden 1	192	40,469
5	SST-5	Ayeyarwady Sit Sali Htone	16°30'48.01"N	95°26'15.03"E	U Mae Kyaw	Garden 1	333	12,141
6	SST-6	Ayeyarwady Sit Sali Htone	16°30'46.26"N	95°25'38.95"E	U Myat Phaw	Garden 1	333	16,187
7	SBK-1	Ayeyarwady Sa Bain Kone	16°16'35.52"N	95°29'36.72"E	U Thant Zin	Garden 1 Tree 1	333	28,328
8	SBK-2	Ayeyarwady Sa Bain Kone	16°15'46.80"N	95°30'33.58"E	Daw Tin Myint	Garden 1 Tree 1	340	56,656
9	SBK-5	Ayeyarwady Sa Bain Kone	16°15'03.51"N	95°29'24.02"E	Daw Aye Kyi	Garden 1 Tree 3	340	16,187
10	TKW-1	Ayeyarwady Tha Kan Wa	16°19'00.23"N	95°29'33.93"E	Daw Aye Thon	Garden 1 Tree 1	400	24,281
11	TKW-2	Ayeyarwady Tha Kan Wa	16°18'26.00"N	95°29'31.17"E	U Saw Hto Be Bae	Garden 1	400	40,469
12	TKW-3	Ayeyarwady Tha Kan Wa	16°16'43.87"N	95°29'42.17"E	U Aung Min Thein	Garden 1 Tree 3	333	20,234
13	TKW-4	Ayeyarwady Tha Kan Wa	16°17'36.57"N	95°30'33.39"E	Daw Tin Aye	Garden 1 Tree 25	333	12,141

Source: Prepared by the Survey Team

2-1-3-3 Condition of Environment and Social

The PAPs household information for each sector are as shown in Table 2-1-3.6 to Table 2-1-3.8.

Table 2-1-3.6 Age, Sex, Number of Households and Structure

No.	Plan No.	Head of household	Head of household age	No. of households	Age composition of households				Sex	
					Under 5	6-17	18-60	Over 60	Male	Female
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										

Source: Prepared by the Survey Team

Table 2-1-3.7 Occupation, Income and Expense

No.	Plan No.	Head of household	Occupation	Annual income (MMK)	Annual expense (MMK)
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					

Source: Prepared by the Survey Team

Table 2-1-3.8 Ethnicity, Religion, Educational Level and Transportation

No.	Plan No.	Head of household	Ethnicity	Religion	Educational Level (Graduated school)						Transportation		
					Temple	Primary School	Secondary School	High School	University/College	Graduate school	Motorbike	Bus	Other
1.	77 DD1	U Tun Aung Mya	Chin	N/A		1	9	6		3	3	1	
2.													
3.													
4.													
5.													
6.													
7.													
8.													
9.													
10.													
11.													
12.													
13.													
14.													
15.													
16.													
17.													
18.													
19.													

Note: Children who are in school are not included in the number of educational levels (graduated schools) in the table above.

Source: Prepared by the Survey Team

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2-1-3-4 Land Donation

In the water supply plan, ownership of several planned sites is private and land donation is expected. The outline is as shown in Table 2-1-3.9.

Table 2-1-3.9 Expected Land Donation Plan

Plan No.	State/Region	Village Tract	Owner
SST-1	Ayeyarwady	Sit Sali Htone	...
SST-2	Ayeyarwady	Sit Sali Htone	
SST-3	Ayeyarwady	Sit Sali Htone	
SST-4	Ayeyarwady	Sit Sali Htone	
SST-5	Ayeyarwady	Sit Sali Htone	
SST-6	Ayeyarwady	Sit Sali Htone	
SBK-1	Ayeyarwady	Sa Bain Kone	
SBK-2	Ayeyarwady	Sa Bain Kone	
SBK-5	Ayeyarwady	Sa Bain Kone	
TKW-1	Ayeyarwady	Tha Kan Wa	
TKW-2	Ayeyarwady	Tha Kan Wa	
TKW-3	Ayeyarwady	Tha Kan Wa	
TKW-4	Ayeyarwady	Tha Kan Wa	

According to the World Bank Guideline, even if the donations are voluntary. If determining informed consent can be difficult, the following 8 criteria are suggested in the guidelines. In the Project, confirmation of the eight criteria will be implemented by the Compensation Committee. If all of the conditions are not confirmed, land will be acquired according to the compensation policy, or the works in the site concerned will be suspended and a new site will be examined.

