

Resettlement Plan

August 2015

Myanmar: Mandalay Urban Services Improvement Project

Prepared by Mandalay City Development Committee for the Asian Development Bank.

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TA-8472 MYA: Preparing Mandalay Urban Services Improvement Project

Draft Final Report Vol. 4: Resettlement Plan





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Abbreviations and Acronyms

ADB	Asian Development Bank
AH	Affected Households
AP	Affected Persons
CBO	Community Based Organization
COI	Corridor of Impact
CSS	Country Safeguards System
DMS	Detailed Measurement Survey
EA	Executing Agency
EMA	External Monitoring Agency
GOM	Government of Myanmar
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
HH	Households
IA	Implementing Agency
IOL	Inventory of Losses
JICA	Japan International Cooperation Agency
MCDC	Mandalay City Development Committee
MRG	Mandalay Regional Government
NGO	Nongovernment Organization
PIB	Public Information Booklet
PMO	Project Management Office
PIC	Project Implementation Consultants
RCS	Replacement Cost Study
RP	Resettlement Plan
ROW	Right of Way
SES	Socio-Economic Survey
SPS	Safeguards Policy Statement (2009)
TOR	Terms of Reference
WB	World Bank
WTP	Water Treatment Plant
WWTP	Waste Water Treatment Plant

Conversion Units

length			area		capacity		
12 inches	1 foot		1 Acre	43,560 sft.			
3 feet	1 yard			0.404685642 ha			
			1 ha	2.471 acres			

Glossary of Terms and Definitions

- | | |
|-----------------------------------|---|
| Compensation | - Payment given in cash or in kind to affected persons (APs) at replacement cost or at current market value for assets and income sources acquired or adversely affected by the project. |
| Cut-off date | - The date of completion of census, inventory of losses (IOL) of project affected persons, and as announced officially by the MCDC and the Project Management Unit (PMU). Anyone who occupies or encroaches into the defined boundaries of the Project area after this date will not be entitled to compensation and other assistance for affected assets and incomes. |
| Detailed Measurement Survey (DMS) | - With the use of approved detailed engineering drawings, this activity involves the finalization and/or validation of the results of the IOL, severity of impacts, and list of APs done during the preparation of this resettlement plan (RP). |
| Affected person (AP) | - Refers to any person or persons, household, firm, private or public institution that, on account of acquisition of their land and other fixed assets or due to the changes resulting from the Project, will have its (i) standard of living adversely affected; (ii) right, title or interest in any house, land (e.g., residential, commercial, agricultural, and/or grazing land), water resources or any other fixed assets acquired, possessed, restricted or otherwise adversely affected, in full or in part, permanently or temporarily; and/or (iii) business, occupation, place of work or residence or habitat adversely affected, with or without physical displacement. |
| Economic Displacement | - Loss of land, assets, access to assets, income sources, or means of livelihood as a result of (i) involuntary acquisition of land, or (ii) involuntary restriction on land use or on access to legally designated parks and protected areas. |
| Entitlements | - Refers to a range of measures, such as compensation in cash or in kind, income restoration support, transfer assistance, relocation support, etc., which are provided to the APs depending on the type and severity of their losses to restore their economic and social base. |
| Inventory of Losses (IOL) | - This is the listing of assets as a preliminary record of affected or lost assets during the preparation of the RP where all fixed assets (i.e., land used for residential, commercial, agricultural purposes; dwelling units; stalls and shops; secondary structures, such as fences, tombs, wells; standing crops and trees with commercial value; etc.) and sources of income and livelihood inside the COI are identified, measured, their owners identified and their exact location determined. The severity of impact on the affected assets and the severity of impact on the livelihood and productive capacity of the APs are likewise determined. |

- Land acquisition – Refers to the process of acquiring land whereby an individual, household, firm or private institution is forced by a public agency to involuntarily alienate all or part of the land it owns or possesses to the ownership and possession of that agency for public purposes in return for compensation at replacement costs.
- Physical Displacement - Relocation, loss of residential land, or loss of shelter as a result of (i) involuntary acquisition of land, or (ii) involuntary restriction on land use or an access to legally designated parks and protected areas.
- Relocation – This is the physical displacement of a DP from his/her pre-project place of residence and/or business.
- Replacement cost – Means the amount in cash or in kind needed to replace an asset in its existing condition, without deduction of transaction costs or depreciation and salvageable materials, at prevailing current market value at the time of compensation payment.
- Replacement Cost Study – This refers to the process involved in determining replacement costs of affected assets based on empirical data.
- Resettlement Plan – This is a time-bound action plan with budget, setting out the resettlement objectives and strategies, entitlements, activities and responsibilities, resettlement monitoring, and resettlement evaluation.
- Severely affected Households – This refers to AHs who will (i) lose 10% or more of their total productive and generating assets, with or without physical displacement.
- Vulnerable groups – These are distinct groups of people who might suffer disproportionately or face the risk of being further marginalized due to the project and specifically include: (i) female-headed households with dependents, (ii) household heads with disabilities, (iii) households falling under the generally accepted indicator for poverty, (iv) elderly households who are landless and with no other means of support, (v) landless households, (vi) ethnic minorities.

Executive Summary

The Government of the Republic of the Union of Myanmar has requested the Asian Development Bank (ADB) a project preparatory technical assistance (TA) to prepare the Mandalay City Urban Services Improvement Project. The project is expected to help Mandalay increase its development potential as a regional economic growth centre.

The key components of the project include: (i) Water Supply system improvements; (ii) Wastewater Management and Urban Drainage¹; and (iii) Institutional capacity strengthening and public awareness raising. The Project components, (i) to (ii) above, will have limited permanent and/or temporary resettlement impacts as attempts have been made to avoid or minimize land acquisition in the project. Permanent impacts will be caused only in the waste water management component due to the acquisition of land for the WWTP site. Additionally, construction and civil work activities in the project will cause temporary impacts on private assets including road side vendors and businesses.

The proposed acquisition of land, 12.98 acres, or 5.253 ha, located south of Kandawagyi Lake in Yin Taw Village, Amarapura Township, for the WWTP site will affect a total of 17 households. These include 8 land owners, 3 tenants, and 6 seasonal workers hired by the land owners and tenants to work in the field.

5 households (2 land owners and 3 tenants) would be affected due to the loss of crops. The 3 affected tenants cultivate multiple land holdings and are hired by land owners living either in Mandalay city or in other parts of the country and have other sources of incomes. 8.62 acres (3.488 ha) of cultivable area will be affected by the project. The remaining area 4.36 acre (1.76 ha) is under water and not cultivable. Summary of impacts due to the land acquisition is shown in the table below.

Land acquisition for the WWTP will result in physical and economic displacement of 17 households (58 persons), including 8 land owners, 3 tenants and 6 seasonal workers. Given the magnitude of impacts, the project is categorized as 'B'.

Census and socioeconomic survey of population affected by the WWTP site covered a total of 7 households (37 persons) including 4 land owners and 3 tenants. 4 land owners were not available for the survey as either they live away from the site in Mandalay City or in other parts of the country. The number of females in the affected population is comparatively high. The male-female ratio of the affected population is 43:57. Average HH size is 5.3 as against 3.2 for the Yin Taw village.

There is only one women-headed household among the 7 households surveyed. However, there are more than one earning members in the women-headed household. The household also has a disabled member. Additionally, one household, a tenant falling below the poverty line, is identified as vulnerable household.

¹ This component also includes a small pilot solid waste component linked to the clean up of Thin Gazar

Type of Loss	Description	No. of HH	No./Qty
1.Land	Agricultural Land	8	8.62 acre
	Agricultural land (Under water)	4	4.36 acre
	Total	-	12.98
2.Structure	Main Structures	1	289 sft.
3. Loss of crops	Corn, groundnut, green gram, vegetables	5	8.62 acre
4. Loss of employment	6 persons employed by three tenants	6	-
5. Loss of business incomes	Loss of income from shops	-	-
6.Trees	Fruit trees	-	-
7. loss of Public Utilities	33 kVA Electric Line (about 1 km) and 6 electric poles	-	6
Level of impact:	Household affected by entire loss of structure	1	-
	Severally affected HH due to entire loss of land holdings	8	-
Total No. of Affected HH: Land owners: 8, Tenants 3, and Seasonal Workers: 6		17	-

Project affected households were consulted prior to and during the census, IOL and socioeconomic surveys. Households were also provided information on key policy objectives, principles, compensation entitlements and grievance redress procedures. Consultation with affected and beneficiary communities will continue throughout the resettlement planning and implementation phase. Affected households will be provided with a copy of the PIB during updating of the RP.

A Grievance Redress Mechanism is proposed in the project and it is expected to be in place prior to finalization of the RP.

The RP includes a review of local laws and regulations, gap analysis and proposed gap-filling measures. The resettlement policy proposed in the project is consistent with the provisions of the ADB's SPS and takes into consideration relevant provisions of local laws and regulations. Households affected severally by permanent loss of productive assets, business incomes and sources of livelihood due to the acquisition of land for the WWTP, including affected vulnerable households, will be entitled to income restoration and rehabilitation assistance. Income restoration and livelihood rehabilitation strategy and programs for the severely affected households, vulnerable households and business affected households will be further refined and finalized in the updated RP following consultations with the affected households.

The RP includes internal and external monitoring framework. All monitoring reports will be uploaded on the MCDC and ADB websites. TOR for external monitoring is attached as Annex M. The resettlement cost, including 15% contingencies, is estimated at 1,543,000,000 Kyat or USD 1,512,745 at an exchange rate of 1 USD to 1020 Kyat. MRG through MCDC/PMU is responsible for the provision of adequate funds to carry out the implementation of the RP. In the case of over-runs, MRG will ensure that adequate funds are made available as and when necessary for efficient and timely implementation of resettlement activities.

The draft RP is endorsed by MCDC. Upon approval from the ADB, the RP will be disclosed to key stakeholders and uploaded on MCDC and ADB websites.

1 Introduction

1.1 Background

Mandalay is the second city and capital of the central region and is considered by many to be the capital of Myanmar culture and the Buddhist religion. It is the second largest city in Myanmar with a population of approximately 1.25 million and is on the crossroads of routes linking Laos, Cambodia, Thailand and Vietnam to India and is also on the link between China and the Andaman Sea. Mandalay is growing at a very high rate of just under 3 percent per annum since 1990.

Mandalay District is a district of the Mandalay Division in central Myanmar. Though the district used to consist of two cities, Mandalay and Amarapura, today, with the urban sprawl of Mandalay capturing Amarapura and Patheingyi, the district and the city of Mandalay have become effectively one and the same. Mandalay district consists of seven townships: Aungmyethazan, Chanayethazan, Maharaungmye, Chan Mya Tharsi, Pyigyitagun, Amarapura and Patheingyi.

The Government of the Republic of the Union of Myanmar has requested the Asian Development Bank (ADB) a project preparatory technical assistance (TA) to prepare the Mandalay City Urban Services Improvement Project. It is within this context that the Union of Mandalay together with the ADB has placed the Mandalay City Urban Services Improvement Project within the current lending programme. The project is expected to help Mandalay increase its development potential as a regional economic growth centre.

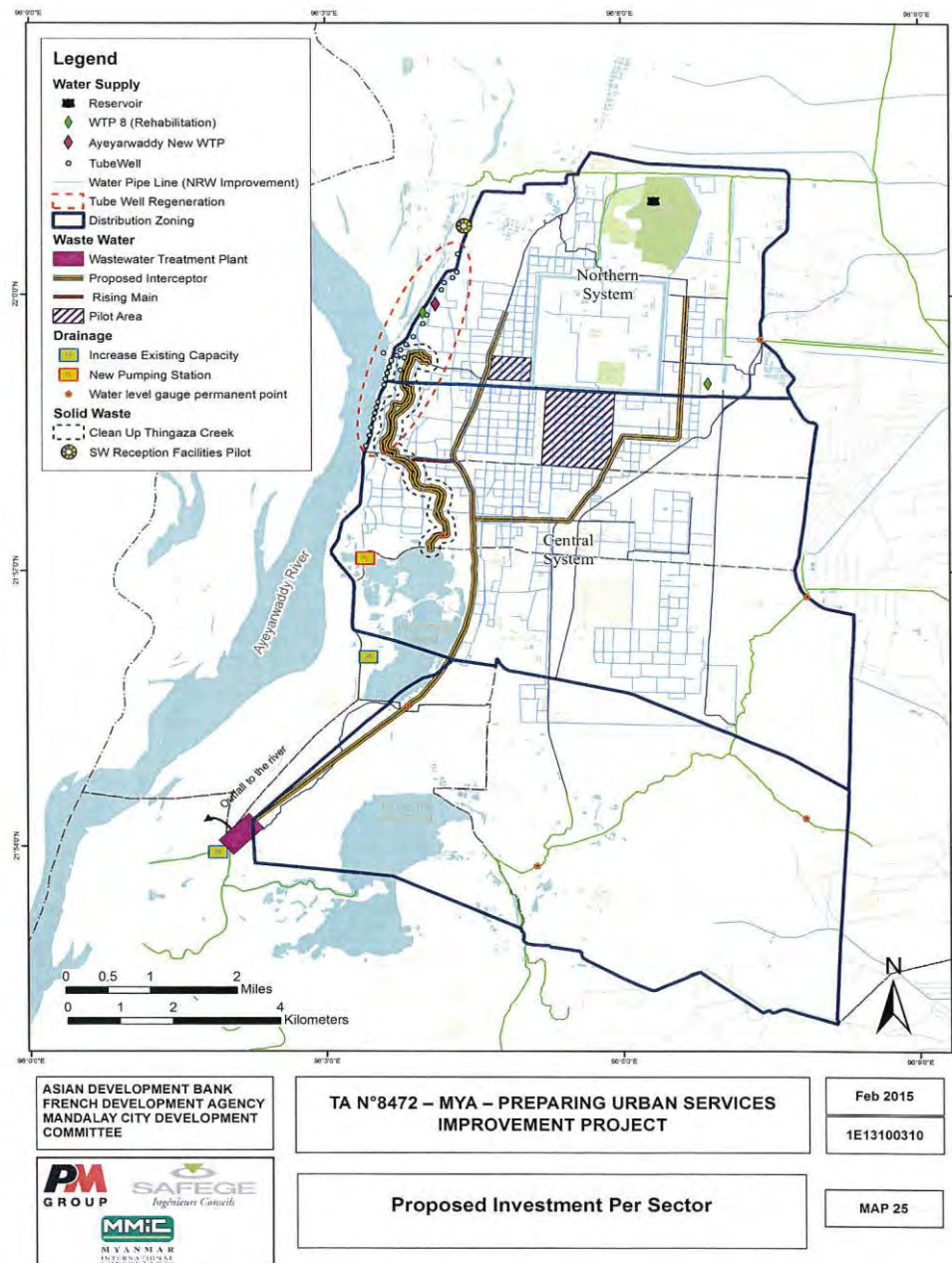
1.2 Description of the Project

The proposed project will improve urban environment and public health in Mandalay city. The outcome will be improved access to sustainable urban services. Climate change resilient designs will be introduced in infrastructure construction and upgrading. Proposed location of various project components is shown in Figure 1.1. Key components of the project include:

- (i) Water Supply system improvements,
- (ii) Wastewater Management & Urban Drainage,
- (iii) Institutional capacity strengthening and public awareness raising.

The Project components will have limited resettlement impacts, both permanent and temporary as attempts have been made to avoid or minimize land acquisition in the project. Acquisition of land will be necessary for the WWTP site. Additionally, there may some limited temporary impacts on existing structures during the civil works for laying of sewer and interceptor mains.

Figure 1.1: Location of Project Components in Mandalay



1.3 Project Components

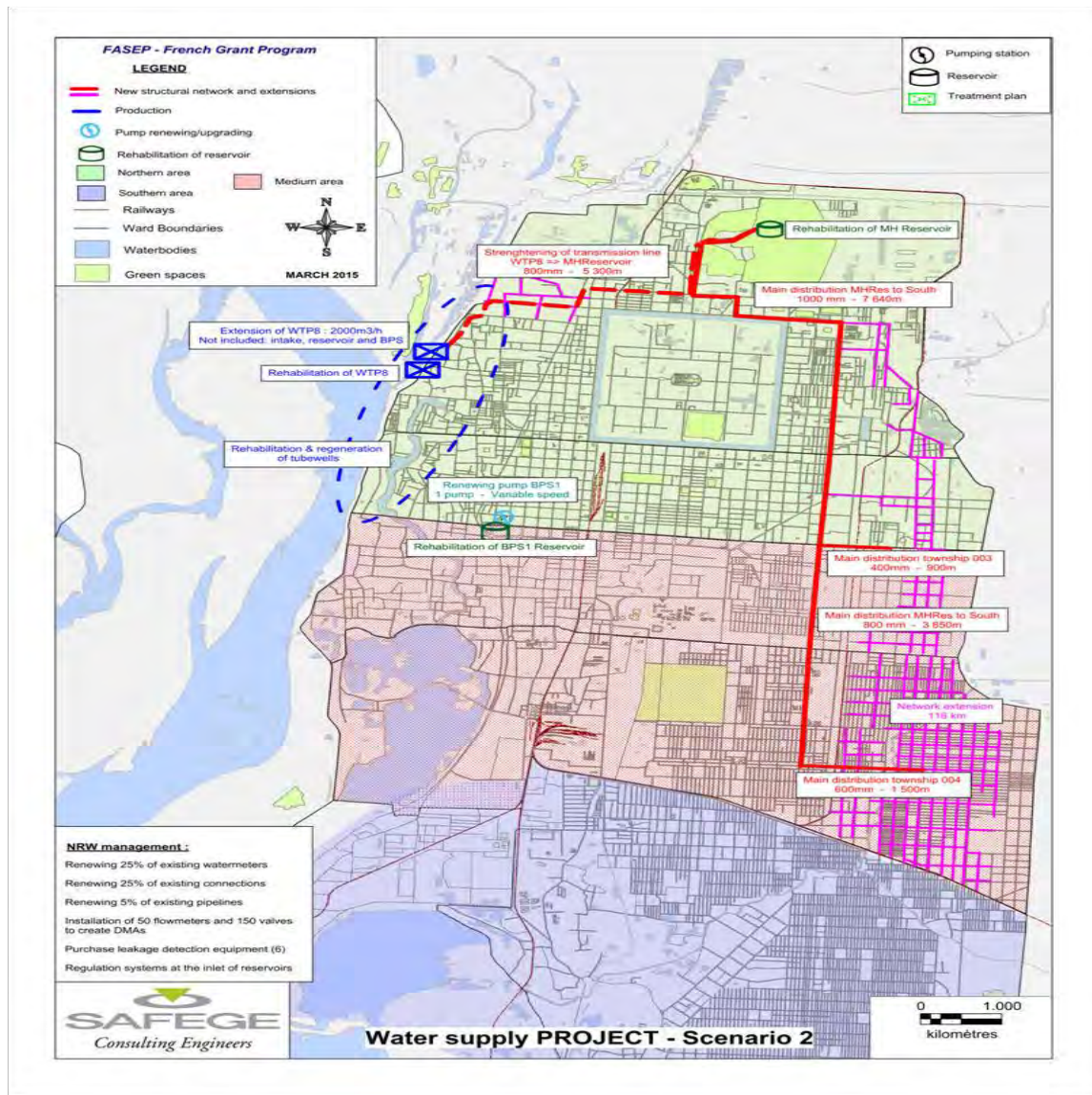
Description of project components including proposed interventions are summarized below.

1.3.1 Water Supply System Improvement

Apart from improvement of monitoring system management and rehabilitation and upgrading of the existing water supply system, the component will include extension to the existing supply area by: i) construction of 19.1 km of main transmission lines and 116km of

distribution systems; ii) improved monitoring via the installation of watermeters and level meters; iii) Rehabilitation of existing reservoirs (BPS1 and Mandalay Hill reservoir) and pumps of BPS1; and iv) extension of the existing water treatment plant. Figure 1.2 presents proposed interventions under the water component.

Figure 1.2: Water Component, Mandalay



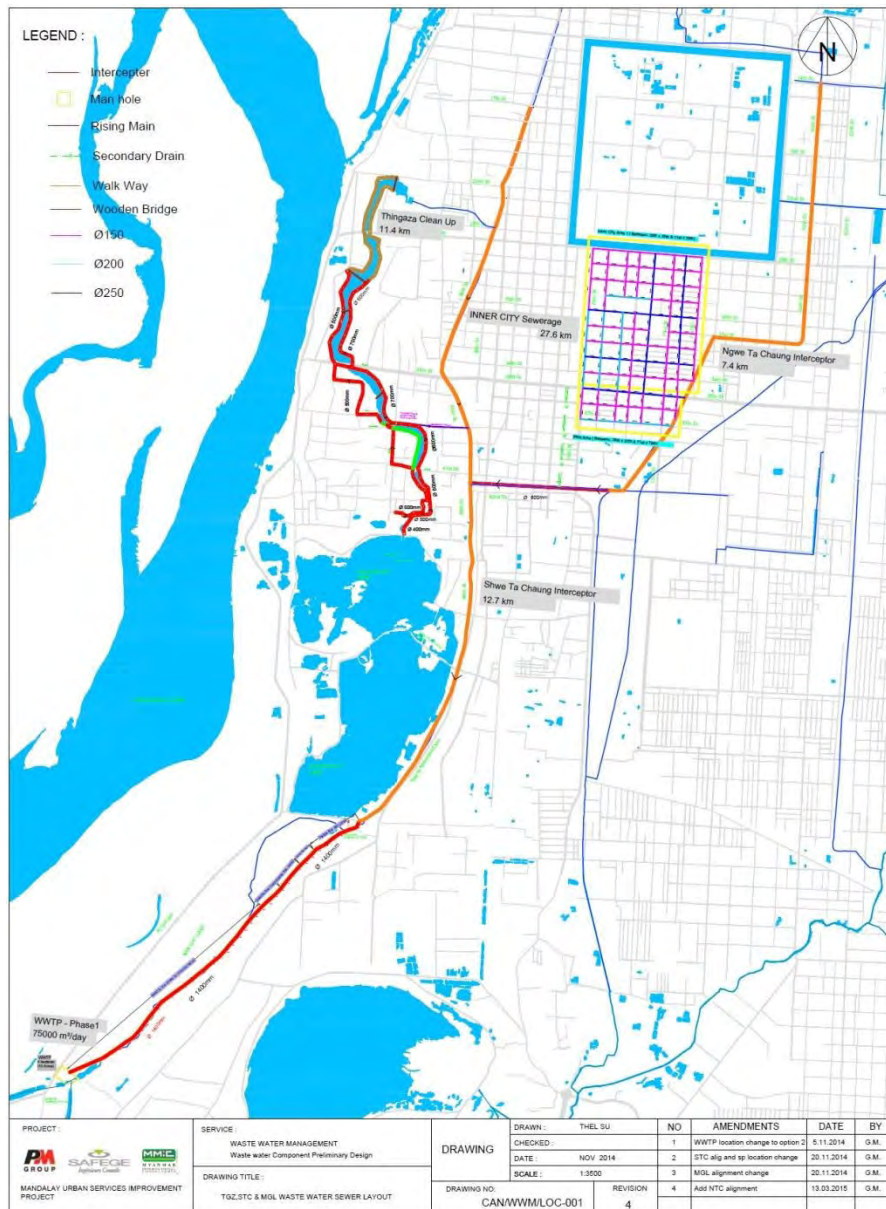
1.3.2 Waste Water Management

This component will provide centralized wastewater collection and treatment system, and improved septage management for Mandalay city. Specific interventions for Waste Water include:

- a. Installation of interceptors and trunk sewers.
 - i) 27.6 km of tertiary and secondary level wastewater networks
 - ii) 7.95 km of box culvert within the Shwe Ta Chaung Canal;
 - iii) 11.4 km (500 to 800 mm) along Thin Gazar Creek
 - iv) 7.4 km of box culvert within Mingalar/Nehtauchaung canal up to Shwe Ta Chaung

- Canal
- v) Sewer main (1400 mm) connecting to the proposed WWTP site
- b. Thin Gazar Pump Station at the corner of 89th and 38th street with maximum capacity of 400 l/s pumping to Shwe Ta Chaung Interceptor
 - c. Waste Water Treatment Plant with 75,000 m³/day capacity in the first phase located south of Kandawgyi Lake at Yin Taw village track plot No. 608, Amarapura Township
- Proposed interventions for the waste water component are shown in Figure 1.3.

Figure 1.3: Waste Water Component, Mandalay



1.3.3 Urban Drainage and Flood Protection

Sustainable Urban Drainage component includes:

- Cleaning and dredging of drainage canals;

- Reconstruction of 4 bridges to remove hydraulic bottlenecks;
- Increasing capacity of pumping stations; and
- Improving system operation and level control storage ponds.

1.3.4 Project Management Support and Capacity Building

- This will cover the following activities:
- System Design & Production of Tender Documents
- Construction Management & Supervision
- Overall Project Management including training
- Specific Capacity Building
- Urban Planning Capacity Building
- Awareness Raising

1.4 Summary of Impacts

Water supply, waste water and urban drainage, and solid waste components of the projects will cause some permanent and temporary impacts in various degrees on private assets and loss of livelihood in the project. Summary of project components and potential permanent and temporary impacts is presented in Table 1.1 below.

Water Supply System Improvement

Water intakes along the Ayeyarwady River will be on public land.

Existing water treatment facilities (No. 8 along the Ayeyarwady River) is proposed to be extended by improving water treatment process. MDCDC owned a large tract of land designated for social housing project adjacent to the north of the existing water treatment plant. MDCDC plans to take 4,500 sqm (0.45ha) of the land for the proposed extension of the WTP. As the work for the social housing is yet to be started the available land is open and free of any encumbrances. Proposed location of the site is shown in Figure 1.4. Therefore, any land acquisition for improved water treatment facilities is not envisaged.

Wastewater Management

Permanent impacts in the wastewater component will be caused due to the acquisition of private land for the waste water treatment plant to be located at the Yin Taw village track, Amarapura.

The sewer and interceptor mains will be generally within the existing ROW of roads and no acquisition of private land is envisaged. The proposed system will be comprised of 23.8 km of network constructed as 17.4 km of concrete pipes (ranging from 400 to 1400mm) and 8.4 km of box culvert within the existing Shwe Ta Chaung Canal. The sewer mains connecting the proposed WWTP plant will be either under the Old Shwe Ta Chaung canal or along the existing road in Aye Zayet, Wat Kone and Dan Tabin villages. To avoid adverse impacts, albeit temporary, the sewer mains will be aligned behind the row of houses along the narrow road that passes through these two villages.

The pumping station along the Thin Gazar Creek, at the junction of 38th and 89th Street, will be sited on MDCDC land. Hence no acquisition of private land will be necessary.

Figure 1.4: Site Plan for the Proposed WTP Extension



Solid Waste Management

As part of a solid waste component, initially it was proposed to close the two existing solid waste landfill sites at Kyar Ni Kan and Thaung Inn Myout and establishment of sanitary land fill and power generation from solid waste at the Thaung Inn Myout site. However, the sanitary land fill site at the Thaung Inn Myout was not considered suitable and was

dropped. Due to the delays in identification of suitable site for sanitary landfill the component is now proposed to be included in Phase 2 of the project.

Optimization of solid waste collection system will involve reduction of existing over 70 to 12 collection points in the future, each requiring about 500 sqm land. These collection centres will be most likely sited on the MCDC land and at this stage acquisition of private land for this component is not envisaged. As part of MUSIP solid waste is no longer included as a specific component. A pilot collection point is nevertheless included as part of the Thin Gazar subcomponent of the wastewater and drainage component.

Table 1.1: Project Components, Potential Impacts & Estimated Land Requirements

No.	Project Components	Technical Details	Potential Impacts
01A. Water Supply			
1.1	Distribution Network	About 116 km length	Pipes will be laid within the ROW of existing roads. No LA required.
1.2	Water Intake along the Ayayurvaddy River	Provision of temporary barge to allow rehabilitation of existing facilities	Within river. No LA necessary
1.3	Water Treatment Plant No. 8	Rehabilitation and extension of water treatment process/sedimentation facilities	Additional area 0.45ha required for expansion will be on MCDC land. Therefore, acquisition of private land not necessary
2. Wastewater & Flood Management			
2.1	Pumping Station	One.	Area: 0.5 ha. At the corner of 89th and 38 th St. Next to solid waste collection centre. Along eastern bank of Thin Gazar Creek. MCDC land. Mahar Aungmyae Township.
2.2	Wastewater Treatment Plant (WWTP) including treatment facilities for septic tank effluents	South of Kandawagyi Lake	Area: Approx. 13.0 Acre. Potential loss of agriculture land & one structure affecting 11 households (58 APs).
2.3	Main Sewerage Line along old Shwe Ta Chaung Canal to WWTP site	Along the Old Shwe Ta Chaung Canal and the road traversing Aye Zayet, Wat Kone and Dan Tabin villages 3.96 km length	LA not necessary but temporary impacts on structures.
2.4	Collector Mains and Interceptors	Ngwe Ta Chaung, Mingalar & Shwe Ta Chaung Canals; Thin Gazar Creek; and some parts of 22 nd Street, Sein Pan Road, Mahasi Meditation Road, Tar Tein road and Metta Lane. Approx. 54.35 km length	Mostly within the ROW. Land acquisition not envisaged. Temporary Impact on vendors, semi-permanent and temporary structures along the canals.
2.5	Dredging of drains and canals	Precise length not known	LA for dredging activities not necessary. Dredged material is proposed to be disposed on the WWTP site. At this stage any LA for disposal of dredged spoils not known
2.6	Pilot Collection Centre	Approximately 0.15-0.2 ha	All collection centres are likely to be on MCDC land. Acquisition of private land is not envisaged.

1.5 Organisation of Resettlement Plan

This resettlement plan (RP) describes potential permanent impacts caused by the acquisition or repossession of land for various components and temporary impacts during the construction phase; socioeconomic characteristics of potentially affected persons (APs);

review of existing legal framework in Myanmar and analysis of gap between the provisions of the ADB's SPS and local laws and regulations pertaining to land acquisition and resettlement; applicable policy objectives and principles; entitlements for compensation and other assistance to affected persons for their losses; estimated cost of resettlement, public consultation and participation and proposed grievance redress mechanism; implementation schedule; and monitoring and supervision.

The RP is consistent with the ADB SPS (2009) requirements.

2 Scope of Resettlement Impacts

Assessment of potential resettlement impacts, permanent and temporary, was conducted based on the site visits, consultation with key stakeholders, focus group discussions and structured questionnaire surveys. Description of potential impacts is presented in the following sections.

2.1 Measures Taken to Avoid or Minimize Adverse Impacts

Various design alternatives were considered to avoid or minimize land requisition and resettlement impacts in the project. All the alternatives were carefully reviewed and optimal options adopted. Specific steps taken to avoid or minimize impacts include the following:

- All water intakes and water treatment plant expansions to be located on public land along the Ayeyarwady River;
- Existing Mingalar and Shwe Ta Chaung canals and several sections along the Thin Gazar Creek will be used for the proposed interceptor main in the waste water component. Along the western bank of Thin Gazar creek, between 35th and 41st street, proposed interceptor mains is moved westwards along the streets to avoid adverse resettlement impacts on monasteries that occupy land along the Thin Gazar Creek.
- The proposed pumping station for the waste water treatment plant was moved from the initially identified site, which would have required acquisition of private land, to the available MCDC land at the junction of 38th and 89th street.
- Sewer mains connecting the proposed WWTP site will be aligned, as far as possible, using the old Shwe Ta Chaung Canal and ROW of existing road in Aye Zayet, Wat Kone and Dan Tabin villages thereby avoiding permanent resettlement impacts. Alignment was decided based on the field visits to minimize impacts on existing structures along the road. Where necessary, the alignment of the sewer main will be moved behind the row of structures to use available open public land.
- The site for the WWTP was moved to Yin Taw village track Plot No. 608, Amarapura Township away from the proposed urban residential development, from previously proposed site at the south of Kandawgyi Lake, to minimize cost of land acquisition. Initially, the larger site covering 29.27 acre was proposed for the WWTP site and draft RP was prepared accordingly. However, with an aim to further minimize land requirements a better, albeit costlier, technical alternative for WWTP proposed. This further reduced the land requirement to 12.98 acres. The proposed site is mainly agricultural land with some unused flood prone water-logged areas.

