

Environmental Monitoring Report

Semi-Annual Report no. 5
For the period covered July 2020–June 2021
Project Number: 47381-002
September 2021

Sri Lanka: Mahaweli Water Security Investment Program – Tranche 1

Minipe Left Bank Canal Rehabilitation Project (MLBCRP)

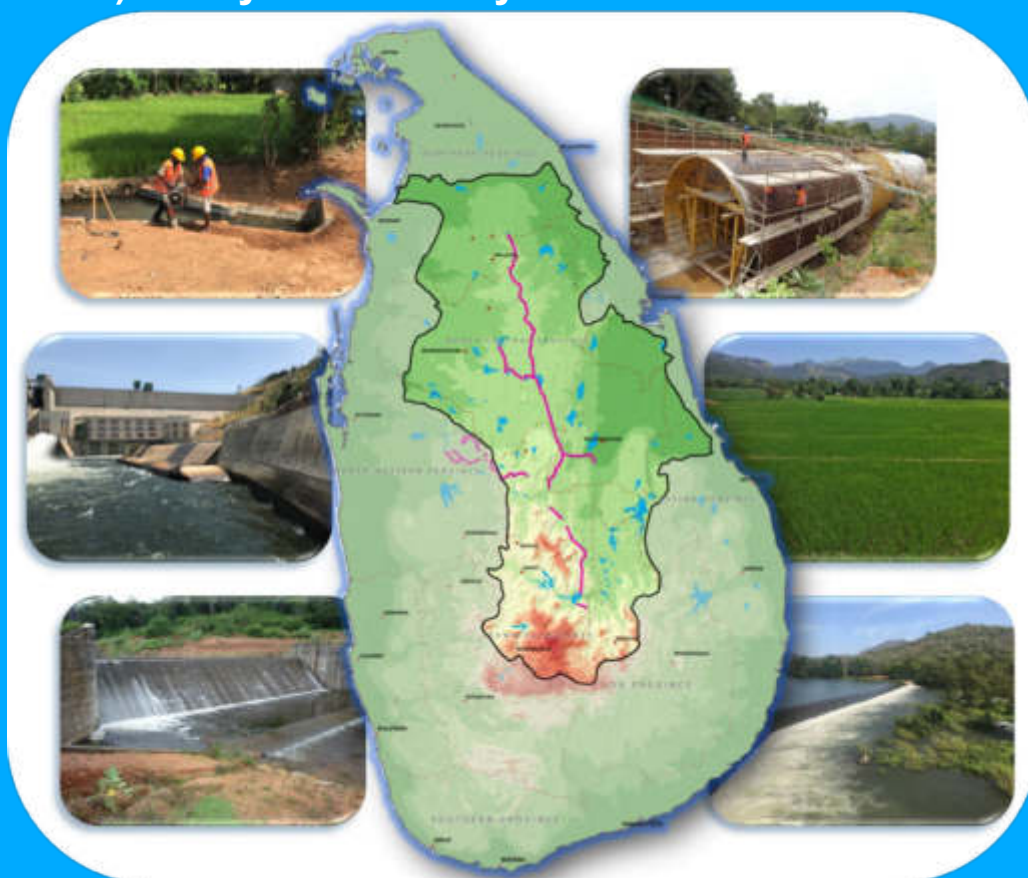
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Mahaweli Water Security Investment Program

Annual Environmental Monitoring Report (SAEMR) No. 05 for Minipe Left Bank Canal Rehabilitation Project (MLBCRP) – July 2020 to July 2021



Ministry of Irrigation
Sri Lanka



September 2021

Draft Report

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1 INTRODUCTION

1.1 Scope of the Report

1. This Annual Environmental Monitoring Report (AEMR) No. 5 is prepared to update the progress with respect to environmental safeguard compliance of the Minipe Left Bank Canal Rehabilitation Project (MLBCRP) including the Minipe Anicut raising by 3.5 m and upgrades to the Left Bank Canal headworks.