- WB-1: The infrastructure must not be site specific.*
- WB-2: The impacts must be minor, that is, involve no more than 10 percent of the area of any holding and require no physical relocation.*
- WB-3: The land required to meet technical project criteria must be identified by the affected community, not by line agencies or project authorities (nonetheless, technical authorities can help ensure that the land is appropriate for project purposes and that the project will produce no health or environmental safety hazards).*
- WB-4: The land in question must be free of squatters, encroachers, or other claims or encumbrances.*
- WB-5: Verification (for example, notarized or witnessed statements) of the voluntary nature of land donations must be obtained from each person donating land.*
- WB-6: If any loss of income or physical displacement is envisaged, verification of voluntary acceptance of community-devised mitigatory measures must be obtained from those expected to be adversely affected.*
- WB-7: If community services are to be provided under the project, land title must be vested in the community, or appropriate guarantees of public access to services must be given by the private titleholder.*
- WB-8: Grievance mechanisms must be available.*

In the Project, landowners have offered to provide land free of charge for the water supply target sites.

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To confirm that item WB-2 in the World Bank's Operational Policy is reflected in the policy, comparison was conducted between the current land area held by owners and the area of the Project target sites as shown in Table 2-1-3.10.

Table 2-1-3.10 Results of Verifying the World Bank's Operational Policy (WB-2)

Plan No	Name of Owner	Target	Held Area (m ²)	Project Target Area (m ²)	Occupation Ratio of the Project Target Area (%)
SST-1		Private land (garden)	32,375	400	1.2
SST-2		Private land (garden)	40,469	400	1.0
SST-3		Private land (garden)	101,171	400	0.4
SST-4		Private land (garden)	40,469	192	0.5
SST-5		Private land (garden)	12,141	333	2.7
SST-6		Private land (garden)	16,187	333	2.1
SBK-1		Private land (garden)	28,328	333	1.2
SBK-2		Private land (garden)	56,656	340	0.6
SBK-5		Private land (garden)	16,187	340	2.1
TKW-1		Private land (garden)	24,281	400	1.6
TKW-2		Private land (garden)	40,469	400	1.0
TKW-3		Private land (garden)	20,234	333	1.6
TKW-4		Private land (garden)	12,141	333	2.7

Note: 1 acre is assumed to be 4,046 m²

Source: Prepared by the Survey Team

2-1-4 Compensation and Support Plan

2-1-4-1 Compensation for loss in the Project (Estimation of Compensation Amount)

Estimated cost of compensation for road and bridge plan is shown in Table 2-1-4.1.

Table 2-1-4.1 Necessary Cost Estimation for Land Acquisition (Road and Bridge)

Item	Compensation Contents
Type of Loss	
Immovable Property (Building)	Resettlement is not needed for the Project.
Crop	<p>Compensation equivalent to three times the annual yield will be provided. The compensation for crops and trees is included in compensation for land. The applied items are as follows;</p> <p>Zo Zang Village (rice/ 0.099acre (400 m²)) 14kg/1 acre/1 year*4,166 MMK/kg= Approx.59,000MMK</p> <p>Zo Nun Zang Village (rice / 0.015acre (60 m²)) 2kg/1 acre/1 year*4,166 MMK/kg= Approx.8,000MMK</p> <p>Note: Sale value per kilo is calculated as 4,166MMK. Source: Kalaymyo, Bogale Whole Sale Center and interview to farmers</p> <p style="text-align: right;">Total Amount of crop compensation is 67,000MMK</p>
Movable Property	<p>As a result of conducting hearings with DRRD, resettlement or restoration free of charge is being considered, however, considering the results of discussions with owners, resettlement costs will be provided according to necessity (no estimate at the present time).</p> <p style="text-align: right;">Total amount of movable property compensation is 0MMK (tentative)</p>
Job Opportunity	<p>Construction work related to the Project provides job opportunities with priority given consideration such as gender equality (Not estimated for now).</p> <p style="text-align: right;">Total amount of job opportunity compensation is 0MMK (tentative)</p>

