February 2017 Project Number: 47381-002

SRI: Mahaweli Water Security Investment Program

Minipe Left Bank Canal Rehabilitation (30+140 km to 72+960 km) MLBCR-NCB-2 to 5

Final Report (Main)

Prepared by Ministry of Mahaweli Development and Environment with the assistance of Program Management, Design and Supervision Consultant (Joint Venture Lahmeyer International GmbH – GeoConsult ZT GmbH) for Democratic Socialist Republic of Sri Lanka and the Asian Development Bank.

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Mahaweli Water Security Investment Program

DUE DILIGENCE REPORT 2 : 30+140 Km TO 72+960 Km MLBCR-NCB-2, 3, 4 & 5 - FINAL

February 2017



Program Management, Design and Supervision Consultant



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DUE DILIGENCE REPORT 2 : 30+140 Km TO 72+960 Km MLBCR-NCB-2, 3, 4 & 5 - FINAL

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ABBREVIATIONS

ADB	Asian Development Bank
BoQ	Bill of Quantities
CAPC	Cabinet Appointed Procurement Committee
CEA	Central Environmental Authority
DPC	Department Procurement Committee
EA	Executing Agency
EIA	Environmental Impact Assessment
EOI	Expression of Interest
FAM	Facility Administration Manual
GBL	Geotechnical Baseline Report
GOSL	Government of Sri Lanka
IA	Implementing Agency
ICTAD	Institute for Construction Training and Development
ID	Irrigation Department
ISEWP	Improving system efficiencies and water productivity
km	Kilometre
KMTC	Kalu Ganga-Moragahakanda Transfer Canal
m³/s	Cubic metres per second
masl	Metres above mean sea level
MASL	Mahaweli Authority of Sri Lanka
MCB	Mahaweli Consultancy Bureau
MCM	Million m ³
MDP	Mahaweli Development Program
MIWRM	Ministry of Irrigation and Water Resources Management
MLBCR	Minipe Left Bank Canal Rehabilitation
MFF	Multitranche financing facility
MFP	Ministry of Finance and Planning
MMDE	Ministry of Mahaweli Development and Environment
MPC	Ministry Procurement Committee
MPP	Master Procurement Plan
MRB	Mahaweli River Basin
NCPCP	North Central Province Canal Project
NPA	National Procurement Agency
NWPC	North Western Province Canal
PD-MWSIP	Program Director Mahaweli Water Security Investment
	Program
PD-UEC	Project Director – Upper Elahera Canal
PMDSC PPTA	Program Management, Design and Supervision Consultant
	Project Preparatory Technical Assistance
PSC	Program Steering Committee Resettlement Framework
RF RIP	
RPC	Resettlement Implementation Plan
SBD	Regional Procurement Committee Standard Bid Documents
SIWRM	Standard Bid Documents Strengthening Integrated water Resources Management
ToR	Terms of Reference
UEC	Upper Elahera Canal
	סאלי בומווכום כמוומו

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1 INTRODUCTION

1.1 Background

1. The Mahaweli River is the largest river basin in Sri Lanka, with a catchment of 10,300 km² and an average flow volume of 5,474 MCM (more than 10% of the national annual renewable water). The headwaters originate in the highlands of the wet zone, and the river flows to the northeast. It represents a large and strategically important water resource, which is being developed to meet the countries energy, water and food needs. The Mahaweli Development Program (MDP) was initiated in the early 1960s with the objective of developing the water and land resources of Mahaweli River Basin and the dry zone of the northern provinces for irrigation and power generations.

2. The Mahaweli Water Security Investment Program (MWSIP) is the final stage of the Mahaweli Development Plan, a multisector development of the water and land resources of Mahaweli River Basin and North Central Province. This is the end-point of an investment program that has spanned more than six decades and is pivotal in meeting national development goals of food security, social development, energy production and environmental protection

3. The North Central Provincial Canal Project (NCPCP)) has been split into 2 Phases (1 and 2) by the Ministry of Mahaweli Development and Environment with the aim of implementing the final stages of the MDP (refer to **Figure 1**). Phase 1 is the "Mahaweli Water Security Investment Program" (MWSIP) which is being financed through a Multi-Tranche Finance Facility (MFF) modality of 3 tranches from ADB. The Government of Sri Lanka has received from the ADB an ADF Loan of USD 74 Million and USD 76 Million Loan from ordinary capital resources, and has itself contributed USD 40 Million (total USD 190 Million), to support Tranche 1 of the MWSIP and an additional USD 495 Million is foreseen to finance the remaining 2 tranches of Phase 1 – financed through ADB, other donor co-financing and the Government of Sri Lanka (total USD 675 Million).

4. The Executing Agency (EA) is the MMDE on behalf of the Government of Sri Lanka (GoSL) and the Implementing Agency (IA), responsible for day-to-day management is the Program Management Unit (PMU), based in Colombo, and Project Implementation Units (PIU) for each of the three construction implementation component Projects. The Loan agreement signed between the GoSL and the ADB, stipulates that any "Involuntary Land Acquisition and Resettlement" (LAR) safeguards issues that arise during project implementation will require a Resettlement Implementation Plan (RIP)¹ or other appropriate document showing all impacts are mitigated in accordance with the government's relevant legislation and policies, and the existing Program Resettlement Framework, and particularly with ADB's Safeguard Policy Statement (SPS) 2009 and within the legal framework of Sri Lanka. ADB will only finance projects and programs that fully comply with its SPS (2009).

5. This document focusses on the findings of due diligence investigations, conducted by the PMU and PIU, supported by the "Program Management, Design and Supervision Consultant" (PMDSC), for a situation where a number of farmers, encroaching on canal reservation land, were identified in the Program' Minipe Stages (NCB) 2, 3 and 4 project locations of kilometre 30+140 to 72+960 between km 0 and 72+960 (refer to **Table 1**). It was feared, that these farmers may be impacted if required to cease agricultural activities on this reservation land in order to make way for civil works contractors space for construction and access to site. No construction would occur in the land reserve in all areas except in Stage 3, where a strip of reserve land would be permanently required for widening of a length of canal embankment road (Bogahawatta – Maraka – Radunna feeder canals). The study also considered the NCB-5 subproject that involved the installation of electric radial gate structures in selected locations

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¹ Resettlement Implementation Plan (RIP) is the legally accepted term in Sri Lanka for a Land Acquisition and Resettlement Plan (LARP) or Resettlement Plan (RP)

between 00+000 to 72+960; and the issue of potential water availability limitations caused by construction works during the two annual cropping seasons and the two off-season periods.

6. This Due Diligence Study has found that the farmers have signed to voluntarily release the encroached reservation lands, if temporarily required, during the construction period; while farmers in stage 3, voluntarily released land areas permanently for the purposes of the Bogahawatta – Maraka – Radunna feeder canals embankment road widening. There will also be minimal project induced impacts on canal water resources during the two cropping seasons (the off-season) periods. No impacts were found, in relation to NCB-5, although recommendations have been made to ensure safeguards remain compliant. The report provides recommendations for the EA and contractor in order to maintain compliance in accordance with ADB SPS (2009) and within the Policies and Laws of Sri Lanka.

SN	Sub-project Stage	NCB /ICB Number	From Km Chainage	To Km Chainage
1	Minipe Anicut Heightening and Left Bank Canal Rehabilitation Project - MLBCRP Stage 2	MLBCR-NCB-2	Km 30+140	Km 49+820
2	Minipe Anicut Heightening and Left Bank Canal Rehabilitation Project - MLBCRP Stage 3	MLBCR-NCB-3	Km 49+820	Km 63+650
3	Minipe Anicut Heightening and Left Bank Canal Rehabilitation Project - MLBCRP Stage 4	MLBCR-NCB-4	Km 63+650	Km 73+960
4	Minipe Anicut Heightening and Left Bank Canal Rehabilitation Project - MLBCRP - Rehabilitation and Electrification of Radial Gated Structures and Improvements to Cross Regulators	MLBCR-NCB-5	Located at Chainages: Km 20.789, 29.844, 30.431, 43.634, 57.961, 66.800, 69.006 and Karawgahawewa tank	

Table 1 : Sub-projects covered by this DDR 2²

1.2 Basis for this Due Diligence Study

7. In accordance with the Loan Agreement requirements, the EA and IA have informed the ADB that farmers have encroached into canal reservation, conducting agricultural activities. The encroachment in 30+140 to 73+960 area appears to be outside of the Minipe Left Bank Canal rehabilitation footprint area along the existing canal, while the Bogahawatta – Maraka – Radunna feeder canals under Stage 3 (NCB-3) includes some areas where a strip of land is required for permanent embankment road widening. In all cases, encroachers do have associated adjacent titled land. It was thought that some of the reserve land areas may be required to be used at times by the contractor during construction.

8. The Farmer Organization Leaders have given an assurance that all encroached farmers will voluntarily suspend their agricultural activities during the construction period, if they are required, in order to allow the Contractor's access to the canal and works sites. They also gave assurance that farmers would voluntarily release lands permanently, if required, for the project footprint, due to benefits they would receive from improved canal structures as a result of the Project. However, the Farmer Organization Leaders believed it was not their responsibility to request or enforce the

² Throughout the document each of the terms in this Table 1, Stage or NCB is used interchangeably.

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encroached farmers to stop their activities in related reservation areas. Until the Due Diligence Study, there had been no direct consultation with the encroaching farmers on this matter.³

9. The ADB has requested that an inventory of the reserve land encroachment area be conducted along the 74 kilometres of the canal in which construction will take place, and that a Due Diligence Report (DDR) be prepared to determine whether, or not, there will be Involuntary Resettlement (IR) impacts, based on ADB SPS (2009) and Sri Lanka laws. This second Due Diligence Report (DDR 2) covers the key length of the Minipe Left Bank Canal from Kilometre 30+140 to Kilometre 73+960, encompassing the MLBRCP-NCB-2, 3, and 4 Civil Works Contracts areas, the Bogahawatta – Maraka – Radunna feeder canals, as well as the proposed radial gates NCB-5 Civil Works contract locations (from 00+000 to km73+960). The first DDR was approved by ADB in August 2016, covering Kilometre 00+000 to Kilometre 30+140, and is now being implemented along with NCB-1 Civil Works Contact.

10. The objectives of this Due Diligence Study are to report the results of the inventory of the encroaching farmers, identifying impacts and results of consultations; followed by making recommendations to fill any identified potential gaps with SPS (2009) and the Resettlement Framework policies. The Study has focused on three potential areas in which SPS (2009) IR policy may, or may not, be triggered:

- (i) The Project canal rehabilitation and structures footprint.
- (ii) The construction contractor's activities, particularly accessibility through reserve land on which farmers have encroached.
- (iii) Potential for loss of access to water from the canal was also examined, given that access to public natural resources for livelihood is also another aspect of the SPS (2009) IR policy requirements that has to be considered.

³ "Encroachment" in the context of this report refers to encroachment on the canal wayleave and not necessarily on the contractors' wayleaves.