2.2 Methodology for Resettlement Impact Assessment

In the project the permanent impacts will be caused due to the land acquisition for the WWTP site. The site is located in Yin Taw Village Track in Amarapura Township. The hand drawn site plan showing the affected land holdings, together with information on the land owners, category of land, plot numbers and area of plots was received from the Land Record Office of Amarapura.

Field Verification

The proposed site is bound on its north by a public pathway which connects the main road on the west of the site to the villages on its east. The field verification and consultation with the local residents and village administrator revealed that the hand drawn map provided by

the land record office had several major gaps. Some of the plot numbers were not shown, names of the land owners and corresponding plot numbers were incorrect, the plot boundaries and area stated in the list were inconsistent. In consultation with the local residents, information on land owners and plot numbers was updated but could not be verified. PPTA consultant requested land records officials to accompany the survey team and assist in on-site verification. Subsequent to the joint verification the list of land owners was revised. However, information on three land holdings without numbers could not be confirmed. Revised list of land owners together with the site plan is attached as **Annex A**. During the detailed design proper cadastral and topography survey of the entire site needs to be carried out in consultation with the land record office of Amarapura Township and APs/local residents, to delineate and stake-out boundary of the area to be acquired and to determine precise areas of individual land holdings.

Census, IOL & Socio-Economic Survey

Data on census, assessment of potential losses i.e. Inventory of Losses (IOL), and socioeconomic characteristics of affected households for the WWTP site was collected during 24-26 January 2015. Survey was aimed for 100% coverage of all the affected households for census, IOL as well as for socioeconomic data. IOL survey also included measurement of affected structures. Information on the areas for affected land holdings was obtained from the list provided by the land Record office in Amarapura. At this stage, the preparation of the RP is based on the preliminary designs and will need to be updated when the technical designs are finalized. Potentially affected structure was measured as accurately as possible. However, Detailed Measurement Surveys (DMS) for the affected structures and land holdings should be conducted for updating the RP.

The census, IOL and the socioeconomic survey (SES) was carried out by the resettlement specialist supported by a team of 6 enumerators for taking measurements and recording details of the affected assets. IOL and SES Questionnaire is attached as **Annex B**.

2.3 Description of Permanent Impacts

The proposed acquisition of land covering an area of 12.98 acres for the WWTP site will affect a total of 11 households (58 persons)². These include 8 land owners and 3 tenants cultivating the land for different land owners. Additionally, 6 seasonal farm workers hired by the tenants to work in the field during the cropping season would be affected due to the land acquisition.

IOL covered a total of 7 households including 4 land owners and 3 tenants. Another 4 land owners who live in Mandalay city or in other parts of Myanmar were not available for the survey. Description of losses is presented in the following sections. Inventory of Losses are summarized in Table attached as **Annex C**.

2.3.1 Loss of Agriculture land

The project will acquire a total of 12.98 acres of agricultural land affecting 8 land owners. The land is categorized as 'low land' or 'culturable land'. Distribution of land holdings by areas is shown in the list of land owners in Annex A.

² Number of APs was determined based on the average HH size of 7 surveyed households.

Tenure Status

All the land owners possess the right to utilize/cultivate the land issued by the Land Record Department, Amarapura Township. However, only three out of a total of 4 land owners surveyed possess Form 7 issued by the Land Record office in Amarapura.

Almost all the land holdings are prone to seasonal flooding for a prolonged period of 4-5 months every year. However, several plots at the southern tip are low-lying and remain permanently, or for most part of the year, under water and cannot be used for cultivation even for a short duration. Of the 8 land owners, one owner has his entire land holding permanently under water, while three other land owners have part of their land holdings permanently under water. Total area permanently under water is estimated to be about 4.36 acres. Areas under water are shown in list of land owners in Annex A.

Field verification identified that some land owners own more than one land holdings. Breakdown of number of land owners by ownership of land holdings is presented in Table 2.1 below:

Table 2.1: Land Owners by Number of Land Holdings

No. Of Land Holdings	No of land Owner	Self cultivated	Remark
1	3	1	Part of plot 90/3 of 1 land owner is permanently under water & cannot be cultivated.
2	4*	1	-
3	-	-	-
4	1	1	-
Total	8	3	3 tenants cultivate multiple plots of 7 land owners.

*One household has both the land holdings water-logged permanently or for most part of the year and cannot be cultivated

All the 8 land owners will be affected due to the entire loss of their agricultural land. However, one owner has his entire plots permanently under water that cannot be cultivated. Other 3 land owners have part of their land holdings permanently under water. However, they have either other land holdings that are cultivable or other sources of incomes. Of the 8 Land owners, only 3 cultivate their land holding themselves. Others land owners have other businesses and leave cultivation of their plots to the 3 tenants.

2.3.2 Loss of Structures

Only 1 household would be affected by entire loss of 1 structure totalling an area of 289 sft. The structure, used for residential purposes only during the harvesting season, is built on stilts and has direct access from the main road. The structure is temporary in nature with tin-sheet roof and bamboo sheet walls.

Secondary Structures

No secondary structures will be affected by the project.

2.3.3 Loss of Trees and Crops

There are no fruit trees, or perennial and/or wood trees affected by the project.

Loss of Crops

Of the 11 households, 6 households (3 land owners and 3 tenants) would be affected due to the loss of crop. Affected 3 tenant households cultivate multiple land holdings on the site and in the vicinity. The land holdings are owned by owners who live either in Mandalay city or in other parts of the country and have other sources of incomes. One land owner having most of his land permanently under water also works as a tenant for other land owner. Of the 12.98 acres, 8.62 acres of cultivated area will be affected by the project. The remaining area (4.36 acre) is mostly under water and is not cultivable. Area under cultivation and the types of crops grown are shown in Table 2.2 below.

Table 2.2: Types of Crops and Cultivation Area

Tenure of Affected HH	No. of HH	Area under cultivation(Acre)	Crops
Owner	3	4.45	Groundnut, Corn, onion and some seasonal vegetables
Tenant	3	4.17	Groundnut, Corn, onion and some seasonal vegetables
Total	6	8.62	-

Groundnut and Corn are the two main crops grown over 60%, or about 5.0 acre, and 40% (3.62 Acre) of the cultivation area respectively. Two households also grow vegetables on small plots covering a total area of about 1000 sft., or 0.02 acre.

Severally Affected Households

All the affected land owners would be severally affected in terms of entire loss of their land holdings falling within the WWTP site. However, the potential impact for most of the land owners on their household incomes and livelihood may not be significant as they have other sources of incomes. Four of the absentee land owners live in Mandalay city or other parts of Myanmar and are engaged in various business activities. Of the remaining 4 land owners, one owner has a tenant cultivating his land and other three cultivate their land themselves. One land owner has most of his land water-logged and cultivates only part of the land holding.

Except for one, 2 other tenants cultivating the land for different land owners do not pay any rent for the land they cultivate. The arrangement is quite informal and based on the understanding that the tenants will guard the land and will vacate the land as and when the land is required by the land owner. One tenant pays 100,000 Kyat per year as the rental fee to the land owner.

2.3.4 Loss of Employment and Livelihood

Loss of Employment

6 employees who are working for land owners or tenants will be affected by loss of their employment. These 6 persons are employed by three households to work as seasonal labour on the farm. None of the employees live on site.

Loss of Business Income

There are no shops or businesses operated by affected households in the area. Hence, acquisition of land will not cause any loss of business incomes.

2.3.5 Loss of Public Utilities and Infrastructures

An electric line with 6 electric poles traverses the proposed site for WWTP. These will need to be removed from the site for the construction of WWTP. One sluice gate for flood control owned by MCDL located mid-way at the western edge of the WWTP site is not likely to be affected by the project. However, for construction of WWTP the level of the land will need to be raised and the sluice gate will no longer be required.

2.4 Description of Temporary impacts

Although proposed alignment of transmission and interceptor mains and location of project components (Sites for WWTP, pumping station, water intakes, etc.) is carefully chosen to avoid and minimize permanent impact on private assets, construction and civil work activities in the project will cause temporary impacts on private assets including road side vendors and businesses. An assessment of potential temporary impacts on private assets and roadside businesses was carried out through transect walks and field visits. Description of potential temporary impacts is presented for each of the project component.

2.4.1 Water Supply System Improvement

Water transmission mains and distribution network will be within the right of ways of existing roads and the potential temporary impacts during the construction phase will only be minor.

2.4.2 Wastewater and Urban Drainage

Permanent impacts due to the wastewater and urban drainage components are minimized by careful alignment of interceptor mains. The alignment of interceptor mains is proposed within the existing Mingalar and Shwe Ta Chaung canals and Thin Gazar Creek, and within the right of way of existing roads. Most of the roads have sufficiently wide ROW with clear width in excess of 6 meters. However, laying of interceptors mains is likely to cause some temporary impacts on road side private assets and businesses. Most of the impacts will be felt by small businesses and vendors along the Shwe Ta Chaung Canal in the downtown Mandalay, between the 31st and 24th street, and along some sections of the Thin Gazar Creek. Findings of the survey of potential temporary impacts by each section of interceptor mains and sewer mains are presented in **Annex D**.

2.5 Relocation Requirements

Only one structure currently used for residences will be affected due to the acquisition of land for the project. The structure is owned by a land owner and is associated with cultivation of the land. Loss of structure due to land acquisition will not physically displace the household as they normally live in their home in village Yin Taw. Except for one, all the affected land owners covered by the survey have shown preference for compensation in cash and for self-relocation.

2.6 Summary of Impacts

Summary of permanent impacts is presented in Table 2.3.

Table 2.3: Summary of Resettlement Impacts

Type of Loss	Description	No. of HH	No./Qty
1.Land	Agricultural Land	8	8.62 acre
	Agricultural land (Under water)	4	4.36 acre
	Total	-	12.98
2.Structure	Main Structures	1	289 sft.
3. Loss of crops	Corn, groundnut, green gram, vegetables	5	8.62 acre
4. Loss of employment	6 persons employed by three tenants	6	-
5. Loss of business incomes	Loss of income from shops	-	-
6.Trees	Fruit trees	-	-
7. loss of Public Utilities	33 kVA Electric Line (about 1 km) and 6 electric poles	-	6
Level of impact:	Household affected by entire loss of structure	1	-
	Severally affected HH due to entire loss of land holdings	8	-
Total No. of Affected HH: Land owners: 8 Tenants : 3 Seasonal workers: 6		17	-

3 Socio Economic Profile

3.1 Socio-economic Overview of Mandalay City

In 1992 the population of Mandalay was approximately 636,000, growing to its estimated 1.2 million (86%) in twenty-one years. Based on the data obtained from each township, the population in 2014 is estimated to be 1.22 million. Based on 2013 population figures provided by the Dept. of Immigration, there are an estimated 240,000 households in Mandalay City with an average household size of 5.25 persons per household.

Mandalay's population consists mainly of (96.38%) Bamer ethnic group. The ethnic groups such as: Kachin, Kayah, Kayin, Chin, Mon and Rakhine are present only in very small numbers in all the townships. Other ethnic minority groups, mainly the Chinese, Indians and Bangladeshis, make up about 2.36% of Mandalay's population. Population breakdown by ethnic groups for each township is shown in **Annex E**. Ethnic minority groups are culturally and economically integrated with the mainstream Bamer population.

Population distribution by religion is shown in Table 3.1 below. Most of the population is Buddhist by religion. Among other ethnic groups, Muslims make 3.41% and Hindus slightly over one percentage.

Table 3.1: Population in Mandalay Region by Religion, 2014

No	Township	Buddhist	Christian	Hindu	Islam	Other	Total
1	Aung Myae Thar Zan	167794	1326	1934	5775	824	177653
2	Chan Aye Thar Zan	140291	1064	3231	1539	-	146125
3	Maha Aung Myae	158020	868	3249	9618	-	171655
4	Chan Mya Thar Zi	185958	854	484	8612	9021	204929
5	Pyi Gyi Takon	147000	565	3582	3581	13	154741
6	Amarapura	168584	347	352	12363	-	181646
7	Pa Thein Gyi	186104	94	56	288	-	186542
Total		1153751 (94.32%)	5118 (0.41%)	12888 (1.05%)	41676 (3.41%)	9858 (0.81%)	1223291 (100%)

Source: Facts and Figures on Mandalay Region, Seven Townships General Administration Department, Mandalay District 2014

Mandalay is the second biggest city in Myanmar and, besides being a religious and cultural centre, it is a major commercial and industrial hub. Most of the industries and manufacturing establishments are located in the Pyi Gyi Takon Township. By contrast, Amarapura and Pa Thein Gyi are mostly rural in nature. This is also reflected in the average annual per capita income by townships (Table 3.2). Per capita income figures for the financial year 2011-12 are available for all the townships. However, for financial year 2012-13 & 2013-14 data for some of the townships is not available.

Table 3.2: Average Annual Per Capita Incomes in Mandalay Region by Townships

No	Township	2011-12	2012-2013	2013-14
1	Aung Myae Thar Zan	1,089,536	-	-
2	Chan Aye Thar Zan	1,556,697	1,594,051	-
3	Maha Aung Myae	1,296,421	-	-
4	Chan Mya Thar Zi	845,060	890,626	905,400
5	Pyi Gyi Takon	2,603,992	2,560,000	2,680,000
6	Amarapura	721,247	833,550	-
7	Pa Thein Gyi	617,788	730,459	750,000
Average in the Region		1,297,928		

Source: Facts and Figures on Mandalay Region, Seven Townships General Administration Department, Mandalay District 2014

3.2 Socio-economic profile of Affected Persons

Census and socioeconomic survey of population affected by the WWTP site covered a total of 7 households (58 persons). 4 land owners were not available for the survey as either they live out of Mandalay City or in other part of the country. Their land holdings are cultivated by tenants. Of the 7 surveyed households, only one is women-headed.

Detailed description of socioeconomic characteristics of surveyed households is presented in the following sections and a summary in **Annex F**.

3.2.1 Demographic Features

Population by age group and sex is shown in Table 3.3 below. All the surveyed households live in Yin Taw village.

There is very high percentage of people in the 17-60 age-group. There are no children in 0-5 age-group among the surveyed households. The number of females in the affected population is comparatively high. The male-female ratio of the affected population is 43:57. Comparative male female ratio for the wards in Amarapura Township varies between 48:52 to 45:55 and the entire Amarapura Township 47:53. In Yin Taw village the number of male and female (2014) is reported to be 662 and 738 respectively giving it a male female ratio of 47:53. The reason for comparatively high number of females in the surveyed households is not clear. However, it is a very small sample to draw any conclusion.

Table 3.3: Household Members by Age-Group and Sex

No.	Age-group	Number of HH members by Sex			Percentage
		M	F	Total	
1	0-5 years	0	0	0	0%
2	6-16 years	2	4	6	16.2%
3	17-60 years	13	15	28	75.7%
4	>60 years	1	2	3	8.1%
Total		16	21	37	100%

One member of female-headed household is handicapped/disabled.

Household Size

Population distribution by household size is shown in Table 3.4. Five out of 7 surveyed households have more than 5 members. Average household size of the surveyed population is 5.3. Comparative figure for the Yin Taw village is only 3.2.

Table 3.4: Household Size

No	HH size	No of HH		Total Number
		Number of HH	Percentage	
1	1-2	1	14.3%	2
2.	3-5	1	14.3%	3
3.	>5	5	71.4%	32
Total		7	100%	37

Religion & Ethnicity

All the surveyed households are Bamar by ethnicity. All the 7 respondents are Buddhist by religion.

3.2.2 Housing Conditions

The affected structure, used as a residence is temporary in nature, mainly constructed with bamboo sheet and tin roof. The affected structure is built on stilts with direct access from the main road.

3.2.3 Employment and Occupation

The breakdown of working population (26 household members) by occupations indicates that more than one member of households are engaged in farming activities, making it 66.7% of all working members (Table 3.5). Other occupations include business (6.0%), operating shops (22.2%), and government service (6.0%).

Table 3.5: Occupation of Household Members (>5 years of age)

No.	Types of Occupation	No. of working members			Percentage
		M	F	Total	
01.	Agriculture	8	6	14	66.7%
02.	Business	3	4	7	6%
03.	Government Service	1	0	1	6%
04.	Weaving	0	0	0	0%
05.	Shop	2	2	4	22.2%
Total		14	12	26	100

The remaining 11 household members above the age of 5 years are either schooling or above 60 years of age. All the household members engaged in running a shop do it from their home in Yin Taw village.

3.2.4 Household Income and Expenditures

Number of households deriving income from agriculture and other secondary sources is shown in Table 3.6 below. Average monthly household income of surveyed households is Kyat 8,560,000/month which is comparatively high compared to average per capita income for the Mandalay Region. Household incomes from agriculture as the main occupation and that derived from secondary occupations are in equal proportion. When household income is considered from all sources, only one household earns below 185,000K/month. 80.0% of surveyed households earn incomes above Kyat 300,000/month. Household earning monthly income below 185,00K/month falls below poverty line. Hence he is considered as a vulnerable household falling BPL³.

Table 3.6: Number of HH by Monthly Household Income

No.	Kyat	HH with Agriculture as main occupation	HH with Secondary Occupation	No. of HH Income from all sources
1	<185,000	1 (16.5%)	0 (0%)	1 14.5%
2	185,001-300,000	0 (0%)	0 (0%)	0 (0%)
3	300,001-1,000,000	4 (67%)	3 (60%)	0 (0%)
4	>1,000,000	1 (16.5%)	2 (40%)	6 (85.5%)
Total		6* (100%)	5^ (100%)	7 (100%)

*One household does not have any income from agriculture.

^ Two households do not have any income from non-farming sources.

Expenditure

Most of the respondents were not able to provide adequate information on average monthly expenditures. Responses from a few households indicate that most of the monthly expenditure is for the food items followed by agricultural inputs. More information on expenditure patterns will need to be collected at the time of updating of RP.

Savings

Of the 7 respondents, except for one, all the other households have indicated to have some savings after meeting all expenses every month. One household indicated the need for financial support to meet expenses on agricultural activities and normally takes short-term (4-6 month) loan from Agriculture Bank regularly. In case of emergency households borrow money from their friends and neighbours.

3.2.5 Education & Health

Literacy level of the affected population is quite high (Table 3.7). All the members of the surveyed households possess at least primary school level education. A total of 16% household members have college or graduate level education. One adult member above the age of 60 years attends monastic education.

³ Considering the UN standard of 1.25 USD/person/day as the standard measure of poverty and an average household size of 4.7 for urban population in Myanmar.

Table 3.7: Literacy Level

No.	Education level	Persons			Percentage
		M	F	Total	
1	Primary	6	11	17	46%
2	Secondary	10	3	13	35%
3	College	0	3	3	8%
4	Graduate	0	3	3	8%
5	Monastic Education	0	1	1	3%
Total		16	21	37	100%

Health

There are no reported cases of any major illness among the surveyed households. Only three household members reported to have minor illness including cough. No households reported to have any member suffering from any long-term illness. Common types of illness reported by the households are shown in Table 3.8 below.

Table 3.8: Type of illness by HH Members

No	Type of illness	Persons	Male	Female
1	Cough	1	1	0
2	Pneumonia	0	0	0
3	Diarrhoea	0	0	0
4	Dysentery	0	0	0
5	Malaria	0	0	0
6	Others	2	1	1
Total		3	2	1

3.2.6 Access to Utilities and Public Services

Access to utilities

Access to water, electricity and fuel for cooking is shown in Table 3.9 below. The responses included the access to utilities in their houses Yin Taw Village.

Table 3.9: Access to Utilities

No. of HH	Water			Electricity		Cooking		
	Pipe water	Deep/shallow well	Hand pump	Metered	Solar plate	Electric	Fire wood	Charcoal
	3	2	3	5	1	2	1	6

Of the 7 respondents, 6 households have flush toilet and septic tank. The remaining household has pit latrine.

Access to Public Services

All the surveyed households either live in Yin Taw village or in Mandalay City. Yin Taw village has school, health facilities and market. Therefore, these public services and facilities are easily accessible to the households within a distance of 1-2 km. None of the surveyed households reported to live on site. The owner of the affected structure lives in

Yin tau village and uses the house on the site only intermittently in the harvesting season. Yin Tau village and the facilities are at about 3-4 km away from the site.

3.2.7 Possession of Consumer Goods

All the household possess motor-cycle and mobile phones. Many household possess TV and fridge (Table 3.10).

Table 3.10: Possession of Consumer Goods

	Cycle	M. Cycle	Car/Van	TV	Fridge	Computer	M.phone
No. of HH	4	7	3	5	3	2	7

3.2.8 Awareness of the Project and Options

All the 7 respondents have reported to have prior knowledge about the project. Of these 6 households obtained information through the village head and one from his friend.

Upon receiving the information about the project and potential loss of their land holdings, all the land owners had expressed concerns about loss of their land and sought more information and advise from MCDC and the Village Head.

In response to the question on their opinion about the project, all the households expressed possible benefits to the community but expressed concerns about the impacts on their land holdings. This is not surprising as the households are aware of the potential loss of their land holding and had expressed their reservations about the level of compensation expected from MCDC based on their past experiences.

Preference for mode of compensation

Only one respondent out of 4 land owners expressed preference for replacement land. Three households expressed preference for compensation in cash. Confirmation on the land-for-land option will be obtained through follow-up consultations prior to finalization of the RP.

Table 3.11: Preference for Mode of Compensation

No	Preference	No. of HH
1	Replacement Land of same category and area/productivity	1
2	Cash compensation at market rate	3
3	Undecided	0
4	No answer	0
Total		4

Food Security

Of the 7 households surveyed, all but one indicated to have sufficient income to cover for food and other household expenses. These six households also indicated to have sustainable food supply for the households. Only one household, a tenant does not consider to have sufficient food security.

3.3 Socio-economic Profile of Waste Pickers

About 190 waste pickers (150 households) currently working on both the solid waste landfill sites are likely to be affected by loss of their livelihood due to the closure of the landfill sites.

At Kyar Ni Kan site about 120 waste pickers (or 100 households) and at Thaug Inn Myout about 70 waste pickers (50 households) work every day. Almost all the waste pickers at the Kyar Ni Kan site have been working there for more than 2 years. At the Thaug Inn Myout site twenty three out of 29 waste pickers have been working there for less than two years.

The socio-economic questionnaire survey of waste pickers, using a sample size of 42% covered 62 households and one shop keeper, 33 hh for the Kyar Ni Kan and 29 hh for the Thaug Inn Myout, was conducted on 14th and 15th September, 2014. The socioeconomic survey also covered one shop keeper at the Kyar Ni Kan site who will lose business income due to the closure of the landfill site, thus making it a total of 63 households covered by the survey. In parallel with the socio-economic surveys, focus group discussions with two separate groups of waste pickers was also carried out to augment information collected through the questionnaire surveys. Questionnaire used for survey of waste pickers and a brief description of socioeconomic characteristics is presented as **Annex G**.

Vulnerable Waste-Picker Households

Socioeconomic survey of 62 waste pickers identified a total of 25 vulnerable households. These include a total of 11 women-headed households and 18 households falling below the poverty line.

Although the closure of the two solid waste dump sites and establishment of sanitary landfill is now proposed under subsequent financing in Phase 2, the information gathered can be used when this component is undertaken.

3.4 Gender Issues

Of the 7 households surveyed, there is a one women-headed household. Women play dominant role in household as well as in economic activities among the surveyed households. In most cases they also take decisions with respect to managing the business. Most of the participants in the consultation meeting with the APs held prior to the census and IOL surveys were women.

Based on the ownership of land holdings, of the 4 land owners not covered by the survey 2 land owners are reported to be women. Acquisition of land for the WWTP site will have direct impact on the livelihood of women-headed households. Following measures will be taken in the project to ensure equitable representation of women in decision making:

- Consultations with the APs in the project will ensure equitable participation by women. Women will participate in consultations on the DMS, and disbursement of compensation and other forms of assistance.
- Where possible, the involvement of local WU representatives will be encouraged in facilitating these consultations and ensuring women's specific needs are met.
- The income rehabilitation measures must be gender sensitive and take into consideration the needs and priorities of women. Women will also be consulted specifically to determine the business support services and skills training activities
- The targeting of women household members for participation in project-supported training will help them to gain employment and restoration of livelihood.
- For the women-headed households, the compensation payments will be signed off by the affected women.

- Appropriate monitoring indicators, disaggregated by gender, will be developed for monitoring social benefits, economic opportunities, livelihood restoration and resettlement implementation, and in restoration of livelihoods and living standards during post-project implementation.

The PMU, social safeguards specialist, and gender specialist will be involved in updating and implementation of the RP to ensure that these measures are adequately implemented and are gender sensitive. The resettlement and gender specialists will make concerted efforts to consult with women APs (household heads and women in AP households). This will be done through individual and women focus group discussions.

3.5 Vulnerable Groups

Socio-economic survey of affected households identified one women-headed household. The same household also has one disabled member. The household has three other earning members. Therefore, the household is considered vulnerable due to the disabled household member. Additionally, one household is considered vulnerable due to falling BPL.

4 Public Consultation, Participation and Disclosure

4.1 Public Participation

In the context of resettlement, public participation includes both, the information exchange (dissemination and consultation), and collaborative form of decision-making (participation). Dissemination refers to transfer of information from project authorities to the affected population. Consultation, on the other hand, generally refers to joint discussion between project authorities and the affected population serving as a conduit for transfer of information and sharing of ideas. To be effective, the consultation should be meaningful⁴. Public consultation and participation is an ongoing process throughout resettlement planning and implementation, not an event. The level of information which is disseminated or the issues on which consultation takes place vary with the progress in the project process and resettlement activities.

4.2 Objectives of Public Consultation and Participation

Information dissemination to, consultation with and participation of affected people and involved agencies reduce the potential for conflicts, minimize the risk of project delays, and enable the project to design resettlement and rehabilitation as a comprehensive development program to suit the needs and priorities of the affected people, thereby maximizing the economic and social benefits of investments. Specific objectives of public information campaign and public consultation are as follows:

- To share fully the information about the proposed project, its components and its activities, with affected people.
- To obtain information about the needs and priorities of the affected people, as well as information about their reactions to proposed policies and activities.
- To inform various options for relocation and rehabilitation measures available to people.
- To obtain cooperation and participation of the affected people and communities in activities required to be undertaken for resettlement planning and implementation.
- To ensure transparency in all activities related to land acquisition, resettlement and rehabilitation.

4.3 Public Participation and Consultations in Resettlement

In general, there are two phases to the public consultation and participation activities:

Phase I: During RP preparation activities. This consists of public consultation and information dissemination about the project and consultation and focus group discussion with key stakeholders and affected communities both prior to and during the field surveys (IOL/SES).

Phase II: During the finalization of the RP, and Resettlement Implementation. This phase consists of RP implementation including finalization of entitlements; compensation assessment and payment; selection of relocation sites, where applicable; design and site

⁴ ADB's SPS (2009) defines 'Meaningful Consultation' as: A process that (i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people; (iii) is undertaken in an atmosphere free of intimidation or coercion; (iv) is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) enables the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues.

development; relocation and house construction; planning and implementation of income restoration and rehabilitation measures; and handing over the site for civil works.

4.4 Stakeholders

Key primary and secondary stakeholders for the MUSIP include the following:

- a. Households affected by permanent or temporary impacts
- b. MCDC
- c. Mandalay Regional Government (MRG)
- d. ADB and other multilateral donors
- e. Mandalay University
- f. Civil Society organizations

4.4.1 Information Campaign and Public Consultation during RP Preparation

During Phase I, resettlement plan preparation, the following activities were carried out:

Consultation with MCDC

MCDC, as the one of the key stakeholder in the project, was informed of the project objectives and its likely impacts during the social safeguards awareness workshop held in March 2014. Senior staff of the MCDC was informed of ADB's SPS objectives, principles and key requirements. The key resettlement policy objectives and principles, entitlement matrix and the proposed grievance redress mechanism were also discussed with the heads of all departments and the PPC members in November 2014 to seek their concurrence.

Focus Group Discussion with Affected Households (Waste Pickers) including Vulnerable Groups

Focus group discussions were conducted with three groups of waste pickers at the Kyar Ni Kan and Thaug Inn Myout sites. Feedback from the participants was obtained on their preferences for the type of assistance for restoration of livelihood. Project information was also provided through informal discussions to randomly selected households during the site visits. More than 60% of waste pickers indicated having prior knowledge of the project through informal information given by the MCDC officials. The proceedings of the focus group discussions were documented with details on the people attended, issues raised and discussed, and the information provided on the major emerging issues. The minutes of the FGD are provided in **Annex G**. However, this component is now scheduled to be taken up under subsequent financing in Phase 2 of the project.

Information Dissemination to Key Stakeholders

Project objectives, likely resettlement impacts and key resettlement policy and principles were also explained to the key stakeholders during the Interim Workshop held in September 2014. In addition to MCDC, the workshop was attended by representatives from Resettlement and Rehabilitation Department (MRG); Irrigation Department (MRG); Planning Department; General Administration Department; Environment Conservation Department, Mandalay Technology University; Myanmar Engineering Society; JICA and the French Embassy. Printed media in Mandalay gave wide coverage on the project for information to general public.

Information dissemination and consultation with APs prior to IOL and SES

Prior to the start-up of census and IOL, a public meeting was held on January 24, 2015, with the land owners, MCDC officials and representatives from Amarapura Township. The public meeting was organized by the MCDC and was held Yay Lae monastery, Yin Taw Village, Amarapura. In addition to the 8 affected land owners, seven other land owners &

their representatives participated in the meeting (**Annex H**). Following information was provided to the APs:

- Project objectives;
- Potential benefits and likely impacts due to the land for WWTP;
- Objectives and key social safeguards policy principles;
- Grievance redress mechanism; and
- General policy provisions and mitigation measures.

Several APs complained that their land is strategically located and is very expensive. They cited their experience with MCDC and expressed that MCDC does not give fair compensation for the land it acquires.

The consultants explained the provisions of the ADB policy and emphasized that MCDC is required to follow the social safeguards policy of the project which is consistent with the ADB's policy and that the ADB will continue to supervise and monitor implementation of resettlement in the project.

Despite some reservations, the APs agreed to cooperate with the consultants and help in completion of surveys.

Information Dissemination and Consultation during Inventory Preparation

The information provided to APs included the following:

- Project description and its likely impacts;
- Objective and contents of the survey;
- General provisions of compensation policy;
- Resettlement options (land-for-land or cash compensation for affected land, and relocation options); and
- Grievance redress mechanism and procedures

4.4.2 Information Campaign and Consultation during Finalization of RP and Resettlement Implementation

During the Phase II; project design, updating of RP and resettlement implementation; following public consultation activities will be carried out. Proposed information dissemination and public consultation activities have also been incorporated in the Consultation and Participation Plan (CPP). Specific activities are described below.

Public Information and Consultation

During the detailed design preparation, demarcation of project boundaries and identification of COI, public consultation and information dissemination will be conducted in a public meeting to inform potential project affected households and communities about the key resettlement policy provisions, grievance redress mechanism and the schedule for field surveys to update information on census, IOL and socioeconomic surveys and conducting Detailed Measurement Surveys (DMS). Simultaneously, arrangements for resettlement training workshops for the relevant staff of the PMU on RP implementation will be made.

Census, DMS & Inventory and Updating of RP

Further consultation with each affected household will be carried out at the time of updating and confirmation of inventory of affected assets (cultivation area affected, area of affected structure etc.) and to finalize compensation assessment.

Public Consultation for Validation of Impacts and Entitlements

After finalization and approval of the updated RP by the ADB, arrangements will be made for a series of public meetings at strategic locations in the project area. APs and other beneficiary communities will be informed of a suitable time and place for public meetings. These meetings are intended to clarify information that has been given to-date and provide APs with an opportunity to discuss issues of concern and obtain clarification. Adequate time will be given to ward heads and other local authorities to contact and inform APs, and the beneficiary communities, about the purpose, time and place of the meetings. Both, men and women from affected households, as well as other interested community members will be encouraged to attend.

Relevant information on the following aspects will be given to APs:

- Project Components
- APs' Rights and Entitlements
- The grievance mechanism and the appeals process
- Participation of APs in Grievance Redress Committees (GRC)
- Rights to participate and be consulted
- Proposed resettlement activities and implementation schedule
- Organizational responsibilities

Public Information Booklet (PIB)

Copies of the Public Information Booklet (PIB), in Myanmar language will be provided to the participants. English version of the draft PIB is attached as **Annex I**.