Item	Compensation Contents
Others	
Cost for looking for alternative site	It is no necessary because owner is unnecessary to looking for altanative site Total amount of looking for altanative site compensation is 0MMK (tentative)
Total	67,000MMK

2-1-4-2 Entitlement Matrix

An entitlement matrix serves as a tool for evaluating the possible losses caused by the Project, namely it identifies eligibility of PAPs and provides a basis for necessary compensation and resettlement assistance with the PAPs. Table 2-1-4.2 summarizes the Entitlement Matrix designed for the Project.

Table 2-1-4.2 Entitlement Matrix

Type of Loss	Eligible Entity	Compensation Policy	Responsible Organization
Immovable Assets (e.g. fixed assets such as houses, structures, buildings, wells, etc.)	Owners of the Assets	Cash compensation worth either the value of the assets lost or twice their value measured in market price as replacement cost.	DRRD and DRD in cooperation with related department, local and Regional/ State Governments and/or communities
Movable Assets (e.g. transportation cost)	Owners of the Assets	Movable assets are not subject to compensation in principle. However, if costs for transporting the assets are required, such transportation costs or transportation mode to transfer the assets shall be provided.	DRRD and DRD in cooperation with related department, local and Regional/ State Governments and/or communities
Private Land (e.g. farmland, residential land, commercial land)	Owners of the Assets	Cash compensation worth the value of the assets measured in market price as replacement cost.	DRRD and DRD in cooperation with related department, local and Regional/ State Governments and/or communities
Crops, and Valuable Plants/Trees	Owners of the Assets	Cash compensation that is worth three years the expected earnings accrued from farming measured in market price as replacement cost.	DRRD and DRD in cooperation with related department, local and Regional/ State Governments and/or communities
Job Opportunity (Concerns: long term or short term negative impacts against incomes, sales, employment, work place, offices, etc.)	Labors. Traders such as vendors, stallers, shop keepers	Support in finding new jobs, restarting existing businesses and so on through measures such as micro credit and subsidies Provision of prioritized employment opportunity in construction-related works of the project	DRRD and DRD in cooperation with related department, local and Regional/ State Governments and/or communities
Changes in living environment	Relocated households	Improvement of living environment in relocated areas, strengthening cooperation with local communities	DRRD and DRD in cooperation with related department, local and Regional/ State Governments and/or communities
Community Assets (such as Pagoda, heritage structure, etc.)	Community	Compensation for relocation or move.	DRRD and DRD in cooperation with related department, local and Regional/ State Governments and/or communities

Source: Prepared by the Survey Team

2-1-5 Grievance Redress Mechanism

Disputes may happen during the implementation of A-RAP, and it is important to establish a clear