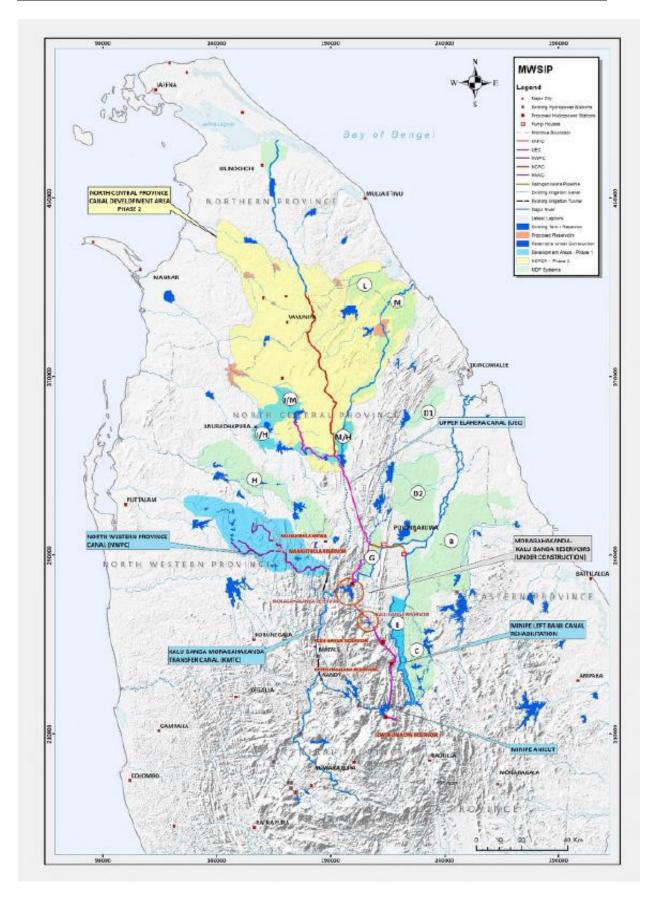


Figure 1 : Layout Map of the Mahaweli Water Security Investment Program

2 BRIEF MWSIP PROGRAM DESCRIPTION

11. Phase 1 Program Outputs include construction of new and improved water conveyance and storage infrastructure. There are five Project Components listed under the Program as shown below, three of which involve civil works (refer to **Figure 1**), split into several International (9) and National (9) Competitive Bidding Contracts, and two of which are consultancies:

- (i) Minipe Anicut Heightening and Left Bank Canal Rehabilitation Project (MLBCRP) (**Figure 2**) this report specifically relates to due diligence studies under this MLBCRP.
- (ii) Upper Elahera Canal Project (UECP).
- (iii) North Western Province Canal Project (NWPCP).
- (iv) Improving System Efficiencies and Water Productivity (ISEWP).
- (v) Strengthening Integrated Water Resources Management (SIWRM).

2.1 Upper Elahera Canal (UEC)

12. Construction of approximately 82 kilometers of canal (including 28 km of tunnels) connecting the Moragahakanda Reservoir to the existing tanks of Huruluwewa, Manankattiya, Eruwewa and Mahakanadarawa. The Kalu Ganga-Moragahakanda Transfer Canal (KMTC) under this component will include the construction of approximately 9 km of transfer canal (including 8 km of tunnels) for the transfer of water between Kalu Ganga and Moragahakanda Reservoirs. The civil works will be carried out through 7 international contracts – one contract under Tranche 1; three proposed in Tranche 2; and four in Tranche 3 (**Figure 1**).

2.2 North Western Province Canal (NWPC)

13. NWPC includes the construction of 96 km of new and upgraded canals (including 940 m of tunnel) for transfer of water from the Dambulu Oya River and the existing Nalanda and Wemedilla Reservoirs to the cascade irrigation systems and Mahakithula and Mahakirula Reservoirs with a combined storage volume of approximately 26 MCM linked to the NWPC. It will be constructed through 8 civil works contracts – one national and two international in Tranche 1; and five national contracts for civil works proposed for Tranche 3 inclusion (Figure 1).

2.3 Minipe Anicut Heightening and Left Bank Canal Rehabilitation (MLCBR)

14. The MLBCR component of the program includes the heightening of the Minipe diversion weir (anicut) (downstream of the Rantembe Dam) by approximately 3.5 meters, construction of new intake gates to the Minipe Left Bank system, construction of emergency side spillways on both the Left and Right Bank system, and rehabilitation of approximately 74 km of the Left Bank system to improve conveyance and reliability of service to existing irrigated lands (**Figure 1 and 2**). All civil works contracts (one international and five National) are covered by Tranche 1 (**Figure 1**).

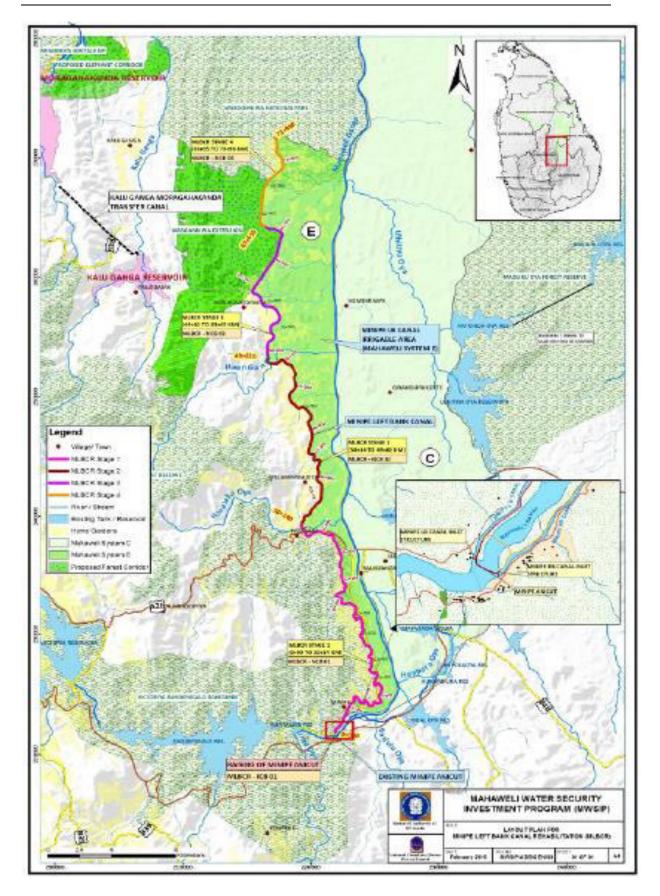


Figure 2 : Minipe Left Bank Canal Rehabilitation Project

15. The MLBCR component includes six civil works packages, including one through International Competitive Bidding (ICB) and five through National Competitive Bidding (NCB) including one mechanical and electrical component for rehabilitation and motorization of gated structures. The MLBCRP ICB-1, which has no involuntary resettlement impacts⁴ involves heightening of the existing concrete weir (anicut) to add upstream storage (needed to compensate for greater daily flow variations due to peaking operation of the upstream power stations) and rehabilitation of regulating structures and desilting of the main canal (**Figure 2**). This report mostly refers to this Project, particularly the length of canal rehabilitation covered by National Competitive Bidding 2, 3, and 4 (NCB-2, NCB-3 and NCB-4) packages covering Km 30+140 to 73+960, as well as NCB-5 which covers rehabilitation and electrification of radial gated structures and improvement of cross regulators along the full 74 kilometers of the Minipe Left Bank Canal (Also refer to Maps presented in (**Annex B**).

2.3.1 Description of MLBCRP NCB-2 (Stage 2) – Km 30+140 to Km49+820

16. The scope of this MLBCRP-NCB-2 contract package, as written in bidding documents, includes Rehabilitation of Minipe Left Bank Canal – Stage 2 (30+140 km to 49+820 km). The rehabilitation works under this Contract will consist of the following work items:

- (i) Clearing vegetation, water weeds in the canal bed, secondary growth in canal banks.
- (ii) De-silting along the canal where necessary and forming definition walls on left hand side.
- (iii) Construction of new cross regulators and improvements to existing ones.
- (iv) Construction of definition walls and drainage inlets with gabions.
- (v) Modifications and improvements to existing turnout structures, vented causeways and cross regulators.
- (vi) Improvements to existing bridges.
- (vii) Construction of a clay curtain wall at 35 + 180 km on right hand side.
- (viii) Construction of concrete curtain walls to existing retaining walls and construction of new retaining walls.
- (ix) Construction of bathing steps and side drain inlets at bridges.
- (x) Flood damage repair to downstream of Okirikotuwa Canal spill and canal spill at 49+513 km.
- (xi) Improvements to existing causeway ramps.
- (xii) Casting and fixing boundary posts and kilometre posts.

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⁴ Refer to "July to September Resettlement Monitoring and Evaluation Report No. 3", disclosed on ADB website.

2.3.2 Description of MLBCRP NCB-3 (Stage 3) – Km 49+820 to Km 63+650

17. As per the bidding documents, the scope of this MLBCR-NCB-3 contract package includes the Rehabilitation of Minipe Left Bank Canal – Stage 3 (49+820 km to 63+650 km). The rehabilitation works under this Contract includes the following work items:

- (i) Clearing vegetation, water weeds in the canal bed, secondary growth in canal banks.
- (ii) De-silting along the canal where necessary.
- (iii) Construction of new cross regulators.
- (iv) Construction of definition walls and drainage inlets with gabions.
- (v) Modifications and improvements to existing turnout structures, vented causeways and cross regulators.
- (vi) Improvements to existing bridges.
- (vii) Construction of curtain walls to existing retaining walls and construction of new retaining walls.
- (viii) Construction of bathing steps and side drain inlets at bridges.
- (ix) Construction of waste canal from Pallegama Road Crossing up to Namini Oya Canal spill to prevent entering waste coming from Hettipola town to canal.
- (x) Canal lining with gabion boxes and concrete base.
- (xi) Improvements to Bogahawatta Maraka Radunna feeder canals.
- (xii) Construction of trapezoidal canal sections with ceramic measuring gauge
- (xiii) Casting and fixing boundary posts and km posts.

2.3.3 Description of MLBCRP NCB-4 (Stage 4) – Km 63+650 to Km 73+960

18. The scope of the MLBCR-NCB-4 contract package, as written in bidding documents, includes Rehabilitation of Minipe Left Bank Canal – Stage 4 (63+650 km to 73+960 km). The rehabilitation works under this Contract consist of the following work items:

- (i) Clearing vegetation, water weeds in the canal bed, secondary growth in canal banks.
- (ii) De-silting along the canal where necessary.
- (iii) Construction of definition walls and drainage inlets with gabions.
- (iv) Modifications and improvements to existing turnout structures, vented causeways and cross regulators.
- (v) Improvements to existing bridges.
- (vi) Construction of curtain walls to existing retaining walls and construction of new retaining walls.
- (vii) Construction of bathing steps and side drain inlets at bridges.
- (viii) Rock excavation and canal bed concrete lining.
- (ix) Construction of trapezoidal canal sections with ceramic measuring gauge
- (x) Casting and fixing boundary posts and km posts.

2.3.4 Description of MLBCRP NCB-5 – Rehabilitation and Electrification of Radial Gated Structures and Improvement of Cross Regulators

19. The MLBCR-NCB-5 contract package, as written in bidding documents, includes rehabilitation and electrification of radial gate structures and cross-regulators; installation of water level and weather recording equipment as well as control center. More specifically, works under this Contract will consist of the following work items:

- (i) Rehabilitation and electrification of gates of 8 Nos Radial Gated Structures along the left Bank Minipe Canal:
 - a) Rehabilitation and improvements to mechanical components of Gates
 - b) Electrification of gate operations The hydro- mechanical equipment of Minipe anicut consist of 24 radial gates at 8 different locations. These radial gates are used to regulate water and currently operated by manually by human labor. All those gates are needed to be controlled both manually and electrically. Power lines and power from Ceylon Electricity Board will be supplied through MMDE.
- (ii) Rehabilitation and improvements to gates in three Cross Regulators in the Minipe Left Bank Canal.
- (iii) Supply and installation of three Automatic Water Level Recorders at the specified locations along the Minipe Left Bank Canal, including data transmitting arrangements to Central Control Center (Table 2).
- (iv) Supplying and fixing an automatic weather station at Hasalaka Irrigation Engineer's Office.
- (v) Establishment of control center at Minipe Irrigation Engineer's Office at Hasalaka under the Provisional Sum Items Provided

Table 2 : Automa tic level recorders along MLBC length (exact locations to be confirmed)

Station* Location		Description
31+860	Beginning of Stage 2	After the existing cross regulators at 31+848
50+000	Beginning of Stage 3	After Heenganga aqueduct
63+660	Beginning of Stage 4	After the proposed cross regulator at 63+650

* Exact locations to be shown by the Engineer to suite site conditions

3 ASSESSMENT OF POTENTIAL IMPACTS

20. This section assesses the potential impacts. Firstly, a summary is provided of the inventory of farmers and other residents that are using reservation areas and are identified as potentially affected (referred to as encroachers, or Potentially Affected Persons (PAPs)). An assessment is then presented of key accessibility requirements in the occupied reservation and other areas to the construction sites and of construction activities to water resources availability.