2. This AEMR for the MLBCRP is prepared addressing following aspects, based on the available information for the monitoring period from July 2020 to July 2021, which fulfils the Asian Development Bank (ADB) requirement to submit a AEMR to ADB and Central Environmental Authority (CEA) for the “Category B” projects as documented in FAM¹ and EARF:²

- (i) Background/ context of the monitoring report (adequate information on the project, including physical progress of project activities, scope of monitoring report, reporting period, and the monitoring requirements including frequency of submission as agreed upon with ADB).
- (ii) Changes in project scope and adjusted safeguard measures
- (iii) Environment qualitative / quantitative monitoring data.
- (iv) Monitoring results compared against previously established benchmarks and compliance status (e.g., obtaining necessary approvals for establishment of certain facilities, timeliness, and adequacy of environmental mitigation measures; and training, capacity building, etc.).
- (v) Records on disclosure of monitoring information to affected communities.
- (vi) Identification of key issues or grievances from affected people or recommendations for improvement.
- (vii) Proposed items of focus for the next reporting period and due date.

3. The purpose of this report is to ensure that the Project is implemented with due concern for environmental and social safeguards according to the ADB's Safeguard Policy Statement (SPS, 2009), and specifically to ensure that these issues are adequately addressed in compliance with the requirements of ADB. Further, this report is to assess the progress with implementation of the program in complying with the approved Initial Environmental Examination Report (IEE)³ including Addendum to the IEE⁴ and updated Environmental Management Plan (EMP)⁵ No. 13.1 of the IEE approval No. CEA/CPO/KY/07/929/12 issued by CEA on 16 October 2015, renewed approvals (dated on 03.01.2019 by Letter ref. CEA/CPO/KY/07/929/2012, and on 08.11.2019 by Letter ref. CEA/CPO/KY/07/929/2012 issued by CEA provincial office for Central Province) valid until 15 October 2022, confirming all the conditions remain unchanged of the original approval by CEA .

4. This AEMR for MLBCRP is prepared by the Environmental Specialist (ES) of Program Management Design and Supervision Consultant (PMDSC) based on the monthly monitoring and progress reports received from the Environmental Monitoring Specialist (EMS) of PMDSC. Further, the report contains the observations and records of the Resident Engineer (RE) for MLBCRP, and the ES of PMDSC made as per the site visits attended once a month, including records of monthly environmental meetings, and records of the random visits take place when significant environmental incidents are reported.

¹ Paragraph 60 of Facility Administration Manual (FAM), June 2015 prepared by MMDE.

² Paragraph 111 of Environmental Assessment Review Framework (EARF) November 2014 (updated in June 2017) by MMDE.

³ Initial Environmental Examination Report (IEE) for Proposed Raising of the Minipe Anicut, and Rehabilitation of Minipe Left Bank Canal Project in Kandy District (April 2015) by the Irrigation Department

⁴ Addendum to Initial Environment Examination Report (IEE) including the revised Environmental Management Plan (EMP) for Minipe anicut raising and LB canal rehabilitation in April 2016

⁵ Updated Environmental Management Plan (EMP) by PMDSC incorporating design changes highlighted in the addendum to IEE (June 2016) and approved by CEA Provincial Office, Kandy on 11.01.2017.