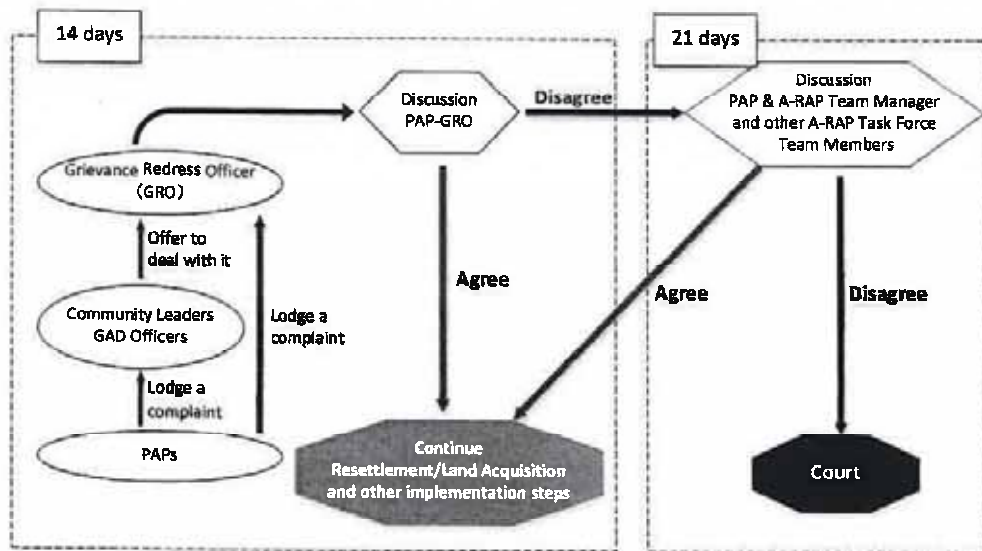
complaint procedure for PAPs, so that concerns and disagreements regarding the resettlement and compensation can be addressed satisfactorily. The success of a complaint mechanism is dependent on how swiftly such issues are resolved.

PAPs should be notified (e.g. handed a letter of notification that is explained to those who cannot read by a trusted intermediary) about the complaint mechanism. In addition, the complaint redress officer should be responsible for receiving and processing complaint complaints from PAPs. The name and contact information for this person should be given to the all relevant PAPs.

Under this complaint mechanism, if a PAP is dissatisfied with a resettlement or compensation measure or the delivery of entitlements, he/she must lodge a complaint in first instance to the complaint redress officer, and the complaint redress officer must answer in no later than 7 days (one week) after receiving the complaint. All complaints and respective actions must be recorded.

If a dispute cannot be resolved within a stated period of fourteen (14) days, it should be referred to the ARAP Implementation Team Manager, and he/she, in cooperation with other team members of the A-RAP Task Force, must answer within another established period of twenty-one (21) days. Compensation will be paid upon resolution of the complaint or dispute.

In case the complaint is not satisfied with the decision made by A-RAP Implementation Team Manager, the PAP(s) has a right to lodge the complaint to the court. The complaint procedure should not replace the existing legal processes, but provide a consensus-based complaint mechanism that would seek to resolve issues rapidly in order to expedite the receipt of compensation without expensive and time consuming legal options. A possible scheme for complaint redress mechanism is illustrated in Figure 2-1-5.1.



Source: Prepared by the Survey Team

Figure 2-1-5.1 Scheme for Grievance Redress Mechanism (Proposed)

2-1-6 Implementation system

2-1-6-1 Compensation Committee of Implementation Agencies and Related Organization

In implementing the basic resident resettlement plan, the implementing agencies, i.e. DRRD and DRD will establish a compensation committee in each sector. In the compensation committees, the necessary personnel from the implementing agencies and related agencies will be assigned to conduct the following duties. Moreover, the compensation committees will be established at the time of the Project detailed design and will immediately commence activities.

- Manager: Supervise overall implementation of the basic resident resettlement plan.
- Work implementation officer: While appropriately confirming that the basic resident resettlement plan is being implemented according to schedule, assist implementation of the basic resident resettlement plan.
- Officer in charge of handling complaints: To appropriately respond to complaints from the impacted residents, this officer will build good relations with the impacted residents and communities.
- Treasurer: Manage payment of compensation expenses, etc.

2-1-6-2 Rolls and Responsibilities of Related Organization

Rolls and responsibility of related organization are as described in Table 2-1-6.1.

Table 2-1-6.1 Rolls and Responsibilities of related Organization

Organization	Roll	Responsibility
MOC, MOALI	Jurisdiction of DRRD, DRD	Give approval for land acquisition and resident resettlement, etc. based on the Project.
DRRD, DRD	Executing agency of the Project	Confirm data concerning the needed land for transfer and expropriation. Organize and run a compensation committee. Liaise closely with impacted residents and local governments. Negotiate and reach agreement with local residents concerning amounts of compensation. Appropriately respond to complaints. Offer livelihood assistance to impacted residents during the resettlement phase. Implement internal monitoring.
GAD	Supervision / Executing Agency of the Land Acquisition Act	Based on the Land Acquisition Act and past performance of the General Administration Department, conduct guidance on the process of resettlement and expropriation arising in the Project. Assist selection of resettlement destinations and rebuilding of livelihoods. Assist determination of the compensation amount and rate. Mediate in cases where agreement cannot be reached between impacted residents and DRRD.