3.1 Inventory of Encroaching Farmers

21. An inventory of assets of encroaching farmers was conducted by the MLBCR PIU and MWSIP PMU to quantify the potential impact of the Project on encroaching farm assets that are within the Canal Reserve areas for Kilometre 30+140 to 73+960.

22. The survey was conducted during the period of June to November 2016 led by the Project Director of MLBCR PIU, under the guidance of PMU and PMDSC resettlement safeguards specialists and with the assistance of farmer organisations of the Minipe colonization scheme. The methodology adopted for the inventory was to fill out a questionnaire by the farmer leaders, who were well aware of the locations of encroachments, their size of lands and the farmers responsible. The task was given to each farmer group leader responsible for respective turnouts who filled in the form to give the necessary data and information (**Annex A, F, I** and J).⁵ The forms completed by farmer leaders, included all names of farmers who utilize the canal area reserve. The data that was collected by farmer leaders included:

- (i) Number of encroachments and name of encroachers
- (ii) Extent of encroached lands
- (iii) Cropping patterns
- (iv) No. of structures and their purposes
- (v) Farmer organizations
- (vi) Turnouts
- (vii) Cultivation seasons

23. Within the canal reserve in along the MLBCRP Stages 2, 3 and 4 areas 464 plots of land are encroached by adjacent farmers. However, not all of these encroachments may potentially be affected by the Project. This section discusses the baseline information inventory of encroaching farmers, focussing only on those that may experience impact due to the Project. **Annex I** also presents the results of the inventory for each individual Encroachment in reserve area, indicating if they may be potentially impacted - affected persons PAPs) - and whether the land area may need to be released for the construction contractor to temporarily use or released for permanent use of embankment road widening (Stage 3 only).

⁵ Additional data for those farmers agreeing to voluntary acquisition of encroached lands on which they farm, is supplemented through information collected on the agreement documents.

3.1.1 Numbers of Encroaching Farmers

24. **Table 3** presents the number of potentially affected people and plots. There are 161 farmers (168 plots) living along the canal reserve area, although some are currently not conducting agricultural activities. However, there are 55 farmers, all in Stage 3 subproject, that will have access to a small area of encroached land permanently affected by the footprint of the canal embankment with road which will be widened under this Project. The areas on which NCB-5 contracts will be located, did not show any encroachment, as it is state land.

25. During the survey, it was noticed that all encroachers, or their children or relatives of the scheme, are legal land holders of adjacent lands. Therefore, all the encroachers are settlers of the Minipe colonization scheme who are descendants of existing legitimate land holders.

SN	Stage/NCB Section	Description	Quantity
	Stage 2	Total No. of Plots affected	34
		No. of Plots with Permanent Losses	-
1		No. PAPs	34
		No. of PAPs with Permanent Losses	-
		Total No. of Plots affected	117
2	Stage 2	No. of Plots with Permanent Losses	55
_	Stage 3	No. PAPs	110
		No. of PAPs with Permanent Losses	55
	Stage 4	Total No. of Plots affected	17
3		No. of Plots with Permanent Losses	-
5		No. PAPs	17
		No. of PAPs with Permanent Losses	-
		Total No. of Plots affected	-
4	NCB 5	No. of Plots with Permanent Losses	-
4		No. PAPs	-
		No. of PAPs with Permanent Losses	-
Total	Total No. of Aps (Farmers)		
Total	Total No. of Plots potentially affected		
Total	Total No. of Plots potentially temporarily affected		
Total	No. of Plots (permanent	55	

Table 3 : Number of Encroaching Plots and affected people by Stage/NCB section

Please note that 08 radial gates will be installed at different locations of the canal where lands are belonging to the State at KM. 20.789,29.844,30.431,43.634,57.961,66.800,69.006 and Karawgahawewa tank

26. When the reservation lands are available close to the legitimate allotments of the farmers, such lands are often occupied without the consent of the authorities in the country. This has been a normal practice throughout modern Sri Lankan history. This is most likely permitted because authorities are not keen to enforce clear reserve land unless the particular land is needed for development purposes of the government. Although this is a reason for lack of enforcement relating to land encroachment, at the same time it does not necessarily make any argument for or against compensatory requirements for land use in the project, in accordance with ADB SPS (2009).

3.1.2 Land Encroachments

27. The total encroachment area (**Table 4**), amounts to 6.8 Hectares of which 4.65 Ha will be permanently used under the footprint for the canal embankment in Stage 3. The permanently lost land amounts to approximately 9.1% of total land area held by this group of farmers that will permanently

lose access. The encroached area includes paddy, maize and mixed cropping systems as well as some areas under no cultivation. No temporary or permanent land losses are foreseen in locations of NCB-5.

SN	Stage/NCB Section	Description	Quantity (A. R. P.)	Quantity (Hectares)
1	Stage 2 (NCP 2)	Extent of Encroaching Lands Temporary lost	A.01 R. 01 P. 17	0.54 (approximately)
1	Stage 2 (NCB-2)	Extent of Encroached area permanently lost	-	-
2 Stage 3 (NCB-3)	Extent of Encroaching Lands Temporary lost	A.03 R. 01 P.02	1.28 (approximately)	
		Extent of Encroached area permanently lost	A.11 R. 02 P.12	4.65 (9.1%) (approximately)
3	Stage 4 (NCB-4)	Extent of Encroaching Lands Temporary lost	A R. 03 P.21	0.35 (approximately)
5		Extent of Encroached area permanently lost	-	-
		Extent of Encroaching Lands Temporary lost	-	-
4	NCB-5	Extent of Encroached area permanently lost	-	-
Extent of Encroaching Lands Temporary lost				2.17 Ha (approximately)
Tota	Total Extent of Encroached area permanently lost			4.65 Ha (approximately)
Tota	Total extent of Encroached Lands Area lost (temporary and permeant)			6.82 Ha (approximately)

Table 4 : Number of Encroaching Plots and affected people by Stage/NCB section

3.1.3 Crops and Trees

28. The inventory recorded 168 allotments with 12 categories of crops and trees (**Table 5**), the highest number of which were 152 allotments of paddy, followed by mixed cropping (8) and no cultivation (5). The farmers earn steady income from permanent crops mostly in the form of a seasonal income, either two times or four times per year, depending upon the crop.

29. Income from paddy provides two incomes per year in the Maha (September to March) and Yala (May to August) rice cropping seasons. It has been observed that over 90% of these encroachers have other legitimate paddy lands in the same scheme, adjacent to the reserve area, which earn them substantial income.

30. The number of trees affected are present in **Table 6**. The highest loss will be Bananas (21) followed by coconut (13), Pepper (8) and Teak (8). These are all on the NCB-3 area where the embankment road widening is proposed. No trees of crops are impacted in NCB-5 locations.

۵	Description/Quantity	Stage 2 (NCB-2)	Stage 3 (NCB-3)	Stage 4 (NCB-4)	NCB-5	Total
1	Number of Paddy Allotments	34	101 (39)	17	-	152 (39)
2	Coconut	-	1	-	-	1
3	Maize	-	3	-	-	3
4	no cultivation	-	5	-	-	5
5	Mee	-	1	-	-	1
6	Triticale	-	3	-	-	3
7	*Number of Mix Crops Allotments	-	8	-	-	8

 Table 5 : Number of Tree and Cropping Allotments

Table 6 : Number of Trees on Affected Plots

D	Description/Quantity	Stage 2 (NCB-2)	Stage 3 (NCB-3)	Stage 4 (NCB-4)	NCB-5	Total
1	Mango	-	1	-	-	1
2	Coconut	-	13	-	-	13
3	Ari (betel) nut	-	5	-	-	5
4	Banana	-	21	-	-	21
5	Pepper	-	8	-	-	8
6	Mahogany	-	4	-	-	4
7	Teak	-	8	-	-	8

3.1.4 Structures

31. Within the canal reserve land there are 183 plots with structures, mostly houses and number of shops. However, none of these structures are located within identified potentially affected areas in NCB-2, 3 4 or 5. There will be no temporary or permanent impacts on structures otherwise an RIP process will be in accordance with the ADB/GoSL requirements in Section 5 (below) and RIP implementation will be completed prior to construction commencing.

3.2 Identification of Reservation Lands Potentially Affected by Construction

32. An examination of locations of structures to be constructed under NCB-2, 3, 4 and 5 packages were conducted during site visits by PMU, PIU and PMDSC on 21-24 June 2016 in order to identify the cultivated reservation lands which will be affected by the reconstruction or rehabilitation of turnouts, definition walls, bridges and spillways in the Minipe Left Bank Canal Rehabilitation Project. These would be the key areas, where access through occupied reservation lands may be required, if it is not possible from the canal embankment road. During the visit, proposed structures to be constructed (canal rehabilitation and reconstruction or rehabilitation of turnouts, definition walls, bridges and spillways) under the project were identified, along with their location with information of surrounding land tenure type for accessibly. This section, and in Annex D, presents a summary of the findings of this examination. Annex B presents four sets of Maps on which the permanent, available road accesses and the project engineering structure locations are marked. Photographs of structures and roads are presented in Annex C. Also, assessed, were logistics in which contractors would need to move machinery and materials and execute construction. It should be noted that some of the recommended mitigations for structures to be constructed have been repeated under the various NCBs below for easy reference, given that each NCB contract may be awarded to different firms, depending upon bid evaluation results.

3.2.1 Site Access

33. The accesses include main roads, secondary roads and car/jeep tracks. The need for involuntary resettlement will be avoided by the contractor restricting its construction activities, space and accesses as much as possible to the already existing embankment roads and tracks, as marked on the Maps (Annex B). While a number of these structures will be accessible off roads, car tracks and bund roads, there were also a number of structures, being constructed, mostly on the left-hand side of the canal which, in some cases, short accesses will be required across reserve area that is being farmed and some areas of encroached reserve farmland may be required for materials stockpiling and to access the canal banks for rehabilitation. Notable from Annex D and the field visit is that for all locations, the access for construction by the contractor will be through Government, reserve titled land and hence, no private land acquisition will be necessary. Farmers (100%) have signed letters which give no objection to the contractors utilizing encroached land areas near the canal for construction purposes (Annex J).

34. At this stage the actual magnitude, and exact location, of encroached reserve land that the contractor might need for its access, and for what period of time, is unknown until the contract is awarded, the contractor mobilizes and prepares his construction plan. It will be a requirement that the PIU, with contractor, consult with each (100%) of the farmers on which reserve land will be used by the contractor. If there are any objections or grievances, alternative routes will need to be found or, if no alternatives are possible, the RIP processes will commence to ADB SPS (2009) requirements. No trees or structures will be impacted, otherwise the RIP process will be enacted to ADB SPS (2009) requirements.

3.2.2 MLBCRP NCB-2 (Stage 2) –30+140 Km to 49+820 Km

35. Key structures to be constructed under the NCB-2 Contract located between Kilometre 30+140 to kilometre 49+820 include turnouts, definition walls, bridges and spillways as follows (Refer to Maps in **Annex B**, Photographs **Annex C** and Accessibility records **Annex D**).