The meetings will follow the format detailed below:

- Explanations will be given verbally and in visual format.
- Adequate opportunities will be provided for APs and other participants to provide feedback and ask questions.
- APs and other participants will be encouraged to contribute their ideas for implementation arrangements including income rehabilitation and relocation, where necessary;
- The RP Implementation Team will prepare a complete list of all APs present at the meetings.
- Complete record of all questions, comments, opinions and decisions that arise during the information/consultation meetings will be maintained and presented as a report to the project authorities.

Asset Compensation Form

Based on the final inventory and compensation assessment, the RP implementation teams will complete Assets Compensation Form for each affected household. In case there is any disagreement on any aspect of the form, the initial grievances should be recorded and address in accordance with the grievance redress procedures.

As a good practice each AP will be provided with a copy of the final 'assets compensate form' in which the AP's affected assets, compensation entitlements and final compensation amounts are recorded. The AP will be asked to sign the form to indicate his/her agreement with the inventory recorded, and with entitlements and compensation amounts.

During the follow-up visit, APs will also be consulted about their preferred options for cash or land-for-land, and for rehabilitation assistance measures. These preferences should be

documented for planning and design of resettlement and appropriate rehabilitation assistance measures.

Information to APs about Compensation Payment

A letter of notification will be sent to each AP with the time, location and procedures for compensation payment. The APs will also be informed in advance on the documents (letter of authority, identification card, copy of the 'assets compensation form', etc.) that they are required to bring with them for compensation payment purposes.

Consultation with APs to confirm preferences for rehabilitation assistance (income restoration) measures

APs entitled to income restoration and other rehabilitation assistance will be contacted personally to confirm their preferences for the type of rehabilitation assistance and preferred schedule for delivery of such assistance.

Information to APs on Relocation and Site Clearance

APs will be consulted and informed about location of replacement cultivation land, and the timing of relocation. Displaced households will be informed about the schedule for the project site clearance and start up of the physical works. APs will be given sufficient time to harvest their crops, where applicable, prior to start-up of civil works.

Information to the general public and APs about the beginning and on-going schedule for physical works:

PMU, through the ward heads and other local authorities will notify general public along the affected sections of the project areas about the schedule for physical works. Public announcements should be made to inform them in advance. For laying of interceptor mains, some section of roads may need to be closed temporarily to facilitate civil works. A communications strategy is of vital importance in terms of managing traffic during road closure. Local communities will be continuously consulted, and informed, regarding location of construction camps, access and hauling routes and other likely disturbances during construction. The road closure together with the proposed detours will be communicated via advertising, pamphlets, radio broadcasts, road signage, etc.

The Public Relations and Information Department of the MCDC will use its print media and FM radio channel to keep general public informed about the project and status of activities.

4.5 Disclosure

The draft RP, endorsed by MCDC, will be submitted to the ADB for review and uploaded on the ADB's website. Upon finalization, the updated RP shall be submitted to ADB for review and approval and will be disclosed on ADB's website. The updated RP will also be uploaded on MCDC website.

Summary of the RP, including the entitlement matrix, will be translated in Myanmar language and provided to respective ward heads for onward information dissemination to affected and beneficiary communities. Hard copies of the English version of the final RP will be available at the MCDC office, and PMU, accessible to general public for information.

5 Grievance Redress Mechanism

Effective planning and implementation of the Resettlement Plan (RP) requires efficient Grievance Redress Mechanism that will assist all Affected Person (APs) in resolving their queries and complaints.

The Public Relations & Information Department of MCDC is mainly responsible for dissemination of information and awareness generation among the general public about policies, decisions and programmes of the MCDC through print and electronic media (FM Mandalay). There is currently no mechanism in existence for public consultation and for feedback from people in MCDC. Public grievances and complaints, if any, are generally sent to concerned departments or to the Board of Trustees.

The roles and responsibility of the Department of Public Relation and Information would need to be strengthened and expanded to include participatory approach to development whereby feedback from public on key development issues is sought on regular basis. The expanded role should also include mechanism for grievances redress. There is also a need to strengthen and integrate the existing grievance resolution system into the grievance redress mechanism proposed for the project.

5.1 Grievance Redress Mechanism

To ensure that all grievances and complaint by affected persons, as well as the general beneficiary/affected communities, in regard to land acquisition, compensation and other assistance, relocation, income rehabilitation or any other aspects of the project are resolved in a timely and satisfactory manner, and that all avenues for airing grievances are available to them, a grievance redress mechanism is established in the project.

5.1.1 Grievance Redress Committee (GRC)

It is proposed to establish a Grievance Redress Committee with an aim to strengthen and expand the role of the Department of Public Relation and integrate the existing grievance resolution system. The committee will be headed by the Senior Officer from Department of Public Relations & Information, MCDC.

The composition of the GRC would include:

- a. Representative from the Department of Public Relations, MCDC
- b. Board of Trustee, Member
- c. Representative from Townships, Member (as needed)
- d. Town elder, Member
- e. Representative from Women Association, Member
- f. Representative from Social Welfare Group
- g. Community representatives from the complainant's ward (as needed)

Representatives from Townships and from Complainants' wards will be called to participate in the GRC meetings for review of cases pertaining to their jurisdictions. Depending on the type of complaint, GRC may also ask representatives of the relevant technical department to be present for the meeting.

Additionally, complainants or their representatives will be informed in advance of the review meeting and requested to be present, or send their representatives, for the same.

5.1.2 Grievance Redress Procedure

Consultation and participation of the APs should serve to minimize the occurrence of major grievances. The AP may request the village leader or the independent monitoring agency (NGO or university) to assist in processing his complaint. Project staff will make efforts to address all complaints on site as they arise to preclude their elevation to higher level. However, in order to ensure that the affected people have avenues for redressing their grievances, a three stepped procedure has been established for the Project.

- a. As a first step, all complaints and grievances by the APs would be addressed through consultation and in participatory manner at the first instance they are brought to the notice of ward head or township administration. The ward head or township administration, in consultation with the project staff, will try to address complaints within 15 days.
- b. If the complaint is not resolved within 15 days from the date it is brought to the ward head or township administration or if the APs is not satisfied with the response, he/she can bring the complaints to the head of the PMU at the MCDC. The PMU will address the complaint in 15 days from the time it is received.
- c. However, if the complaint is not resolved within 15 days from the date it is brought to the PMU or if the APs is not satisfied with the response, he/she can bring the complaints to the notice of the GRC at the MCDC level. The GRC will address the grievances within 3 weeks from the date they are received.

In case the grievances could not be resolved at the GRC level within 3 weeks from the date they are brought to its notice, or if the AP is not satisfied with the decision of the GRC he or she can seek legal recourse in the court of law at any time on their own will.

If efforts to resolve complaints or disputes are still unresolved and unsatisfactory, the complainants have the right to send their concerns or problems directly to ADB's Southeast Asia Department (SERD) through ADB Myanmar Resident Mission. If the households are still not satisfied with the responses of SERD, they can directly contact the ADB's Office of the Special Project Facilitator as outlined in the Information Guide to the Consultation Phase of the ADB Accountability Mechanism.

The GRC and the procedures for resolving complaints and grievances will be made public through an effective public information campaign. The grievance redress procedure shall also be explained in the project's Public Information Booklet.

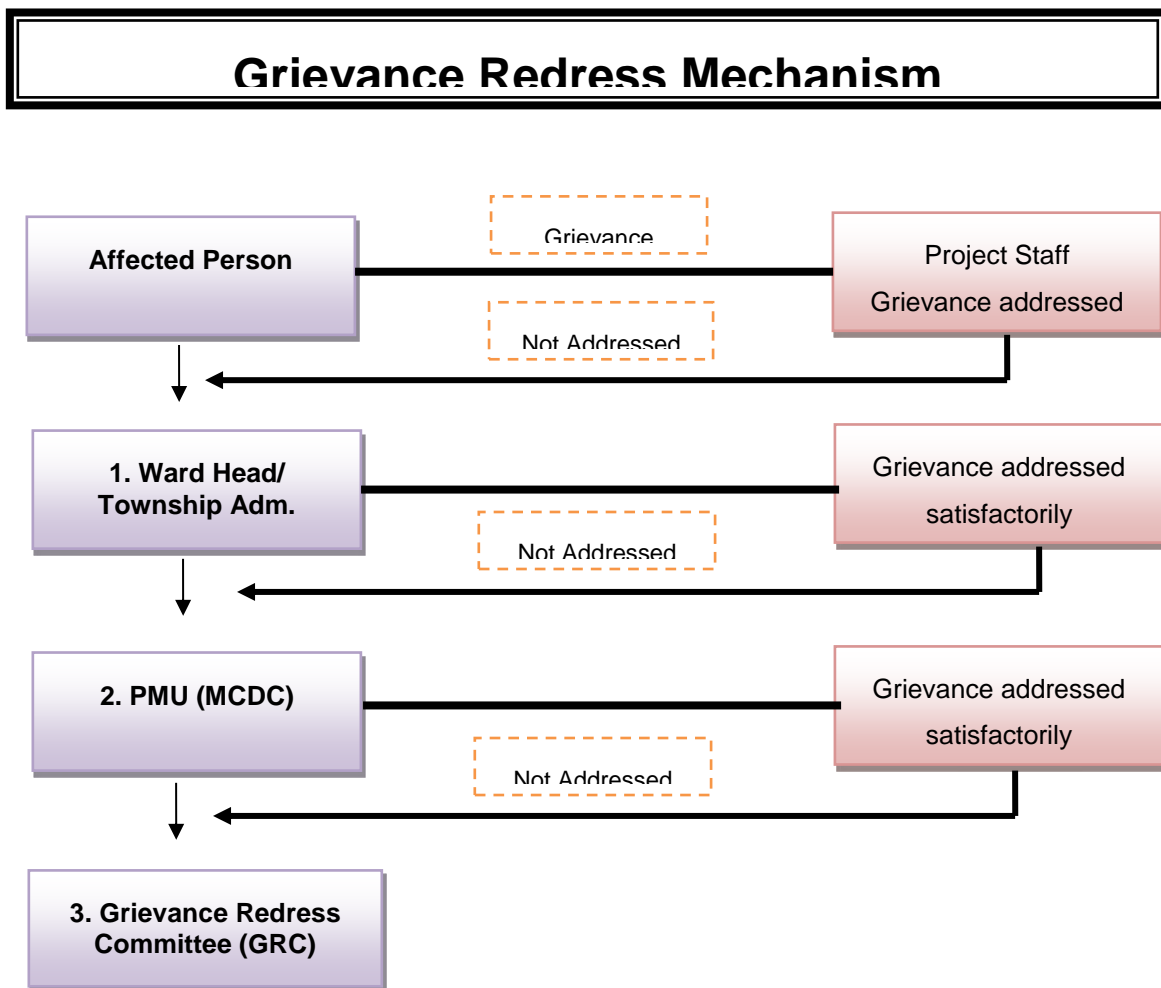
One of its roles and responsibilities of the ward heads, township administration and GRC is to ensure that any queries, or concerns made by the affected households and local communities are properly heard, logged (regardless of whether it was lodged verbally or in writing), and resolved in a transparent and timely manner. Complaints received at the ward and township levels will be documented and conveyed to the GRC in their monthly reports for their information. Documentation of grievances and complaints at the township administration level will record the date they are received, action taken to resolve the complaint with date, and how and when the decision is conveyed to the complainant.

Department of Public Relation and Information will set up a database to manage and monitor grievances which will show name and contact details of the complainant, date and nature of complaint, any follow up actions, resolutions and how and where resolutions were communicated to the complainant, and status of actions.

This proposed set-up aims to address any concerns promptly, effectively, and transparently and at no cost and retribution, to the affected households. All costs incurred in grievance resolution will be covered out of the project funds.

The construction supervision consultant will provide the necessary training and guidance in setting up the GRC and grievance mechanism to GRC members. The formalized GRC composition with clear roles and responsibilities; procedure and process will be reflected in the Implementation Plan which will be submitted to ADB for review and concurrence prior to Resettlement Plan implementation.

Figure 5.1: Grievance Redress Mechanism



6 Legal and Policy Framework

Land ownership in Burma has been vague since the 1960s when most of the land was nationalized during the socialist reign of Ne Win. The body of law governing land in Burma is expansive, complex and poorly harmonized, with many of the legal instruments dating back to the late nineteenth century. Although the state enacted several major land-related laws in 2012, their effect on preexisting laws is unclear.

6.1 Land rights and Land Related Issues in Myanmar

Land related issues in Myanmar are complex as multiple ministries are involved in management of different types of land such as: the Department of Settlements and Land Records within the Ministry of Agriculture and Irrigation, MOECA, and General Administration in Townships and Districts (Ministry of Home Affairs). The confusion is further raised when line ministries or project proponents such as Ministries of Industry, Electric Power, Transportation, Energy and Mining are involved. Coordination among GoM Ministries is difficult across different issues and sometimes confusing for stakeholders. Land titling is very costly (about \$50/acre) as well as a drawn out process.

Land Classification

In Myanmar the land is divided into two main categories: Agricultural Land and Non-Agricultural Land.

'Agricultural Land' refers to cultivable waste land at the disposal of the State and land which is occupied for the purposes of agriculture such as paddy (rice land), *ya* (dry land), *kaing* (alluvial land) and garden.

'Non-agricultural Land' refers to land that is not used for agricultural purposes. For example, forest land, grazing ground, road, town and village lands, etc. If agricultural land is not used for cultivation, all the buildings on agricultural land can be removed by authorities.

From land administration point of view the land is classified into eleven categories. A brief description of each category is given below.

6.1.1 Agriculture Land

The 1963 'Disposal of Tenancies Law' defines 'Agricultural Land' as: 'Land being utilized or kept in possession for agriculture purposes'. In general terms this include paddy land, garden land on which vegetables and flowers are grown, rubber plantation land and also virgin land occasioned by the diversion of the river current. With the enactment of the 'Land Nationalization Act' in 1953, all agricultural land comes under direct control of the State. The State gives out agriculture land on lease to farmers who automatically become tenants to the land. Tenants are required to pay revenue with regard to the land allocated to them. In accordance with the land Nationalization Act, agricultural Land is not transferable.

Agricultural land is to be used only for agriculture purposes. However, according to the Land nationalization Act 1953 (Article 39, the title from agriculture to non-agriculture use can be changed with the permission from the State / Division Peace and Development Council.

There is no legal provision which bars non-citizens from having access to agricultural land. This can be clearly seen from the fact that many Muslims in the Northern Rakhine State who do not have Citizenship status still have access to agricultural land.

Respective State/Division Peace and Development Council, with the approval of the Ministry of Agriculture and Irrigation, can allow the use of agricultural land for other purposes (e.g.; for building houses or fish-ponds) and issue an official document 'La Na 39' to that effect. 'La Na 39' land is transferable and could eventually be upgraded to 'Grant Land' by the Government.

6.1.2 Garden Land

The classification of garden land falls within the broader definition of agriculture land. However, the types of crops grown on garden land may differ and the tenant is liable to pay higher revenue to the State. As in the case of agriculture land, garden land is not transferable, in practice however, garden land are frequently transferred by sale.

6.1.3 Grazing Land

Grazing land is different from the other types of land in the sense that no revenue/rent is levied on lawful use of the grazing land. All grazing land comes under direct management of the concerned Village Tract Peace and Development Councils. Grazing land is used only by the cattle owned by the people who are residents of the villages.

6.1.4 Culturable Land, Fallow Land and Waste Land

This is also a separate class of land in which the government may grant the right to state-owned economic organizations, joint-ventures, other organizations and private individuals on a commercial basis to cultivate/utilize this category of land for agriculture, livestock breeding or aquaculture enterprises. The land can be granted on a lease of maximum period of 30 years and exemption from payment of land revenue and income-tax is also granted for specified periods depending on the type of agriculture or livestock breeding.

6.1.5 Forest Land

Forest land is declared by and under the control of the Forest Department, Ministry of Forestry, in accordance with the 'Forest Law' and its rules and regulations. Permission from the Forestry department is required for extracting timber, cutting fire-wood, producing charcoal or catching fish, or for mining and oil exploration within the forest land. Forest land can be reclassified into other category only with the permission of the Ministry of Forest as well as from the Cabinet.

6.1.6 Freehold Land

Freehold land exists mostly in big cities and towns like Yangon and Mandalay and with very few instances, if at all, in small towns and villages. Freehold land can be also interpreted as ancestral land. Ownership of such land is conclusive and the owner is not required to pay land revenue. Freehold land is transferable and can be acquired by the State for development in public interest in accordance with the provisions of the 'Land Acquisition Act' with due payment of compensation in cash or with alternative plots or in certain cases, with apartments/buildings etc. Such authority vests with the General Administration Department which is under the Ministry of Home Affairs.

6.1.7 Grant Land

'Grant Land' is owned by the government and exists almost everywhere in cities and towns but very few cases in villages. Grant Land is at the disposal of Government may be disposed of by grant or lease to any person or entity for a stipulated period which could range from 10 years, to 30 years to 90 years etc. which is extendible upon application. During the lease period the land is not at the disposal of government. Grant land is transferable and lessee/owner is legally

bound to pay land revenue to the State. During the lease period the Government can take back this land for public purpose in accordance with the 'Land Acquisition Act', in which case the owner is entitled to compensation.

For purposes of management of 'Grant Land' for Yangon and Mandalay, the 'Grants' are put into effect by the 'Yangon City Development Committee' and the 'Mandalay City Development Committee' respectively. Both cities have their own 'Development Committee Law'. For other cities and towns, 'Grants' are put into effect by the concerned 'District General Administration Department' as they fall within the broader application of the Development Committee Law' which applies to all parts of the country except Yangon and Mandalay.

6.1.8 Town Land

Town Lands are in fact the Grant Land, Freehold Land and La Na 39 land within the town boundaries. In small towns due to development pressure many land parcels hitherto classified as agriculture land could be transferred as La Na 39 land types for non-agriculture use under Article 39 of the Land nationalization Act (1953). La Na 39 type land is transferable and could also eventually become 'Grant Land'. Owners of La Na 39 land are liable to pay land revenue to Government.

6.1.9 Village Land

'Village Land' is situated out of 'Town Land' and could either be 'Grant Land' or 'La Na 39 type land' which could eventually be transformed into Grant Land. Village land is transferable and the owners are liable to pay revenue to the Government.

6.1.10 Cantonment Land

'Cantonments' is a specific type of land acquired by the government for exclusive use by the military which is also exclusively administered by the military. Freehold, Grant and La Na 39 types of land can be acquired by the Government for use as cantonment under the 'Land Acquisition Act' whereby the former owner is entitled to compensation. The Government can acquire other types of land e.g. agriculture land by simply issuing declaration to that effect without invoking the 'Land Acquisition Act'.

6.1.11 Monastery

As in the case of the cantonment, for Monastery the Ministry of Home Affairs can acquire Freehold, Grant and La Na 39 types of land under the 'Land Acquisition Act' whereby the former owner is entitled to compensation. The Government can acquire other types of land e.g. agriculture land by simply issuing declaration to that effect without invoking the 'Land Acquisition Act'. Monastery land is exempted for revenue.

6.2 Existing Laws and Regulations in Myanmar

This Resettlement Plan follows laws, regulations and policies of the Government of Myanmar and Asian Development Bank's Safeguards Policy Statement (2009) policies and guidelines. Myanmar does not have any consolidated policy or law governing all aspects of involuntary resettlement. However, provisions of the Land Acquisition Act and other regulations cover some aspects of land acquisition and resettlement. A summary of legal provisions relevant to land acquisition and resettlement is provided in the following sections.

6.2.1 The Constitution of Myanmar

The 2008 State Constitution⁵ of the Republic of the Union of Myanmar in Chapter I of the Basic Principles of the Constitution, Section 37, Sub-Section (a) declares that the State “is the ultimate owner of all lands and all natural resources above and below the ground, above and beneath the water and in the atmosphere in the Union”. While the 2008 constitution provides for citizens the right of private property, right of inheritance, and the right to settle in any place within country, these rights are subject to “existing laws”. Among other, these existing laws include: (i) The Land Acquisition Act (1894) empowering the State to acquire land where it is needed for public purposes; (ii) The Lower Burma Town and Village Act 1899; (iii) The Towns (amendment) Act 1947; (iv) The Village (amendment) Act 1961; (v) The City of Mandalay Development Law 2002; (vi) MCDC Urban Planning and Land Management Rules 2009; and (vii) MCDC Rules on Roads and Bridges (2009).

6.2.2 Land Acquisition Act 1894

The LAA of 1894 has been amended by the Government of Burma (Adaptation of Laws) Order, 1937 and The Burma Laws (Adaptation) Act – Burma Act 27, 1940 (2nd November 1940). The Land Acquisition Act 1894 (hereafter referred as LAA) regulates the land acquisition process and compensation of affected population. The law deals with matters related to the acquisition of private land and other immovable assets required for public purpose through the exercise of the right of eminent domain. The LAA also contains provisions for acquisition of land and assets on an emergency basis. In a situation where a project of public purpose has to be implemented urgently, the government may acquire land on an emergency basis.

The LAA contains provisions that meet some of the key requirements of SPS. Legally the law is still effective. However, current administrative structure in Myanmar and that envisaged in the LAA are quite different rendering many provisions of the LAA ineffective and irrelevant. This law provides the basis for payment of compensation when land is acquired for a public purpose. The Act also allows for the taking of land by the Government for a business purpose.

The right to acquire land for public purposes is established when Section 4 of the LAA is triggered. The LAA specifies a systematic approach for acquisition and compensation of land and other properties for development projects. It stipulates various sections pertaining to notifications, surveys, acquisition, compensation and apportionment awards, along with disputes resolution, penalties and exemptions. LAA also provides for disclosure of information on surveys to affected persons.

A brief explanation and salient features of different sections of LAA is given in Table 6.1.

Table 6.1: Salient Features of the Land Acquisition Act 1894

Key Sections	Salient provisions of the LAA (1894)
Section 4(1)	Publication of preliminary notification and conducting survey
Section 5 and 5A (1) 5A (2)	Payment for all damages to the assets surveyed and filling of the objections to the acquisition of any land in writing and opportunity of being heard Provision for objections in writing to be heard by the Collector either in person or by pleader and further enquiry as necessary.

⁵ The new constitution came into force in 2010 following the holding of national elections.

Section 6(1)	The Government makes a more formal declaration of intent to acquire land following hearing of objections received under Section 5.
Section 7	The senior officer authorized by the President of the Union to direct the Collector to take order for the acquisition of the land.
Section 8	The Collector shall cause the land to be acquired to be physically marked out, measured and planned.
Section 9(2)	The Collector gives notice to all affected persons (APs) that the Government intends to take possession of the land and if they have any claims for compensation then these claims are to be made to him at an appointed time.
Section 10(1)	Delegates power to the Collector to record statements of APs in the area of land to be acquired or any part thereof as co-proprietor, sub-proprietor, mortgagee, and tenant or otherwise.
Section 11	Enables the Collector to make enquiries into the measurements, value and claim and then to issue the final "award". The award includes the land's marked area and the valuation of compensation. Although the LAA requires payment of compensation, Myanmar lacks any specific methodology for determining compensation for affected land and other assets.
Section 16	When the Collector has made an award under Section 11, he will then take possession and the land which shall thereupon vest absolutely in the Government, free from all encumbrances.
Section 17	Acquisition of land under emergency situations
Section 18(1)	In case of dissatisfaction with the award, APs may request the Collector to refer the case onward to the court for a decision. This does not affect the Government taking possession of the land.
Section 23(1)	The award of compensation for the owners for acquired land is determined at its market value taking into consideration: i) market value of the land at the date of publication of the notice; ii) damages caused to any standing crops or trees; iii) adverse impacts due to severance of the affected land from other land; iv) adverse impacts on other assets, moveable or immovable; v) causing displacement of residence or place of business due to acquisition; and vi) loss of profits due to the time lag between the notice served under section 6 and time of taking possession of the land.
Section 23(2)	Provision of additional 15% on the assessed market value in view of the compulsory nature of the acquisition for public purposes.
Section 24	Not to take into consideration any improvements made after issuance of notification under section 4.
Section 28	Relates to the determination of compensation values and interest premium for land acquisition
Section 31(3)	Provides that the Collector can, instead of awarding cash compensation in respect of any land, make any arrangement with a person having an interest in such land, including the grant of other lands in exchange.
Section 35	Authorizes the Collector for temporary occupation and use of any waste or arable land for public purpose, not exceeding three years from the commencement of such occupation, on terms as agreed upon in writing between the Collector and the AP. It also provides for payment of compensation for any damages caused due to the occupation and restoration of land to its original condition

6.2.3 The Lower Myanmar town and Village Lands Act 1899

Governs the land rights in towns and villages and provides for certain rights (such as the right to cultivate and right to sell) relating to hereditary and government lands. The Act (Chapter VIA) stipulates the compensation by the government for the affected land. Whenever the rights of any owner or occupier of any land are infringed by the occupation or disturbance of the surface of the said land, either by the Government or by any person to whom the Government may have disposed of such rights and powers in regard to the said land, the Government shall pay or cause to be paid, to such owner or occupier compensation for the infringement. The compensation shall be determined, as nearly as may be, in accordance with the provisions of the Land Acquisition Act.

6.2.4 The Towns (Amendment) Act 1947

The Act provides for declaration of any local area to be a town by The President of the Union. Under the Act, the Deputy Commissioner is authorized to, by order in writing, declare division of a town into wards and wards to blocks, appointment of a person as ward head and elder of a block, and general duties of headman and elders and residents. The Article 7(f & g) regulates that the headman of the ward is responsible for (i) collecting any revenue or other money due to the Government or to a municipal or town committee from residents of the ward or persons holding land therein; (ii) report to officer as appointed by the Deputy Commissioner in this behalf all trespass or encroachments upon, and injuries to, State land and public property which may occur within his ward.

6.2.5 The Village (Amendment) Act 1961

The Act authorizes the Deputy Commissioner to declare any local area shall be a village tract and, when necessary, may determine the limits of any village tract. The Deputy Commissioner is also authorized to appoint the village headman of every village tract; a rural policeman or more than one such policeman in any rural village-tract; constitute a village committee with the powers of a civil court; duties and powers of village headman and rural policeman; and general duties of villagers. The headman of the village is responsible for collecting revenue and other money due to the State from residents of the village-tract or persons holding land therein (Article 8).

6.2.6 The City of Mandalay Development Law (2002)

The City of Mandalay Development Law provides for creation of a “City of Mandalay Development Committee” whose responsibilities include among others, demolishing and resettlement of squatter houses, squatter buildings and squatter wards. The law however, does not include implementation guidelines and procedures.

6.2.7 MCDC Planning and Land Management Rules (2009)

Empowers MCDC to remove squatters and resettle and relocate them systematically (Chapter 2 & 3); confiscate private properties by paying compensation or purchase with reasonable payment, which are located within the project areas or zones; in consultation with the respective agency or organization, get transfer of lands owned by government agency or any organization (Chapter 7); and to remove shanty towns that encroached on the MCDC owned or manageable lands (Chapter 11).

6.2.8 MCDC Rules on Roads and Bridges (2009)

Empowers MCDC to close whole or a section of a road with an advance public notice of one month; coordinate with the respective government agency to survey the needed land and to get

transfer of it after its acquisition; remove buildings according the existing law that existed on the acquired land according to the Rule- Sub Article (a) or (b); and cover the reasonable compensation cost for the land acquired and the buildings removed from the MCDC fund.

6.2.9 Other Relevant Laws and Regulations

The several other relevant laws and regulations and their key provisions are summarized below:

Farmland Law (2012)

The Farmland Law (2012) effectively replaces the Tenancy Law (1963), Protection of Peasants' Rights Law (1963), and Land Nationalization Act (1953). According to this law farmers can retain farmland use-rights (LUC), the state's power to rescind such rights, the process for settling certain land-related disputes, and basic requirements for compensation in the case the government acquires the land for public purposes. Those with LUC may transfer, lease, sell, or use as collateral their agricultural lands, provided that the government is informed about these transactions. The holder of the LUC cannot change the use of the allocated land other than what is provided in the LUC. Neither can the holder of the LUC allow the farmland to fallow for no valid reason. Violation of the conditions set in the LUC could lead to the revocation of the LUC and the confiscation of the farmland.

Article 29 under Chapter 10, Utilization of Farmland, empowers the State to utilize farmland for projects in national interest after obtaining permission from of the Union Government Cabinet and on recommendations from the Central Farmland management Body. Members of the public can request the change in utilization of farmland for other use under Article 30 (A) of the Farmland Law.

While the Farmland Law of 2012 repealed the Land Nationalization Act of 1953 and the Disposal of Tenancies Law of 1963, the effects of these repealed laws remain unchanged.

The Vacant, Fallow and Virgin Land Management Law (2012)

The Vacant, Fallow and Virgin Lands Management Law (2012) governs the allocation and use of virgin land (i.e., land that has never before been cultivated) and vacant or fallow land (which the law characterizes as for any reason "abandoned" by a tenant). The law establishes the Central Committee for the Management of Vacant, Fallow and Virgin Lands (CCVFV), which is responsible for granting and rescinding use rights for such lands. This also outlines the purposes for which the committee may grant use-rights; conditions that land users must observe to maintain their use rights; and restrictions relating to duration and size of holdings. The Central Committee is also empowered (Chapter VII, Section 19) to repossess the land from the legitimate owner, after payment of compensation calculated based on the current value to cover the actual investment cost, for infrastructure and other special projects in the interest of the State.

Under the *Farmland Law 2012* and *Vacant, Fallow, and Virgin Land Management Law*, the State remains the ultimate owner of all land. The two laws have received criticisms from concerned farmers and land rights activists in Myanmar as well as from international economists. Under these new laws, farmers still lack land tenure security and are subject to the government's crop prescriptions and production quotas. The main concern is that these land laws will not protect farmers from wide scale land grabs. However, GoM recognizes the need for Myanmar to have comprehensive sustainable land use and management policies in order to develop and improve living conditions in rural communities.

Transfer of Property Act (1882)

The Transfer of Property Act (1882) provides for the transfer of property (movable and immovable), including, sales, mortgages, charges, leases, exchanges and gifts. Technically, it is said that the Transfer of Property Act (1892) is still in force. However, the Land Nationalization Act (1953) replaced the provisions of the Transfer of Property Act (1892) on housing, land, and properties rights.

The Land and Revenue Act (1879)

The Land and Revenue Act (1879) was the first major land law enacted in Burma and governed the acquisition of land rights for private persons as well as the procedures for assessment and collection of land revenue taxes. Under the law, all lands were for the first time divided into either “state land” or “non state land”. The Act did not apply to land within the limits of any towns, nor to reserved forestry, fisheries land, military cantonments or specified religious sites.

The protection of the Right to Cultivation Act, 1963

The 1963 Protection of the Right of Cultivation Act under certain circumstances protects cultivators against confiscation of their land and their farming implements.

Myanmar Special Economic Zones Law (2014)

Chapter 17 Land Use, Para 80 provides for the developer to a) pay the agreed expenditures for transfer, resettlement and compensation if houses, buildings, gardens, paddy fields, fruit bearing plants and plantations on the land are required to be cleared or transferred; (b) shall, as necessary, negotiate with the management committee in order to ensure that the persons who have to leave the land do not fall below their previous standard of living, their fundamental needs are fulfilled and the transfer is easy and smooth;

6.3 ADB’s Safeguards Policy Statement (2009)

The ADB Safeguards Policy Statement (SPS) consolidates three existing safeguard policies: involuntary resettlement, indigenous peoples, and environment.

The aim of ADB Policy on Involuntary Resettlement is to avoid or minimize the impacts on people, households, businesses and others affected by the acquisition of land and other assets, including livelihood and income. Where resettlement is not avoidable, the overall goal of the ADB policy is to help restore the living standards of the affected people to at least their pre-project levels by compensating for lost assets at replacement costs and by providing, as necessary, various forms of support.

The objectives of the involuntary resettlement policy (SR2) are:

- a. to avoid involuntary resettlement wherever possible;*
- b. to minimize involuntary resettlement by exploring project and design alternatives;*
- c. to enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-project levels; and*
- d. to improve the standards of living of the displaced poor and other vulnerable groups.*

The involuntary resettlement safeguards (SR2) cover physical (relocation, loss of residential land, or loss of shelter) and economic displacement (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land or (ii) involuntary restrictions on land use or on access to legally designated parks and protected

areas. It covers them whether such losses and involuntary restrictions are full or partial, permanent or temporary.

The SR2 of ADB's 2009 SPS adopts a holistic approach in development as it mandates the incorporation of its other cross-cutting policy themes including:

(i) **Gender and Development (2006)**. It adopts gender mainstreaming as a key strategy for promoting gender equity, and for ensuring that women participate and that their needs are explicitly addressed in the decision-making process for development activities. For projects that have the potential to cause substantial gender impacts, a gender plan is prepared to identify strategies to address gender concerns and the involvement of women in the design, implementation and monitoring of the project.