Organization	Roll	Responsibility
Other organization SLRD, MoALI Department of Human Settlement and Housing Development, MoALI NGOs	Support for DRRD, DRD	Supporting and advising DRRD, DRD

2-1-7 Cost and Resource

Table 2-1-7.1 shows the estimated budget and costs related to implementation of the resident resettlement plan in the Project. DRRD will be responsible for providing appropriate funds for expropriating land and implementing resident resettlement. An important point is that it will be necessary to review and reconsider the estimated amounts in the detailed resident resettlement plan conducted in the detailed design.

Table 2-1-7.1 Implementation Budget for RAPs

Item	Estimation		Description
	MMK	USD	
Road and Bridge (DRRD)			
Compensation (House)	330,000		4 householders of Route TK –BR2 (Renovation of bridge)
Compensation (Land)	315,000		4 householders of Route TK –BR2 (Renovation of bridge)
Compensation (Agricultural land)	387,000		2,320 m ² in target site of road and bridge sector
Loss of income	0		N/A
Support for living	0		N/A
Consultation with residents	100,000		50,000*2 times
Monitoring	300,000		100,000*3 years
Sub-total	1,432,000		
Contingency funds (+8%)	114,560		
Total	1,546,560	1,289	

Note: 1 USD=1,200 MMK (As of July, 2018)

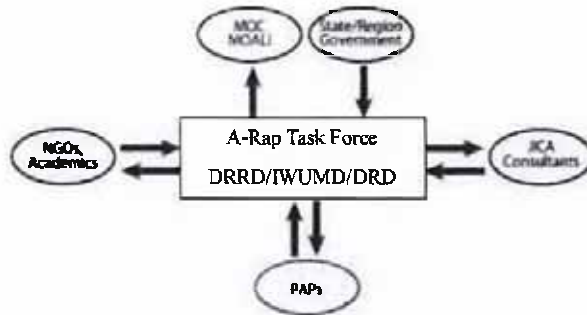
Source: Prepared by the Survey Team

2-1-8 Monitoring System

It is required to monitor the implementation of the A-RAP from the stage of consultation and agreement with PAPs for compensation and resettlement assistance to the stage after implementation. Monitoring will be implemented to investigate, analyze and evaluate the resettlement activities in a fair and facilitated manner with transparency.

It is necessary that Project executing agencies (DRRD, IWUMD and DRD) together with state/regional governments, and their ministries, establish special task force teams in order to monitor the resettlement activities. These teams shall be a single window to respond to problems with regard to the resettlement activities of the Project, and is expected to report the progress of the resettlement activities to the Project executing agencies and concerned authorities such as state/regional governments.

NGOs can also be involved as the third party in the monitoring activities as per necessity. A flow chart of a proposed monitoring system is illustrated in Figure 2-1-8.1. For a reference, resettlement monitoring sheet is shown Figure 2-1-8.2.



Source: Prepared by the Survey Team
 Figure 2-1-8.1 A-RAP Monitoring System

Resettlement Monitoring Sheet					
Name of HH Head : _____					
Progress of Resettlement					
Progress	Date	Checked	Remark		
Official Notice					
Confirmation on result of census survey					
Survey relocation if any					
Negotiation	1 st time				
	2 nd time				
	3 rd time				
	4 th time				
	5 th time				
Agreement on compensation and relocation					
Securing of Land					
(1) Post Resettlement Monitoring					
Date	Location	Occupation (if changed)	Income Level	Perception	Remarks
Note: 2 times in the first year and 1 time in the second year after relocation.					
(2) Record of Grievance / Perception and Redress					
Date	Grievance	Redress	Results	Checked by independent Org. (if any)	

Source: Prepared by the Survey Team
 Figure 2-1-8.2 Monitoring Sheet (Proposed)

2-1-9 Implementation Schedule (Proposed)

Proposed implementation schedule of ARAP is as follows.