3.2.2.1 Turnouts

36. Thirty-seven turnouts to be rehabilitated or reconstructed under this contract. Three turnouts are in state reservation lands and will not impact on encroachment (D2, D17 & D18). The remaining 34 turnouts will affect encroached reservation lands presently occupied by farmers whom are mostly cultivating paddy in two seasons each year. The construction space for rehabilitation of a turnout will affect one or two encroached reservation lands which are located one side or both sides of the turnout.

37. 335 encroachers signed no objection letters, although only 34 land parcels were identified and potentially affected. All farmers (100%) in the impacted area signed the non-objection letters. There were four encroachers who did not give their consent as they are living outside of the impacted area. Although 335 encroachers have signed no objections to utilising the encroached land areas for construction contractors' use, only those with encroached land areas near the canal that may be potentially impacted by contractor's temporary land use have been presented in **Annex J**. The access roads are available to transport construction materials.

3.2.2.2 Definition Walls and Retaining Walls

38. Twelve definition walls and nineteen retaining walls will be constructed in order to protect the canal from erosion and to limit the canal flow, depth and width. Most definition walls are to be constructed on the left side of the canal, while all but 3 retaining walls will be constructed on the right side of the canal (2 of these are right and left bank construction). The canal road runs along most of the length of the left-hand side of the canal, which will make for easy access in constructing the definition walls. However, there is very limited road access to the right-hand banks of the canal. Therefore, the materials can be transported via the main roads and canal bund road, but will also need to access the site on the right-hand side of the canal, in which most of these retaining walls will be constructed, and which do not have direct road access.

39. The construction materials and machinery will need to be stockpiled at the construction site or moved across the canal area, to avoid the building of large scale access tracks. Bidding documents require that in cases where direct access is not available from the roads and bund roads, then materials and machinery will need to be transported through the canal itself in the off-season. There are times when irrigation canal authorities will close off water supply in the canal (during off-season), which is annual practice, but time lengths and dates change each year. At this time, the communities utilize the common or household wells for their water supply requirements. During this time the contractors will be required to move their machinery and materials. It is possible to send bulk materials and machinery to be stockpiled on the right bank at one or two times, with the contractor only requiring to arrange labour and smaller materials as needed to cross a flowing canal.

40. The contractor will not be permitted, without PMU/the Engineer's approval, to block canal water flow for any reason that is in addition to the regular practice by irrigation authorities. Additional time requirement for using a dry canal, disrupting canal water supply, will be in coordination with dry season closures by authorities and people within the affected areas of water supply shall be consulted. This may only be up to a maximum addition of one month (ie. 3 months from August to October). There may be a requirement for the contractor to supply water for consumption for affected communities if recharging of wells is required, but is not possible through opening the canal. Materials may be stored on the state lands in close proximity to the construction sites.

3.2.2.3 Bridges

41. Thirty existing vehicle and foot bridges, used for by transportation of goods and for movement of people over the canal, will be rehabilitated. At each bridge rehabilitation site, there are available access roads for transport of materials and availability of state lands for the storing of construction materials. Therefore, there is no effect to the encroachments in the reservation lands from the rehabilitation of

bridges (**Annex C**). However, during construction, the contractor must provide continuous, alternative access across the canal, in close proximity to existing crossings (in the case of walkways) and the closest routing which will be adequate for all vehicular traffic (cars, trucks etc), also providing adequate signage pointing the public through the alternative route.

42. Furthermore, similar to the situation with the definition and retaining walls (3.2.2.2), the contractor will not be permitted, without PIU/the Engineer's approval, to block canal water flow for any reason that is in addition to the regular practice by irrigation authorities. Coffer dams, diversions and any other similar devices, will be used where possible. During the times when the irrigation canal authorities will close off water supply in the canal (during off-season), the contractors will be required to conduct activities that require a dry canal bed.

3.2.2.4 Canal Spillways

43. Ten existing canal spills will be rehabilitated under the NCB-2 contract. The access is available through the bund road for the transportation of construction materials. However, during the construction period road should be closed for the rehabilitation of causeways which are located across the road. Therefore, alternative access roads should be identified as a detour to enable movement of vehicles and people to conduct their daily livelihood activities with as little as possible disruption. During the field visit it was found that there are a number of alternative access roads available in the area for vehicles and pedestrians to detour around the spillway construction sites. It was identified that no effect to the encroachments of reservation lands on the rehabilitation of canal spills (**Annex B** and **C**).

3.2.2.5 Rock excavation and canal lining

44. Two sections of the canal will be lined laying concrete at the bottom of the canal. There are four sites of the canal where rock removal shall be carried out to allow improved water flow. The bid document, hence contract, requires this construction work be undertaken during the off season so that there will be minimal disruption to water availability. Access is available through bund road and will, therefore, not impact adjacent cultivated lands.

3.2.2.6 Dumping Sites

45. Two sites were identified for temporary dumping and stockpiling of debris and excavated spoil, removed during the clearing of the canal. Furthermore, the that PIU expects excavated debris will be temporarily stockpiled on the embankments of the roads without effect to roads or environment.

46. If additional dumping or stockpile sites are required, they shall be on Government land that is compliant with the EMP and does not impact on any private or encroaching PAPs. The contractor shall be required to make reparation measures to these sites back to the pre-project state, as a minimum standard.

3.2.3 MLBCRP NCB-3 (Stage 3) – Km 49+820 to Km 63+650

47. Key structures to be constructed under the NCB-3 Contract from km 49+820 to 63+650 include turnouts, definition walls, bridges and spillways as follows (Refer to Maps in **Annex B**, Photographs **Annex C** and Accessibility records **Annex D**).

3.2.3.1 Turnouts

48. Stage 3 will include construction and rehabilitation of 27 turnouts are located from D35 to D57, all of which access from the canal bund and other roads is available. However, during the construction period the encroached reservation lands might be required by the contractor for temporary stockpiling the materials and other temporary uses for a short period. Therefore, the consent was obtained from

55 farmers using reservation land along the canal area, for temporary use these allotments for construction works if necessary.

49. All farmers (100%) have given their consent in writing to PIU. However, it will be a requirement that the PIU, with contractor, consult with each (100%) of the farmers on which reserve land will be used by the contractor, to ensure they still have no objection or claims. Full records will be kept on consultations and reported in PMDSC Resettlement Monitoring reports. Objections or grievances will require alternative routes to be found or RIP processes will commence.

3.2.3.2 Definition and Retaining Walls

50. There are four retaining walls expected to be constructed under this program. Construction activities will be carried out where the canal embankments are placed and, therefore, not effect cultivated lands. Constructions materials can be transported through canal road where vacant state lands have been identified for storage of materials. Thirteen definition walls will be built in order to define the canal route and enable efficient water flow in the canal. Accordingly, definition walls are located at state lands where access is available. There is no effect to private or encroached reservation lands by this construction.

51. Some of the retaining and definition walls are located on the opposite side of the canal embankment road, where there is no road access. Therefore, construction materials and machinery will need to be stockpiled at the construction site or moved across the canal area, to avoid the building of large scale access tracks. Bidding documents require that in cases where direct access is not available from the roads and bund roads, then materials and machinery will need to be transported through the canal itself in the off-season.

52. There are times when irrigation canal authorities will close off water supply in the canal (during off-season), which is annual practice, but time lengths and dates change each year. At this time, the communities utilize the common or household wells for their water supply requirements. During this time the contractors will be required to move their machinery and materials. It is possible to send bulk materials and machinery to be stockpiled on the right bank at one or two times, with the contractor only requiring to arrange labour and smaller materials as needed to cross a flowing canal. The contractor will not be permitted, without PIU/the Engineer's approval, to block canal water flow for any reason that is in addition to the regular practice by irrigation authorities.

3.2.3.3 Bridges

53. Fifteen vehicle and nine foot bridges will be rehabilitated under this project where bridges are located in the state lands. For construction, present access roads can be used and materials can store at state lands close to the construction sites. Therefore, there is no effect to the encroachments in the reservation lands from the rehabilitation of bridges (**Annex B, C and D**). However, during construction, the contractor must provide continuous, alternative access across the canal, in close proximity to existing crossings (in the case of walkways) and the closest routing which will be adequate for all vehicular traffic (cars, trucks etc), also providing adequate signage pointing the public through the alternative route.

54. Furthermore, the contractor will not be permitted, without PIU/the Engineer's approval, to block canal water flow for any reason that is in addition to the regular practice by irrigation authorities. Coffer dams, diversions and any other similar devices, will be used where possible. During the times when the irrigation canal authorities will close off water supply in the canal (during off-season), the contractors will be required to conduct activities that require a dry canal bed.

3.2.3.4 Canal Spillways

55. There are six canal spills that will be rehabilitated under this project. Spills are located in the canal itself where no effect to private or encroached lands. The access is available through the bund road for

the transportation of construction materials. However, during the construction period the road shall be closed for the rehabilitation of causeways which are located across the road. Therefore, during construction, the contractor must provide continuous, alternative access in place of the blocked causeways, in close proximity to existing crossings or the closest routing which will be adequate for all vehicular traffic (cars, trucks etc.). Construction materials can be stockpiled and stored at the construction sites, where the land area belongs to the Irrigation Department.

56. Similar to the bridges construction (3.2.3.3), the contractor will not be permitted, without PIU/the Engineer's approval, to block canal water flow for any reason that is in addition to the regular practice by irrigation authorities. Coffer dams, diversions and any other similar devices, will be used where possible. During the times when the irrigation canal authorities will close off water supply in the canal (during off-season), the contractors will be required to conduct activities that require a dry canal bed.

3.2.3.5 Canal Lining

57. There are nine sections of the canal to be lined for the purpose of soil erosion protection and water flow efficiency. As these are part of the existing canal alignment, no private or encroached lands will be affected by these construction activities.

58. Access for materials to be transported to site is available through the canal bund road and will not impact adjacent cultivated lands. Lining will be carried out during off seasons/dry period of the canal. Construction materials can be stored in the construction sites where the available state lands. The bid document, hence contract, requires this construction work be undertaken during the off season so that there will be minimal disruption to water availability. The contractor will not be permitted, without PIU/the Engineer's approval, to block canal water flow for any reason that is in addition to the regular practice by irrigation authorities.

3.2.3.6 Rehabilitation and construction of Other Structures

59. Heenganga Aqueduct at Km 49+820, a cross regulator and drainage inlet at km 53+200 and Km 56+400, respectively will be rehabilitated. A new cross regulator shall be constructed at Km 63+650. There is no effect to the private or encroached lands by these construction activities because all sites are located at the state lands along the existing canal alignment. Access to the construction sites is available through canal bund road.

60. The contractor will not be permitted, without PIU/the Engineer's approval, to block canal water flow for any reason that is in addition to the regular practice by irrigation authorities. Coffer dams, diversions and any other similar devices, will be used where possible. During the times when the irrigation canal authorities will close off water supply in the canal (during off-season), the contractors will be required to conduct activities that require a dry canal bed.

61. An area from Bogahawewa to Marakawewa to Radunnewewa is to be de-silted and the embankment widened with canal bund road constructed in some areas. Lining will also be included for short lengths of these two feeder canals. Some encroached land shall be permanently affected. Fifty-five encroaching farmers have volunteered strips of land area, as a permanent loss of cropping space, and signed letters to this effect (**Annex I** and **J**). With the signing of these letters recognising voluntary land loss to the project, a corridor has been set. The contractor will be instructed not to stray outside the set corridor. In the case that the canal bund road development extends outside to the set corridor, work shall be automatically suspended and an RIP shall be triggered.

3.2.3.7 Dumping Sites

62. Government, unoccupied land has been identified for temporary dumping and stockpiling of debris and excavated spoil, removed during the clearing of the canal. Furthermore, the PIU expects

excavated debris will be temporarily stockpiled on the embankments of the roads without effect to roads or environment.