(ii) **Public Communications Policy (2011)**. It seeks the active participation of affected people and other stakeholders during the development and review of safeguard policies on ADB-assisted programs and projects, consistent with ADB's OM Section F1/OP (March 2010); and

(iii) **Accountability Mechanism Policy (2012)**. It is part of ADB's continued efforts to enhance its capacity in responding to and/or resolving the problems associated with the implementation of its policies in all programs or projects it assists. It consists of a consultation phase and a compliance review phase, by which the problems or issues raised by the affected people and/or stakeholders are investigated and resolved.

Indigenous People

The guiding principles on ADB's policy on **Indigenous Peoples (IPs)** are prescribed in SR3 of the 2009 SPS. The objective is to design and implement projects in a way that fosters full respect for IPs' identity, dignity, human rights, livelihood systems, and cultural uniqueness as defined by the Indigenous Peoples themselves so that they (i) receive culturally appropriate social and economic benefits (ii) do not suffer adverse impacts as a result of projects and (iii) can participate actively in projects that affect them.

Under the SPS, "Indigenous Peoples" is a generic term referring to a distinct, vulnerable, social, and cultural group possessing the following characteristics in varying degrees:

- self-identification as members of a distinct indigenous cultural group and recognition of this identity by others;
- collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories;
- customary, cultural, economic, social or political institutions, that are separate from those of the dominant society and culture; and
- a distinct language, often different from the official language of the country or region.

ADB's Indigenous Peoples Policy (SPS 2009) will not be applicable for the present project as the ethnic population within the MCDC areas do not satisfy above criteria. The ethnic minority households within the seven townships covering MCDC area are dispersed and are fully integrated, socially and economically, with the mainstream population.

6.4 Current Practices & Procedures in land Acquisition and Resettlement

A review of land acquisition and resettlement in three⁶ currently ongoing development projects was carried out to identify key policy provisions, and planning and implementation practices and procedures. The three projects reviewed are at different stages of completion and success in resettlement planning and implementation varies from one project to other. The key policy provisions and procedures adopted for planning are summarized below:

- Steps taken to minimize adverse impacts due to land acquisition;
- Field survey including census, inventory of losses and socioeconomic surveys;
- Preparation of RP, except for Daewoo-Kyauk Phyu project;
- Compensation for land and other fixed assets, including crops at replacement cost based on the rates determined through market surveys, and accredited by local authorities;
- Entitlements to APs without legal titles to land for their assets;
- Assistance for relocation and restoration of livelihood;
- Public consultation with and participation of affected households encouraged and decision on assistance and compensation for lost assets determined through consultative and participatory manner;
- Monitoring

Some of the projects encountered problems during resettlement implementation. These include: i) difficulty in understanding of proper jurisdiction of the land; ii) difficulties in confirmation of land records; iii) difficulties in the determination of reasonable market value of land; and iv) confusion due to the involvement of different ministries. There were also complaints from affected households about lack of meaningful public consultation and lack of effective grievance redress mechanism.

6.5 Comparison of Key Features of Myanmar Act and Laws and ADB's Involuntary Resettlement Principles and Practices

A comparison between the Myanmar Land Acquisition Act (1894) and other local laws related to land acquisition and resettlement and ADB safeguard policy principles (SPS) with regard to key land acquisition and resettlement (LAR) aspects is shown in Table 6.2. The objective of this exercise is to identify if and where the two sets of policy provisions and procedures are in conformity with each other and more importantly, where there are differences and gaps, and how these gaps are to be addressed.

⁶ The projects include: i) ADB Pyapon-Maubin Road Rehabilitation Project; ii) Daewoo-Kyauk Phyu, Rakhine State (The Shwe Project consists of off-shore field facilities and on-shore gas transportation system); and iii) Thilawa SEZ Project.

Table 6.2: Gap Analysis and Gap-Filling Measures

ADB Project Principles	Relevant Laws of Myanmar	Policy Gaps & Gap-Filling Measures
<p>1.1 Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks.</p> <p>1.2 Determine the scope of resettlement planning through a survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks.</p>	<p>None</p> <p>LAA 1894 in Section 4(1) requires publication of preliminary notification and conducting survey. However, the scope of surveys is limited to the impacts on land and other assets. No provision for census and socio-economic survey</p>	<p>No provision of screening.</p> <p>Although under the environmental Conservation Law there is a stipulation of protection under the Constitution and screening through a social impact assessment to determine resettlement impacts. However, there are no procedures/guidelines in the conduct of social impact assessment for screening purposes with respect to involuntary resettlement.</p> <p>Limited provision of impact assessment. However, detailed surveys conducted in ongoing ADB funded and private sector projects.</p> <p>In the project, socio-economic conditions of affected households including vulnerable households, disaggregated by gender will be identified</p> <p>The project and its associated facilities will be categorized according to their social and economic impacts to formulate mitigating measures to avoid the vulnerability of APs.</p>
<p>2.1 Carry out meaningful consultations with affected persons, host communities, and concerned NGOs.</p> <p>2.2 Inform all displaced persons of their entitlements and resettlement options. Ensure their participation in planning, implementation, and monitoring and evaluation of</p>	<p>None</p> <p>LAA Section 9(2) provides for dissemination of information on affected assets.</p>	<p>No provision in the acts and policies. However consultation with and participation of affected persons encouraged in practice.</p> <p>Meaningful consultations with affected persons, host communities, and concerned NGOs were carried out with documentation of minutes and will continue throughout the project cycle.</p> <p>Affected households will be informed of their entitlements and resettlement options during the consultation meetings. .</p>

ADB Project Principles	Relevant Laws of Myanmar	Policy Gaps & Gap-Filling Measures
resettlement programs.		
<p>2.3 Pay particular attention to the needs of vulnerable groups, especially those below the poverty line, the landless, the elderly, women and children, and indigenous peoples, and those without legal title to land, and ensure their participation in consultations</p> <p>2.4 Establish a GRM to receive and facilitate resolution of the affected persons' concerns</p>	<p>None</p> <p>Land Acquisition Act (1894), Part II, Objection. 5A. (1) Any person interested in any land which has been notified under section 4, sub-section (1), as being needed or likely to be needed for a public purpose or for a company may, within thirty day of the notification, object to the acquisition of any land in the locality, as the case may be.</p> <p>(2) Every objection under sub-section (1) shall be made to the Collector in writing, and the Collector shall give the objector an opportunity of being heard either in person or by pleader and shall, after hearing all such objections and after making such further inquiry, if any, as he thinks necessary. Submit the case for the decision of the President of the Union, together with the record of the proceedings held by him and a report containing his recommendations on the objections. The decision of the President of the Union on the objections shall be final.</p> <p>Farmland Law 2012. Chapter VIII. Deciding Land Disputes In Respect Of The Right For Farming And Appeal</p> <p>22. Land disputes in respect of the right for farming shall be decided by the Ward or Village Tract Farmland Management Body, after opening the case file and making actions such as enquiry and hearing about the land disputes.</p> <p>23. (a) Whosoever may appeal to the respective Township Farmland Management Body against within 30 days from the date of decision made by the Ward or Village Tract Farmland Management Body in accordance with the section 22 of this law;</p> <p>24 (a) Whosoever may appeal to the respective District Farmland Management Body against within 30 days from the date of decision made by the Township Farmland Management Body in accordance with the section 23 subsection (b)of this law;</p>	<p>No provision of meaningful consultation with vulnerable groups. In the project, meaningful and participatory consultations with APs including vulnerable groups will be undertaken throughout the Project cycle. Public Information Booklet (PIB) in the form and language understood by them will be distributed in order to elicit their active participation.</p> <p>LAA provides for objections from affected households but there is no provision to set up a reliable grievance redress mechanism to address all issues related to involuntary resettlement.</p> <p>Farmland Law Article 22-25 provide for GRM limited to disputes on farmland only.</p> <p>GRM set up in the ADB funded project.</p> <p>A GRM will be set up and affected communities will be informed about the procedures in filing their grievances and complaints through the PIB.</p>

ADB Project Principles	Relevant Laws of Myanmar	Policy Gaps & Gap-Filling Measures
<p>2.5 Support the social and cultural institutions of displaced persons and their host population.</p> <p>2.6 Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement decisions should be preceded by a social preparation phase</p>	<p>25(a) Whosoever may appeal to the respective Region or State Farmland Management Body against within 60 days from the date of decision made by the District Farmland Management Body in accordance with the section 24 subsection (b)of this law;</p> <p>(b) Region or State Farmland Management Body may approve (or) revise (or) cancel the decision made by the District Farmland Management Body;</p> <p>(c) the decision made by the Region or State Farmland Management Body is final;</p> <p>None</p> <p>None</p>	<p>The project will provide adequate support for the existing social and cultural institutions of displaced persons and host population.</p> <p>Not applicable as the resettlement impacts in the project are not complex and sensitive</p>
<p>3.1 Improve, or at least restore, the livelihoods of all displaced persons through:</p> <p>3.2 land-based resettlement strategies when affected livelihoods are land based where possible or cash compensation at replacement value for land when the loss of land does not undermine livelihoods,</p>	<p>None</p> <p>Land Acquisition Act (1894), Part III, Acquisition, Section 31(3): Notwithstanding anything in this section, the Collector may, with the sanction of the President of the Union, instead of awarding a money compensation in respect of any land, make any arrangement with a person having a limited interest in such land, either by the grant of other lands in exchange, the remission of land-revenue on other lands held under the same title, or in such other way as may be equitable having regard to the interests of the parties concerned.</p> <p>Part II-Acquisition: 11. On the day so fixed, or on any other day to which the enquiry has been adjourned, the Collector shall proceed to enquire into the objections (if any) which any person interested has stated pursuant to a notice given under section 9 to the measurements made under section 8, and into the value of the land at the date of the publication of the notification under section 4, sub-section (1) and into the respective interests of the persons claiming the compensation, and shall make an award under his hand of:</p>	<p>No provision in existing acts and policies. However, assistance for income restoration provided in private sector projects.</p> <p>Partial gap. Although LAA requires consideration of market value in deciding compensation, it lacks standard methodology in determining compensation.</p> <p>LAA provides for land-for-land.</p> <p>In the project, assistance in-kind will be provided to affected households to restore livelihoods. Livelihood training programs will be carried out and job opportunities for affected households during construction will be explored. Strategy for relocation to consider no or minimum disruption to affected households.</p>

ADB Project Principles	Relevant Laws of Myanmar	Policy Gaps & Gap-Filling Measures
	<p>(i) the true area of the land; (ii) the compensation which in his opinion should be allowed for the land; and (iii) the apportionment of the said compensation among all the persons known or believed to be interested in the land, of whom, or of whose claims, he has information, whether or not they have respectively appeared before him.</p> <p>12. (1) Such award shall be filed in the Collector's office and shall except as hereinafter provided, be final and conclusive evidence, as between the Collector and the persons interested, whether they have respectively appeared before the Collector or not, of the true area and value of the land, and the apportionment of the compensation among the persons interested. (2) The Collector shall give immediate notice of his award to such of the persons interested as are not present personally or by their representatives when the award is made.</p> <p>15. In determining the amount of compensation, the Collector shall be guided by the provisions contained in sections 23 and 24.</p> <p>Land Acquisition Act (1894), PART III REFERENCE TO COURT AND PROCEDURE THEREON.</p> <p>23. (1) In determining the amount of compensation to be awarded for land acquired under this Act, the Court shall take into consideration: First, the market value of the land at the date of the publication of the notification under section 4, sub-section (1); Secondly, the damage sustained by the person interested by reason of the taking of any standing crops or trees which may be on the land at the time of the Collector's taking possession thereof; Thirdly, the damage (if any) sustained by the person interested, at the time of the Collector's taking possession of the land, by reason of severing such land from his other land; Fourthly, the damage (if any) sustained by the person interested, at the time of the Collector's taking possession of the land, by reason of the acquisition injuriously affecting his other property, moveable or immoveable, in any other manner, or his earnings; Fifthly, if in consequence of the acquisition of the land by the Collector the person interested is compelled to change his residence or place of business, the reasonable expenses (if any) incidental to such change; and Sixthly, the damage (if any) bona fide resulting from diminution of the profits of the land between the time of the publication of the declaration under section 6 and the time of the Collector's taking possession of the</p>	

ADB Project Principles	Relevant Laws of Myanmar	Policy Gaps & Gap-Filling Measures
<p>3.3 Prompt replacement of assets with access to assets of equal or higher value, 3.4 Prompt compensation at full replacement cost for assets that cannot be restored, and 3.5 Additional revenues and services through benefit sharing schemes where possible</p>	<p>land. (2) In addition to the market-value of the land as above provided, the Court shall in every case award a sum of fifteen per centum on such market-value, in consideration of the compulsory nature of the acquisition.</p> <p>None</p> <p>None</p> <p>None</p>	
<p>4. Provide physically and economically displaced persons with needed assistance, including the following: (i) if there is relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; (ii) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) civic infrastructure</p>	<p>Social Welfare Objectives of Ministry of Social Welfare, Relief and Resettlement (b) To contribute towards the development of human resources. (c) To assist those who are facing social problems. (d) To take preventive measure to control occurrence of social problems. (e) To give assistance to the State in some way by implementing social development tasks and giving social assistance Limited to resettlement of emergency / disaster affected communities only</p> <p>Myanmar Special Economic Zones Law (2014). Chapter 17 Land Use – 80. The developer or the investor – (a) shall pay the agreed expenditures for transfer, resettlement and compensation if houses, buildings, gardens, paddy fields, fruit bearing plants and plantations on the land are required to be cleared or transferred; (b) shall, as necessary, negotiate with the management committee in order to ensure that the persons who have to leave the land do not fall below their previous standard of living, their fundamental needs are fulfilled and the transfer is easy and smooth; Limited to Special Economic zones only</p>	<p>No provision in existing acts and policies. In practice, provision for income restoration in a private sector project.</p> <p>In the project, displaced APs will be provided with needed assistance like secured tenure to relocation land (if any), better housing at resettlement sites with comparable access to employment and production opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities and transitional support and development assistance, as prescribed in ADB policy</p> <p>In the project assistance in-kind will be provided to affected households to restore livelihoods. Livelihood training programs will be carried out and job opportunities for affected households during construction will be explored.</p>

ADB Project Principles	Relevant Laws of Myanmar	Policy Gaps & Gap-Filling Measures
and community services, as required.		
5. Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards. In rural areas provide them with legal and affordable access to land and resources, and in urban areas provide them with appropriate income sources and legal and affordable access to adequate housing	<p>Social Welfare Objectives of Ministry of Social Welfare, Relief and Resettlement</p> <p>(b) To contribute towards the development of human resources.</p> <p>(c) To assist those who are facing social problems.</p> <p>(d) To take preventive measure to control occurrence of social problems.</p> <p>(e) To give assistance to the State in some way by implementing social development tasks and giving social assistance</p> <p>Limited to resettlement of emergency / disaster affected communities only</p> <p>Myanmar Special Economic Zones Law (2014). Chapter 17 Land Use – 80. The developer or the investor – (a) shall pay the agreed expenditures for transfer, resettlement and compensation if houses, buildings, gardens, paddy fields, fruit bearing plants and plantations on the land are required to be cleared or transferred; (b) shall, as necessary, negotiate with the management committee in order to ensure that the persons who have to leave the land do not fall below their previous standard of living, their fundamental needs are fulfilled and the transfer is easy and smooth.</p> <p>Limited to Special Economic zones only</p>	<p>No specific provision of improving the livelihood of vulnerable groups.</p> <p>The displaced poor and vulnerable group, including women displaced by the Project will be assisted in improving their standards of living. Preference will be given to members of the affected households in the hiring of unskilled labor during implementation</p>
6. Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.	None	<p>No provision for negotiated settlement on compensation.</p> <p>People who enter into negotiated settlements with the Executing Agency over the acquisition of their lands will still maintain the same or better income and livelihood status.</p>
7. Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.	<p>The Mandalay city development committee Law (MCDC Law) 2002 under section 8 (d) provides resettlement of squatter but no details provided on their entitlements and relocation assistance.</p>	<p>No specific entitlements to persons without any title to affected land.</p> <p>In the project, all affected households without titles to land or any recognizable legal rights to land will be identified and will be eligible for resettlement assistance and compensation for non-land assets.</p>
8. Prepare a resettlement plan	None	<p>No provision in existing acts and policies.</p> <p>RP prepared in the ADB and JICA</p>

ADB Project Principles	Relevant Laws of Myanmar	Policy Gaps & Gap-Filling Measures
<p>elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule</p>		<p>funded projects. In the project, resettlement plan that elaborates the entitlements of, the income and livelihood restoration strategy for the APs will be prepared, with provisions for institutional arrangements, monitoring and reporting frame-work as well as budget and time-bound implementation schedule.</p>
<p>9. Disclose a draft resettlement plan, including documentation of the consultation process in a timely manner, before project appraisal, in an accessible place and a form and language(s) understandable to affected persons and other stakeholders. Disclose the final resettlement plan and its updates to affected persons and other stakeholders.</p>	<p>Land Acquisition Act (1894), Part VII, Section 42. Every such agreement shall, as soon as may be after its execution, be published in the Gazette, and shall thereupon (so far as regards the terms on which the public shall be entitled to use the work) have the same effect as if it had formed part of this Act:</p>	<p>Partial disclosure requirements in the LAA. In the project, pre-IOL and post-IOL consultations will be held with stakeholders and the affected households to disclose findings and proposed assistance Draft resettlement plan will document the consultation process and will be disclosed to the APs and other stakeholders in local language and in a timely manner. Final resettlement plan will be disclosed to APs and other stakeholders and uploaded on MCDC website</p>
<p>10.1 Conceive and execute involuntary resettlement as part of a development project or program. Include the full costs of resettlement in the presentation of project's costs and benefits. 10.2 For a project with significant involuntary resettlement impacts, consider implementing the involuntary resettlement component of the project as a stand-alone operation</p>	<p>None None</p>	<p>No provision to consider involuntary resettlement as part of development project. Resettlement Plan will consist of adequate budgetary support, grievance resolution mechanism, institutional mechanism and monitoring. Not applicable as involuntary resettlement impacts are considered not significant.</p>
<p>11.1 Pay compensation and provide other resettlement entitlements before</p>	<p>None</p>	<p>No provision to pay compensation and other assistance prior to displacement Compensation and other</p>

ADB Project Principles	Relevant Laws of Myanmar	Policy Gaps & Gap-Filling Measures
<p>physical or economic displacement.</p> <p>11.2 Implement the resettlement plan under close supervision throughout project implementation</p>	<p>None</p>	<p>resettlement entitlements shall be paid in full to the APs before any physical or economic displacement shall take place.</p> <p>Internal monitoring shall be in place as part of resettlement management process.</p>
<p>12. Monitor and assess resettlement outcomes, their impacts on the standards of living of displaced persons, and whether the objectives of the resettlement plan have been achieved by taking into account the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.</p>	<p>None</p>	<p>No provision for monitoring in existing acts and policies.</p> <p>Internal monitoring provided for in ongoing ADB and JICA funded projects.</p> <p>The project management unit will internally monitor Resettlement Plan implementation. Monitoring indicators are included in the resettlement plan. Periodic monitoring reports will be posted on the ADB website.</p>

The gap analysis and comparison between Myanmar LAA 1894 and other laws and the ADB’s SR2 Policy Requirements shows that the provision of existing acts and laws have, in general, no equivalence with the provisions of the ADB’s SPS (SR2) requirements. Although the LAA 1894 contains several provisions that come close to SPS requirements, in practice they fall short of the objectives due to the lack of standard methodologies and implementation guidelines. Local laws do not cover the most critical aspects of the SPS requirements on income and livelihood restoration and do not recognize entitlement to project affected persons without title to land for assistance and compensation for their lost non-land assets and income and livelihood.

In addition to the preceding gap analysis, local acts and laws also fall short on cross-cutting policy themes that are equivalent to those of ADB, such as: (i) Public Communications Policy (2011) on disclosure and exchange of information; and (ii) Gender and Development (2006).

In the project, the policy and principles adopted in this RP will be consistent with the SPS requirements (SR2) and will supersede the provisions of the relevant decrees currently in force in Myanmar.

7 Entitlements, Assistance and Benefits

7.1 Key Principles of Involuntary Resettlement

The Myanmar Land Acquisition Act 1895 (LAA) and other local laws in vogue do not fully comply with the ADB's Safeguard Policy Statement (SPS, 2009). Therefore, following policy principle will be adopted for the project:

(i) As a matter of policy, land acquisition and other involuntary resettlement impacts would be avoided or minimized by exploring all design options;

(ii) Lack of formal legal title or rights will not be a bar to eligibility for compensation and assistance under the project. AHs without title or any recognizable legal rights to land are eligible for resettlement assistance and compensation for non-land assets at replacement cost;

(iii) All compensation will be based on the principle of replacement cost at the time of acquisition. For houses and other structures, this will involve the costs for materials and labor at the time of acquisition, with no depreciation or deduction for salvageable materials. Compensation for land will be replacement land or, in case where replacement land is not available or the household opts for cash compensation, compensation in cash at replacement cost adequate to purchase land of equivalent attributes in the vicinity;

(iv) The process and timing of land and other asset acquisition will be determined in consultation with APs to minimize disturbance. In case of potential loss of standing crops the owners will be given sufficient time to harvest the crops before any displacement;

(v) Where houses and structures are partially affected to the degree that the remaining portion is not viable for its intended use, the project at the informed request of the AP, will acquire the entire asset;

(vi) The project will carry out meaningful consultations with affected people, host communities, and concerned key stakeholders throughout the resettlement and planning phase. APs will be systematically informed and consulted about the project, the rights and options available to them and proposed mitigating measures. The comments and suggestions of APs and communities will be taken into account in resettlement planning and implementation;

(vii) The key information in the RP such as measurement of losses, detailed asset valuation, compensation and resettlement options, detailed entitlements and special provisions, grievance procedures, timing of payments and displacement schedule will be disclosed to APs in an understandable format including the distribution of Public Information Booklets (PIB) prior to submission of the RP to ADB for review and approval;

(viii) Resettlement planning and implementation will ensure that gender concerns are incorporated, including gender-specific consultation and information disclosure. This includes special attention to guarantee women's assets, property, and land-use rights, and to ensure the restoration of their income and living standards;

(ix) Existing cultural and religious practices will be respected and preserved to the maximum extent possible;

- (x) Special measures will be incorporated in the RP to protect vulnerable groups such as ethnic minorities, women-headed households, children, households headed by the disabled, the elderly, landless and people living below the generally accepted poverty line. Vulnerable APs will be provided with appropriate assistance to help them improve their standard of living through asset building strategies such as provision of land, replacement housing of minimum standards and increased security of tenure;
- (xi) An effective Grievance Redress Mechanism will be established for hearing and resolving grievances during the planning and implementation of the RP.
- (xii) Institutional arrangements will be in place to ensure effective implement of land acquisition, compensation payment, resettlement and implementation of livelihood rehabilitation programs with full participation of and consultation with affected households;
- (xiii) Adequate budgetary support will be made available to cover the costs of land acquisition and resettlement within the agreed implementation period;
- (xvi) Appropriate reporting, monitoring and evaluation mechanisms will be established and put in place as part of the resettlement management system.
- (xiv) Voluntary donation will not be applied for any assets;
- (xv) Compensation for lost assets, resettlement allowances and assistance to affected persons will be paid in full and income rehabilitation measures, where necessary, will be in place at least one month prior to the mobilisation of the contractor and commencement of any construction activities.

7.2 Eligibility

Eligibility will be determined with regard to the cut-off date, which is taken to be the date of completing census and detailed measurement survey of land and/or other assets affected by the projects. All APs who are identified in the project-impacted areas as of the cut-off-date will be entitled to compensation for their affected assets and to rehabilitation measures sufficient to assist them to improve or at least maintain their pre-project living standards, income-earning capacity and production levels. Those who encroach into the subproject area after the cut-off date will not be entitled to compensation or any other assistance. For the purposes of the project the cut-off date is established at **26 January 2015**. The APs were informed of the cut-off date at the time of the census and IOL surveys and advised that any people who illegally settle in the project area after the cut-off date will not be entitled to compensation and/or assistance under the project.

In addition, the eligibility for compensation with regard to land is determined by legal rights to the land concerned. There are three types of APs:

- i) Persons with legal rights to land lost, fully or partially;
- ii) Persons who do not currently possess a legal rights but have a claim that is recognizable under national laws and,
- iii) Persons who do not have any title or recognizable claim to the land lost.

Affected persons included under i) and ii) above shall be compensated for the affected land and assets upon land. APs included under iii) will not be entitled to any compensation for

the affected land, but will be entitled to compensation for their non-land assets and other assistance.

All businesses identified on the cut-off date will be entitled to compensation for their lost income based on the tax record or, in its absence, comparable rates from registered businesses of the same type with tax records, or for shops not qualifying under these categories (hawkers, vendors, etc.), the option of using the actual income based on survey followed by a verification of the income data based on comparable incomes in the project area.

Hawkers or businesses who settle in the affected areas after the cut-off date will not be eligible for compensation. They however will be given sufficient advance notice (at least 1 week) requesting them to vacate premises and dismantle affected structures prior to subproject implementation. Contractors will provide shifting assistance to any vendors needing help.

7.3 Resettlement Category

Land acquisition for the WWTP will result in physical and economic displacement of 11 households (58 persons), including 8 land owners and 3 tenants. Additionally 6 seasonal farm workers will lose their jobs. Given the magnitude of impacts, the project is categorized as 'B'.

7.4 Compensation Principles & Entitlements

Compensation policy and entitlements proposed in the project, and as specified in the following sections, take into consideration the relevant GOM regulations as well as the objectives and principles explained in the preceding section. The overall objective is to ensure that the DPs are able to improve or at least restore their livelihood to pre-project level. Vulnerable households are provided with additional assistance to meet the above stated objectives.

7.4.1 Principle of Replacement Cost

All compensation will be based on the principle of replacement cost in cash or in kind in accordance with the provision of the LAA (1894), Section 23(1). In case of cash compensation, replacement cost is the amount calculated before displacement, which is needed to replace an affected asset without deduction for taxes and/or costs of transaction as follows:

- Productive Land based on actual current market prices that reflect recent land sales in the area, and in the absence of such recent sales, based on recent sales in comparable locations with comparable attributes, fees and taxes, or in the absence of such sales, based on productive value;
- Houses and other related structures based on actual current market prices of materials and labor without depreciation or deduction for salvaged building materials and fees;
- Annual crops equivalent to current market value of crops at the time of compensation;
- For fruit trees, cash compensation at replacement cost is equivalent to three years of harvest based on the current market value for each type, age and relevant productive value at the time of compensation.

7.4.2 Entitlements

Entitlement for affected households include provisions for permanent land losses, loss of structures (house & shops), loss of crops and trees, compensation for loss of employment and business incomes, relocation assistance and provision of income rehabilitation. Specific entitlements are detailed below:

Entitlements for Loss of Agricultural Land. The APs will be entitled to:

- The general mechanism for compensation of lost agricultural land will be through provision of "land for land" arrangements (LAA, Section 31(3)), of equal size or equivalent productivity and locational advantage similar to the land lost, with improved or better condition for cultivation compared to that at the time of handing over to the project.
- The grant of land Use Right (Form 7) for the replacement land, where applicable, will be without any taxes/fees or the fee and taxes must be included in the package of compensation to DPs.
- In case suitable land is not available or the selected location is not acceptable to the AP, cash compensation at current market value will be provided at the informed request of the AP. The compensation rates will be as determined by the independent land appraiser. The rates thus determined will be valid for one year. In case of delays beyond a period of one year, the rates will be revised, as necessary.
- In case of entire loss of land holding, AP will be entitled to transition allowance of K50,000/month for a period of three months.
- Priority will be given to at least one member of the affected households in project-related employment.
- At least one member of the severally affected household will be entitled to participate in the Livelihood Restoration Program
- APs whose agricultural land is temporarily taken by the works under the Project will be paid a rental fee equivalent to the net loss of income for the period of disruption, damaged assets, crops and trees, as the case may be.

Entitlements for Loss of Structures. The APs will be entitled to:

- Compensation for structure at replacement cost based on actual market price of materials and cost of labor for dismantling, transfer, and rebuilding. No deduction for depreciation or the remaining values of salvageable materials.
- Affected household will be entitled to a lump-sum transport/shifting allowance of Kyat 20,000 for transfer of personal effects.
- APs would be assisted in getting necessary approvals for re-installation of affected utilities like electricity, telephone, and/or water connections, as applicable.
- Displaced APs will be entitled to a transition allowance of K 50,000/month for a period of three months to cover rental accommodation during the construction of house at new location. In the project, affected household already has a house in Yin Taw village. Therefore, provision of rental accommodation/allowance will not be required.

Entitlements for Loss of Crops and fruit Trees. The APs will be entitled to:

- Compensation for fruit trees will be equivalent to the three years harvest value based on the average value of annual harvest.

- Compensation for the affected crops will be equivalent of three years of harvest based on the rates established by the Agricultural department or production values stated by the APs.
- Affected Households will be allowed to continue to harvest their trees/crops and will be given at least 3 months advance notice to enable them to harvest the trees/crops, before the project authorities take possession of the land for clearing and handing over for civil works.
- Severally affected tenants without any other land or other sources of income will be entitled to income rehabilitation assistance

Entitlements for Permanent Loss of Business Incomes. The APs will be entitled to:

- Compensation for permanent loss of Business income equivalent to two month income based on the IOL/SES.
- Assistance in locating a new site for business equivalent to or better than the previous location, in consultation with the AP.
- Automatic inclusion in Livelihood Restoration Program.
- Transport/shifting allowance, lump sum amount of Kyat. 20,000 per affected business (shop)

Entitlements for Temporary Loss of Business Income. The APs will be entitled to:

- Compensation for temporary business losses will cover income losses of the interruption period and will amount to maximum of 15 days⁷ of actual income or monthly allowance.

Entitlements for Loss of Livelihood/Employment. The APs will be entitled to:

- Affected agriculture labor will be compensated for the loss of income and will be paid a one-time allowance equivalent to the minimum labor wages (Kyat 5000/day) for a period of three month (90 days).
- Assistance in providing jobs in project generated employments;

Entitlements for Loss of Community or Government Property will be compensated at full replacement cost.

Entitlements to Vulnerable Households:

- Vulnerable households will be provided a lump sum allowance equivalent minimum wages (Kyat 5000/day) for a period of three months (Kyat 450,000) over and above their entitlements for compensation and other assistance.
- Inclusion in Livelihood restoration program

Additional Subsidy. In accordance with the provision of LAA, Section 23(2), all the APs will be provided with an additional subsidy equivalent of 15% on the assessed market value of lost land and other fixed assets including crops and trees, in view of the compulsory nature of the acquisition for public purposes.

The Entitlement Matrix in Table 7.1 includes the main types of losses and the corresponding nature and scope of entitlements. The detailed design of the civil works together with the DMS and socioeconomic surveys will be the basis for determining actual impacts. A replacement cost study (RCS) will be carried out at the time of finalization of the

⁷ It is estimated that the road side business will not be affected for more than 15 days during the construction phase.

RP to determine actual replacement costs and rates. Entitlements described in this RP will not be lowered during RP updating but can be enhanced as required. Voluntary donation will not be applied for any assets.