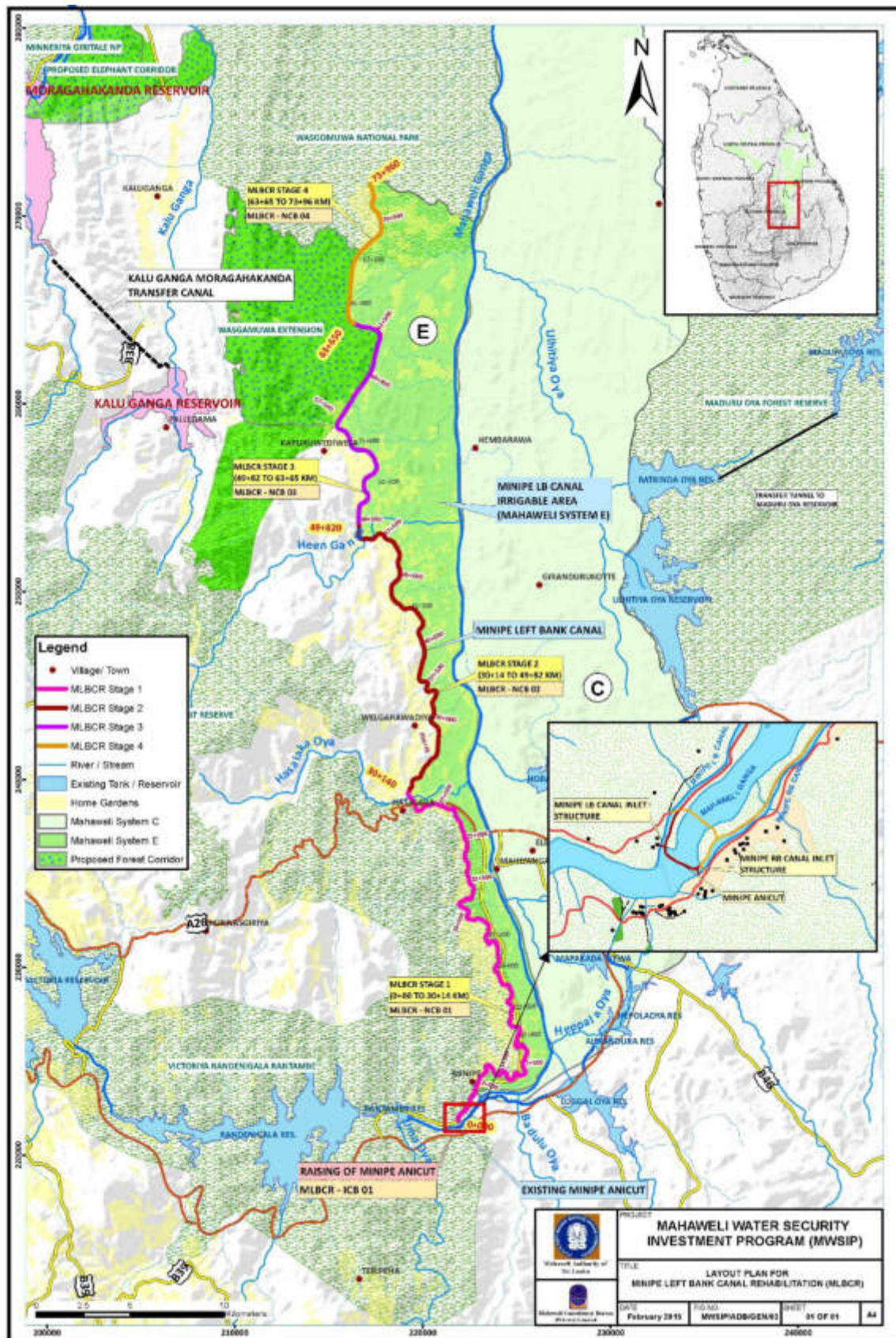


Figure 1-1: General Layout map of the MLBCRP area

1.2 Environmental sensitivity of the MLBCRP area

5. **Figure 1-1** on the previous page of this AEMR provides the general layout map of the project area indicating the land use and the sub-project boundaries of each construction packages. The Minipe anicut is located about 3.2 km downstream from the Rantambe Reservoir, the last hydropower generating scheme on the Mahaweli River. The natural flow from the Rantambe Reservoir as well as the generation flow through the turbines is collected at the Minipe Anicut, which then diverts water into Left Bank (LB) and Right Bank (RB) canals.