63. If additional dumping or stockpile sites are required, they shall be on Government land that is compliant with the EMP and does not impact on any private or encroaching PAPs. The contractor shall be required to make reparation measures to these sites back to the pre-project state, as a minimum standard.

3.2.4 MLBCRP NCB-4 (Stage 4) – 63+650 Km to 73+960 Km

64. Key structures to be constructed under the NCB-4 Contract from km 63+650 to 72+960 includes turnouts, retaining and definition walls, bridges and spillways as follows (Refer to Maps in **Annex B**, Photographs **Annex C** and Accessibility records **Annex D**).

3.2.4.1 Turnouts

65. In this Stage of the canal there are nine turnouts are located from D58 to FC82. These turnouts are located in cultivated reservation lands utilised by farmers of stage 4 where only one allotment also belongs to the irrigation department. Access is available for all nine turnouts via canal bund road or D canal roads. Requirement to use reservation lands are only for stockpiling of construction materials where necessary. If additional dumping or stockpile sites are required, they shall be on Government land that is compliant with the EMP and does not impact on any private or encroaching PAPs. The contractor shall be required to make reparation measures to these sites back to the pre-project state, as a minimum standard.

66. All farmers (17 farmers) have signed letters that give no objection to the contractors utilising encroached land areas near the canal for construction contractors' use (**Annex J**), as necessary. However, it will be a requirement that the PIU, with contractor, consult with each (100%) of the farmers on which reserve land will be used by the contractor, to ensure they still have no objection or claims. Full records will be kept on consultations and reported in PMDSC Resettlement Monitoring reports. Objections or grievances will require alternative routes to be found or RIP processes will commence.

3.2.4.2 Definition and Retaining Walls

67. Two definition walls and one retaining wall will be built on the left hand side. These two definition walls will be built on state lands where no effect to private or encroached lands is foreseeable. The materials can be transported via the main roads and canal bund road and materials can be stockpiled on nearby state lands.

68. The bidding documents also identify retaining wall constructions on the right-hand side of the canal on lands belonging to state. The materials can be transported via the main roads and canal bund road, but will also need to access the site on the right hand side of the canal, and which do not have direct road access. Therefore, access is available through canal bund road and materials can be stockpiled at state land close to the site. Construction materials and machinery will need to be moved across the canal area, to avoid the building of large scale access tracks. Bidding documents require that in cases where direct access is not available from the roads and bund roads, then materials and machinery will need to be transported through the canal itself in the off-season. No effect to private or encroached cultivated lands by this construction.

69. There are times when irrigation canal authorities will close off water supply in the canal (during off-season), which is annual practice, but time lengths and dates change each year. At this time, the communities utilize the common or household wells for their water supply requirements. During this time the contractors will be required to move their machinery and materials. It is possible to send bulk materials and machinery to be stockpiled on the right bank at one or two times, with the contractor only requiring to arrange labour and smaller materials as needed to cross a flowing canal. the contractor will

not be permitted, without PIU/the Engineer's approval, to block canal water flow for any reason that is in addition to the regular practice by irrigation authorities

3.2.4.3 Bridges

70. There are eight vehicle, and nine foot, bridges to be rehabilitated under this contract. All bridges are located across the Minipe canal where no effect to private or encroached lands. Access is available from canal bund road to bridge rehabilitation sites. Near each bridge rehabilitation site state land is available for the storing of construction materials. Therefore, there is no effect to the encroachments in the reservation lands from the rehabilitation of bridges.

71. During construction, the contractor must provide continuous, alternative access across the canal, in close proximity to existing crossings (in the case of walkways) and the closest routing which will be adequate for all vehicular traffic (cars, trucks etc.), also providing adequate signage pointing the public through the alternative route.

72. Furthermore, the contractor will not be permitted, without PIU/the Engineer's approval, to block canal water flow for any reason that is in addition to the regular practice by irrigation authorities. Coffer dams, diversions and any other similar devices, will be used where possible. During the times when the irrigation canal authorities will close off water supply in the canal (during off-season), the contractors will be required to conduct activities that require a dry canal bed.

3.2.4.4 Canal Spillways

73. Four spillways will be rehabilitated at the different points of the canal. Construction activities will be carried out on state lands where there is no effect to private or encroached lands. Access is available via canal road. However, during the construction period the road shall be closed for the rehabilitation of causeways which are located across the road. Therefore, during construction, the contractor must provide continuous, alternative access in place of the blocked causeways, in close proximity to existing crossings or the closest routing which will be adequate for all vehicular traffic (cars, trucks etc). Construction materials can be stockpiled and stored on state lands close to the site or at the construction sites, where the land area belongs to the Irrigation Department.

74. The contractor will not be permitted, without PIU/the Engineer's approval, to block canal water flow for any reason that is in addition to the regular practice by irrigation authorities. Coffer dams, diversions and any other similar devices, will be used where possible. During the times when the irrigation canal authorities will close off water supply in the canal (during off-season), the contractors will be required to conduct activities that require a dry canal bed.

3.2.4.5 Cross-Regulators

75. There are two cross-regulators to be installed at two sites in the canal (Km 69.638 and Km 73.577). No effect to private or encroached lands is foreseen, since construction works will be on state land. Access is available through canal road and materials can be stockpiled on state lands.

76. The contractor will not be permitted, without PIU/the Engineer's approval, to block canal water flow for any reason that is in addition to the regular practice by irrigation authorities. Coffer dams, diversions and any other similar devices, will be used where possible. During the times when the irrigation canal authorities will close off water supply in the canal (during off-season), the contractors will be required to conduct activities that require a dry canal bed.

3.2.4.6 Canal Lining

77. Five sections of the canal will be lined for the purpose of water flow efficiency. Lining will be carried out during off seasons/dry period of the canal. No effect to the private or encroached lands under this

construction works. Access is available through canal road and across the canal. Construction materials can be stored at state lands close to the sites.

78. Access for materials to be transported to site is available through the canal bund road and will not impact adjacent cultivated lands. The bid document, hence contract, requires this construction work be undertaken during the off season so that there will be minimal disruption to water availability. The contractor will not be permitted, without PIU/the Engineer's approval, to block canal water flow for any reason that is in addition to the regular practice by irrigation authorities.

3.2.4.7 Removing Trees and Deep Cut in the Canal

79. At the sections of inside the canal, chainage 65.150 to 66.000 KM tress will be removed. The chainage of 71.600 to 72.100 section of the canal will be deepened. Construction activities will be carried out during off season and no effect to private or encroached lands. Access is available through canal bund road.

80. Access for materials to be transported to site is available through the canal bund road and will not impact adjacent cultivated lands. The bid document, hence contract, requires this construction work be undertaken during the off season so that there will be minimal disruption to water availability. The contractor will not be permitted, without PIU/the Engineer's approval, to block canal water flow for any reason that is in addition to the regular practice by irrigation authorities

3.2.4.8 Dumping Sites

81. Government, unoccupied land has been identified for temporary dumping and stockpiling of debris and excavated spoil, removed during the clearing of the canal. The PIU expects excavated debris will be temporarily stockpiled on the embankments of the roads without effect to roads or environment.

82. If additional dumping or stockpile sites are required, they shall be on Government land that is compliant with the EMP and does not impact on any private or encroaching PAPs. The contractor shall be required to make reparation measures to these sites back to the pre-project state, as a minimum standard.

3.2.5 MLBCRP-NCB-5 – Rehabilitation and Electrification of Radial Gated Structures and Improvement of Cross Regulators

83. The MLBCRP-NCB-5 sub-project involves the rehabilitation and electrification of seven radial gate structures and improvements to cross-regulators in various locations of the Minipe Left Bank Canal. The PIU and PMDSC has carried out further investigations, including consulting with local authorities and site inspections. All seven sites were found to be on State lands, with accessibility and construction space from Canal bund roads (also refer to Section 3.1 above).

84. Automatic Water Level recorders are to be installed at the beginning of Stages 2, 3 and 4, with exact locations to be supplied by the engineer. Locations for these stages shall be easily accessible nearby existing accesses to prevent any requirement for temporary or permanent loses of farm land area.

85. Supplying and fixing an automatic weather station and the establishment of control center at Minipe Irrigation Engineer's Office at Hasalaka will not require additional land acquisition. There are access roads and materials may be stockpiled within the Minipe Irrigation Engineers Office compound.

Location	Left side of proposed	Right side of proposed	Remark
Chainage (Km)	Canal centre line	Canal centre line	
Km 20+789	Manaoya Radial Gates -	Manaoya Radial Gates -	Udadumbara Divisional
	State lands	State lands	secretary division
Km 29+884	Nikaliyaddaoya Radial Gates - State lands	Nikaliyaddaoya Radial Gates - State lands	Udadumbara Divisional secretary division
Km30+431	Hasalakaoya Radial Gates – State lands	Hasalakaoya Radial Gates – State lands	Udadumbara Divisional secretary division
Km 43+634	Barawaramahaoya Radial	Barawaramahaoya Radial	Udadumbara Divisional
	Gates - State lands	Gates - State lands	secretary division
Km 57.961	Bulatthaoya Radial Gates -	Bulatthaoya Radial Gates	Wilgamuwa Divisional
	State lands	- State lands	secretary division
Km 66+800	Gemburuoya Radial Gates	Gemburuoya Radial Gates	Wilgamuwa Divisional
	- State lands	- State lands	secretary division
Km 89+006	Dunuwilawewa Radial	Dunuwilawewa Radial	Wilgamuwa Divisional
	Gates - State lands	Gates - State lands	secretary division

 Table 7 : Initial Resettlement Impacts Screening

3.3 Access to Water Resources from Canal

86. Although encroaching farmers have assured that they will not farm the reservation areas, in the case that it is needed by the contractor, the investigation also looked into water resources access impacts for all canal water users.

87. According to PPTA studies a majority of water is used for irrigation, particularly during the two cropping seasons. However, there have been no studies of other water users (domestic, small-business, and other non-irrigation uses). Observations on site have shown the canal water is a source for household consumption (washing clothes and bathing and some human consumption) and livestock. This is during the cropping seasons and periods when the canal water is open.

88. However, Irrigation Department controls water flow through the canal. The irrigation authorities generally close the canal for repairs for an average of 3 weeks in April/May and then for 2 months in August/September, outside of the cropping seasons depending upon weather, water availability and farmers' requirements (**Annex E**). With these restrictions, it is understood that households have access to wells also for consumption needs. However, it thought that the wells may need re-charging every two to three weeks. This will impact on the contractor's movement of machinery and construction work, without using diversion mechanisms, while timing for recharging of wells will also affect people.

89. Under the environmental safeguards, a survey was requested by the PMU to be conducted to obtain information on these other canal water uses, in order to ensure that adequate amounts and quality of water resources are maintained.⁶ The Environmental Management Plan and the bidding documents for each NCB contract, require the contractor to:

- (i) Conduct construction and rehabilitation activities within the canal outside of the two cropping seasons.
- (ii) Ensure coffer dams and diversions are constructed during the construction, in order to allow continued water flow for those using water outside of the cropping seasons.

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⁶ Also, refer to Environmental Management Plans for Minipe Stages 2, 3, 4 and 5, included in each of the bidding documents

- (iii) Limit construction and movement of materials/machinery within the canal to the regular annual period when the canal water flow is stopped by authorities. If the contractor requires additional time, a proposal for extending the closure, by no more than 1-month (i.e., maximum 3 months) during the period August October, and without interruption of the cropping seasons, may be considered and approved by the Engineer and client in consultation with water authorities. The contractor shall be responsible to supply potable water to the affected communities, in the event that regular recharging of wells is not practicable, in order for communities to maintain their livelihoods with as little disruption and possible.
- (iv) Ensure that environmental protection mechanisms, such as silt catchment and mitigations for hazard materials uses, are in place so that water quality is not affected by project construction activities.