Table 7.1: Entitlement Matrix

Type of Loss	Application	Eligible Person	Project Entitlement and/or Assistance
Permanent Impacts			
1.1 Permanent loss of agriculture land	Lands partially or fully affected 12.98 acre including 4.36 acre of flooded land	AP or AH with Land Use right certificate (formal legal rights) or recognizable as a full title. 8 HH (4 HH for flooded land)	<ul style="list-style-type: none"> • Compensation will be paid in cash at replacement cost or in kind. Replacement land will at least be of equivalent productivity at location acceptable to AP. • The rates determined by the land appraisal will only be valid for a year. In case of delays beyond a period of one year, the rates will be revised, as necessary. • Exemption from paying tax on compensation and administrative cost for the affected land. • In case of entire loss of land holding, AP will be entitled to transition allowance of K50,000/month for a period of three months. • Priority will be given to at least one member of the affected households in project-related employment • Affected household will be entitled to participate in the Livelihood Restoration Program
		APs without legal right or recognizable rights No HH in this category	<ul style="list-style-type: none"> • AP will be entitled to compensation at replacement cost for the investments made on the land • In case of physical displacement, APs will be entitled to transition allowance of K 50,000/month for a period of three months • Priority will be given to at least one member of the affected households in project-related employment • Affected household will be entitled to participate in the Livelihood Restoration Program
1.2 Loss of Residential/Commercial land	Land partially or fully affected Nil	AP or AH with Land Use right certificate (formal legal rights) or recognizable as a full title. No HH in this category	<ul style="list-style-type: none"> • Compensation will be paid in cash at replacement cost, or in kind. Replacement land will at least be of similar or better attributes at location acceptable to AP. • In case of partial loss of land, if the remaining land is no longer viable for continued use, compensation for entire land holding at replacement cost. • The rates determined through by land appraisal will only be valid for a year. In case of delays beyond a period of one year, the rates will be revised, as necessary. • Exemption from paying tax on compensation and administrative cost for the affected land. • The project will assist APs in getting the residual land registered • Displaced AP will be entitled to transition allowance of K50,000/month for a period of three months.
		APs without legal right or recognizable rights	<ul style="list-style-type: none"> • In case the residual land is sufficient area for reconstruction of affected assets, the AP will be allowed to shift back for relocation on residual land and will be entitled to a lump sum transition allowance of K 50,000.

		No HH in this category	<ul style="list-style-type: none"> Exemption from paying tax on compensation and administrative cost for the affected land. Displaced AP will be entitled to transition allowance of K50,000/month for a period of three months.
2.1 Loss of Structures	<p>Affected structures including fence, gate and improvements made on the land. Partially or fully affected</p> <p>1 Structure Total Area: 289 sft</p>	<p>Owner of the affected structure (AP or AH with or without certificate to the land).</p> <p>1 HH</p>	<ul style="list-style-type: none"> Compensation for structure at replacement cost based on actual market price of materials and cost of labor for dismantling, transfer, and rebuild. No deduction for depreciation or the remaining values of salvageable materials. Physically displaced households will be entitled to Transport /shifting allowance of Kyat 20,000. APs would be assisted in getting necessary approvals for re-installation of affected utilities like electricity, telephone, and/or water connections. In case of partial loss of structures and if the remaining structure is viable for continued use,, compensation at replacement cost for affected structure and a lump sum repair allowance at 20% of the compensation. In case the remaining structure is rendered unviable for continued use, compensation at replacement cost for the entire structure. Displaced APs will be entitled to a transition allowance of K 50,000/month for a period of three months to cover for rental accommodation during the construction of house at new location..
3. Loss of Trees and/or Crops	<p>All fruit trees and affected crops as recorded in the joint IOL/SES questionnaire.</p> <p>Crops Total Area: 8.62 acre</p>	<p>Owners of affected trees and crops</p> <p>6 HH (3 land owners & 3 tenants)</p>	<ul style="list-style-type: none"> Compensation for fruit trees will be equivalent to the three years harvest value based on the average value of annual harvest. Compensation for the affected crops will be equivalent to the harvest value of three years and based on the rates established by the Agricultural department or annual production value, whichever is higher. Severely affected HH will be entitled to livelihood restoration assistance Affected Households will be allowed to continue to harvest their trees/crops and will be given at least 3 months advance notice to enable them to harvest the trees/crops, before the project authorities take possession of the land for clearing and handing over for civil works.
4. Loss of Business Incomes	<p>Businesses affected permanently</p>	<p>Affected AP with or without any legal rights for land or license for the affected businesses</p> <p>No HH affected</p>	<ul style="list-style-type: none"> Compensation for loss of Business income equivalent to two month income based on the IOL/SES. Assistance in locating a new site for business equivalent to or better than the previous location, in consultation with the AP. Automatic inclusion in Livelihood Restoration Program. Transport/shifting allowance, lump sum amount of Kyat 20,000 per affected business
5. Loss of Livelihood / Employment	<p>Loss of source of income</p>	<p>Affected seasonal workers</p> <p>6 HH</p>	<ul style="list-style-type: none"> One time allowance of 3 month based on the minimum official wage (Kyat 5,000/day) Assistance in providing jobs in project generated employments

6. Community Facilities, Public infrastructures	Loss of electric distribution line. 6 Electric Poles	Respective local government & communities	<ul style="list-style-type: none"> The project will rehabilitate and construct affected utilities and public facilities in consultation with local government and communities.
7. Vulnerable Households	landless household	1 HH with disabled member, 1 HH BPL 2 households	<ul style="list-style-type: none"> Vulnerable household will be provided a lump sum allowance equivalent minimum wages for a period of three months (Kyat 450,000) over and above their entitlements for compensation and other assistance. Inclusion in Livelihood restoration program
8. Unforeseen impacts or losses	Impacts on private or public properties which have not been accounted for in the DMS.	The APs, AHs, public or private institutions.	<ul style="list-style-type: none"> Compensation will be paid for any damages to properties, based on prevailing replacement costs and in accordance with the entitlement provisions in the policy.
Temporary impacts			
1. Temporary loss of land.	Land for temporary work stations, storage of equipment and material	AP or AH with formal legal rights or recognizable rights under the law	<ul style="list-style-type: none"> Project contractor will pay lease or rent to the owner on the agreed period of using the land based on prevailing rental cost and agreement with the land owner. APs whose agricultural and is temporarily taken by the works under the Project will be will be paid a rental fee equivalent to net loss of income for the period of disruption, damaged assets, crops and trees, as the case may be. Restoration of the land to its original condition, or better, prior to its return to the land owner. PMU will inform the public at least 45 days before the start of civil works/excavation activities The contractor will ensure that the excavation of trenches and other civil work activities are carried in a systematic manner and least inconvenience to general public and roadside property owners. Contractors will make arrangements to minimize traffic obstructions and facilitate smooth flow of traffic.
2. Loss or limitation of access	Closure of traffic in some road sections during the installation of water/sewer pipes.	The motorists	<ul style="list-style-type: none"> Project contractor to provide necessary signage and inform the public and motorists on safety precautions and necessary diversions/rerouting arrangements
	Limitation of access to and from the roadside businesses/ shops.	The pedestrians, customers and affected shop owners.	<ul style="list-style-type: none"> Contractor will be advised to provide temporary access to roadside businesses and residences to minimize inconvenience and for continued access.
3. Disruption of business	Small business occupying the sidewalks, Vendors.	APs doing their business on the sidewalks.	<ul style="list-style-type: none"> In consultation with the APs, the PMU will assist in providing temporary relocation site for roadside vendors and mobile shops Compensation will be paid based on lost days income, for a maximum of 15 days.

7.5 Addressing Gender Issues

The Project includes the following specific actions to address gender issues::

- During the updating of this RP, both men and women will participate in public meetings providing inputs to DMS, and consultations on resettlement activities, relocation and income restoration options.
- As far as possible, a male and a female representative of affected households will be invited to participate in meetings for resolution of grievances and complaints.
- Special assistance will be provided to elderly, disabled and women-headed households during relocation and in the provision of income restoration assistance.
- Appropriate monitoring indicators, disaggregated by gender, will be developed for monitoring social benefits, economic opportunities, livelihood restoration and resettlement implementation, and in restoration of livelihoods and living standards during post-project implementation.

7.6 Assistance to Vulnerable Groups

Based on the socioeconomic surveys, there are only 2 vulnerable households based on the disabled member and household income criteria.

Vulnerable households will receive assistance equivalent to minimum wages (Kyat 5000/day) for a period of three months, over and above their entitlements for compensation and allowances for their losses, as specified in the entitlement matrix. Vulnerable households will also be entitled to income restoration and rehabilitation measures provided in the project and will be encouraged to participate in the decision making process for selection of appropriate rehabilitation measures and skill training programs based on their needs and preferences.

8 Income Restoration and Rehabilitation

8.1 Entitlements to Income Restoration

Households affected severally by permanent loss of productive assets, business incomes and sources of livelihood due to the acquisition of land for the WWTP, including affected vulnerable households, will be entitled to income restoration and rehabilitation assistance. A brief description of house households entitled to income restoration is presented in the following sections.

8.1.1 Livelihood Restoration for Affected Households

Acquisition of land for the WWTP will affect a total of 11 households who are currently engaged in farming activities or own the land cultivated by the tenants. Of these 8 households are land owners who would be affected by loss of their entire land holdings. Additionally, 3 tenants who are currently cultivating the land will lose their household income from agriculture. Many land owners and tenants have other land holdings or other sources of incomes. However, 2 households (1 land owners and 1 tenant) do not have any other sources of incomes. The impact of the project on their livelihood and living standards will be severe. Therefore a total of 11 households (8 land owners + 3 tenants) would be entitled to income restoration and rehabilitation assistance.

8.1.2 Livelihood Restoration for Vulnerable Households

IOL and socioeconomic surveys identified only two vulnerable households. These include one women-headed household with a disabled member and another tenant household BPL who would also be severally affected due to his only source of household income. All vulnerable households would be entitled to additional assistance over and above their entitlements for compensation and other assistance and for income rehabilitation assistance.

Therefore, all the 11 households, including 8 land owners and 3 tenants, would be entitled to income restoration and livelihood rehabilitation assistance.

8.2 Proposed Income Restoration Measures

Specific income restoration and rehabilitation measures will be finalized in consultation with affected households to meet their priorities and needs. The households will be provided various options to choose from. Following is the range of measures/options that will be offered to households:

- **Project-related employment.** Priority will be given to the entitled households in jobs generated by the project during the construction phase. Depending upon the skills required, contractors will be required to give first option of such jobs to the affected people rather than bringing labor from outside the project areas.
- **Agricultural Assistance / Extension.** Of the 8 land owners affected, 7 have sources of incomes other than farming. Five of these depend entirely on their incomes from businesses and other non-farming activities. For one land owner agriculture as his main and only source of household incomes. All the 8 land owners are entitled to income rehabilitation by virtue of entire loss of their land holdings. The project will offer them agriculture extension assistance for increased productivity. The assistance may include a package of better seeds, saplings for cash crops, needed fertilizer, and training for better crop management. Additionally, these farmers will also be assisted in obtaining

loans, where necessary, to purchase better farming equipment, and in marketing their farm produce.

- **Support for income-generating activities.** This will include appropriate technical support, assistance in vocational planning, small business planning, financial planning, the accessing and use of credit, and other measures to promote existing or new income-generating activities.

Vocational Training. There are several government and private sector managed vocational training programs currently available in Mandalay. The training program managed by the Department of Social Welfare in the Ministry of Social Welfare, Relief and Resettlement, is particularly focused for women. Short (5 days to one week) and medium term (one to two months) training courses in sewing and decorations are available. Private sector offers short term (1 week) training programs in food preservation and bakery. Another medium term training program is managed by an NGO in Mandalay. The details on the types of programs available, duration and cost of these vocational training programs are provided in **Annex J**.

Income restoration and livelihood rehabilitation strategies for the severely affected households, vulnerable households and business affected households will be further refined and finalized in the updated RP following consultations with the affected households.

For purposes of resource allocation and budgeting for livelihood restoration program an average allocation of 250,000/household is proposed.

8.3 Gender Strategy

The PMU, with assistance from the supervising consultants, will carry out the following specific actions to address gender issues in the project:

- a) During the updating of this RP, both men and women will be invited to participate in the discussions during public meeting and providing inputs to DMS.
- b) Gender issues will be included in the training on project implementation by supervising consultant to concerned personnel of the PMU and the MCDC staff.
- c) Livelihood restoration program will include at least 30% of females.

A number of strategies will be adopted to ensure gender-sensitive resettlement and rehabilitation measures and, to engage women actively in the planning and implementation of the resettlement program as well as other programs. The Resettlement Committees and resettlement and gender specialists will be directly involved in all aspects of the development and implementation of the gender strategy, to ensure that these measures are adequately streamlined into project implementation.

9 Resettlement Cost and Budget

Estimated resettlement costs are based on the prevailing rates as of February 2015. The resettlement costs will be revised at the time of updating of the RP based on the technical design; field surveys including cadastral and topographic survey of WWTP site to determine individual land holdings of affected land owners and precise areas of each land holding; and DMS to revalidate census, IOL and socioeconomic data. The market rates for affected assets will need to be revised at the time of finalization of the RP.

Funds for RP implementation will be part of the Project budget. The annual investment plans for the Project will include resettlement and rehabilitation costs.

9.1 Methodology for Determining Replacement Cost

For the purpose of the RP the methodology adopted for estimation of replacement cost was based on the information collected from the IOL/Socioeconomic surveys, informal interview of village administrator, and official rates obtained from the relevant government departments.

The assessment of compensation for final RP will be based on the Replacement Cost Study (RCS). MDCDC will contract an independent professional appraiser to conduct market study to determine replacement cost for all types of affected assets: cultivation land, structures, crops and fruit trees. Draft TOR for the RCS is attached as **Annex K**.

9.2 Unit Prices for Cost Estimation

Details on the unit prices and estimated cost of affected assets are provided in the following sections.

9.2.1 Land

The prices for cultivation land will be based on current market rates, and will be established by provincial and local authorities based on the market transactions. Generally, the market value for land varies with location. Therefore, the assessment of compensation for affected land would be location specific and will be based on the prevailing market rates. The prevailing market rates for cultivation land are used for assessment of compensation to ensure compensation for affected land is at replacement cost.

Information on the prevalent market rates was obtained in May 2014, as shown in Table 9.1 below.

Table 9.1: Prevailing Market Rates for Land (2014)

Category	Location	Rate in USD		Equiv. Rate (Approx.) Kyat Lakh/Acre
		USD/Ha	USD/Acre	
Category 1	Downtown ⁸	25,739,583		100,000
Category 2	Suburban Land	3088750		12,000
Category 3	Rural Land	643490		2500
Category 4	Rural Land Frequent Flooding	257396		1000

Above information was revalidated through personal interview of affected households and informal discussions with residents in the vicinity of the WWTP site.

Reportedly one project affected plot measuring an area of 0.82 acre was sold in January 2015 at the price of 80,000,000 Kyat making a unit rate of approximately 97,600,000 Kyat

⁸ Small Treatment plant site is located in downtown area.

per acre or approximately USD 95,000/acre. The actual transaction amount reconfirms the market rates as shown in Table 9.1 above. For purposes of compensation for the affected cultivation land a unit rate of Kyat 1000 Lakh/acre will be used.

About 4.36 acre of cultivation land remains permanently under water. The unit rate for this land will be at 500 Lakh/Acre.

9.2.2 Structures

Compensation for loss of structures will be at replacement cost, based on the current market rates for the building material and labor, without depreciation and deductions for salvaged material. Unit rates for different types of structures were obtained from the Building Department, MCDC. The rates are shown in Table 9.2.

Table 9.2: Unit Rates for Structures (2014)

No	Type of Building	Plinth Area Estimate (PAE)/sq.ft.
1	Bamboo sheet wall with Zinc roof	15,000Kyat
2	Wooden wall with Zinc roof	18,000Kyat
3	Brick Norgi (Wood and Brick)	20,000Kyat
4	Brick Building	22,000Kyat
5	Reinforced Concrete (RC)	25,000Kyat
6	Steel Structure	24,000Kyat

Source: Mandalay City Development Committee (MCDC) Building Department

The affected structure used for residences falls in Category 1. Therefore the applicable unit rate will be at 15,000 Kyat/sft.

Estimated Cost of Secondary Structures

No secondary structures are affected in the project.

9.2.3 Trees

The project will cause loss of any fruit or productive trees.

9.2.4 Crops

The project will impact a total cultivation area of 8.62 acres. The proportion of cultivable land generally allocated by the affected households for growing of groundnut and corn is approximately 60% and 40% respectively. Estimated areas under cultivation for different crops and average annual production value is shown below.

Total Cultivated area =8.62 Acre

Groundnut area: 5.00 Acre (332007Kyat/acre) = 1,660,035 Kyat

Corn area: 3.60 Acre (671700 kyat/acre) = 2,431,554 Kyat

Vegetables: 0.02 Acre (150,000/acre) = 3,000 Kyat

Annual value of crops and vegetables: 4,094,589 Kyat

Compensation for loss of crops equivalent to three years of harvest is estimated at 12,283,000 Kyat.

9.2.5 Loss of Public Utilities

Affected electric distribution line is 33 kVa. The cost for the affected electric poles is estimated at 150,000K/pole while the cost of the electric distribution line is at 6,000,000K/km length. Total cost of 6 electric poles and 1 km length of 33 kVa line is estimated at 6,900,000K.

9.2.6 Loss of Business Incomes

Businesses will be compensated for income loss if any due to loss of access (full/partial, permanent /temporary). The project will not cause any loss businesses.

9.3 Implementation, Administration and Contingency Costs

Resettlement implementation costs include costs of general administration, public consultation, internal monitoring, payment of per diem and allowances to the staff of PMU, Township and Village/ward officials participating in resettlement implementation. Administration costs represent 5% of the total resettlement cost. The cost estimates for resettlement also include a provision for contingencies of 15% of total resettlement cost.

MRG through MCDC/PMU is responsible for the provision of adequate funds to carry out the implementation of the RP. In the case of over-runs, MRG will ensure that adequate funds are made available as and when necessary for efficient and timely implementation of resettlement activities.

Estimated Resettlement cost is shown in Table 9.3 below. Some cost components can be covered by the ADB loan. However, prior agreement with ADB will need to be reached on the specific resettlement costs that may be covered under the loan.

9.4 Procedures for Flow of Funds

Mandalay Regional Government (MRG) as the Implementing Agency for the project will be responsible for providing necessary funds for all aspects of resettlement implementation. Necessary funds will be disbursed through MCDC to the PMU for RP implementation. The PMU in coordination with the township Administration will make payment of compensation and allowances to the APs.

Table 9.3: Estimated Resettlement Cost

No.	DESCRIPTION	No. of HHS	UNIT	QTY.	RATE '000 Kyat/UNIT	AMT. KYAT '000
A.	Compensation for Agriculture Land					
	Cultivable Land	8	Acre	8.62	100,000	862,000
	Agricultural land permanently under water	4	Acre	4.36	50,000	218,000
B.	Compensation for Structures					
	Main Structures:					
	Residences	1	Sft.	289	15	4,335
	Shop	-	-	-	-	-
	Secondary Structures	-	-	-	-	-
C.	Loss of Crops (3 land owners & 3 tenants)	6	Acre	8.62	-	12,283
D.	Fruit Trees	-	No.	-	-	-
Sub. Total (Sum of A+B+C+D)						1,096,618
E.	Subsidy as per LAA Section 23(2) at 15% of Assessed Compensation for fixed assets					164,492
1. Compensation for Affected Assets (A+B+C+D+E)						1,251,100
G.	Compensation for Loss of Business Income	-	Months	-	-	-
H.	Transport Allowance	1	L. S.	-	20	20
I.	Transition Allowance for entire Loss of Land	8	Months	3	50	1,200
J.	Allowance for Loss of employment	6	Days	90	5	2,700
K.	Allowance to Vulnerable Households	2	Days	90	5	900
L.	Income Rehabilitation Assistance	11	L.S.	-	250	2,750
2. Sub Total (Sum of G+H+I+J+K+L)						7,570
M.	Public Utilities (6 Elect. Poles)	-	-	-	-	6,900
N.	Fee for Replacement Cost Study (L.S.)	-	-	-	-	2,000
O.	External Monitoring & Post-Implementation Evaluation	-	-	-	-	10,000
3. Sub Total (Sum of M+N+O)						18,900
P.	Resettlement Implementation Management (5% of Item 1, 2 & 3)					63,878
4. Resettlement Cost (!+2+3+P)						1,341,448
Contingencies (15% of estimated cost, Item 4)						201,217
Total Estimated Resettlement Cost						1,542,665

Total resettlement cost is estimated at 1,543,000,000 Kyat or USD 1,512,745 (USD 1.51 million) at an exchange rate of 1 USD to 1020 Kyat.

10 Institutional Arrangements

According to the present arrangements between the Government of the Republic of Union of Myanmar (GOM), the MRG and the ADB, the MRG will be the Executing Agency (EA) of the ADB project after loan effectiveness and the MCDC will be the Implementing Agency (IA). Proposed institutional arrangements and the key responsibilities in regard to social safeguards are described below:

10.1 Mandalay Regional Government (MRG)

In regard to the social safeguards, the MRG will have the following responsibilities:

- Endorse the draft RP and the updated RP and submit to ADB for concurrence;
- Generate awareness on the project development to all relevant institutions and various administrative levels within the province;
- Direct its relevant departments such as departments of finance, construction, transport, and natural resources and environment to help in the preparation and implementation of the resettlement plan and the updated resettlement plan;
- Approve the unit rates which are detailed in the replacement cost survey report as proposed by the qualified appraiser to enable the PMU in finalizing the RP;
- Approve the detailed compensation plan and overall resettlement plan budget which will be reviewed and submitted by the Department of Finance;
- Settle complaints and concerns raised by the affected community, if any, at the provincial level.

10.2 MCDC

Mandalay City Development Committee (MCDC) was formed in 1992 in accordance with The State Law and Restoration Council Law 10/92 and placed under the Prime Minister. Under this law, MCDC was made responsible for land management and planning besides delivery of all urban services in Mandalay City.

The MCDC is chaired by the Minister of Development Affairs of the Regional Government who is the concurrent Mayor of Mandalay City. The Mayor is appointed by the Chief Minister of the region. The Secretary is also appointed by the Chief Minister and responsible for the City's Planning and Land Management Department. There are four committee members all appointed by the Chief Minister, each with specific oversight responsibility of different departments. Organization set-up of the MCDC is shown in **Annex L**.

Specific responsibilities of the MCDC in regard to the social safeguards issues in the project will include the following:

- Management of all land within the City Boundary with the exception of Government Land, Government Departments' owned land, Religious Land and Agricultural and Virgin Land.
- Coordinate with the Ministry of Agriculture on the current status of affected land;
- To update land ownership records of affected households in order to facilitate assessment of compensation for affected land and other assets and implementation of RP;
- To finalize resettlement policy and principles for the project, in accordance with the ADB's SPS requirements (SR2);

- To facilitate census of affected households and detailed measurement survey (DMS) of affected assets for RP preparation and finalization;
- To contract experienced valuation expert to carry out Replacement Cost Study (RCS) for affected assets to determine compensation for affected assets;
- To monitor and supervise, through PMU, implementation of the final approved RP, including payment of compensation and other assistance in accordance with the approved RP and Entitlement Matrix, implementation of income restoration measures, and relocation of affected households and communities;
- To ensure establishment of efficient Grievance Redress Mechanism (GRM);
- To ensure dissemination of information to affected households and communities and encourage their participation in the decision making process for resettlement; and
- Conduct internal monitoring of resettlement implementation and submit periodic progress and monitoring reports to the ADB.

10.3 Project Management Office (PMO)

The Project Management Office (PMO) for the MUSIP will be established prior to the project implementation. PMO will include at least one senior staff with experience in social safeguards issues, supported by at least three technical staff. The support staff will assist in public consultation grievance resolution, data management, and assessment and payment of compensation and planning and implementation of income rehabilitation measures. The PMO will be assisted by the Project Implementation Consultant (PIC). The PMO will have the following responsibilities:

- Participate in preparation and implementation of the resettlement plan and the updated resettlement plan in collaboration with relevant ministries and MCDC departments and submit the same for approval of MCDC/ MRG and for ADB review and approval.
- Prepare necessary safeguards documents for the linked projects for submission to the MCDC and the ADB;
- Develop and implement a training program for the MCDC staff, and affected wards and Township administration, and related groups regarding the resettlement plan/ updated resettlement plan and management of grievances and complaints.
- Engage a qualified appraiser to carry out replacement cost study. Submit the unit rates proposed by the qualified appraiser to the MCDC for review and approval
- Work with the MCDC in finalizing the Resettlement Plan.
- Secure the budget for preparation and implementation of the resettlement/ updated resettlement plan, ensure that funds for compensation, assistance and resettlement are available and in a timely manner.
- Coordinate with the MCDC to direct relevant departments and various levels of authorities in implementing the project and updated resettlement plan.
- In coordination with the grievance Redress Committee, serve as grievance officer for PMO and coordinate/monitor/track/report on grievances related to the Project.
- Internally monitor the preparation and implementation of the resettlement plan/updated resettlement plan and ensure that resettlement-related activities are carried out in accordance with the updated resettlement plan agreed between the MCDC and the ADB.

- Oversee the disclosure of resettlement related documents and consultation with affected persons and key stakeholders.
- Appoint NGO/CBOs in conducting public consultation and awareness programs and monitoring of resettlement activities.
- Review of monitoring reports and implementation of remedial actions, and reports on implementation of updated resettlement plan for submission to ADB.
- Coordinate the work of the External Monitoring Agency

Suggested organization of the PMO is shown in **Figure 10.1**.

10.4 Non-Government Organizations & Community Based Organizations

Non-Governmental Organizations (NGOs) and Community Based Organization can play an important role in resettlement planning and implementation, particularly in public consultation and participation, grievance resolution and monitoring of resettlement activities. MCDC and PMO will select appropriate NGO and CBO, including university, for providing necessary support in resettlement planning and implementation. Specific responsibilities will include:

- Coordination of field work for census, IOL, SES and DMS for updating of the RP.
- Monitoring of compensation payments and implementation of resettlement plan.
- Representing affected persons and households in forwarding their grievances and complaints and their resolution.

10.5 Project Implementation Consultants (PIC)

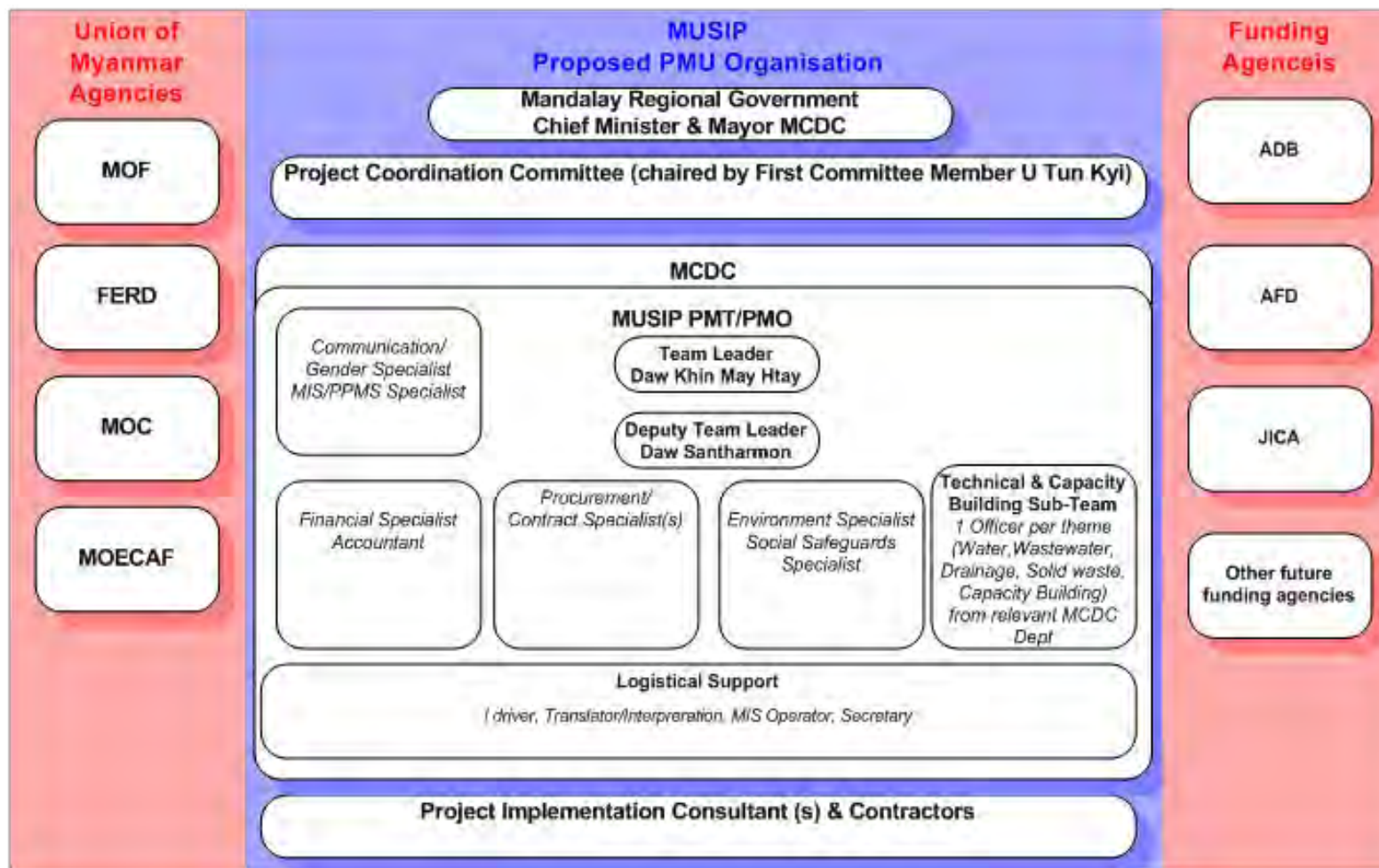
Project Implementation Consultant (PIC) contracted by MCDC to provide necessary technical support to MCDC and the PMO will include an international social safeguards expert (6 months intermittent inputs) and a national social safeguards specialist (12 months intermittent input). The resettlement consultant will have experience in both planning and implementation of resettlement plans in Myanmar and help develop the capacity of MCDC and local officials of other relevant agencies responsible for updating, and internal monitoring of the RP. Specific tasks include:

- Assist PMO/MCDC in conducting necessary field surveys for updating of RP, as well as for preparation of RP for the linked projects, and provided needed technical support to facilitate its approval;
- Assist PMO in conducting cadastral and topographic survey of the WWTP site;
- Coordinate in conducting detailed measurement survey (DMS) based on detailed engineering design and update the list of affected persons to record any change from the preliminary design;
- Assist PMO in preparation of required materials to undertake effective information campaigns about the project resettlement related information, project implementation/construction schedule and conduct of public consultations;
- Assist in the conduct of the information campaign, public consultation, and community participation on social safeguards;
- Verify the assessment of compensation during the RP updating, conducted by the contracted appraiser, and make necessary amendments to the RP entitlement matrix, as necessary;
- Participate and monitor compensation payments to AHs and advise PMO on the actions needed to ensure compensation is paid in full and in a timely manner;

- Ensure that grievances are addressed promptly and properly and ensure proper documentation of grievances.

TOR for the International Social Safeguards Expert is included as Annex M.

Figure 10.1: Proposed PMO



- Provide periodic training on grievance redress procedures, if necessary;
- Coordinate and provide needed technical and logistical support to PMO, township administration and local ward heads in RP implementation;
- Coordinate with PMO in implementing the RP;
- Together with members of the PMO, brief officials at all levels on the contents and procedures for implementing the RP and if necessary, provide suggestions to improve procedures for the coordination of resettlement and compensation;
- Establish and implement procedures for internal monitoring of RP implementation;
- Train PMO assigned social safeguards specialists to carry out internal monitoring and reporting of the RP implementation;
- Conduct periodic spot checks on the RP implementation, and prepare quarterly progress reports to be submitted to PMO and the ADB.
- Design and deliver capacity development activities on ADB social safeguard policies to all relevant agencies as needed, including requirements for participation, communication, and gender mainstreaming;

10.6 Capacity Building

Currently, there is very limited capacity and appreciation in MCDC on social safeguards particularly on the ADB safeguards requirements and international best practices.

There is an urgent need to build social safeguards understanding and awareness within MCDC in general, and PMU in particular, through training workshops. The training of MCDC on social safeguards should focus on:

- Resettlement principles and policy;
- Resettlement planning procedures, including integration of social safeguards in land use planning with an understanding that social safeguards are essentially precautionary measures to protect local people from any infringement on their rights to land, natural resources, knowledge, culture, practices and all social attributes that are central for fulfilling their basic rights.
- The need to avoid, or minimize, involuntary resettlement impacts by considering all technical alternatives, in particular using vacant government land where possible, and taking all possible measures in design and selection of site or alignment.
- Resettlement implementation procedures and sequence of activities;
- Methodology for compensation assessment;
- Data management system;
- Public participation and consultation objectives and procedures, ensuring that all planning and design interventions and decisions are taken in consultation with local communities in a gender sensitive manner.
- Documentation of all consultations and concerns expressed by public and their resolution following GRM.
- Ensuring that all affected persons are able to improve, or at least, restore their incomes and livelihood to pre-project levels.
- Extending assistance to people who do not own property but are nonetheless will be affected by the proposed projects, including groups with communal and/or traditional tenure arrangements, renters, wage-earners and those without legally recognized rights to land and property that they occupy or use.
- Ensuring that communities who relinquish land needed for pipelines or other facilities are provided with an improved water supply as part of the scheme.