6. The entire LB canal is associated with man-modified environment, which includes residential and agricultural areas, except the left-hand side (LHS) of the LB canal from about 57+500 km which comes under MLBCRP-NCB-3 and NCB-4 construction packages, bound to the ecologically-sensitive habitats of proposed extension of the Wasgamuwa National Park (NP). Wasgamuwa NP falls under the jurisdiction of Department of Wildlife Conservation (DWC). Minipe anicut construction work package (MLBCRP-ICB-1) is located entirely within the Victoria Randenigala (VRR) Sanctuary, but a man-modified habitat due to the huge irrigation structure (Minipe Anicut).

7. This anicut has archaeological as well as cultural significance, due to its historical perception which is known to be constructed by King Datusena in the 5th Century AD and later by King Aggabodi I, discovered in the 1960s during the excavations of the Archaeological Commissioner, Dr. Senarat Paranavithana. According to the local folktales, Minipe anicut known as “Yakinnabendi-Portawa” anicut as community believe it is constructed by a she-devil under royal favor.

8. In 1941, the Irrigation Department restored the Minipe Anicut by constructing a low flow weir across the Mahaweli River together with an intake structure to divert water into the LB canal, and in 1962 the length of the LB canal was extended. In 1983, under the Accelerated Mahaweli Development Project, the low flow weir was replaced with a new weir, which also diverted water into the 32-km long RB Trans-basin Canal.

9. The 74-km long LB canal carries 22 m³/s discharge and feeds 7,472 ha of irrigable land in the valley between the LB canal and the Mahaweli River. The LB and RB canals are operated by the Department of Irrigation and the Mahaweli Authority, respectively.

10. Water issues during the construction period are managed by the Irrigation Department and it has been a sensitive aspect, which sometimes affected on the construction progress. Further, maintaining environmental flow to the Wasgamuwa National Park is another requirement to comply with during the construction period as per the CEA and DWC conditional approvals.

1.3 Overall Progress of MLBCRP as of July 2021

11. Out of the six (6) construction packages awarded under MLBCRP, four (4) contract packages successfully completed with construction over by end July 2021, and only NCB-3⁶ and ICB-1⁷ construction packages still being active, showing physical progress of 91% and 64%, respectively, by end July 2021. An overview to the MLBCRP six contract packages is given in the **Table 1-1**.

Table 1-1: Overview and current status in the MLBCRP packages as of July 2021

MLBCRP NCB -1	Contract No.	MWSIP/MMDE/ADB/MLBCR/NCB-1/3267-3268-SRI/NCB/2015/004
	Contractor	M/s. Edward and Christie
	Commencement Date	13 October 2016
	Value of Contract	LKR 568,605,950.69 (incl. VAT)
	Original Completion Date	13 October 2018
	Updated Completion Date	20 December 2020