Table 2-1-9.1 Implementation Schedule (Proposed)

No	Contents/Year	First Year												Third Year	Fourth Year	Fifth Year	
		1	2	3	4	5	6	7	8	9	10	11	12				
Start of Project (start of execution)																	
1	Environmental and social consideration survey (including census)																
2	Stakeholder meetings																
3	Establishment and functioning of systems for implementing the basic resident resettlement plan in each ministry (MOC, MOALI)																
4	Project information disclosure and cut-off date																
5	Preparation of the basic resident resettlement plan and submission to JICA																
6	Establishment of the compensation committees																
7	Functioning of the complaint processing system																
8	Examination and establishment of the compensation policy and procedure																
9	Estimation of the compensation amount for impacted residents, and implementation of additional survey according to necessity																
10	Selection of impacted residents																
11	Decision of compensation (cash and assistance) and acquisition of agreement from the impacted residents																
12	Implementation of lifestyle recovery support measures (agricultural guidance, day labour support, etc.)																
13	Payment of compensation																
14	Completion of the basic resident resettlement plan																
15	Monitoring work																

Source: Prepared by the Survey Team

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**The Project for Rural Infrastructure Development in Local Areas
Environmental and Social Monitoring Form (Draft)**

Before the Tender					
The latest results of the below monitoring items shall be submitted to the donor every month before the Tender.					
1. Actions for Involuntary suspension of business operations and/or move including temporary move in accordance with the Action Plan					
No.	Items	Method	Date	Monitoring Result	Actions taken to Reduce Impacts

Construction Phase					
The latest results of the below monitoring items shall be submitted to the donor progress report throughout the construction phase once in six months.					
1. Actions for Involuntary suspension of business operations and/or move including temporary move in accordance with the Action Plan					
No.	Items	Method	Date	Monitoring Result	Actions taken to Reduce Impacts
2. Pollution Control					
(1) Air Quality					
*Monitor every day and report every six months for the first two years of operation.					
No.	Items	Method	Date	Monitoring Result <i>(Location of occurrence and its status)</i>	Actions taken to Reduce Impacts
(2) Water Quality					
*Monitor every day and report every month during construction period.					
No.	Items	Method	Date	Monitoring Result <i>(Location of occurrence and its status)</i>	Actions taken to Reduce Impacts
(3) Waste Disposal					
*Monitor every time disposed and report every month during construction period.					
No.	Date	Major Items	Dumping Location or Contractors Accepted/Treated	Volume (if scaled)	Remarks

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(4) Noise and Vibration
 *Record every grievance reported from the public during construction period.

No.	Date	Record of Grievance on Noise and Vibration from the Public	Countermeasures to prevent further Accidents and Problems during Reporting Period

3. Working Condition
 *Monitor and report every month during construction period.

No.	Date	Record of Industrial Accidents and Health Problems Occurred	Countermeasures to prevent further Accidents and Problems during Reporting Period

4. Impact during Construction
 *Record every case during construction period.

No.	Date	Record of Traffic Accidents around Construction Site and Grievance from the Public	Countermeasures to prevent further Accidents and Problems during Reporting Period

Over

Implementation Stage

The latest results of the below monitoring items shall be submitted to the donors on biannual basis for the first two years of operation

1. Pollution Control
(1) Air Quality
 *Monitor monthly and report every six months for the first two years of operation.

Date	Item	Method	Date	Monitoring Result (Location of occurrence and its status)	Actions taken to Reduce Impacts (e.g. Spry Water)

2. Environmental Impact
(1) Natural environment
 *Monitor in May and report every six months for the first two years of operation.

Date	Item	Monitoring Result	Photo of the Site

3. Social Impact
(1) Social and environment
 *Conduct interviews and report every six months for the first two years of operation.

No.	Date of Interview	Comments/Feedback on their living and livelihood

Over