Safeguards Training during RP Preparation

Three officials of MCDC, one each from the building, land records and administration section attended the social safeguards training organized by the ADB for the Ministry of Construction (MOC) under its TA 7566. The 3-day training in social safeguards was held on February 18-20, 2015 at Ngwe Saung. It is recommended that the three MCDC staff should continue to work on related issues and eventually be part of the PMO for the project.

11 Implementation Arrangements and Schedule

11.1 Approval of the RP

The RP in its present form is based on the preliminary design. The inventory of assets prepared for the RP is based on the map provided by the land records office of Amarapura Township. The land holding map is hand-drawn and the boundaries of different plots shown do not seem to be consistent with the areas and the land holding areas on the ground. The RP however, presents census and socioeconomic baseline data of APs that were identified at this stage of the project. The RP will need to be updated following detailed design of subproject components.

RP should be updated, endorsed by the MCDC and the MRG, reviewed and approved by the ADB prior to disbursement in the project. Implementation of the RP can begin as soon as the approval from the GOM and the ADB is received. For updating and implementation of the RP following activities will take place sequentially. However, it is emphasized that MCDC should make concerted efforts to consult local government officials and the APs to inform them about the RP and the policy provisions as soon as the RP is updated. Consultation should continue throughout the RP implementation phase. The RP updating and resettlement implementation schedule is shown in Figure 12.1.

Following completion of detailed design, demarcation of land required by various components and corridor of impacts along the interceptor mains, water transmission mains, interceptor and sewer mains, etc. will be identified and additional surveys for impact assessment, where necessary, carried out. These activities and updating of RP will take about six weeks. Implementation of the RP, including finalization of entitlements, payment of compensation and allowances, and relocation of displaced households is expected to take about two months. Implementation of income rehabilitation measures will continue for another 3-4 months. Public consultation, grievance redress activities, and monitoring and supervision will continue throughout the construction phase as civil works in the project components will cause temporary impacts. Mitigation of temporary impacts will need to be monitored and reported regularly.

11.2 Pre-Implementation Activities

11.2.1 Finalization of Alignment and Sites for Project Components

Based on the final detailed designs the alignment of interceptor mains and sewer mains; and location of pumping station and the WWTP sites will be finalized. Similarly for the water supply component, alignment of the water transmission mains will be finalized. These design parameters will assist in finalizing the impacts of the project on private assets and confirmation of any changes in the impacts compared to those identified during the preliminary designs stage and documented in this RP.

11.2.2 Cadastral & Land Holding Survey

In parallel with the preparation of final technical design a cadastral survey together with the topographical survey will need to be carried out for the WWTP site for delineating WWTP site boundary, boundaries and precise areas of each individual land holdings. The cadastral survey will need to be carried in coordination with the Land Records Office, Amarapura; village administrator and the land owners to avoid any complaints on the land ownership at a later date. Survey will lead to stake-out of individual land holdings and WWTP site boundary.

Existing pumping station at the southern tip of the WWTP site is proposed to be rehabilitated to increase its capacity. It is recommended that cadastral survey should include the land under the pumping station and ownership verified. In case of any disputes with the local population or any outstanding claims appropriate Corrective Action Plans (CAP) be prepared and implemented prior to start up of RP implementation.

11.2.3 Public Information Campaign and Updating of Census and Inventory

Following the confirmation of affected and beneficiary population, public information campaign would need to be carried out to inform affected population, other than those covered by this RP, on the project and its objectives, and the schedule of census and inventory for updating of the RP. Households and communities likely to be affected by temporary impacts will be informed on potential impacts and proposed mitigation measures. Affected population will also be informed about the grievance redress mechanism and the establishment of GRC in the MCDC. Affected households will be provided with a copy of the Public Information Booklet (PIB) in Myanmar language. At this stage attempts will also be made to identify their needs and preferences for income restoration measures. Their preferred options will be documented and included in the final RP.

11.2.4 Replacement Cost Study (RCS)

MCDC will contract an experienced valuation expert to conduct market study to determine prevailing rates for land and other affected fixed assets. The rates based on the market study will be used for replacement cost for affected assets. These rates will need to be reviewed and approved by the MCDC.

11.2.5 Updating of the RP

The census and inventory of affected assets should be revalidated by field verification. If considered necessary, additional information on socioeconomic characteristics will be collected. Based on the additional census and inventory of affected assets and the baseline survey, the RP would be updated and finalized. The updated RP will be submitted to the ADB for further review and clearance prior to the implementation of the project. Final RP will be disclosed to the key stakeholders and uploaded on the MCDC and the ADB websites.

11.3 Resettlement Implementation Activities

The description and sequence of activities during the resettlement implementation phase is presented in the following sections.

11.3.1 Hiring and Training of Social Safeguards Staff

Prior to the approval of the RP by the ADB, PMO will take steps to establish social safeguards unit and hire social safeguards specialist and supporting staff with some experience in resettlement and public consultation. Simultaneously, MCDC will establish GRC, as recommended in this RP. After the establishment of GRC and the social safeguards unit, the staff would need to be trained in involuntary resettlement and rehabilitation. The training should be provided by the expatriate resettlement specialist with the Project Implementation Consultant (PIC), who should also oversee the implementation of the RP. The training should focus on the resettlement policy and implementation procedures, public consultation and participation procedures, and planning and delivery of rehabilitation assistance to the APs including vulnerable groups.

11.3.2 Consultation with Affected Population

Following the verification of land ownership and identification of landowners (beneficiary population) public consultation will be carried out to inform the affected population about their entitlements and procedure and schedule for land acquisition, relocation and income restoration. During the public meetings, information to affected households and communities will be provided on the schedule for validation of entitlements prior to the compensation payment. All proceedings of the public meetings including the issues raised and decision taken will be documented.

11.3.3 Contracting External Monitoring Agency

MCDC will contract an experienced external monitoring agency for monitoring of resettlement implementation including planning and implementation income restoration measures.

11.3.4 Validation of Entitlements

After unit prices have been validated and approved by the MCDC, the field teams will visit each AP to validate inventory, finalize entitlements and total amount of compensation and allowances payable to each AP. A Compensation Entitlement Form for each AP would be completed and signed by the APs to indicate their agreement with the affected areas and assets shown, entitlements and compensation amounts. A copy of the signed copy of the form would be given to APs for their record. Any disagreement on the inventory details or compensation rates would be recorded and addressed in accordance with the established grievance redress procedures.

11.3.5 Payment of Compensation and Other Allowances

Upon completion of the Compensation and Entitlements for each AP, public announcements will be made to inform APs on: (a) the schedule for compensation payment; (b) relocation arrangements for those required to relocate; and (c) the schedule for start-up of civil works. APs will also be given an advance notice of at least three months to harvest their crops prior to start-up of the civil works. The schedule for the civil works will be coordinated with contractors to ensure APs are provided sufficient time to complete harvesting activities and no damage to the crops is caused. All payment of compensation and allowances will be made in a public place on scheduled date and time. APs will be informed in advance to bring with them proper identification documents and the signed entitlement forms given to them.

11.3.6 Relocation

A coordinated plan for relocation of APs, if necessary, to the place of their relocation will be prepared in consultation with APs, with assistance provided by the PMO staff, district/township and ward officials. APs will be provided with sufficient time for relocation prior to handing over the site for civil works.

11.3.7 Handing over site for Civil Works

The site will be handed over for civil works when all the APs have received their full compensation and allowances due to them, and are relocated and income rehabilitation measures are put in place. All compensation and resettlement activities in the project road will be completed at least one month prior to start-up of the civil works.

11.3.8 Delivery of Income Restoration and Rehabilitation Assistance

Arrangements for planning and delivery of rehabilitation assistance to severely affected APs and vulnerable groups will start as soon as the payment of compensation to the APs is completed. The types of economic rehabilitation assistance will depend on APs choices, priorities and need.

Figure 12.1: RP Implementation Schedule

Implementation Activities		Months	1	2	3	4	5	6	7	8	9	10	11	12		
I. RP Pre-Implementation Activities																
1	Preparation of Public Relations & Public Campaign Strategy		■													
2	Completion of technical surveys for detailed design		■	■												
3	Demarcation of subproject boundaries, land holding & land ownership maps		■	■	■											
4	Public meetings and consultations		■	■	■	■	■	■	■	■	■	■	■	■	■	■
5	Document APs preferences for relocation and income restoration measures			■	■											
6	Updating of census and DMS			■	■											
7	Replacement cost Study			■	■											
8	Establish rates for land, trees/crops, and structures			■	■											
9	Updating of RP			■	■											
10	Submission of RP to ADB for approval			■	■											
II. RP Implementation																
11	Establishing social safeguards section in PMU			■												
12	Training of social safeguards staff			■	■											
13	Establishing GRC			■	■											
14	Public consultation for validation of entitlements				■											
15	Contracting External Monitoring Agency				■											
16	Approval of the RP by ADB and Issuance of 'no objection'. Disclosure of final RP				■	■										
17	Payment of compensation and allowances				■	■										
18	Give 3 months notice to AHs for harvesting of crops/trees and for relocation				■											
19	Initiate relocation of affected APs				■	■	■	■								
20	Award of Civil work Contracts					■	■	■	■							
21	Implementation of income restoration measures					■	■	■	■	■	■	■	■	■	■	■
22	Resolution of grievances filed by APs and/or AHs				■	■	■	■	■	■	■	■	■	■	■	■
23	Internal Monitoring and Monthly Reporting				■	■	■	■	■	■	■	■	■	■	■	■
24	External Monitoring & Reporting					1				2						
25	Handing over site & startm of civil works									■						

12 Monitoring and Supervision

The implementation of resettlement will be monitored regularly to ensure that the RP is implemented as planned and that mitigating measures designed to address adverse social impacts are adequate and effective. Towards this end, both internal and external monitoring will be carried out in the project.

The Project will establish a system for internal and external monitoring and evaluation. The main purpose of the monitoring and evaluation program is to ensure that resettlement and acquisition of land and other assets is implemented in accordance with the policies and procedures of the RP. External monitoring and evaluation, in particular, will focus on social impacts on APs and whether or not APs have been able to restore a standard of living equal to, if not better than, that which they had before the project.

Specific objectives of the monitoring and evaluation are to (i) ensure that the standard of living of APs is restored or improved; (ii) monitor whether the time lines for implementation activities are being met; (iii) assess if compensation, rehabilitation measures and social development support programs are sufficient; (iv) identify problems or potential problems; and (v) identify methods of responding immediately to mitigate problems.

A process, timeline, and indicators for monitoring are provided in this RP. All data in the monitoring reports will be disaggregated by sex and ethnicity.

12.1 Internal Monitoring

Internal monitoring will be carried out by PMO through township administration. These agencies will conduct internal monitoring by (i) regularly meeting with the representatives of the APs and village administrators; (ii) holding group discussions with all or representatives of severely affected households; and (iii) meeting with marginally affected households. The focus of internal monitoring will be as follows:

- Confirmation on the number of severely affected households due to the entire loss of agricultural land;
- Impact on vulnerable household;
- Contracting of independent appraiser (valuation expert) and external monitoring agency as per the schedule specified in the RP;
- Endorsement of RCS report and compensation rates by MCDC in a timely manner;
- Reaching agreement with the affected households on compensation rates and issuance of summary compensation forms
- Documentation of APs preference on rehabilitation measures;
- Provision of budget by MCDC to cover resettlement costs;
- Progress in the disbursement of compensation and other assistance in accordance with the implementation schedule;
- Issuance of notice to harvest the crops and vacate the land as per schedule;
- Information dissemination and public participation: the number of public consultation-meetings held during the preparation of the detailed compensation plan; the number of AHs that participated; comments, suggestions and concerns of the AHs and how these were addressed.
- Progress in the implementation of the RP: Progress in planning and implementation of income rehabilitation measures including skill training

- Smooth transition period between the payment of compensation and assistance to APs and clearing of area prior to start of civil works.
- Grievance redress: number of APs with complaints, nature of the complaints, status of the resolution of the complaints; assessment of efficiency of the grievance redress mechanism.
- Gender concerns: participation of women in meetings and in the implementation of resettlement; concerns of women in connection with their resettlement and resolution of their grievances.

During subsequent monitoring periods, the IA (PMO) will look into the issues/problems identified in the preceding reports and actions taken to address the problems in a timely manner.

12.2 External Monitoring and Evaluation

External monitoring is required in projects with complex and sensitive resettlement impacts and the projects that are categorized 'A' for IR impacts. MUSIP is categorized as 'B' for IR impacts. However, external monitoring is recommended for MUSIP as it will be the first project to be undertaken by the MRG and MCDC, and they do not have any prior experience and capacity in addressing social safeguards issues in development projects.

General objective of the external monitoring is to provide an independent verification of the Borrower's monitoring information through the conducting of a periodic review and assessment of achievement of resettlement objectives, the changes in living standards and livelihoods, restoration of the economic and social base of the affected people, the effectiveness, impact and sustainability of entitlements, the need for further mitigation measures if any, and to learn strategic lessons for future policy formulation and planning.

Project authorities will contract a competent independent external monitoring agency (EMA), or an independent consultant, to carry out external monitoring of resettlement implementation in the project.

Specific objectives of external monitoring include:

1. To provide project management with an effective tool for assessing RP implementation at various stages.
2. To examine whether or not the implementation of the RP is carried out as planned and in compliance with the approved RP and identify the strengths and weaknesses of the present Resettlement Plan.
3. To identify problem areas and recommend immediately remedial measures for efficient implementation of the policy.
4. To provide inputs for future Resettlement Plan formulation and implementation.
5. To assess the effectiveness of 'income restoration and other rehabilitation measures for affected households and whether the APs, including vulnerable households, have been able to improve, or at least restore their livelihood and standard of living to pre-project level;
6. To assess effectiveness of the GRM established for the project, identify specific problems if any, and suggest improvement of the GRM.

The EMA will focus on the following specific issues and indicators:

- a. Census, IOL (DMS of affected assets)
 - Land and ownership survey are completed properly and individual plots are delineated;
 - Land ownership is regularized based on the land surveys and the land owners are provided with Form 7 by the Land Record office;
 - DMS of Affected lands and other assets is carried out properly and accurately and results of DMS are disclosed to the APs; and
 - Complaints or questions of affected households on the DMS results are addressed in a timely manner and to the satisfaction of the APs.
- b. Consultations with AHs and their knowledge on the entitlements
 - Relevant documents (RP, entitlement matrix, summary compensation forms specifying losses and entitlements for compensation and other assistance) are provided to the affected households;
 - Affected households are consulted on their needs and priorities for planning of income rehabilitation measures;
 - Affected households are informed and consulted regularly and adequately about the land acquisition issues; schedule of resettlement implementation; livelihood restoration; and grievance redress mechanism.
- c. Compensation and assistances provisions
 - All affected households are compensated for lost assets at replacement cost and provided with other allowances before the land is acquired.
 - Compensation for structure affected shall be equal to replacement prices of materials and labor based on the standards and typical structures of works, and free from reduction or salvaging of old materials.
 - Affected business shall be compensated compliantly following the provisions in the approved RP.
 - All types of assistances/allowances as envisaged in the approved RP shall be provided accordingly to the affected households.
- d. Income restoration and livelihood development
 - Income rehabilitation measures are responsive to the needs and priority of the affected households;
 - The delivery of income rehabilitation measures (skill training, job creation, etc.) is in accordance with the schedule specified in the RP;
 - Effectiveness and sustainability of income rehabilitation measures provided to severally affected and vulnerable households and any problems that they may be facing in receiving the measures.
- e. Level of AHs satisfaction
 - Assessing the level of satisfaction of affected households in different aspects in RP implementation (information dissemination and public consultation, DMS, compensation payment, compensation unit rate, rehabilitation measures and recovery of living conditions etc.).
 - Assessing the level of satisfaction of affected households on the grievance mechanism.
- f. Coordination between the resettlement activities and construction schedule
 - Civil works can only be started when (i) land acquisition and resettlement activities (compensation, assistance and relocation) have been completed; (ii) the project

area is clear of issues and problems; and (iii) the income restoration program is in place.

g. Gender Issues

- Participations of women in land acquisition and resettlement activities;
- Impacts of land acquisition and resettlement on women's livelihoods; and
- Participation of women in income rehabilitation activities.

All the data collected by the EMA for external monitoring will be gender sensitive.

Post Implementation Evaluation

Six to 9 months after completion of resettlement implementation the EMA will conduct an evaluation of resettlement process and its impact to assess effectiveness of mitigation and income rehabilitation measures and to determine whether the objectives of the RP in general and of restoration of livelihood and household incomes have been achieved. The assessment will focus on the achievements of resettlement plan targets and the change in the quality of life of affected persons. In case any gaps are identified, the report will recommend follow-up measures and additional resources.

12.3 Reporting Requirements

Progress of resettlement implementation will be included in the project's monthly progress report. Additionally, standalone internal monitoring report will be prepared quarterly and submitted by the PMO to the IA and the ADB.

The external monitoring agency will prepare external monitoring reports and submit to the PMO and the ADB every six months. Second external monitoring report will also include verification of resettlement implementation and incorporate Resettlement Completion Report.

The EMA will conduct post-implementation evaluation 6 to 9 months after completion of resettlement implementation and submit the report to the PMO and the ADB.

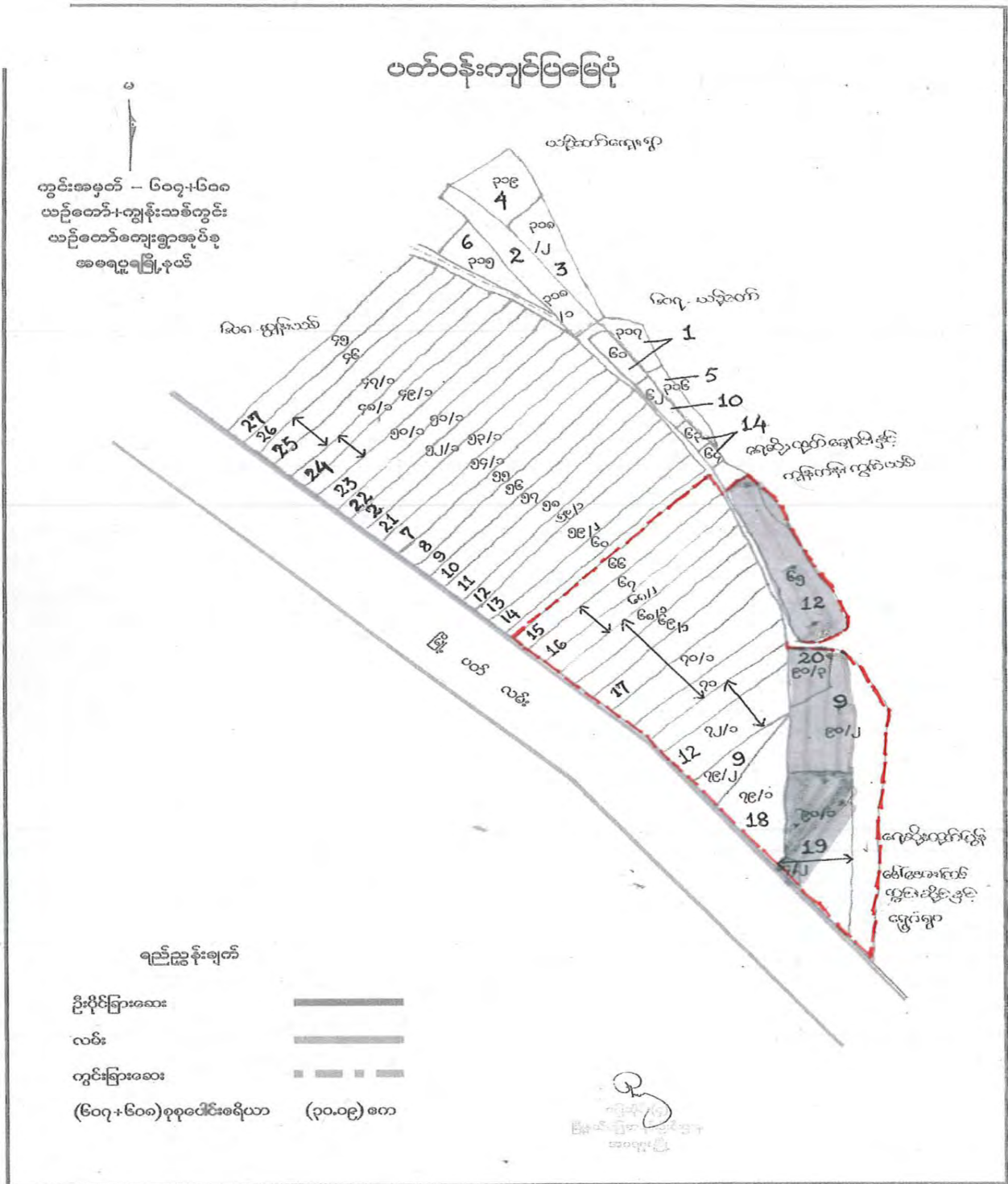
Terms of reference for EMA are attached in **Annex N**.

All monitoring reports will be disclosed to the relevant key stakeholders, posted on the MCDC website/facebook and uploaded on the ADB website.

ANNEXES

Annex A

Land Holding Map of WWTP Site



Source: Land Record Office, Amarapura Township

Proposed WWTP site Land Ownership List

No	Name of farmer	Plot No	Lot Number	Area (Acre)	Remark
1	Daw Shwe Shan	608	79/2	0.32	Cultivated by tenant Daw MyaThaung
			90/2	0.35	Water-logged
2	U Yan Khwe Kan	608	72/1*	1.29	One plot number unidentified on the Map. Cultivated by Tenant U Aung Naing
			65	1.06	Under water
3	U Yin Yan Hlaing	608	66	0.88	Cultivated by tenant Ko Win Moe
4	U Htwe	608	67	0.70	Cultivated by tenant Daw Mya Thaung
			68/2	0.62	
5	U Chit Shan	608	68/1	0.68	One plot number unidentified on the Map.
			69/1	0.68	Self-cultivated
			70/1*	1.62	
			71	0.53	
6	U Ohn Khaing	608	79/1	0.94	Self-cultivated
7	Daw Yan Seing Kyu	608	84/2	0.06	Water-logged
			90/1	1.20	
8	Daw Mon Mon Maung	608	90/3	2.05	Self-cultivated Partly water-logged
Total				12.98	

Note: Total area under water is 4.36 acre

Proposed WWTP site



Fig 1-A & B. Proposed WWTP site from south to east and west side view (November 2014)



Fig 2-A & B.. Proposed WWTP site affected cultivated land (November 2014)



Figure 3 Affected structure in WWTP site. (November 2014)

Annex B

ADB TA 8472 – MYA: MANDALAY URBAN SERVICES IMPROVEMENT PROJECT

Code No.

Introduction: We were assigned by the MCDC for the inventory of properties that will be affected by land acquisition for the Waste Water Treatment Plant under the Mandalay Urban Services Improvement Project (MUSIP) here in your area. Temporary land acquisition shall be carried out for the laying down of sewer pipes beside the selected roads of the City. The reason for the inventory is to determine the compensation and entitlement for persons affected by land acquisition, permanent or temporary. Based on the initial layout of the Project, your property is likely to be affected. However, the impact on your property is not yet final may be changed during Project implementation. May I request for your time to answer the questions in this survey?

A. PROJECT COMPONENTS: Waste Water Treatment Plant

B. LOCATION: 1. Township: Amarapura 2. Ward _____ 3. Village: Yin Taw Village Track

I. GENERAL INFORMATION

A. DEMOGRAPHY:

1. Name of Respondent: _____
2. Sex: [a]__ male [b]__ female 3. Age _____ Yrs.
4. Respondent status in the household: [a]____ household head [b] Relation to HH Head _____
5. If you are not the household head (HH), what is HH Head name? _____
6. Civil status of the HH: [a]__ married [b]__ widow/widower [c]__ single
7. Religion: [a] Buddhist _____ [b] Hindu _____ [c] Muslim _____ [d] Christian _____ [e] Other (specify) _____
8. Ethnicity of the HH: [a] Bamar _____ [b] Shan _____ [c] Ka Chin _____ [d] Rakhine _____ [e] Mon _____ [f] Others _____
9. Household members:

Names of HH Members	Age	Sex		Relation to HH Head	Main Occupation	Secondary Occupation	Education Level	Total Monthly HH Income(Kyat)
		M	F					
Head				-				
Total								

10. How many household members work away from home? _____
11. Where do they work? [a] Same village _____ [b] Outside the village _____
12. How do they go to work? [a] walk _____ [b] M. Bike _____ [c] cycle _____ [d] Bus _____ [e] Others (Specify) _____

13. Average household expenditures per month

[a] Food _____ [b] health _____ [c] Education _____
 [d] Water & Electricity _____ [e] Cooking Fuel _____ [f] Transport _____
 [g] rent/lease _____ [h] Miscellaneous: _____

B. LENGTH OF RESIDENCY

1. How long has your family been living in this place? _____ years.
2. Where did you live before moving to this place? _____
3. Why did you decide to move to this place? _____

II. AFFECTED ASSETS

A. LAND

1. Location of the affected land: [a]__ urban [b]__ rural
2. What is the total area of affected land? _____ Acre/Sft.
3. Area to be acquired from the affected land _____ Acre/Sft.
4. Land use of the affected land: [a]__ agricultural [b]__ residential [c]__ Orchard [d]__ Pond
 (Description of use of land) _____
5. Do you own this land? [a] Yes ___ [b] No _____
 - A. If No,
 - (i). do you rent it? [a] Yes ___ [b] No _____
 - (ii). If you do not own the land what is the name of the owner of the land? _____
 - (iii). Where does the owner live? _____
 - B. If yes,
 - (i) do you have any of the following rights to occupy or use the land:

[a]__ Right of ownership	[d]__ Right to exploitation
[b]__ right to build	[e]__ None
[c]__ right to use	[f] Other (specify)_____
 - (ii) If the household possesses any of the rights, when will that right expires? _____
 - (iii) Do you have any document to prove the right/ownership? [a] Yes ___ [b] No _____
6. Do you own any land in other places? [a]__ Yes [b]__ None
7. If yes, what is the total area of that land in other location? _____ Acre/Sft. Where is the land located?
 How far if the land? _____
 Who manages the land in other place? [a] my family member _____ [b] rented out _____ [c] No one _____
8. If you were to buy land in the vicinity, how much will it cost? [a] Kyat _____/acre/sft. [b] Don't know _____
9. Do you know if anyone sold or purchased land in this area in the past six months? [a] Yes _____ [b] No _____
10. If you know, do you know the price they paid per acre/sft? [a] Kyat _____/acre/sft. [b] Don't know _____

B. AFFECTED STRUCTURE (Please take photo of the HH Head & family members together with the structure & attach to the questionnaire)

1. Number of storeys? [a] Single ___ [b] Double _____ [c] On stilts _____
2. Total area of the structure (total of all floors) _____ Sft.
3. Use of Structure? [a] Residence _____ [b] Shop _____ [c] Resid. cum Shop. _____ [d] Other _____
4. If mixed use, area of Shop/commercial use? _____ Sft.
5. Type of construction: [a] Brick Building _____ [b] Wood & Brick _____ [c] Mud and bamboo _____

6. Material used for construction:

- A. Walls: Concrete ___ brick ___ wood ___ Thatch ___ Mixed (Specify) ___
 B. Flooring: Brick ___ files ___ wood ___ Earthen ___ Mixed (Specify) ___
 C. Roof: Concrete ___ Tiles ___ Tin ___ Thatch ___ Mixed (Specify) ___

7. Do you own the Structure/House? [a]__ own [b] __ with permission from owner w/o rent [c]__ renter

8. If owner of the house, have you rented any part of the house? [a]__ Yes [b]__ No

9. If yes, how much rent do you collect/month? _____ Kyat

10. If with permission from the owner, what is the name of the owner? _____

11. Where does the owner live? _____

12. If Tenant, how much rent do you pay each month? Kyat _____.

13. When was the house constructed: _____

14. How much did your house cost? [a] About Kyat _____ [b] Don't know _____

15. If you were to built this type of house today, approximately how much will it cost?

[a] Kyat _____ [b] Don't know _____

C. OTHER STRUCTURES (Secondary Structures detached from main Structure)

Other Affected Structures	Area Sft.	Length (ft.)	width (ft)	Materials Used	Approx. Cost
a Small business shop					
b Fence					
c Animal shelter					
d Toilet					
e Pavement/ yard					
f Other (specify)					

D. AFFECTED BUSINESS / SHOP

1. Nature of Business: [a] Small variety store ___ [b] Eatery ___ [c] Factory ___ [d] Other (specify) _____

2. Type of structure: [a] Permanent ___ [b] Semi-Permanent ___ [c] Temporary ___ [d] Moveable ___

3. How much is the average income per day? Kyat _____

4. How many persons are employed in the business? _____ Full time? _____ Part Time: _____ None _____

5. Do they have any contract for employment? _____

6. How much salary do you pay to them per month: Kyat _____

7. Since how long they have been working for you? _____

8. Where do they live? [a] same premises ___ [b] Elsewhere ___ [c] Don't know _____

9. Do you have any permit for this shop? [a] Yes ___ [b] No _____

E. TREES AND CROPS

1. Types of wood trees owned by AP.

Name of wood tree	Number and age of affected trees		
	Number	Young ,5 yrs.	Mature >5 yrs.
a			
b			
c			
Total Wood Trees			

2. Types of fruit trees

	Name of Fruit Trees	Number and age of Affected Fruit Trees		
		Total	Young	Fruit-bearing
A				
B				
C				
D				
Total				

3. Crops

	Name of Crops	Areas Planted to Crops (in Acre)
a		
b		
c		
d		
Total		

F. OTHER ASSETS

1. Domestic animals/poultry raised by household in affected lands.

	Name of Animals	Number of Heads
a		
b		
c		

2. Household facilities and utilities:

- A. Water: [a] Piped water ___ [b] Deep/shallow well ___ [c] Hand Pump ___ [d] River ___ [e] Rain water ___
 B. Electricity: [a] metered connection ___ [b] Own Generator ___ [c] Kerosene lamp [d] Other _____
 C. Toilet: [a] flush/septic tank ___ [b] pit ___ [c] river ___ [d] Other _____
 D. Cooking: [a] Gas Cylinder ___ [b] Kerosene Stove ___ [c] Firewood ___ [d] Charcoal _____

3. Consumer Goods: [a] Cycle ___ [b] M. Cycle ___ [c] Car/van ___ [d] TV ___ [e] Fridge ___ [f] Computer ___
 [g] Telephone ___ [h] Other _____

G. COMPENSATION AND RELOCATION OPTIONS

1. For your loss of land, what are your preferences for compensation?

- [a] Replacement land of same category and area/productivity _____
 [b] Cash compensation at market rate
 [c] Undecided

2. In case of entire loss of your land and house, what will be your preference for relocation?

- [a] Relocate myself to other land I own ___ [b] Relocate myself to new location _____
 [c] Relocate to Project sponsored site ___ [d] Not decided _____

3. Do you have any concerns about the project and its impact on your household?

[a] Loss of income _____ [b] Loss of employment _____ [c] Disruption of existing social ties _____
[d] Others (specify) _____

III. SOCIO ECONOMIC ASPECT

A. FOOD SECURITY

1. Do you think you have sufficient incomes to cover all your household expenses for food and other essentials?
[a] Yes _____ [b] No _____
2. Do you have access to sustainable supply of food? [a]__ Yes [b]__ No
3. How many times in a month the household finds it difficult to buy foods? [a]__ once [b]__ twice [c] thrice or more [d]__ none.