⁶ NCB means National Contract Bidding

⁷ ICB means International Contract Bidding

	Current status	<ul style="list-style-type: none"> ▪ Even though the intended completion date of 20 December 2020 has elapsed, there are still incomplete works with 98% physical progress by end June 2021. ▪ Hence conditional completion was granted by Engineer by June 2021, promising that the activities below FSL will be completed in water closure August-November 2021 within defect liability period.
	Summary Environment Safeguard Compliance	<ul style="list-style-type: none"> ▪ No Full time EO since July 2020, and the Environmental Manager of Construction Company involved with environmental aspects. ▪ Latest CEMP renewal done in April 2017 ▪ Due to no fulltime EO, EMS of PMDSC attended site monitoring for the project completion report checklist completed ▪ Completion report addressing environmental aspects, including Operational stage Monitoring Plan is in progress and target to finalize parallel to the completion of remaining 2% of the construction work
MLBCRP NCB -2	Contract No.	MMDE/MWSIP/ADB/MLBCRP/NCB-2/3267-3268 SRI/NCB/2016/010
	Contractor	M/s. Gamini Construction
	Commencement Date	26 April 2017
	Value of Contract	LKR 343,067,496.59 (incl. VAT)
	Original Completion Date	24 April 2019
	Updated Completion Date	11 February 2021
	Current status	<ul style="list-style-type: none"> ▪ All work were completed 100% and the certificate of Completion was issued with effect from 11 Feb 2021.
	Summary Environment Safeguard Compliance	<ul style="list-style-type: none"> ▪ No Full time EO since July 2020 ▪ Latest CEMP renewal done in 2019 ▪ Due to no fulltime EO, EMS of PMDSC attended site monitoring for the project completion report addressing environmental aspects ▪ Completion report addressing environmental aspects, including Operational stage Monitoring Plan is in progress
MLBCRP NCB -3	Contract No.	MMDE/MWSIP/ADB/MLBCRP/NCB-3/3267-3268 SRI/NCB/2016/012
	Contractor	M/s. Nawaloka Construction
	Commencement Date	28 April 2017
	Value of Contract	LKR 829,038,115.52 (incl. VAT)
	Original Completion Date	26 April 2019
	Updated Completion Date	09 April 2021(with EoT granted); Engineer's forecast for the completion is 31 December 2021
	Current status	Overall physical progress reached by the Contractor by end July 2021 was 91%
	Summary Environment Safeguard Compliance	No Full time EO since early 2020, EMS of PMDSC attended with the periodical monitoring; no environmental reports received since Dec 2020, and poor responses on the NCR and environmental issue notices issued by the Engineer
MLBCRP NCB -4	Contract No.	MMDE/MWSIP/ADB/MLBCRP/NCB-4/3267-3268 SRI/NCB/2016/017
	Contractor	M/s. Gamini Construction
	Commencement Date	26 April 2017
	Value of Contract	LKR 246,986,203.92 (incl. VAT)

	Original Completion Date	24 April 2019
	Updated Completion Date	N/A
	Current status	Project was handed over on July 24, 2020
	Summary Environment Safeguard Compliance	No Full time EO since early 202. Final inspection to verify the environmental safeguard compliance status, site restoration etc. was conducted jointly by the EMS of MBCRP and PIU relevant officers with the contractor in July (17th and 21st) and the Completion Report prepared with the Operational Stage Monitoring Plan (OSMP)
MLBCRP NCB -5	Contract No.	MMDE/MWSIP/ADB/MLBCRP/NCB-5/3267-3268/SRI/NCB/2016/019
	Contractor	Dockyard General Engineering (Pvt) Ltd
	Commencement Date	07 February 2018
	Value of Contract	LKR 425,500,000.00 (incl. VAT)
	Original Completion Date	12 February 2020
	Updated Completion Date	N/A
	Current status	Project was handed over on August 15, 2020
	Summary Environment Safeguard Compliance	EMS of PMDSC attended on final site inspection to complete checklist on 10 Sept 2020 at project handing over and the Completion Report prepared with the Operational Stage Monitoring Plan (OSMP)
MLBCRP ICB -1	Contract No.	MMDE/MWSIP/ADB/MLBCRP/ICB-1/3267-3268/SRI/ICB/2016/031
	Contractor	China Gezhouba Group Company Ltd.
	Commencement Date	10 May 2018
	Value of Contract	LKR 2,144,521,484.08 (Incl. VAT)
	Original Completion Date	12 November 2020
	Updated Completion Date	21 May 2021, however the extended time granted was elapsed, and Engineer's forecast of completion is 30 June 2022
	Current status	Actual physical progress as of end July 2021 was recorded as 64 %
	Summary Environment Safeguard Compliance	Scope changed with additional tree felling (14 Trees) with the approval of Department of Wildlife Conservation (DWC) to facilitate construction of LB Gabion wall - January 2021

12. Physical and financial progress of the MLBCRP contract packages were affected by the prevailing Covid-19 pandemic, and GoSL regulations enforced with lockdown and island wide, provincial level travel restrictions that caused difficulties mobilizing labour forces. In addition, changes in the LB water closure period by the Irrigation Department also slow down the contractor's progress as some of the selected contractors like NCB-1 and NCB-3 were not prepared with the alternatives to dealing with water during the construction period.