4 CONSULTATIONS AND DISCLOSURE

90. The potentially affected farmers have been consulted though several formal consultation meetings and several smaller informal discussions along the NCB-2, 3, and 4 Canal areas⁷. This section outlines the consultation and awareness activities occurring during the Due Diligence Studies, spearheaded by the PMU and PIU, with support of PMDSC. During the field visits consultation meetings with the affected encroachers/farmers were conducted, in order to ascertain their views, comments as well as to identify their objection for the rehabilitation (if any).

4.1 Formal Consultation Meetings (Stages 2, 3 and 4)

4.1.1 Initial Farmer Groups Meeting for Stages 1, 2, 3 and 4 – 25 February 2016

91. The first consultation and awareness meeting was held on 25 February 2016, by the PMU and PIU, with all farmers groups of Minipe Left Bank Canal from kilometer 0+000 to kilometer 72+960. The PMU and PIU representatives attended a meeting of farmers' groups (representing all the farmers along this section of canal). At this meeting the following aspects were discussed with the attendees (English translation of minutes in **Annex E**):

- (i) Description of the project and its benefits.
- (ii) Request to cooperate with the project and the officers.
- (iii) Establishment of GRC and its role.

4.1.2 Farmers Formal Consultations – Stages 2, 3 and 4

92. Within each of MLBCRP Stages 2, 3 and 4 (Km 30+140 to km 72+960), the PMU and PIU with the support of the PMDSC, conducted several consultations between 15th and 29th June 2016, allowing the project to be presented, famers to provide their comments and issues about the project and to introduce the program' grievance redress mechanism. At these meeting the following aspects were discussed with the attendees (Refer to Table 8 and for English translation of minutes in **Annex E**):

- (i) The Project was explained, including information on engineering design.
- (ii) The issue of impacts on farmer reservation lands, including that an average of 10 perch per farmer only would be likely affected, if at all. There would be two key impacts during construction:
 - a) Farmers would not be able to cultivate in some of the reservation land and may lose income.
 - b) Contractor may need to store and stockpile materials and excavated spoil from the canal on some reserve areas.
 - c) Some Farms (NCB-3) would lose access to a small area of land permanently.
- (iii) If farmers consent to voluntarily stop use of the reservation land during construction, a letter had been prepared for them to review and sign their consent.
- (iv) The opportunity for grievances to be heard.

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⁷ Consultations for NCB-5 areas were not required as these are in areas of public land, where there are no encroachments or private landuse (refer to Section 3 above).

Table 8 : Summary of formal meetings held on 14,15,21,22,29 June 2016 for the farmers, along the MLBCRP stages 02,03 & 04 - 30+140 Km to 73+960 Km

Chainage (Km)	nage (Km) No of participants Male Female		Points of discussion	Questions and concerns of people & responses from consultants/	Outcome of Discussion	
enaninge (kiii)				PMU/PIU		
30+140 to 49+820 Stage 02	43	16	It was explained in detail on proposed construction program and its effect to the farmers and their lands. Requested for written consent on release of reservation lands for construction.	It was asked on how effect to their lands and if effected what cause of action they can obtain. Some farmers asked about the boundary disputes of their lands	Officers explained that there are no permanent losses to their lands and boundary disputes should deal with the officers of the land commissioner's department. All agreed to implementation of the project. People agreed to give their written consent of release their cultivated reservation lands.	
30+140 to 49+820 Stage 02	43	07	PMU and PIU officers and consultants stated that the purpose of the meeting. Construction schedule explained to the people. Requested for written consent on release the reservation lands for construction.	During the construction period there may be lots of vehicles are moving on the existing roads network that lead to the unnecessary disturbance to the people.	Officers of PIU assured that there may not be that type of disturbance to the people by the vehicles. People emphasized their fullest corporation for the project implementation. Farmers agreed to to give their written consent of release their cultivated reservation lands	
49+820 to 63+650 Stage 03	50	13	Construction program discussed in detail and effect to their lands and water issues in the cultivation seasons during the construction	It was stated that no reservation lands were allocated at their paddy fields and asked what action they will take.	It was given assurance that no effect to their private lands by the construction. All agreed to give their consent for the implementation of the project	
49+820 to 63+650 Stage 03	25	14	It was explained the construction program on rehabilitation of structures. Officers/PMU,PIU requested on release the cultivated	People asked about the commencement of the construction and water issues to their paddy field during construction.	Officers of PIU/PMU said that still tender was not awarded and they will inform them in advance before start the construction. No stop of water during construction they said. All farmers attended at the meeting gave their	

Chainage (Km)	No of participants		Points of discussion	Questions and concerns of people & responses from consultants/	Outcome of Discussion	
	Male	Female		ΡΜυ/ΡΙυ		
			reservation lands for the construction.		consent to release the cultivated reservation lands for construction. They also agreed to give in writing the consent.	
63+650 to 73+960 Stage 04	21	13	The construction program was discussed and explained in details. Officers of PMU/PIU asked on release of cultivated reservation lands for construction works.	as officers of PMU and PIU were given all details on the construction program and they said that they are	Officer of PMU/PIU thanked who are trusted and corporation of the farmers. All farmers agreed to give their consent on release of cultivated reservation lands for the construction.	
63+650 to 73+960 Stage 04	32	11	The construction program was discussed and explained in details. Officers of PMU/PIU requested to release the cultivated reservation lands for construction works.	very happy on the project as at present they faced shortages of	Officers/PMU, PIU stated that farmers support is encouraging situation for them. All farmers agreed to give their consent in writing for release of cultivated reservation lands for the construction.	

93. Farmer leaders encouraged fellow farmers to volunteer releasing reservation lands for construction periods, due to importance of rehabilitation of the canal and turnout structures.

4.2 Informal Consultations in Areas along the Canal Areas

94. Further consultation and awareness activities are planned. As formal minutes were not prepared, Table 9 presents a summary of the discussions. However, key issues to be considered included:

- (i) During construction, water supply for crops and paddy should be assured;
- (ii) Farmers should be made fully aware of any changes to water supply; and
- (iii) Farmers agreed to the need for voluntarily withdrawing use of reservation land for a period to allow for rehabilitation of their turnouts and canal.

4.3 Farmers' Agreements

95. The need for involuntary resettlement will be avoided by the contractor restricting its construction activities, space and accesses as much as possible to the already existing embankment roads and tracks, as marked on the Map (**Annex B**). However, in some cases, short accesses will be required across reserve areas that are being farmed and some areas of encroached reserve farmland may be required for materials stockpiling and to access banks for rehabilitation. In NCB-3 there is a permanent impact of 55 encroached farmland plots, by the project.

96. As mentioned during consultations, farmer organization leaders, on behalf of farmers, mentioned that farmers voluntarily agreed to not conduct farming activities on canal reserve lands during the construction periods, if the contractor required. Additionally, those 55 farmers in NCB-3 also will permanently volunteer encroached land (i.e., land will be changed from farming to embankment road area). In order to show this agreement, farmers signed a letter of no objection (**Annex F** and **J**). Two forms of the letter were provided – one for volunteering agricultural areas temporarily, and a more detailed letter for those volunteering landuse permanently

97. In accordance with ADB SPS (2009) requirement, the written agreements included the PIU, the Grama Niladari and a third-party CBO (Farmers Group Leaders) to collect and witness (**Annex F, I** and **J**). Data of signatures presented in Table 10 indicates that 100% farmers have consented to temporary release of agricultural lands for the period of construction and, in the case of the 55 NCB-3 farmers, permanent release of a strip of encroached farmland for canal embankment and road widening. The PIU/MLBCR has obtained consent from affected 161 encroachers. Fifty-five farmers signed for permanent land release, the extent of which, individual land to be released by each land farmer has been indicated in the consent letter and those varies into each other. A separate letter has been signed by 105 farmers for temporary land release.

Table 9 : Summary of informal meetings held on 14,17 & 29 June 2016 along the MLBCRP stages 2,3 & 4 - 30+140 Km to 73+960 Km

Chainage (Km)	Numbers of participants		Points of discussion	Questions and Concerns of people & responses from	Outcomes of Discussions	
enamage (min)	Male Female			officers/PMU,PIU		
30+140 to 49+820 Stage 02	Male	Female	Officers of PMU/PIU asked on the farmers awareness of proposed rehabilitation program.	Farmers who were attended at the discussion inquired about the time period of construction.	Officers informed that still tender was not awarded and they inform to the people in advance before start the construction.	
30+140 to 49+820 Stage 02	Male	Female	It was explained and asked about farmers attitude on proposed rehabilitation of Minipe left bank canal	People inquired on water issue during the construction period as they wanted to cultivate their paddy field continuously.	Officers/PMU, PIU explained that no stop of water issue during the construction period as it is expected to implement the construction works during the off seasons.	
49+820 to 63+650 Stage 03	Male	Female	Officers asked from the farmers that they are cultivating the reservation lands where turnouts are located.	Some farmers stated that at present they are cultivating reservation lands which are located close to the D canals and turn outs.	The farmers who are having cultivated reservation lands verbally agreed to give their consent in writing for release of their reservation lands for turnout rehabilitation.	
63+650 to 73+960 Stage 04	Male	Female	It was discussed on proposed rehabilitation program.	People said that they welcome the rehabilitation program as they face water shortage for their paddy lands and agreed to release their reservation lands for the construction.	Officers of PMU/PIU appreciated for the generosity of the people.	

SN	Stage	Total number of farmers	Number of signatures	Number of farmers not signed	Comments
1	NCB-2	34	34	0	100% signed
2	NCB-3 - temporary	55 (62 plots)	55 (for 62 plots)	0	100% signed
3	NCB-3- Permanent	55	55	0	100% signed
4	NCB-4	17	17	0	100% signed
	Total	161	161	0	100% signed

 Table 10 : Farmers' Agreements Summary

4.4 Disclosure of this DDR for the Stages 2, 3 and 4 Canal Sections and NCB-5 Locations

99. The PMU, with the support of the consultant, is planning a further set of consultations and disclosure, in which the results of this Due Diligence 2 studies are to be disclosed. Disclosure and further consultations, are expected to follow a similar approach to that recommended by DDR 1 for MLBCRP-NCB-1 (Stage 1), which was approved by ADB on 1st August 2016. This will also allow affected farmers and other project stakeholders and interested parties to be informed of their rights, updates on the Grievance Redress Mechanism and an opportunity to have queries addressed by the project.

100. Approval and disclosure of this Due Diligence Report will be carried out as a condition for each separate MLBCRP-NCB-2 (Stage 2), NCB-3 (Stage 3), NCB-4 (Stage 4) and NCB-5 contracts awards announcements and notices to proceed. There will be social safeguards monitoring and arrangements with which the contractor must comply and they will be strictly monitored by the social and resettlement specialists of the PIU and PMU, supported by the PDMSC specialists (refer to Sections 7 "Findings and Recommendations").

101. Copies of the approved report will be made available to stakeholders from the PMU, PIU and Gramma Niladari and District Secretary levels. A copy of the findings of this report will be available in English and local languages and distributed to farmer groups. The PIU, supported by PMU and PMDSC will assist farmer groups to explain some of the key findings of this report and ensure farmers are informed of the Grievance Redress Mechanism, including rights to complain about social, resettlement, environmental and other matters.

5 LEGISLATIVE FRAMEWORK

103. Involuntary Land acquisition, compensation, relocation and income and livelihood restoration for the MWSIP are guided by the Land Acquisition Act (LAA), 1950 and its amendments, National Involuntary Resettlement Policy (NIRP), 2001, National Policy for the Payment of Compensation, 2008, the Land Acquisition Regulations of 2009 (LA Regulations 2009), National Environmental Act of 1980 and amendments and ADB's Safeguards Policy Statement 2009 (SPS, 2009).