B. HEALTH AND PHYSICAL CONDITION

1. Number of household members who got sick in the last six months: [a] male _____ [b] female _____ [c] none
2. If there was any, which of the following diseases have affected the household member/s?
[a] Cough ___ [b] Pneumonia___ [c]Diarrhea ___ [d] Dysentery___ [e] Malaria _____
[f] Other (specify) _____
3. Number of household members who is affected by long-time illness: [a] male _____ [b] female _____ [c] none
4. Does any household member suffer from any of the following physical disabilities?
[a] Blindness ___ [b] Deafness _____ [c] Amputated hand/leg ___ [d] Other physical disability _____
[e] None _____

C. SAVINGS AND FINANCIAL SUPPORT

1. Is your monthly household income sufficient to cover all your expenses? [a]Yes ___ [b] No___
2. Do you have any savings per month? [a] Yes___ [b] No ___
3. If no, do you need to borrow money in order to meet your monthly expenses? [a]yes___[b] No___
4. If yes, how often do you borrow money in a month? [a] Once___ [b]Twice ___ [c] Quite often ___
5. From whom do you normally borrow? [a] Neighbours___ [b] Friends/relatives___ [c] Money lenders___

D. AWARENESS OF PROJECT

1. Did you have any knowledge/information about this project? [a]Yes ___ [b] No___
2. If yes, how did you know about this project? [a] TV announcement___[b] Newspaper___ [c] Radio___
[d] Information from friends/relatives___[e] Village head___ [f] Can't remember___
3. Do you think the project will benefit / or cause negative impact on you?
[a] Benefit _____ [b] Negative effect _____
4. How do you think the project will benefit you or the community? _____
5. Did you know that your property may be affected by the project? [a]Yes___ [b]No___
6. If yes, what is your first reaction?
[a]Concerned___
[b] Asked for confirmation from MCDC___
[c] Contact village head _____
[d] No reaction_____

E. ACCESS TO SOCIAL SERVICES

1. If the household has school children, what is the distance of the school from the house? _____ miles.
2. Distance of the house from the nearest public market. _____ miles
3. Distance of the house from the health clinic. _____ miles

THANK YOU VERY MUCH

Interviewer:

(Name)

(Signature of Interviewee/HH Head)

(Date)

Date:

Annex C

Myanmar: MUSIP – WWTP -Inventory of Losses

Township: Amarapura

Village: Yin Taw

No.	Name of HH Head	No. of APs	Plot No.	Total Area (Acre)	Tenure Owner/ Tenant	Loss of Structures			Loss of Trees & Crops		Other Losses		Remarks
						Area Main House	Area of Shop	Second. Struct.	Fruit Trees	Loss of Crop	Loss of Agr. Income	No. of Empl.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Daw Shwe Shan	-	79/2	0.32	Owner	-	-	-	-	Cultivated by tenant	-	-	
			90/2	0.35			-	-	-	-	-	-	Water -logged
2	U Yan Khwe Kan	-	72/1	1.29	Owner	-	-	-	-	Cultivated by tenant	-	-	-
			65	1.06			-	-	-	-	-	-	Water-logged
3	U Yin Yan Hlaing	-	66	0.88	Owner	-	-	-	-	Cultivated by tenant	-	-	-
4	U Htwe	6	67, 68/2	1.32	Owner	289	-	-	-	Cultivated by Tenant	-	-	-
5	U Chit Shan	7	68/1, 69/1, 70/1, 71	0.68 0.68 1.62 0.53	Owner	-	-	-	-	Groundnut, Vegetables	6,000,000	-	Self-cultivated
6	U Ohn Khaing	2	79/1	0.94	Owner	-	-	-	-	Groundnut	500,000	-	Self-cultivated
7	Daw Yan Seing Kyu	-	84/2, 90/1	0.06 1.20	Owner	-	-	-	-	-	-	-	Permanently water -logged
8	U Hla Oo/ Daw Mon Mon Maung	7	90/3	2.05	Owner/	-	-	-	-	Groundnut	350,000	-	Partly under water
9	Daw Mya Thaug	6	67, 68/2, 79/2		Tenant	-	-	-	-	Groundnut, vegetables	700,000	3	No rental fees for cultivated land
10	U Aung Naing	3	72/1		Tenant	-	-	-	-	Groundnut	150,000	1	
11	U Win Moe	6	66		Tenant	-	-	-	-	Groundnut	600,000	2	100000/yr.(Rental fees)

Annex D

Summary of Potential Temporary Impacts Waste Water Component, Interceptor Mains

No.	Road Name / Location	Approx. Clear width (m)	Description of Use, Type and Number of Potentially Affected Structures
Min Ga Lar Canal			
01.	From Junction of Ngwe Ta Chaung and Mingalar to 78 th St.	7-8 M	Access to canal through the Great Wall Hotel. Areas along the canal are open unused land. No land acquisition or temporary impacts expected.
02.	At the crossing of 78 th St.	7-8 m	Access for construction equipment may require some temp. acquisition of land
03	From 78 th to 80 th St.	7-8 m	At each road crossing there may be a need for temporary land acquisition to provide access for construction equipments. About 4-6 temporary structures may be temporarily affected.
04	From 81 st St to 84 th St	5-6 m	As above
05	From 84 th St to 86 th St, at the junction with Shwe Ta Chaung near Pyi Lone Chan Thar bridge	7-8 m width of canal	There may a need for temporary land acquisition to provide access to construction equipment. Potential temporary impacts on 3-4 structures.
Shwe Ta Chaung Canal			
01.	17 th up 22 nd St. along 84 th St)	6-7 m	Road (15-20m wide) runs parallel to the canal. No impacts expected.
02	Along 22 nd and 23 rd St.	Canal width 6-7 m	Road (15-20m wide) runs parallel to the canal on its west. 4-5 vendors and temporary storage of material and goods of businesses on the opposite side of the road. Sufficient open apace along the road for construction equipment and material
03.	23rd to 24 th Street, along 86 th St.	6-7 m	Road (15-20m wide) runs parallel to the canal on its west. .5-6 vendors along the canal.
04	Between 24 th and 25 th street.	Canal 6-7 m	There are temporary and semi-permanent structures all along the canal on both sides. Near the bridge on 24 th st. about 15 m clear space currently used by MCDC trucks and parking of trishaws.
05.	Between 25 th St and 26 th St (Along 86 th St)	7-8 m wide canal Clear open area 10-12 m wide	Canal covered by wooden planks, concrete slab and iron plate. The covered area, frontage of several shops of Man Thiri Market is used by temporary display of goods. Additionally 10 vendors (daily income 5-10,000 K/day. Concrete cover over the canal is frontage of Aung Myae Thar Zan Township Planning Department. Space on the 25 th st. bridge 3 vendors and parking of vehicles.
06.	Between 26 th and 27 th St (Along 86 th St)	7-8 m wide canal. Road width 15-20 m	Corner of 26 th st & 86 th parking of vehicles. 15-20 (mostly in the afternoon) vendors. Two tall and big buildings with about 20 shops on the top of the canal, there are 3-4 stalls and motorbike parking between two buildings, These 20 shops and 25 vendors/stalls will be affected temporarily during the construction period.
07.	Between 27 th St and 28 th St (Along 86 th St)	6-7 m	There are temporary and semi-permanent structures all along the canal on both sides. Space on the bridge with 27 th st. occupied by 10-12 stalls/vendors and on the bridge with 28 th about 8 vendors. Some temporary structures along the road may need to be temporarily acquired to facilitate civil works.
08.	Between 28 th and 29 th St (Along 86 th St)	4-5 m canal width	There are series of shops on the bank of the canal, along the road (15-20m wide). Some temporary extensions, small wooden bridges and water distribution pipes across the canal. Some shops along the road may be affected temporarily to provide access for construction equipment. About 4 vendors near the bridge on 29 th .

09	Between 29 th and 30 th St.	5-6 m wide canal	There are semi-permanent shops selling beetle nuts all along the western bank and between the canal and the 86 th road. Temporary shops along the eastern bank of the canal. Some temporary/semi-permanent shops may need to be vacated temporarily to give access to civil works. No vendors on the bridge.
10.	From 30 st St to 31 st St (Along 86 th St)	Canal width 4-5 m. Road about 15-20m	There are semi-permanent shops selling fertilizer all along the western bank of the canal and 86 th road. Temporary shops along the eastern bank of the canal. Some temporary/semi-permanent shops may need to be vacated temporarily to give access to civil works. Several temporary walkways and water distribution pipes across the canal may be affected.
11	From 31 st & 35 th Street (Along 86 th St)	7-8 m wide canal	Road runs parallel to the canal. The space between the road and the canal is mainly used for parking of vehicles. There are 10-15 vendors/temporary stalls.
12	From 35 th to MCDC garbage collection structure on the canal	8-9 m canal	Road 86 th St (15-20 m wide) runs parallel to the canal. Only a few vendors along the canal. Sufficient space within the ROW to provide access for civil works.
13	From garbage collection structure to the Kat Kyaw Pagoda/existing pumping station	8-9 m canal width	Four block of flats along the canal on both sides close to the Kat Kyaw Pagoda. Access for civil works will not affect the blocks. There is sufficient space for storage of const. material and equipment.
Sewer Main Section from Kat Kyaw Gate to WWTP Site			
01	From MCDC Existing pumping station to the existing canal (beginning of the first section)	-	2-3 temporary huts and 1 semi-permanent structure will be affected during construction
02	Inside the Old canal in Nan Kat Inn (Aye Zayat Village)	Open drain about 6-7 m	Some temporary secondary structures such as: small wooden bridges, washing places, pigsty and toilets will be affected during construction of the pipes
03.	Along the existing village road	Road width 5-6 m	To avoid impacts, the alignment should follow about 50m away from the road, behind the existing small temporary and semi-permanent structures along the road.
04	Inside the canal (Wat Kone Village)		Some temporary secondary structures such as: small wooden bridges, temporary stalls, washing places and toilets will be affected during construction.
05	Beside the Road	4-5 m wide road	Most of the existing structures are on one side of the road. Open agricultural land on one side of the road, and a private fencing along the road may be affected temporarily.
06.	Last section connecting with WWTP site		Mostly agricultural, fallow and low-lying unused land.
Thin Gazar Creek – Eastern Bank			
01.	Thingazar Circular Road Near 22 nd St before curving)	Pipe size +1.5 m	Road runs parallel to the eastern bank of the creek. Cham Thar Gyi Bridge, about 10 temporary huts and 4-5 vendors but the road is big enough
02.	From 22 nd to 26 St of Thingazar Circular Road	Pipe size +1.5 m	Road runs parallel to the creek. Public wooden bridge, there are 3-4 temporary shops for making wooden boxes and storage of drums.
03.	Between 26 Street and 35 Street		Road (15-20 ft.) runs parallel to the creek. More than 10 temporary structures and 3-4 food/tea stalls. Some temporary structures for bathing and washing along the bank.
04.	Corner of 35 St		4-5 vendors. Sufficient open space for civil works.

05.	From corner of 35 St to 38th St		10 to 15 vendors and one shop of stone carving business along the road. At 38 th MCDC land for proposed pumping station. Road width sufficient for civil works.
06.	38 th street to 86 th		Parking, several semi-permanent shops and a tea shop along the road. Temporary impacts on some businesses.
07.	38 th to 39 th Street along the creek		A public wooden bridge just before reaching corner of the 39 St. 5-7 temporary shops near the bridge.
08.	From 39St to 41 St		Several temporary shops and parking areas near the corner of 41 St.
09.	From the corner of 41 St (In front of the Jade Market section (41 Street) to Kan Taw Gyi		There are 20-25 temporary shops and stalls. Parking of vehicles. Jade market across the road from the canal. Access to jade market from the road will be restricted during the civil works. MCDC will have to provide alternative parking facilities and continued access to jade market.
Thin Gazar Creek – Western Bank			
01.	On 22 nd Street up to Corner of the Road (Before turning south along the creek)	15 m	There are about 50 temporary shops and vendors/ stalls along the road (7-8 m wide).
02.	From the corner of 22 nd Street to 26 th Street (until MCDC pumping station)	8-10 m	15-20 temporary huts which can be moved temporarily during the civil works.
03.	26 th to 35 th St	7 m	15-20 Temporary mobile stalls including 4-5 stalls near the Chan Thar Ya Bridge just before crossing 35 th st.
04.	From the corner of Wooden bridge to Sein Pan Road	12-15 m wide	Road is about 120 m long.
05.	From Sein Pan Road turning east on Mahasi Meditation Road	Corner 7-10 m wide	Road 20 m wide after the corner with Sein pan Road. Road about 250 long before turning south. Road wide enough for civil works. Access to houses may be affected temporarily.
06.	From junction with Tar Tain Road turning east	12-15m wide	Tar Tain Road about 250 m long joins the creek. Access to houses along the road may be affected temporarily.
07.	From junction with Tar Tain Road to Nibban Seik Oo wooden Bridge at the corner with Ceit Ta Thu Kha road		Along the creek bank between Tar Tain Road to Nibban Seik Oo wooden Bridge at the corner with Ceit Ta Thu Kha road. 8-10 shops just before the corner with Tar Tain Road.
08.	Road south of Tat Tain Road and turning east up to the creek.	10-15 m	Road width 8-9 m, total about 600m until the creek bank. Access to monastery and some houses may be affected temporarily.
09.	From 41 st St to Metta Lane		Crossing of 38 th either around the fire brigade or through the timber shop causing impact on temporary structure used for storage of timber planks. Until Metta lane area, the interceptor to run on the western bank of the creek. No impacts envisaged.
10.	Metta Lane- until Kan Daw Gyi	4-5 m	Narrow (3-4mwide) lane with temporary/semi-permanent structures (one shop, 12 houses and 3 vendors) along the road. Access to these structures will be affected during the civil works.

AREAS ALONG SHWE TA CHAUNG CANAL THAT MAY BE IMPACTED TEMPORARILY DUE TO THE INTERCEPTOR MAINS



Temporary stalls between 24th & 25th St



STC Canal covered at Man Thiri Market



At MDCDC existing pumping station



Old Shwe Ta Chaung Canal, Aye Zyat Village



Wat Kone Village



End of Wat Kone Village

AREAS ALONG THIN GAZAR CREEK THAT MAY BE IMPACTED TEMPORARILY DUE TO THE INTERCEPTOR MAINS



Along 22nd Street



Along Western bank of Thin Gazar Creek
between 22nd & 26th St.



Corner of 35th Street



Western bank of This Gazar Creek



Mahasi Meditation Road



Matta Lane

Annex E

Population in MCDC Area by Ethnic Groups 2014

No	Township	Total PP	Bamar	Kachin	Kayah	Kayin	Chin	Mon	Rakhine	Shan	Others*
1	Aungmyethazan	177,653	164122 (92.38%)	266 (0.15%)	43 (0.02%)	211 (0.12%)	304 (0.17%)	31 (0.02%)	101 (0.06%)	1714 (0.96%)	10901 (6.15%)
2	Chanayethazan	146,125	131930 (90.29%)	428 (0.29%)	9 (0.00%)	289 (0.2%)	321 (0.21%)	56 (0.24%)	148 (0.10%)	2335 (1.59%)	10609 (7.26%)
3	Mahaaungmye	171,655	16667 (97.68%)	335 (0.19%)	30 (0.02%)	205 (0.12%)	223 (0.13%)	93 (0.05%)	321 (0.19%)	2578 (1.50%)	203 (0.12%)
4	Chanmyathazi	204,929	202000 (98.57%)	307 (0.15%)	38 (0.01%)	276 (0.13%)	195 (0.08%)	61 (0.03%)	199 (0.09%)	1191 (0.58%)	662 (0.32%)
5	Pyigyidagun	154,741	145539 (94.05%)	224 (0.14%)	10 (0.00%)	92 (0.06%)	153 (0.10%)	91 (0.06%)	322 (0.20%)	1756 (1.13%)	6554 (4.23%)
6	Amarapura	181,646	181551 (99.94%)	12 (0.006%)	-	13 (0.007%)	34 (0.018%)	-	15 (0.018%)	21 (0.01%)	-
7	Patheingyi	186,542	186211 (99.82%)	18 (0.09%)	-	66 (0.04%)	35 (0.02%)	-	40 (0.02%)	137 (0.07%)	35 (0.02%)
Total		1,223,291	1,179,020 (96.38%)	1,590 (0.13%)	130 (0.01%)	1,152 (0.09%)	1,265 (0.10%)	332 (0.02%)	1,146 (0.09%)	9,732 (0.79%)	28,964 (2.36%)

Source: Year Book, Township General Administration Department, Mandalay District 2014

*Category 'Others' include Chinese, Indian, Bangladeshi and other ethnic minority groups.

Annex F

MUSIP – WWTP: Socio-Economic Characteristics of Project Affected People

Township: Amarapura

Village: Yin Taw

No.	Name of Household Head	Sex	Owner and HH head	HH Size	No. of Child. <16 yrs.	Disable Family member	Own Other Plot	No. of earning member	Employment & Monthly Income					Estimated Total Monthly Income MK	Total Monthly Expend.
									Agriculture	Shop	Govt. Service	Trading/Business	Other sources		
1	Daw Shwe Shan	F	Owner												
2	U Yan Khwe Kan	M	Owner												
3	U Yin Yan Hlaing	M	Owner												
4	U Htwe	M	O & H	6	1		Yes	5	-	-	-	40,000,000	-	40,000,000	18,000,000
5	U Chit Shan	M	O & H	7			Yes	5	14,000,000	-	-		-	14,000,000	1305000
6	U Ohn Khaing	M	O & H	2			-	2	500,000	-	-	2,000,000	-	2,500,000	1,000,000
7	Daw Yan Seing Kyu	F	Owner												
8	U Hla Oo/ Daw Mon Mon Maung	M	Head/ Owner	7	2		Yes	3	350,000	-	70,000	650,000	-	1,070,000	455,200
9	Daw Mya Thaug	F	Tenant	6	1	1	-	4	700,000	500,000	-	-	300,000	1,500,000	900000
10	U Aung Naing	M	Tenant	3	1		Yes	2	150,000	-	-	-	-	150,000	232,000
11	U Win Moe	M	Tenant	6	1			4	600,000	-	-		600,000	1,200,000	555,000

Note: Highlighted owners have not been covered by the SES.

Annex G

**MANDALAY ADB PPTA 8472: PREPARING URBAN SERVICES IMPROVEMENT PROJECT
 QUESTIONNAIRE FOR SOCIO-ECONOMIC SURVEY
 (Waste Pickers)**

Name of the Site:

Name of Township.....

Ward/Village Head

Name of Household Head Male Female

Name of Interviewee

1. Household Information

1.1 Number of HH members persons

- Male person. -Femaleperson

- Employed.....person. -Unemployed.....person

1.2 Ethnic Group:

- Bamar Ka Chin Ka Yah Ka Yin Chin Mon Rakhine Shan
Others

1.3 Religion: Buddhism Christian Hindu Muslim Others

1.4 Information of Household Members

No	Name	Relation to HH Head	Gender	Age Yrs.	Edu. Level	Material Stauts	Occupation
1.		HH Head					
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							

2. Employment:

2.1. Approximately how many waste pickers work on this site?

2.2 How long have you been in waste picking related work?(yrs.).....(mths.)

2.3 How many family members are involving in waste picking related work?

2.4. Besides you, how many other family members work on the dump site? Nil . . .

2.5. Where do you live? On the dump site. Outside the dump site

2.5.1 If on the dump site, Approx Area of the housesq.ft

a. Type of Structure: Semi-permanent Temporary Thatched

b. What is your water source?

River/stream Water canal Tube well Deep well Community well
Piped water Others.....

c. Do you use treated/boiled water for drinking on daily basis? Yes No

d. What type of sanitation facility do you use?

Flush toilet with soak pit Pit latrine Public latrine Open Sources
Others.....

2.5.2 If outside, How far from the dump site?km.

How do you travel to dump site? Personal transport MCDC transport

3. Household Income and Expenditure:

3.1. How much do you earn from waste picking per month? Kyat

3.2. What is approximate household income per month? Kyat

3.3. What are your average monthly expenditure on the following:

Food :.....K/month Transport:K/month
Medical:K/month Other/miscellaneous.....K/month

3.4. Do you have any savings per month? Yes No

4. Relocation:

4.1. Are you aware that this dump site may be closed by the MCDC? Yes No

4.2. If you live on the dump site, where will you move to? Don't know

4.3. When the dump site is closed what other type of work would be looking for?

..... Don't Know .

4.4. Does other household member have skills other than waste pickling? Yes No

If yes, what is their skill?

4.5. What kind of job do would you prefer?

4.6. Do you have any association/union of waste pickers? Yes No

. If yes, what assistance /support is provided by the union to waste pickers?

.....
..... No support

5. Health

5.1. Have you or your family members suffered from any chronic /acute illness within the last

one year? Yes No

5.2. If yes, which of the following illnesses have they suffered from?

- Diarrhea Gastroenteritis Pneumonia Dysentery Skin disease
 Malaria Sore eyes Cough Dengue Typhoid
 Liver Fluke Tuberculosis Cancer HIV/AIDS Others

.....
5.3. How often and how long?

5.4. What do you think the cause of illness is?

- Food Water Weather Insect Flood

Work on the dump site

5.5. Where do you go for medication for the illness?

- Hospital Private clinic Consult Traditional Practitioner
 Buy medication at nearby pharmacy Others

Thank you for your time and cooperation.

Name of Interviewer

Date : / /

Time:

Annex G

SUMMARY OF FOCUS GROUP MEETINGS WITH WASTE PICKERS
 (September 14-15, 2014)

Three Focus Group Meetings were conducted with the waste pickers on September 14-15, 2014. Meetings with Waste Pickers were organized by Mandalay City Development Committee (MCDC) Cleansing Department. The objectives of the focus group discussion were to inform them about the project and likely impacts on their livelihood and seek their feedback. Key points discussed are summarized below.

No	Date	Location	No. of Participants	Dissemination of Information	Issue Raise
1	14Sept. 2014	Aye Yeik Nyein Cemetery Near Kyar Ni Kan Dump Site (North of Mandalay)	27 Waste Pickers	Overall project description, scope of project activities in relation to solid waste dump site, likely loss of their livelihood, and key elements of ADB policy on loss of livelihood and mitigating impacts by providing income restoration assistance	<ul style="list-style-type: none"> • When would the dump site likely to close • Can the project offer alternative jobs • What assistance the project will provide • We would like to continue with the same job, can MCDC help us in this regard
2	15Sept. 2014	South Inn-North Inn Dump Site(South of Mandalay)	31 Waste Pickers and Shop Owner	Overall project description, scope of project activities in relation to solid waste dump site, likely loss of their livelihood, and key elements of ADB policy on loss of livelihood and mitigating impacts by providing income restoration assistance	<ul style="list-style-type: none"> • When would the dump site likely to close • Can the project offer alternative jobs • Would like to continue with the same job, can MCDC help us in this regard • Shop owner would like to return to his village to manage his shop there
3	15Sept. 2014	Aye Yeik Nyein Cemetery Near Kyar Ni Kan Dump Site (North of Mandalay)	19 Waste Pickers	Overall project description, scope of project activities in relation to solid waste dump site, likely loss of their livelihood, and key elements of ADB policy on loss of livelihood and mitigating impacts by providing income restoration assistance	<ul style="list-style-type: none"> • When would the dump site likely to close • Can we work at the new site • Would like to continue with the same job, can MCDC help us in this regard

G Potential Impacts & Socio-economic Profile of Waste Pickers

About 190 waste pickers (150 households) currently working on both the solid waste landfill sites will be affected by loss of their livelihood due to the closure of the landfill sites. At Kyar Ni Kan site about 120 waste pickers (or 100 households) and at Thaug Inn Myout about 70 waste pickers (50 households) work every day. Almost all the waste pickers at the Kyar Ni Kan site have been working there for more than 2 years. At the Thaug Inn Myout site twenty three out of 29 waste pickers have been working there for less than two years.

The socio-economic survey of waste pickers, covering 62 households, 32 hh for the Kyar Ni Kan and 29 hh for the Thaug Inn Myout, was conducted on 14th and 15th September, 2014. The socioeconomic survey also covered one shop keeper at the Kyar Ni Kan site who will lose business income due to the closure of the landfill site, thus making it a total of 63 households covered by the survey. In parallel with the socio-economic surveys, focus group discussions with two separate groups of waste pickers was also carried out to augment information collected through the questionnaire surveys. Brief description of socioeconomic characteristics is presented in the following sections.

G.1 Demographic Profile

The socioeconomic survey covered 63 households, or 304 persons, making it an average household size of 5 (Table G.1). Among the 63 affected households, 11 (22%) are women headed households (Table G.2). All 63 respondents were Bamer by ethnicity and Buddhists by religion.

Table G.1: Average HH Size

No	Location	No of HH	No HH Members	Average HH size
1	Kyar Ni Kan	34	178	5
2	Thaug Inn Myout	29	126	4
Total		63	304	5

Table G.2: Household Head by Sex

No	Location	Male	Female
1	Kyar Ni Kan	29	5
2	Thaug Inn Myout	23	6
Total		52 (78%)	11 (22%)

G.1.1 Age-groups

Respondent population by age groups for both the sites is shown in Table G.3. There is comparatively higher percentage of population in the age-group of 6-16 years in Kyar Ni Kan site. For the Thaug Inn Myout site the percentage of population in the age-group of 17-60 year is comparatively higher. Distribution of population in other age-groups is almost the same for both the sites.

Table G.3: Household by Age groups

No	Location	Age Groups				Total
		0-5 Yrs	6-16 Yrs	17-60Yrs	>60Yrs	
1	Kyar Ni Kan	29 (16.3%)	54 (30.3%)	90 (50.0%)	5 (3.4%)	178 (100%)
2	Thaung Inn Myout	21 (16.7%)	27 (21.4%)	73 (57.9%)	5 (4.0%)	126 (100%)
Total		50 (16.4%)	81 (26.7%)	163 (53.6%)	10 (3.3%)	304 (100%)

G.1.2 Education Level

In general the literacy rate among the surveyed households of above 5 years of age is quite low. Overall an overwhelming majority (76%) of respondent population have education only up to primary level and another 18.9% up to secondary level. 5.1% of respondent population above the age of 5 years have no schooling at all. Low level of education background will pose some limitations on the types of skills training programs that may be proposed under the livelihood restoration programs.

Table G.4: Persons (>5 years of age) by Education Level

No	Location	Education Level			Total
		No Schooling	Primary	Secondary	
1	Kyar Ni Kan	6 (4%)	120 (80.5%)	23 (15.5%)	149 (100%)
2	Thaung Inn Myout	7 (6.7%)	73 (69.5%)	25 (23.8%)	105 (100%)
Total		13 (5.1%)	193 (76%)	48 (18.9%)	254 (100%)

G.1.3 Employment & Occupation

Most of the respondents households have more than one members gainfully employed. Of the 254 persons above the age of 5 years, 54 are studying and the remaining 200 persons are either working or are unemployed. Waste picking is predominant occupation among the households (124 persons) with private jobs as the secondary occupation (29 persons). Of the 63 surveyed households, 22 (32%) households have members engaged in occupations other than waste picking. 45 persons among the surveyed households are unemployed, only 10 of them in the age group of above 60 years.

Table G.5: Occupation of Household Members (>5 years of age)

No	Location	Occupations						Total
		Waste Picking	Govt/ Military	Vendor	Other private Job	Studying	Un-employed	
1	Kyar Ni Kan	72	1	1	11	33	34	152
2	Thaung Inn Myout	52	0	0	18	21	11	102
Total		124	1	1	29	54	45	254

G.1.5 Household Incomes

Typical earning of waste pickers is about 4000-5000 kyat/day. This is comparably better than that earned by a typical non-skilled worker from other occupations. A comparative analysis of monthly household incomes (Table G.6) shows predominantly higher percentage of households in the middle income group in the waste picking category compared to those deriving income from other occupations.

Table G.6: Monthly Household Income by Source

No.	Location	Monthly income by Waste Picking (Kyat/month)			Monthly income by other sources (kyat/month)		
		<185000	185,001-300000	>300000	<185000	185001-300000	>300000
1	Kyar Ni Kan	15	15	4	6	1	0
2	Thaung Inn Myout	12	13	4	12	2	1
Total		27	28	8	18	3	1

Average household income of waste pickers at the Thaung Inn Myout is comparatively higher than those at the Kyar Ni Kan site. Average household income is estimated to be 254,177 Kyat/month and 302,586 Kyat/month for Kyar Ni Kan and Thaung Inn Myout sites respectively. Overall breakdown of household incomes for both the sites is shown in Table G.7 below. This compares well with the average household incomes for Mandalay city which is 263,000 Kyat /month, or 53,000 Kyat/month/person.

Table G.7: Monthly Household Income

No.	Location	Monthly Hh Income (Kyat/month)		
		<185000	185001-300000	>300000
1	Kyar Ni Kan	13	14	7
2	Thaung Inn Myout	5	15	9
Total		18	29	16

The shopkeeper at the Kar Ni Kan site earns about 25,000 Kyat per say. The shop was established about 8 months ago with verbal permission given by MCDC to supply food to the waste pickers. The shop owner has another shop in the village operated by a household member.

Eighteen (18) out of the 63 households covered by the survey earn less than 185,000 kyat/month which is considered as the urban poverty-line based on the UN standard of US\$ 1.25 /person/day.

G.1.6 Household Expenditures

Major proportion of household income is used to cover food expenses by households in both the sites. This is followed by transport and medical. All the waste pickers on the Thaung Inn Myout and 13 out of the 34 waste pickers for the Kyar Ni Kan site use their own or public transport to come to the respective site. 13 waste pickers on the Kyar Ni kan site use the transport provided by MCDC.

Table G.8: Average Monthly Household Expenditure

No	Location	Average monthly expenditure (Kyat)			
		Food	Transport	Medical	Others
1	Kyar Ni Kan	164882	25588	15647	21074
2	Thaung Inn Myout	142758	19414	4828	23241

Only 13 households at the Kyar Ni Kan site have reported to have some savings every month. None of the households at the Thaung inn Mypout reported to have any savings.

G.1.7 Illness

None of the surveyed waste pickers reported any chronic illness in their households. The types of illness the household members have suffered are shown in Table G.9 below.

Table G.9: Number of Household Members with Types of Illness

No.	Location	Types of Illness						
		Diarrhea / Dysentery	Skin	Cough	Asthma	TB	Pneumonia	Others
1.	Kyar Ni Kan	34	5	1	3	1	0	11
2.	Thaung Inn Myout	29	8	7	0	0	1	9

Total	63	13	8	3	1	1	20
-------	----	----	---	---	---	---	----

Most of the household members suffer from stomach related problems that could be attributed to the working environment and sanitation level. However, in response to the question on their views on possible cause of illness, only 2 households related it to the work on dump site and another 8 on the quality of food. 44 respondents did not answer the question.

Of the 63 respondents, twenty-one informed on going to private clinic for treatments and only two indicated of going to government hospitals. This reflects poor accessibility to public health services in Mandalay. There was no response from 36 waste pickers.

G.1.8 Vulnerable Groups

Socioeconomic survey of 62 waste pickers identified a total of 25 vulnerable households.

Women-headed Households. Of the 62 surveyed households, there were 5 women-headed households at Kyar Ni Kan site and another 6 at the Thaug Inn Myout. Of these, 2 households each also fall below the poverty line (BPL).

Households BPL. Of the 62 surveyed households, 13 households in the Kyar Ni Kan and 5 households at the Thaug Inn Myout were identified as falling below the poverty line. Four of these are also women-headed households.

Therefore, without double counting of the 4 women-headed households who are also below the poverty line, there are a total of 25 vulnerable households among the surveyed waste pickers.

G.1.9 Livelihood Restoration

190 households are affected by the closure of the solid waste dump sites. Only 28 respondents out of the 63 surveyed indicated to have only some experience of working as labourer in building construction. In response to the question on what types of jobs they would be looking for, only 8 respondents indicated to have preference for the jobs similar to waste picking, another 17 respondents indicated their preference for the jobs other than waste picking. Most others did not have any information on the types of job opportunities available or particular preferences.