13. The following sections summarize the details of project area, and the remaining construction work including current progress as of July 2021 of the active construction packages under MLBCRP.

1.3.1 MLBCRP-NCB-1 (Stage I)

14. The MLBCRP-NCB-1 package was awarded to rehabilitate the LB canal from 0+000 km to 30+140 km, the Stage 1 of the MLBCRP. **Annex 1** shows the project area of the NCB-1 packages with the land use.

15. As indicated in **Table 1-1**, conditional completion has been granted by the Engineer on 21 June 2021 as there are some defects and minor works needs to be attended. The Contractor has successfully attended the works except for several balance activities below FSL. The activities below FSL will be completed in water closure August-November 2021.

16. Overall package progress and the breakdown of the activities achieved by June 2021 (at the conditional completion) is shown in the **Figure 1-1** and **Figure 1-2**, respectively.

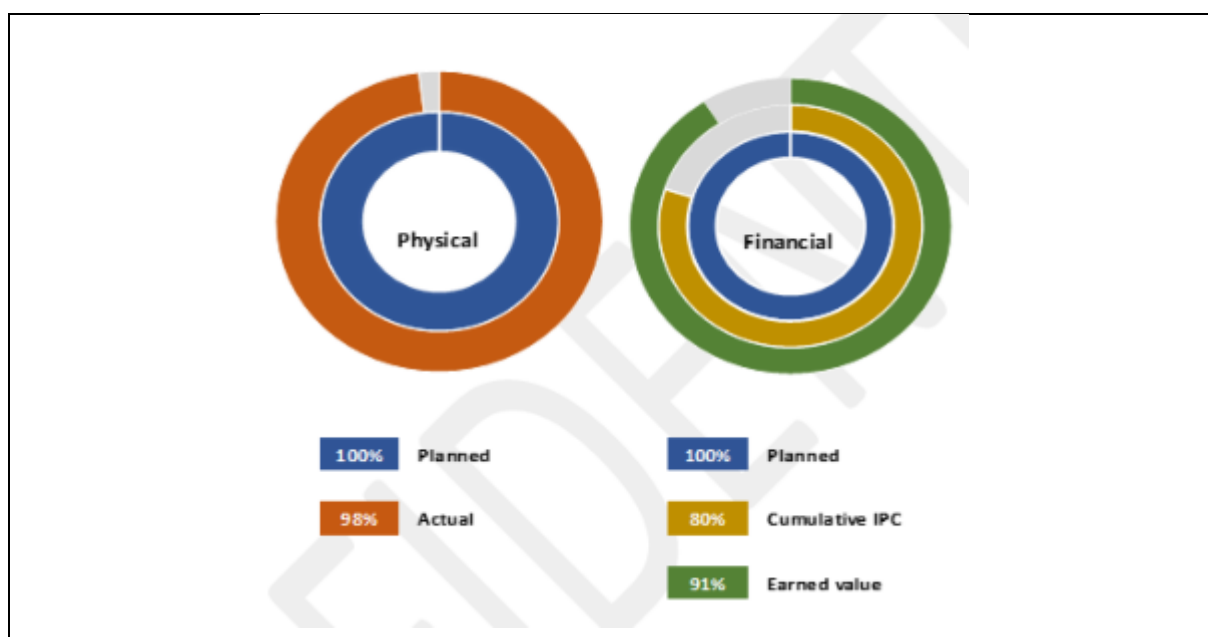


Figure 1-2: Overall physical progress of MLBCRP-NCB-1 package by June 2021

	Target	Achieved
1 Earthworks	100%	81%
2 Causeways	100%	99%
3 Bridges	100%	100%
4 Turnouts	100%	98%
5 Curtain walls	100%	96%
6 Retaining walls	100%	100%
7 Cross Regulators - New	100%	97%
8 Bathing Steps	100%	98%
9 Canal Spills	100%	99%