104. This section provides a summary of key parts of the Sri Lankan legal framework and ADB's Safeguards Policy Statement (2009), which are relevant to the impacts described above in kilometre 30+140 to kilometre 72+960, in the case of Involuntary Resettlement. Additional aspects of the legislative framework may be viewed in the Resettlement Framework and Resettlement Implementation Plan (March 2015), prepared by the Ministry of Mahaweli Development and Environment.

5.1 Legislative Framework of Sri Lanka

105. The LAA provides detailed procedures for land acquisition, consultations, compensation calculations and other assistance packages for resettlement, when acquiring land for "public purposes." It guarantees that no person is deprived of lands except under provisions of the Act, providing compensations for acquisition and disturbances caused by the Project. The normal procedure for Land Acquisition through the LAA is by application to the Ministry of Land and Land Development (MLLD) and once acquired, land is vested in the Government Agency that made application.

106. The LAA is indifferent to the socioeconomic status of the land loser and any adverse livelihood and income compensation. The LAA bases valuation on market rate, while ADB prescribes replacement value.

107. The Government adopted the NIRP in 2001 to ensure that (i) PAPs are fairly and adequately compensated, relocated, and rehabilitated; (ii) delays in project implementation and cost overruns are reduced; and (iii) better community relations are restored among PAPs and lost communities.

108. The NIRP is based on LAA and its amendments, National Environmental Act of 1980 and amendments, and several other applicable laws such as the Urban Development Authority Act and Coastal Conservation Act, Regulations of the Acts and also legal opinions of courts on land acquisition, compensation, consultation and income restoration.

- 109. Some of the key principles relevant to this due diligence study include:
- (i) IR should be avoided as much as possible by reviewing alternatives to the Project as well as alternatives within the Project.
- (ii) Where IR is unavoidable, PAPs should be assisted to re-establish themselves and improve their quality of life.
- (iii) Gender and equality should be ensured and adhered to throughout.
- (iv) Compensation for loss of land, structures, other assets and income and livelihood losses should be based on full replacement cost and should be paid promptly. This should include transition costs.
- (v) Resettlement should be planned and implemented with full participation of the provincial and local authorities.
- (vi) Participatory measures should be designed and implemented to assist those economically and socially affected to be integrated into their host communities.

- (vii) Common property resources and community and public services should be provided to resettled.
- (viii) PAPs who do not have title deeds to land should receive fair and just treatment.
- (ix) Vulnerable groups should be identified and given appropriate assistance to improve their living standards.
- (x) Project executing agencies should bear the full cost of compensation and resettlement.

5.2 Safeguards Policy Statement of Asian Development Bank (SPS, 2009)

- 110. The ADB Policy on Involuntary Resettlement (SPS, 2009) is based on the following principles:
- (i) Screen the project early on to identify past, present and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through survey and/or census of affected persons, including gender analysis, specifically related to resettlement impacts and risks.
- (ii) Carry out meaningful consultations with Displaced Persons (DPs), host communities, and concerned non-government organizations. Inform all DPs of their entitlements and resettlement options. Inform all DPs of their entitlements and resettlement options. Ensure their participation in planning, implementation, and monitoring and evaluation of resettlement programs.
- (iii) Pay 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.
- (iv) Establish a grievance redress mechanism to receive and facilitate resolution of the affected persons' concerns.
- (v) Support the social and cultural institutions of DPs and their host population.
- (vi) Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement decisions should be preceded by a social preparation phase.
- (vii) Improve, or at least restore, the livelihoods of all DPs through (i) 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; (ii) prompt replacement of assets with access to assets of equal or higher value; (iii) prompt compensation at full replacement cost for assets that cannot be restored; and (iv) additional revenues and services through benefit sharing schemes where possible.
- (viii) 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 assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) civic infrastructure and community services, as required.
- (ix) Improve the standards of living of the affected 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.
- (x) 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. This includes cases of voluntary donation.

- (xi) Ensure that DPs without titles to land or any recognizable rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.
- (xii) Prepare a resettlement plan elaborating on affected persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting frame-work, budget, and time-bound implementation schedule.
- (xiii) Disclose a draft resettlement plan, including documentation of consultation process in a timely manner, before appraisal, in an accessible place and in a form and language in which the affected persons and other stakeholders will all understand. Disclose the Final resettlement plan and its updates to DPs and other stakeholders.
- (xiv) 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. For a project with significant involuntary resettlement impacts, consider implementing the involuntary resettlement component as a stand-alone operation.
- (xv) Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the resettlement plan under close supervision throughout project implementation.
- (xvi) Monitor and assess resettlement outcomes, their impacts on the standards of living of affected 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.
- (xvii) Disclose monitoring reports.

5.3 Differences Between Sri Lanka Legislation and ADB SPS (2009)

111. The key gaps between the LAA and IR policy principles of SPS are (i) the entitlements of non-titled PAPs; (ii) compensation at replacement cost; (iii) income restoration and improvement; (iv) consulting PAPs and their host communities on relocation options; (v) special assistance to vulnerable PAPs; (vi) monitoring and assessment of resettlement outcome and impacts; and (vii) the formulation of RIP to address these issues.

112. The issue of non-titled PAPs entitlements is addressed in LAA and elaborated in NIRP and LA regulations 2009. Under the LAA any person having a right title or interested in or over the Land which is to be acquired or over which a servitude is to be acquired (section 10(1)) is entitled to compensation. A person who has interest in land apart from the owner and co-owner's area mortgage, a lessee, or occupier absolutely for himself or in trust for another person or for any charitable, religious or other purpose or a person having servitude over the land (section 65 as amended in 1964). The Court of Appeal in 2001 added tenants to the list. The court also held that the occupier could not in any event be evicted without being compensated in respect for his improvement (if in fact he is the owner of the improvements and owner of the property). This matches ADB's involuntary resettlement safeguards principle that those who do not hold title to land are eligible to resettlement assistances and compensation for loss of non-land assets.

5.4 Principles

113. The ADB can only finance projects that comply with its Safeguards Policy Statement (2009). If gaps exist between ADBs safeguards requirements and countries laws, specific gap-filling measures need to be made to ensure policy and safeguards requirements are achieved. On the basis of differences between the legal framework of Sri Lanka and ADB SPS (2009), the following principles relevant to the Due Diligence Study are as follows:

(i) Screen each project of the investment program to determine whether it triggers the Involuntary resettlement principles (below) and determine the scope of resettlement planning required.

- (ii) Take every effort to avoid physical displacement and/or any other adverse impacts on livelihood and income sources and community resources and infrastructure. If physical displacement and economic displacement are unavoidable, the actions (below) will be taken to ensure that they improve or at least restore their income and livelihoods and rebuild their socio-cultural systems.
- (iii) Consult and inform all PAPs on land acquisition, compensation, and rehabilitation, and their entitlement and grievance redress mechanism.
- (iv) Provide well-planned and budgeted income restoration and improvement programs for the benefits of PAPs, especially for the poor and vulnerable groups.
- (v) All common property resources lost due to the project will be replaced or compensated by the project.
- (vi) If land acquisition is through negotiated acquisition, the project will ensure that PAPs who enter into negotiated acquisition will maintain the same or better income and livelihood status.
- (vii) PAPs without title to land are eligible for resettlement assistance.
- (viii) Disclose resettlement information and RIPs including consultation documentation to PAPs in a language accessible to the PAPs and other stakeholders.
- (ix) The full cost of resettlement will be included in Project costs.
- (x) Pay compensation and provide other entitlement to each eligible displaced person before displacement and construction commences.
- (xi) Monitor and assess the progress of RIP implementation and prepare monitoring reports to share with ADB, PAPs and other stakeholders.

6 GRIEVANCE REDRESS MECHANISM

114. In order to receive and facilitate the resolution of possibly affected peoples' concerns, complaints, and grievances concerning the project's performance, a Grievance Redress Mechanism (GRM) has already been established for the project, and is being enhanced at local and PIUs level, at the Project sites. The GRM addresses potentially affected people's concerns and complaints proactively and promptly, using an understandable, communicated and transparent process that is gender responsive, culturally appropriate and readily accessible to all community members at no costs and without retribution. The mechanism will not impede access to the Country's judicial or administrative remedies. The brochure on the GRM for distribution to stakeholders, community and the public is presented in **Annex G**.

6.1 Types of Grievance

115. Legal issues:

- (i) Application of LAA and its limitations to arrive at replacement cost of acquired property.
- (ii) Difficulties in obtaining abstracts of deeds from Land Registry.
- (iii) Rules and regulations determining the ownership of land and amount of compensation.
- 116. Practical Issues:
- (i) Lack of knowledge on the acquisition process and how to present claims.
- (ii) Delays in payment of compensation.
- (iii) Delays in payments of resettlement assistance and provision of benefits.
- (iv) Most contracts on leased land are verbal. Difficulty in transforming into written contracts.
- (v) Inability to find new land for building new houses.
- (vi) Inability to construct new houses in a short period of time.
- (vii) During the construction period: temporary disruptions.
- (viii) Cracks in structures.
- (ix) Noise pollution.
- (x) Environmental Pollution.
- (xi) Dust problems.
- (xii) Other environmental issues.

6.2 Levels of Grievance Redress in the Program

117. This section outlines the 4 levels of grievance redress on the Project plus the additional systems through the Land Acquisition Act and the courts. Many grievances arise because of inadequate understanding of Project policies and procedures, but can be promptly resolved by proper explanation of the situation to the complainant. The four levels of the Project Grievance Redress Mechanism are as follows:

(i) **Grievance Redress Committee – Grama Niladari Level** - The complainant may submit a Grievance⁸ either in writing or orally to the PIUs Project Resettlement Officer or the PIUs Project

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⁸ A Grievance or complaint any be Project related, environmental or Social

Environmental officer or the Gramma Niladari (GN). The Gramma Niladari is the closest community administrative representative to the affected household, and is under the Divisional administration. It is expected that most complaints will be resolved at this level. A resolution will be determined within 1-week. However, if the complaint cannot be resolved through the Grama Niladari GRC, then the grievance is passed to the GRC – PIU level.

- (ii) Grievance Redress Committee Divisional / Project Implementation Unit (PIU) Level A resolution will be determined within one week. If a resolution cannot be determined, then the complaint will be passed to the GRC Divisional Secretary level by the Project Director.
- (iii) Grievance Redress Committee Project Level At this level the grievance is considered by representatives of Project related Government agencies such as Land Registration office, Inland Revenue office, Forest Department, Wildlife Department, Samurdhi Officer, surveyor and PIU staff. A resolution is expected to be determined within one week. In case the Project Director cannot resolve the complaint, the Project Director will then bring the complaint to the Executive Agency GRC.
- (iv) Grievance Redress Committee Executive Agency (PMU) at Ministry Level In case the complaint cannot be resolved, a resolution could take up to four weeks (inclusive of GRC levels 1iv). This is the final level of the GRM system. However, there are still the law courts, although this is time consuming, costly and often not used.

118. ADB's SPS (2009) requires that the Project level system should not impede access to the country's judicial or administrative systems and thus the complainant has the right to access the legal court system at any time of the resolution process. Therefore, the four levels mentioned above are authorized under the Project to consider grievances in relation to land acquisition cases, compensation payments, resettlement issues, ownership disputes, delays of payment of compensation, rehabilitation assistance programs and environmental concerns related to the Project.

119. The GRM does not cover matters pending in the courts or any disputes concerning compensation rates. However, compensation rate disputes do fall under the LAA. Under the LAA, an Appeal must be constituted to deal with appeals against compensation offers. This process will minimize the grievances. However, a person who does not agree with the decision of the Board of Appeal may still take the case before the Supreme Court claiming a higher amount of compensation. This option is costly and time consuming and is rarely used.