Proposed sanitary land fill and power generation project will create job opportunities for about 30-35 unskilled/semi-skilled workers for sorting of waste and other related activities. Priority will be given to the waste pickers for these jobs. Some other affected waste pickers can be employed on priority basis for the jobs created by the proposed 10-12 collection points. However, there would still be a need for income restoration assistance to about 150 households

Annex H

**Public Consultation Meeting in Yay Lae Monastery, Yin Taw Village
at Amarapura Township**



Fig 1-A & B. Participants in Public Consultation Meeting



Fig 2-A & B. Discussion and Question and Answering in the meeting

အာရှ ဖွံ့ဖြိုးရေး ဘဏ် နည်းပညာ အကူအညီ မဏ္ဍိုင်
 ပဉ္စလေးမြို့ပြ ဝန်ဆောင်မှု၊ လုပ်ငန်းများ ဖွံ့ဖြိုးတိုးတက်ရေး စီမံကိန်း
 အစည်းအဝေးတက်ရောက်ကြသူများစာရင်း

Yay Loe Monastery, Yin Tau Village
 နေရာ ယာဉ်စက်... နေ့စဉ်... ရက်စွဲ ၂၇/ ၂/ ၂၀၁၅
 ၂:၀၀ pm
 အချိန် ၁:၀၀ PM

စဉ်	အမည်	လက်မှတ်	လက်မှတ်နံပါတ်
၁။	ဦးအောင်မြင်		၀၇၄၃၀၆၇၇၄၇
၂။	ဒေါ်ခင်အေး		၀၇၇၃၂၃၀၇၄၅
၃။	ဒေါ်ခင်အေး		၀၇၃၃၇၃၂၂၅၇
၄။	မအေးမအေး		၀၇၄၀၇၇၇၇၇၇၇
၅။	ဒေါ်ခင်အေး		၀၇၂၀၁၈၇၇၇၇
၆။	ဒေါ်ခင်အေး		၀၇၂၅၆၅၅၅၅၅၅
၇။	ဒေါ်ခင်အေး		၀၇၇၅၆၅၅၅၅၅၅
၈။	ဒေါ်ခင်အေး		၀၇၇၅၆၅၅၅၅၅၅
၉။	ဒေါ်ခင်အေး		၀၇၇၅၆၅၅၅၅၅၅
၁၀။	ဒေါ်ခင်အေး		၀၇၇၅၆၅၅၅၅၅၅
၁၁။	ဒေါ်ခင်အေး		၀၇၇၅၆၅၅၅၅၅၅
၁၂။	ဒေါ်ခင်အေး		၀၇၇၅၆၅၅၅၅၅၅
၁၃။	ဒေါ်ခင်အေး		၀၇၇၅၆၅၅၅၅၅၅
၁၄။	ဒေါ်ခင်အေး		၀၇၇၅၆၅၅၅၅၅၅
၁၅။	ဒေါ်ခင်အေး		၀၇၇၅၆၅၅၅၅၅၅

PUBLIC INFORMATION BOOKLET

ADB TA 8472 MYA MANDALAY URBAN SERVICES IMPROVEMENT PROJECT (MUSIP)

MANDALAY CITY DEVELOPMENT COMMITTEE (MCDC)

OBJECTIVE

The main objective of MUSIP is to improve urban environment and public health in Mandalay city. The outcome will be improved access to sustainable urban services. The improvement of urban services will have a direct impact on the improvement of public health.

PROJECT

The Mandalay Urban Services Improvement Project will mainly include:

1. Water Supply System Improvement;
2. Wastewater and Urban Drainage; and
3. Solid Waste Management.

Water supply system improvement will include extension of transmission and distribution for general public; new water reservoir on Mandalay Hill; extension of existing water treatment plant; and a new water intake, storage & water treatment plant (WTP) in Talingyi village.

Wastewater Improvement will include construction of Wastewater Interceptor Mains, Sewer Trunk and a Waste Water Treatment Plant (WWTP) covering about 30 acres in Yin Taw village, Amarapura.

The waste water collection System will be carried out along the Thin Gazar Creek, Shwe Ta Chaung Canal and Mingalar Canal, and some parts of 22nd Street, Sein Pan Road, Mahasi Meditation Road, Tar Tein road and Metta Lane.

Solid Waste Improvement will include new collection centres for better management of collection and sorting of solid waste before it is transported to the

dump sites at Kyar Ni Kan and Thaug Inn Myout. In the future an establishment of a new sanitary landfill is also planned.

POTENTIAL PERMANENT AND TEMPORARY IMPACTS DUE TO THE PROJECT

Besides benefits of the project, there will be some adverse permanent impacts due to the acquisition of land and other assets. The project will also cause some temporary impacts during the construction phase on residential/commercial establishments along the roads and streets covered by the project.

The **permanent impacts** will result in the loss of private land that is required for the construction of wastewater treatment plant and water treatment plant. Total area required for the WWTP is about 30 acres and for the WTP and intake will be about 6 acres. There may be some acquisition of land for the sewer mains and water transmission mains and access road. Additionally, some existing structures will be affected along the Mingalar canal to provide access for construction works.

Proposed closure of solid waste dump sites will affect about 150 households in loss of their livelihood and sources of household incomes.

The implementation of MUSIP in Mandalay will also cause some adverse **temporary impacts** to the residents and businesses along the project roads where sewer pipelines will be laid out. No acquisition of land and/or private assets will be necessary. The temporary impacts may include inconvenience in parking and restricted flow of vehicular traffic and access to roadside businesses and residences for short durations.

COMPENSATION AND ASSISTANCE FOR PERMANENT AND TEMPORARY IMPACTS

MUSIP project in Mandalay has a detailed policy to provide compensation and assistance for **permanent** loss of assets and business due to the acquisition of land.

- All land and structures affected by the project will be compensated at replacement cost based on the current market prices. In addition, if there is any loss of business incomes due to the acquisition of land, the households will be compensated for their loss of incomes.
- In case of loss of trees, crops or orchards compensation will be provided at market rates
- In case the households are displaced due to the land acquisition, they will be provided with transport assistance and help in settling down at the new place.
- Households affected by loss of employment will be provided assistance in skill training and assistance during the transition period.

Project authorities have prepared a resettlement plan which provides detailed information on the policy on compensation and other entitlements.

Specific measures and assistance for **temporary impacts** include:

- Project authorities and contractors will ensure that temporary impacts are avoided or minimized. Where necessary, assistance for temporary shifting of businesses and vendors will be provided by the contractor.

- The contractor will be responsible to provide temporary access to all the roadside businesses/houses facing the civil works for short durations.
- There will be no damages to any private properties. However, in the unlikely event of any damages, the contractors will be responsible to provide full compensation for such damages and to restore the properties to original conditions.
- In case the contractors use any private land, they will be responsible for paying rental in cash for the rented land outside the ROW. The rental amount would be negotiated between the owner and the contractors but will be no less than the prevalent market rates. Restoration of the land will be done by the contractor immediately after use.
- In case of any loss of business incomes due to the civil works, the contractors will be responsible to pay for the loss of income for the duration of the loss.

COMPLAINTS AND GRIEVANCES

In accordance with the Myanmar laws, the project has established a simple but effective procedure to address any complaint or grievances that the communities may have in regards to any aspect of the project including the civil works that will be carried out.

- People can bring his/her complaint to the ward head or township administration either in writing or verbally. These complaints will be

addressed by the ward heads/township administration within 15 days.

- In case the person filing the complaint is not satisfied with the decision taken by the Ward Head/Township administration, he/she can bring the complaint to the PMU in MCDC.
- However, if the person filing the complaint is still not satisfied with the decision taken by the PMU, he/she can bring the complaint to the Grievance Redress Committee set up in the MCDC.
- If the complainant is not satisfied with the decision taken by the GRC, he/she can approach the Court of Law.
- Complaints received at various levels and the decision taken will be properly documented.
- All costs involved in filing the complaints will be borne by the project.

Additionally, the project authorities will take the following actions:

- Complaints / Suggestion Boxes will be placed at MCDC office;
- Complaint and Suggestion Forms will be made available at the site offices.
- Complaint Book/Register will be kept at the PMU as well as GRC secretariat in the MCDC.

For further information about the project or for filing the complaints, please contact:

- MCDC, Mandalay
Tel/Fax:
- PMU- MUSIP, MCDC, Mandalay
Tel/Fax:ADB, Manila: Tel: (632) 632.4444

Vocational Training Facilities in Mandalay

A. Ministry of Social Welfare, Relief and Resettlement, Department of Social Welfare
No. 169, 83 St. Between 25th and 26th. Mandalay.
Tel: 02-36798

Vocational Trainings in Mandalay (Focused on Women)

No	Subject	Duration	Course Fees	Remark
Basic Course				
1	Sewing (Blouse)	1.5 mth	5,000 to 10,000K	Mon-Fri. 9:00-12:00/12:30-15:30
2	Sewing (Shirt/Coat in Myanmar Style)	1.5 mth	5,000K	Mon-Fri. 9:00-12:00/12:30-15:30
3	Sewing (Bra)	1.5 mth	5,000K	Mon-Fri. 9:00-12:00/12:30-15:30
4	Embroidery and Knitting	1.5 mth	5,000K	Mon-Fri. 9:00-12:00/12:30-15:30
5	Coat (Western Style)	1.5 mth	10,000K	Mon-Fri. 9:00-12:00/12:30-15:30
6	Trousers	1.5 mth	10,000K	Mon-Fri. 9:00-12:00/12:30-15:30
7	Myanmar Food	1.5 mth	5,000K	Mon-Fri. 9:00-12:00/12:30-15:30
8	Snacks	1.5 mth	5,000K	Mon-Fri. 9:00-12:00/12:30-15:30
Advanced Course				
1	Varieties of Blouse	2 months	50,000K	Mon-Fri. 9:00-15:30
2	Skirts	2 months	50,000K	Mon-Fri. 9:00-15:30
3	Dress	2 months	50,000K	Mon-Fri. 9:00-15:30
4	Computer Embroidery	2 months	50,000K	Mon-Fri. 9:00-15:30
5	Computer Embroidery	2 months	50,000K	Mon-Fri. 9:00-15:30
6	Sequin	2 months	50,000K	Mon-Fri. 9:00-15:30
7	Designing	2 months	50,000K	Mon-Fri. 9:00-15:30
Evening Special Trainings				
1	Western and Eastern Food	2 months	7,000K	15:30-17:30 Regular Class
2	Fruits, Food and Flower Decoration		5,000K	15:30-17:30 Regular Class
3	Hospitality		5,000K	Depending on demand
4	Bouquet	5 days	15,000K	Depending on demand
5	Embroidery	1 month	15,000K	Depending on demand
6	Sequin	2 weeks	15,000K	Depending on demand
7	Myanmar traditional Wedding Dress	2 weeks	80,000K	Depending on demand

Weekend Special Classes				
1	Sewing	2 months	10,000/ 15,000K	In feet/centimetre the same subjects as basic course

Note: Depending upon the type of skill training and duration, each trainee will have to buy necessary material and tools for training costing between 50,000 to 80,000 Kyat.

B. Nan Hteik Taw Win Private Training Center

No 43, Corner of 29 St and 72 St.

Contact Number: 02-31505, 09-5134987

Email: nantheiktawwin@gmail.com

No	Subject	Duration	Course Fees	Remark
1	Making Soft drinks (Concentrated juice)	1 week	150,000K	
2	Preserved Fruits and pickles	1 week	150,000K	Plum, Pine Apple, Lime, Tomato, Ppaya and etc
3	Making Ice-cream and Yogurt	1 week	150,000K	
4	Bakery	1 week	150,000K	Cakes and Breads
5	Making Varieties of Jelly	1 week	150,000K	
6	Snacks	1 week	150,000K	Fried potato, Dried bean and peas
7	Making Dim-sum	1 week	150,000K	
8	Homemade coconut preservation	1 week	150,000K	
9	Preserved meats	1 week	150,000K	
10	Making Sauce and Jams	1 week	150,000K	

The Brahmoso, Humanitarian Aid Organization

62nd Road, between 33X34 Streets, Chanayetharzan Township, Mandalay.

Contact Number: 02-66400, 02-39143, 09-74350

Email: brahmoso.info1@gmail.com

No	Subject	Duration	Course Fees	Remark
1	Basic Sweing Course	3 months	Not specified	Salary for the Trainer managed by the organization 100,000-150,000K/month
2	Repairing for motorbike at workshop		Not specified	It intends for long term plan and on job training at workshops, but the organization supports teaching Aid and apparatus for trainees about 40000-50000Kyat/time
3	Knitting	2-3 months	Not specified	Salary for the Trainer managed by the organization 50000K-100,000K/month

Note: There are some other courses such as Basic Computer and special classes for matriculation exam especially for students. For street children, there is a basic religious course program with an aim to build trust. The organization provides support in the form of foods and uniforms to students.

**Mandalay City Development Committee (MCDC)
Mandalay Urban Services Improvement Project (MUSIP)
Terms of Reference for Replacement Cost Study**

A. Background

The Government of the Republic of the Union of Myanmar has requested the Asian Development Bank (ADB) a project preparatory technical assistance (TA) to prepare the Mandalay City Urban Services Improvement Project (MUSIP). The project is expected to help Mandalay increase its development potential as a regional economic growth centre. The proposed project will improve urban environment and public health in Mandalay city. The outcome will be improved access to sustainable urban services. Climate change resilient designs will be introduced in infrastructure construction and upgrading.

However, besides the positive benefits, the project will also cause some adverse social impacts due to the acquisition of land for the proposed Waste Water Treatment Plant to be located at Yin Taw village track plot No. 608, Amarapura Township. The acquisition of land, mainly agricultural, will affect more than 40 households who use the land for cultivation. The acquisition will result in loss their land, loss of structures and business incomes. A draft Resettlement Plan (RP) for the project has been prepared with details of losses and estimated compensation based on the values of affected assets as stated by the respondents. The RP is now being revised based on updated information.

In accordance with the ADB's Safeguards Policy Statement (SPS) and the policy objectives and principles adopted in the project. all affected land and non-land assets will be compensated at replacement cost based on the current market prices. All land acquisition and resettlement will be carried out by the MCDC, the implementing agency for the project, through the Project Management Unit (PMU).

B. Objectives of the Assignment

The objective of the assignment is to determine unit rates, in terms of Kyat/sft or per ace as the case may be, for the affected land and different types of structures affected by the project based on their type of construction and use of building material. The rates must be based the current market prices for building material, labor cost and transport charges. The rate for affected land must be based on the current market prices on the principle of replacement cost.

MCDC wishes to mobilize a professional appraiser (valuation expert) to conduct assessment of affected land, structures and other fixed assets which will be affected by acquisition of land for the WWTP site. Under the proposed Replacement Cost Study (RCS) the consultant shall carefully assess different types of principal as well as auxiliary / secondary structures on all the affected land parcels for their diversity, and combination, of different types of material used and group them in four or five major categories based on combination of material used for different components of a building (foundation, walls, floor, walls, roof, etc.). Similar approach shall be used for secondary (or auxiliary) structures such as: boundary walls, guards kiosk, gates, wells, garage, kitchen, store, etc. The unit rates thus determined will be the basis for the final compensation entitlements to each of the affected entities and individuals and for finalizing contract between them and the MCDC.

C. Scope of Work

Approach. The establishment of unit rates will be carried out based on information collected from: (i) desk research; and (ii) market investigations. Desk research will focus on relevant materials of government authorities and will take into consideration the unit rates established by relevant government department, However, these materials will play the supporting role only. As the work is aimed at obtaining market rates for land and construction costs for different types of affected structures, market evidences are the factors which most strongly base the formulation of these

costs. Direct interviews with people in the construction industry such as: material suppliers and contractors will help produce reliable data for establishment of unit rates.

Data collection. The interviews will be conducted based on a pre-developed interview guide. Assessment of construction cost for different types of buildings would be, in addition to others, based on: (a) Interviews with owners of structures (type of main materials they used for their current structures; distance of transport; costs of various materials; labor cost); and (b) interviews with construction contractors (main materials which are most used by the local people to build their structures; costs of those main materials; cost of labor; average construction cost (cost per sft) for different types of structures according to different categories; and (c) validation of government construction prices (cost per sft for each category), if available.

Unit rates for land will be based on actual market transactions carried in the area of its vicinity in the recent past and interview of estate agents to determine market rates.

D. Outputs

Based on the activities carried out, the consultant should submit a brief report presenting: (i) methodology used; (ii) rates for land of similar type, category and attributes; (iii) table of costs of different types of building material used for construction based on the market surveys; and iv) the unit rates to be applied for the project for different types/categories of structures.

The report will also provide a table with comparable most recent rates of land transactions and structures as established by MCDC and other relevant government departments.

A similar table shall be prepared to indicate unit rates for different types of secondary structures: boundary fences, well, tube-well, stores, etc. The report will clearly define construction cost per sft of each category and type of structures based on cost of material, specifications, finishes, defining wage for a working day of construction worker, and transport cost, etc. The report should be produced in English and in Myanmar language. One copy each of the report will be submitted to the MCDC and the ADB.

E. Schedule

The tasks for the Replacement Cost Study will be a critical input to determine compensation for land and structures. Therefore, it is expected that this work will be undertaken as early as possible. The proposed RCS is expected to take not more than three weeks from the date of its commencement. Draft report (together with a soft/electronic copy) on the RCS should be submitted to the MCDC and the ADB.

F. Qualification and Experience Requirement

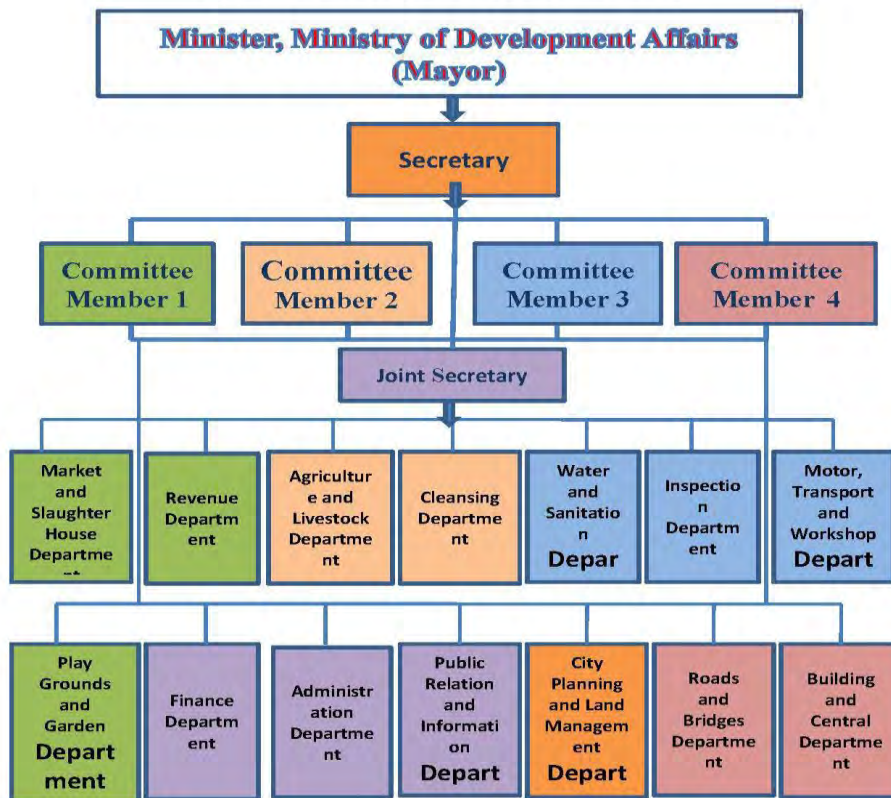
The consultant should hold a university degree and be a professional valuation expert with at least five years of professional experience in valuation of land and structures. He or she must possess a license registration to practice as a building valuation expert, or equivalent discipline, in Myanmar. He or she should be well conversant with application of market methodologies for valuation purposes; market trends in land and construction industry; and building regulations. The consultant should preferably have an experience of 2 years of working in similar field and conducting RCS for projects funded by WB or other international sponsors such as ADB. The consultant should preferably be fluent in written and spoken English.

G. Support by MCDC

The consultant shall report to the MCDC who will provide the consultant with: i) information on the affected land parcels; ii) other relevant information as necessary. MCDC will also assist in arranging access to, and coordination with relevant departments, local authorities and organizations, and access to affected entities, as necessary.

MCDC Organization Chart

Appendix :- Organisational Structure of MCDC



Annex M**Myanmar-Mandalay Urban Services Improvement Project (MUSIP)
PROJECT IMPLEMENTATION AND SUPERVISION CONSULTANT
Terms of Reference
Social Safeguards Expert/Resettlement Specialist****A. Background**

The Government of the Republic of the Union of Myanmar has requested the Asian Development Bank (ADB) a project preparatory technical assistance (TA) to prepare the Mandalay City Urban Services Improvement Project (MUSIP). The project is expected to help Mandalay increase its development potential as a regional economic growth centre. The proposed project will improve urban environment and public health in Mandalay city. The outcome will be improved access to sustainable urban services. Climate change resilient designs will be introduced in infrastructure construction and upgrading.

The project will cause some adverse social impacts due to the acquisition of land for the proposed Waste Water Treatment Plant to be located at Yin Taw village track plot No. 608, Amarapura Township. The acquisition of land, mainly agricultural, will affect about 17 households who use the land for cultivation. The acquisition will result in loss their land, loss of structures and business incomes. 8 households will be severally affected due to the loss of their land and/or loss livelihood due to the acquisition of cultivation land. Final Resettlement Plan (RP) for the project has been prepared with details of losses and estimated compensation based on the values of affected assets as stated by the respondents and is ready for implementation.

Project Implementation Support Consultant (PISC) contracted by MCDC to provide necessary technical support to MCDC and the PMO will include an international Resettlement and social development Specialist (6 person months) and a national resettlement specialist (12 person months) on an intermittent basis to assist and supervise all social and resettlement related activities. The resettlement consultant will have experience in both planning and implementation of resettlement plans in Myanmar and will help develop the capacity of MCDC and local officials of other relevant agencies responsible for updating, and internal monitoring of the RP. Specific tasks include:

- Assist PMO/MCDC in conducting necessary field surveys for updating of RP, as well as for preparation of RP for the linked projects, and provided needed technical support to facilitate its approval;
- Assist PMO in conducting cadastral and topographic survey of the WWTP site;
- Coordinate in conducting detailed measurement survey (DMS) based on detailed engineering design and update the list of affected persons to record any change from the preliminary design;
- Assist PMO in preparation of required materials to undertake effective information campaigns about the project resettlement related information, project implementation/construction schedule and conduct of public consultations;
- Assist in the conduct of the information campaign, public consultation, and community participation on social safeguards;
- Verify the assessment of compensation during the RP updating, conducted by the contracted appraiser, and make necessary amendments to the RP entitlement matrix, as necessary;
- Participate and monitor compensation payments to AHs and advise PMO on the actions needed to ensure compensation is paid in full and in a timely manner;

- Ensure that grievances are addressed promptly and properly and ensure proper documentation of grievances.

The **International resettlement and Social Development Specialists** should have a minimum of 10 years of relevant professional experience after graduation. He/she shall have a Master's Degree, or equivalent, in Anthropology, Sociology, Applied Social Science or other related fields. He/she shall have experience in the social impact assessments, detailed measurement surveys, implementing and monitoring resettlement and in conduct of public consultations. He/she must be familiar with Myanmar laws and regulation and in particular in land related issues, land laws and regulations. Additionally, the consultant shall be familiar with ADB's 2009 Safeguard Policy Statement (SPS) and its requirements.

The **national resettlement specialist** should have a minimum of 3 to 5 years of relevant professional experience after graduation. He/she shall have a Master's Degree, or equivalent, in Anthropology, Sociology, Applied Social Science or other related fields. He/she shall have experience in the social impact assessments, detailed measurement surveys, implementing and monitoring resettlement and in conduct of public consultations. He/she must be familiar with Myanmar laws and regulation and in particular in land related issues, land laws and regulations. Additionally, the consultant shall be familiar with ADB's 2009 Safeguard Policy Statement (SPS) and its requirements.

Annex N**Myanmar-Mandalay Urban Services Improvement Project (MUSIP)
EXTERNAL MONITORING AND EVALUATION OF
LAND ACQUISITION, RESETTLEMENT AND REHABILITATION
Terms of Reference****A. Background**

The Government of the Republic of the Union of Myanmar has requested the Asian Development Bank (ADB) a project preparatory technical assistance (TA) to prepare the Mandalay City Urban Services Improvement Project (MUSIP). The project is expected to help Mandalay increase its development potential as a regional economic growth centre. The proposed project will improve urban environment and public health in Mandalay city. The outcome will be improved access to sustainable urban services. Climate change resilient designs will be introduced in infrastructure construction and upgrading.

However, besides the positive benefits, the project will also cause some adverse social impacts due to the acquisition of land for the proposed Waste Water Treatment Plant to be located at Yin Taw village track plot No. 608, Amarapura Township. The acquisition of land, mainly agricultural, will affect about 17 households who use the land for cultivation. The acquisition will result in loss their land, loss of structures and business incomes. 8 households will be severally affected due to the loss of their land and/or loss livelihood due to the acquisition of cultivation land. Final Resettlement Plan (RP) for the project has been prepared with details of losses and estimated compensation based on the values of affected assets as stated by the respondents and is ready for implementation.

In accordance with the ADB's Safeguards Policy Statement (SPS) and the policy objectives and principles adopted in the project, all affected land and non-land assets will be compensated at replacement cost based on the current market prices. All land acquisition and resettlement will be carried out by the MCDC, the implementing agency for the project, through the Project Management Unit (PMO).

The core of the resettlement policy specified in the RP is that all affected persons are paid just and fair compensation for all their lost assets, incomes and businesses based on the principle of replacement cost. Additionally, implementation of the project component and civil works will cause temporary impacts on many roadside assets including temporary businesses and vendors. The resettlement policy specified in the RP provides for assistance to households and businesses affected temporarily during the implementation phase. An equally important part of the policy is that all the affected persons are duly informed of the project objectives, compensation policy and entitlement criteria, and grievance redress mechanism through an extensive public information campaign and consultation procedures.

In view of the need to assess the adequacy and effectiveness of the implementation of the above policy for the proposed project, regular monitoring of the implementation of the RP is a requirement. The independent External Monitoring Agency (EMA) may involve itself in all aspects of RP implementation and shall have access to all organizations involved and all project documentation. The implementation of the RP for the MUSIP is expected to begin in xxxxxx 2016. Therefore, the EMA is expected to begin monitoring for the RP implementation in xxxxxx 2016.

B. Objectives

General objective of the external monitoring is to provide an independent verification of the Borrower's monitoring information through the conducting of a periodic review and assessment of achievement of resettlement objectives, the changes in living standards and livelihoods, restoration of the economic and social base of the affected people, the effectiveness, impact

and sustainability of entitlements, the need for further mitigation measures if any, and to learn strategic lessons for future policy formulation and planning.

Specific objectives of external monitoring include:

1. To provide project management with an effective tool for assessing RP implementation at various stages.
2. To examine whether or not the implementation of the RP is carried out as planned and in compliance with the approved RP and identify the strengths and weaknesses of the present Resettlement Plan.
3. To identify problem areas and recommend immediately remedial measures for efficient implementation of the policy.
4. To provide inputs for future Resettlement Plan formulation and implementation.
5. To assess the effectiveness of 'income restoration and other rehabilitation measures for affected households and whether the APs, including vulnerable households, have been able to improve, or at least restore their livelihood and standard of living to pre-project level;
6. To assess effectiveness of the GRM established for the project, identify specific problems if any, and suggest improvement of the GRM.

C. Monitoring Targets

The EMA will focus on the following specific issues and indicators:

- a. Census and IOL (DMS of affected assets).
 - Land and ownership survey are completed properly and individual plots are delineated;
 - Land ownership is regularized based on the cadastral surveys and the land owners are provided with Form 7 by the Land Record office;
 - DMS of Affected lands and other assets is carried out properly and accurately and results of DMS are disclosed to the APs; and
 - Complaints or questions of affected households on the DMS results are addressed in a timely manner and to the satisfaction of the APs.
- b. Consultations with Affected Households and their knowledge on the entitlements
 - Relevant documents (RP, entitlement matrix, summary compensation forms specifying losses and entitlements for compensation and other assistance) are provided to the affected households;
 - Affected households are consulted on their needs and priorities for planning of income rehabilitation measures;
 - Affected households are informed and consulted regularly and adequately about the land acquisition issues; schedule of resettlement implementation; livelihood restoration; and grievance redress mechanism.
- c. Compensation and assistances provisions
 - All affected households are compensated for lost assets at replacement cost and provided with other allowances before the land is acquired.
 - Compensation for structure affected shall be equal to replacement prices of materials and labor based on the standards and typical structures of works, and free from reduction or salvaging of old materials.
 - Affected business are compensated following the provisions in the approved RP.
 - All types of assistances/allowances as envisaged in the approved RP are provided accordingly to the affected households.
- d. Income restoration and livelihood development

- Income rehabilitation measures are responsive to the needs and priority of the affected households;
 - The delivery of income rehabilitation measures (skill training, job creation, etc.) is in accordance with the schedule specified in the RP;
 - Effectiveness and sustainability of income rehabilitation measures provided to severely affected and vulnerable households and any problems that they may be facing in receiving the measures.
- e. Level of APs satisfaction
- Assessing the level of satisfaction of affected households in different aspects in RP implementation (information dissemination and public consultation, DMS, compensation payment, compensation unit rate, rehabilitation measures and restoration of living conditions etc.).
 - Assessing the level of satisfaction of affected households on the grievance mechanism.
- f. Coordination between the resettlement activities and construction schedule
Civil works can only be started when (i) land acquisition and resettlement activities (compensation, assistance and relocation) have been completed; and (ii) the income restoration program is in place.
- g. Gender Issues
- Participations of women in land acquisition and resettlement activities;
 - Impacts of land acquisition and resettlement on women's livelihoods; and
 - Participation of women in income rehabilitation activities.

D. Methodology

Monitoring methodology will consist of the following:

- a. Review of acquisition and compensation documents to ensure full compliance with policy requirements and to ensure that the entitlements for affected assets and assessment of compensation and allowances are determined in accordance with the policy in the RP. The review will also determine whether the documentation and the computerized database conform to the project requirements.
- b. EMA will conduct four (4) compliance monitoring visits during the RP implementation, each lasting for at least one to two weeks, to ascertain that:
- IOL/DMS forms correctly record all affected assets;
 - entitlements for compensation and allowances are correctly determined;
 - compensation is assessed based on the principle of replacement cost;
 - affected people are adequately informed of project objectives, impacts, compensation policy and entitlements through an effective public information campaign;
 - Grievance redress procedures are adequately explained to the people and the grievances, if any are affectively and timely resolved;
 - compensation has been duly paid prior to the start up of construction works under the projects;

Data Collection Methods

Data and information will be gathered through:

- Questionnaires, to be personally administered.
- Direct interviews with affected households.

- Specific focus group interviews aimed at identifying the specific problem issues related to groups such as land owners, tenants, workers affected by loss of job, women heads of households, etc.
- Community meetings to discuss problem issues and identify solutions
- Interview of and discussion with project staff in the field

Data Analysis

Data and information collected will be analyzed as necessary

Data Base Storage

The Monitoring Team will maintain a database of resettlement monitoring information that will be updated every three months. The information on each affected household will be updated based on information collected in successive rounds of data collection. All data bases compiled will be fully accessible to PMU.

E. Follow-Up Evaluation Study

Six to nine months after completion of resettlement implementation, the EMA will conduct a follow-up socio-economic evaluation study to assess the impact of the project on income levels and living standards of the affected people who are severely affected by the project and to check whether or not the APs have been able to improve, or at least, restore their standard of living and incomes. The assessment will focus on the achievements of resettlement plan targets and the change in the quality of life of affected persons. In case any gaps are identified, the report will recommend additional measures to enable the APs to achieve restoration of incomes, if necessary.

F. Outputs

EMA will conduct two (2) compliance monitoring visits during the RP implementation and one (01) follow-up study of post-implementation evaluation 6 to 9 months after completion of resettlement implementation.

The following outputs are expected from the assignment:

- a. Inception Report two weeks after mobilization of the EMA;
- b. External Monitoring Reports **every three months** to include:
 - (i) a report of progress of implementation of all aspects of RPs especially covering the monitoring indicators specified in Section C of this TOR;
 - (ii) deviations, if any, from the provisions and principles of the policy and procedures on land acquisition, compensation and resettlement;
 - (iii) identification of problem, issues and recommended solutions, so that PMU is informed about the ongoing situation, and can resolve problems in a timely manner; and
 - (iv) report progress on the follow-up of problems and issues identified in the previous report.

The first quarterly monitoring report for the MUSIP will be due on xxxxx 2016.

Follow up of Monitoring Reports

The monitoring reports should be discussed during a meeting between the Monitoring Agency and PMO held immediately after the submission of the report. Necessary follow-up action should be taken based on the problems and issues identified during reports and follow-up discussions.

Two copies each of the draft reports, in English, on the evaluation of resettlement implementation should be submitted to the PMO with simultaneous submission to the ADB.

Two copies each of the final reports should be submitted following the review of the draft report by the ADB.

The second compliance monitoring visit will verify completion of resettlement implementation and the external monitoring report will incorporate Resettlement Completion Report. Civil works will start one month after the verification of resettlement completion and submission of the Resettlement Completion Report by the EMA.