6.3 Grievances Submitted to Date in the MLBCRP 30+140 Km to 72+960 Km

120. To date, there have been no grievances submitted in relation to MLBCRP area from Km 30+140 to Km 72+960 (Stages/NCBs 2, 3, and 4) as well no grievances submitted relating NCB-5 sub-project locations. This is inclusive of complaints through Sri Lanka's formal, legislated complaints procedure. However, the Grievance Redress Mechanism has been established in MLBCRP and first Grievance Redress Committee Meetings have been held. **Annex H** presents the make-up of the GRCs at different levels.

121. Furthermore, during the conduction of consultations and surveys, the potentially affected persons are made aware of the GRM, particularly of how and where to submit a Grievance at the GND level. GRM levels have been set up and GRCs operating at each level in the contract areas, as required by ADB SPS (2009), prior to the civil works contract award. Awareness campaigns have been conducted as part of consultation meetings on site (Annex E). The brochure on the GRM for distribution to stakeholders, community and the public is presented in Annex G.

7 FINDINGS AND RECOMMENDATIONS

123. The activities of pre-construction and construction shall be conducted in accordance with the requirements set forth in this Due Diligence Study and Report and in addition to the EIA, the Specific Sub-project EMPs and other subsequent documented requirements. This Due Diligence Study has established the findings below, covering the Minipe Left Bank Canal Rehabilitation Project NCB-2, 3 and 4 (from 30+140 Km to 72+960 Km), MLBCRP-NCB-3 Bogahawewa to Marakawewa to Radunnewewa feeder canal and NCB-5.

7.1 MLBCRP-NCB-5 – Rehabilitation and Electrification of Radial Gated Structures and improvement of Cross-Regulators

124. NCB-5 is located on selected land areas between 000+000 Km to 72+960 Km. Based on the results of the detailed Design, Inventory activities and site visits, data indicates that no potential involuntary resettlement and land acquisition impacts are anticipated as a result of Sub-project NCB-5 construction activities. There is adequate access to many of the construction sites by road (or track) along the embankment of the canal, on which there are no encroachments, and there would be space enough for construction activities to occur. The sites to be selected by the engineer, shall be selected using criteria which includes sites where there is existing public access, without encroachment, and on which there will be no involuntary land acquisition or resettlement impact. However, if the contractor requires additional construction space, that may impact on agricultural areas, then the Contractor shall comply with the recommendations set forth for NCB-2, 3 and 4 (Section 7.3).

7.2 Bogahawewa to Marakawewa to Radunnewewa Feeder Canal Embankment Under MLBCRP-NCB-2

125. On the **Bogahawewa to Marakawewa to Radunnewewa feeder canal** embankment widening, which is a part of the Scope of Works in MLBCRP-NCB-3 and will involve a requirement for permanent land:

- (i) Inspections, consultations and an inventory has been conducted, covering a potentially affected strip plot of land along the Bogahawewa to Marakawewa to Radunnewewa feeder canal to be rehabilitated and widened. There are 55 affected plots, in which 4.65 Ha, less than 10%, of land area may be potentially affected by this feeder canal construction. Apart from rice, there some land areas growing mango, coconut, betel nut, banana, teak, Mahogany, Triticale and maize in potentially affected (Annex I). Some are mono- others are mixed- cropping.
- (ii) There are 55 potentially affected persons, currently occupying canal reserve agricultural lands permanently impacted by the canal embankment widening and rehabilitation.
- (iii) All 55 potentially affected persons have signed agreements to volunteer land and assets areas for the embankment widening (Annex I and J). In accordance with the requirements for volunteering assets set out in the ADBs "Involuntary resettlement Sourcebook", the volunteering of occupied land and impacted assets were fully disclosed on the agreements signed by the AP, the District authority and the Farmer Group leader, acting as a third party observer to ensure agreements were fully voluntary.
- (iv) The PIU, with the PMDSC support, and the contractor shall Consult again with those land users, whose lands are potentially affected. Verification of land and assets recorded to be volunteered by each affected person shall be conducted and the actual volunteer acquisition will be recorded by the contractor surveyors, at the time of setting out the embankment corridor (refer to Annex I and J).

- (v) With the signing of the agreements by APs, a maximum corridor for the canal embankment has been set. The contractor will have this maximum alignment only for construction. At no time, shall the land/assets required, be higher or different than that recorded in the signed letter attached to this report.
- (vi) In the case that additional land and/or assets acquisition is required, a Resettlement Implementation Plan (RIP) shall be triggered.
- (vii) The Contractor shall comply with the recommendations set forth for NCB-2, 3 and 4 (below).

7.3 MLBCRP – Left Bank Canal and Structures Rehabilitation NCB-2, 3 and 4)

126. The Due Diligence Study also established the following land acquisition and resettlement findings covering **Minipe Left Bank Canal Rehabilitation Project NCB-2, 3 and 4 (from 30+140 Km to 72+960 Km)**:

- (i) The inventory of the canal reservation found there are 464 plots of encroached farmland. Of this, it was found that there were 106 potentially affected people (farmers) encroaching on 113 plots of canal reserve land between Kilometre 30+140 and Kilometre 72+960 of the Minipe Left Bank Canal that may be affected by contractors need to temporarily use land for construction space. They are cultivating mostly paddy in two seasons (Maha and Yala). There are no tree crops or structures on the identified affected plots. These affected people are encroaching from legally titled plots adjacent to reserve area.
- (ii) There is adequate access to many of the construction sites by road (or track) along the embankment of the canal, on which there are no encroachments, and there would be space enough for construction activities to occur. However, around some of the structures to be rehabilitated, construction space requirements may impact on agricultural areas. It was thought that some of the reserve land areas may be required to be used at times by the contractor during construction, but not as part of the footprint of project structures to be constructed. For some structures, there may be some locations where diversion tracks are needed by contractor. A small number of areas may be required in occupied reserve areas. Actual space requirements, hence magnitude of affected area for construction, cannot be fully finalized until the contractor is mobilized and the locations, albeit small, are identified. However:
 - a) The PIU will restrict access to sites to the use of existing roads and tracks to the extent possible. The contractor shall as much as possible limit construction work-space to the canal contours and existing access roads and Government lands, as approved by the PMU.
 - b) Farmer Organization Leaders have given an assurance in February 2016 that all encroached farmers will voluntarily suspend their agricultural activities during the construction period, if they are required, in order to allow the contractor's access to the canal and works sites. There is documentary evidence that encroachers will refrain from agricultural activities in the cases that encroached lands are required by a contractor. Through Farmer Groups, affected farmers out of (100%) have signed letters consenting to *"release the lands which are in our possession under encroachments whenever those lands are wanted for the development activities of the Minipe Left Bank Canal Rehabilitation Project"*.
 - c) Apart from the Bogahawewa to Marakawewa to Radunnewewa feeder canal (paragraph 123 above), there is no other permanent or temporary land acquisition. Furthermore, there is no temporary or permanent involuntary resettlement or land acquisition expected.
 - d) There will be no temporary or permanent impacts on structures or tree crops or forest areas, otherwise an RIP process will be in accordance with the ADB/GoSL requirements

in Section 5 (above), and RIP implementation will be completed prior to construction commencing.

- e) The contractor shall be required to prepare a construction plan at mobilization, which will include:
 - Locations, purpose and time periods in which the contractor will be required to utilize the encroached land location;
 - Plans for rehabilitation of the locations back to their pre-project condition, which will be done to the satisfaction of engineer and landuser;
 - The Contractor will be permitted to utilize a location for the time period when the work is carried out in nearby location, and will be for a maximum of one growing season only, in such times that encroached lands are required during the irrigation season.
- f) The contractor shall allow the farmers time to harvest (where required), prior to using for construction purposes.
- g) The PIU, with the PMDSC support, and the contractor shall:
 - Consult again with those land users, whose lands the contractor wishes to utilize for construction works, to verify and confirm the signed agreement (Annex J).
- h) In the event of objection or grievance, alternatives must be sought to the satisfaction of the land users, alternative locations found and/or RIP processes will be triggered in accordance with the ADB/GoSL requirements in Section 5 (above).
- Several proposed definition and retaining walls are located on the right hand side of the canal, which are at minimum 400-500 metres from a road access through gardens and crops. To minimize creating new accesses on the right hand side of the canal, disrupting livelihoods, the contractor shall:
 - Move machinery and materials across the canal from embankment roads during offseasons, when canal is generally dry.
 - There is adequate space for materials stockpile, and also structure locations are, on public, unoccupied land areas. Therefore, there should be no impact on communities or occupied reserve lands.

7.4 General Requirements for all MLBCRP NCB-2, 3, 4 and 5

127. Water resources for irrigation should not be impacted, because internal canal rehabilitation activities will be scheduled outside the two irrigation seasons when canal water resources are required. Canal authorities will annually, for a period during the two off-season times, close off the canal water supply. The surrounding communities use alternative water sources (e.g., wells) for their daily needs when the canal water supply is closed by authorities. The following requirements are recommended, in order to minimize any disruption to the community:

- (i) During the off-season when canal remains flowing, albeit minimal flow, the contractor will be required to install diversions and coffer dam systems, in order to allow water supply to be continued, for off-season requirements.
- (ii) In the event that the contractor requires a dry canal for their work within the canal area, they may, after engineer approval, apply to and coordinate with the canal authorities regarding timing of annual canal closure periods and construction timing. This may be an extension for up to one additional month, provided all communities' alternative water supply is maintained. The contractor may be required to supply potable water to communities if well resources are not adequate this will be discussed with canal and local authorities.

128. Disclosure of this DDR 2 shall be arranged, prior to Contract award, as followed by the MLBCR - PIU and MWSIP PMU, with the support of the PMDSC:

- (i) A copy of the findings of this report will be available in English and local languages and distributed to farmer groups. The PIU, supported by PMU and PMDSC will assist farmer groups to explain some of the key findings of this report and ensure farmers are informed of the Grievance Redress Mechanism, including rights to complain about social, resettlement, environmental and other matters.
- (ii) A summary of these recommendations and findings shall be provided to all Farmer Groups for distribution and awareness of potentially affected people.
- (iii) Awareness meetings shall be conducted with all APs and stakeholders to ensure understanding of the recommendations and conditions of this DDR, to ensure social and resettlement safe-guards are followed.
- (iv) All disclosure modes recommended, shall also be accompanied by Grievance Redress mechanism brochures, ensuring people have access to contacts and can know their rights for lodging complaints and grievances (**Annex G**).

129. This Report, or at minimum, the findings of this Due Diligence Study, will need to be attached to the Bidding Documents or provided to the contractor at the time of contract negotiation, since bidding has already been completed on some of the NCB 2-5 contracts. Compliance shall be fully monitored.

130. The Environmental Management Plans and the bidding documents for NCB 2, 3, 4 and 5 require the contractor to:

- (i) Conduct construction and rehabilitation activities within the canal outside of the two cropping seasons.
- (ii) Ensure coffer dams and diversions are constructed during the construction, in order to allow continued water flow for those using water outside of the cropping seasons.
- (iii) Limit construction and movement of materials/machinery within the canal to the regular annual period when the canal water flow is stopped by authorities.

(iv) Ensure that environmental protection mechanisms, such as silt catchment and mitigations for hazard materials uses, are in place so that water quality is not affected by project construction activities.

131. Permanent land requirements on NCB-3 : Bogahawewa to Marakawewa to Radunnewewa feeder canal embankment widening is known. However, the exact amounts and locations of encroached reserve land temporarily required for construction purposes on NCB-2, 3 and 4 Miniple Left Bank Canal or structures rehabilitation and construction will not be fully known until the contractor submits a Construction Plan. Given this, a Monitoring Plan will be prepared by the MLBCRP PIU, with support of the PMDSC Specialists as part of the regular Resettlement Monitoring and Evaluation Reports by the PMDSC to the PMU and ADB.