Figure 1-3: Breakdown of progress achieved under MLBCRP-NCB-1 by June 2021

1.3.2 MLBCRP-NCB-3 (Stage 3)

17. The MLBCRP-NCB-3 package was awarded to rehabilitate the LB canal from 49+820 km to 63+650 km, the Stage 3 of the MLBCRP. **Annex 2** shows the project area of the NCB-3 packages with the land use.

18. Construction work under the MLBCRP-NCB-3 contract package is conducted by the M/s Nawaloka Construction. As explained in **Table 1-1**, the extended time for completion was until 09 April 2021 had elapsed and the Engineer waiting for the revised construction program to decide on the fresh EOT. The contractor has the opportunity to work in three dry canal reaches as the main canal is by passed, but Contractor failed achieving targets due to poor financial resources eventually ended up with less manpower and lack of construction materials.

19. **Figure 1-3** shows the breakdown of progress achieved under each key work item of the scope of work of the MLBCRP NCB 3 package by end June 2021.

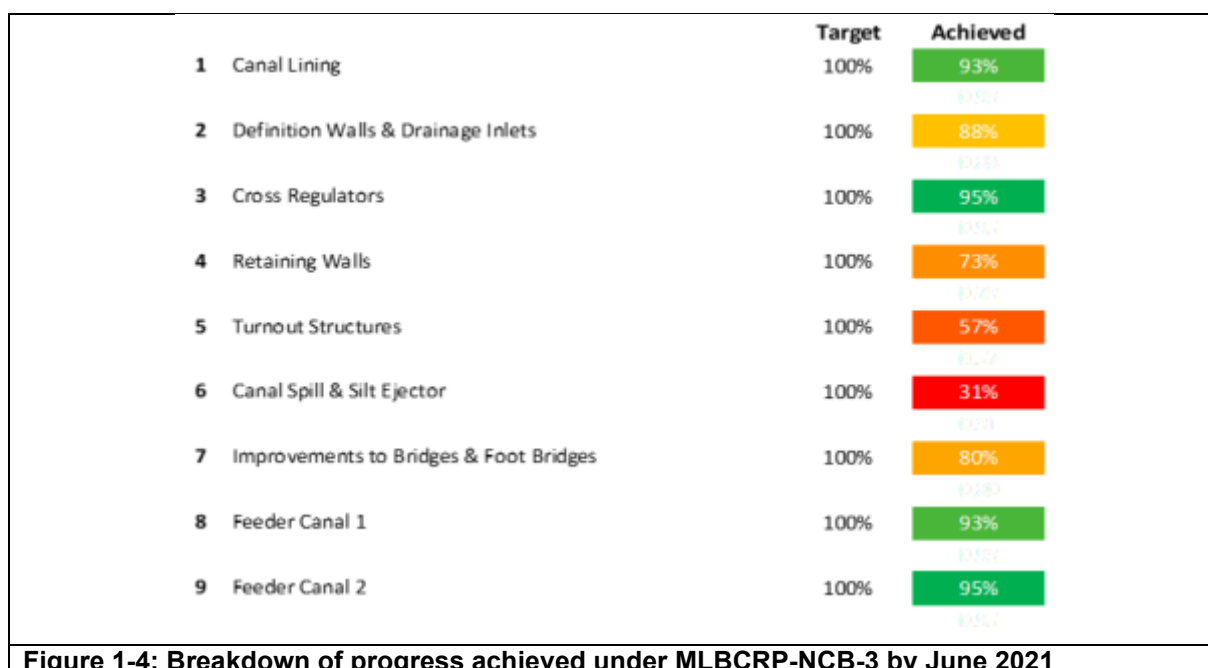


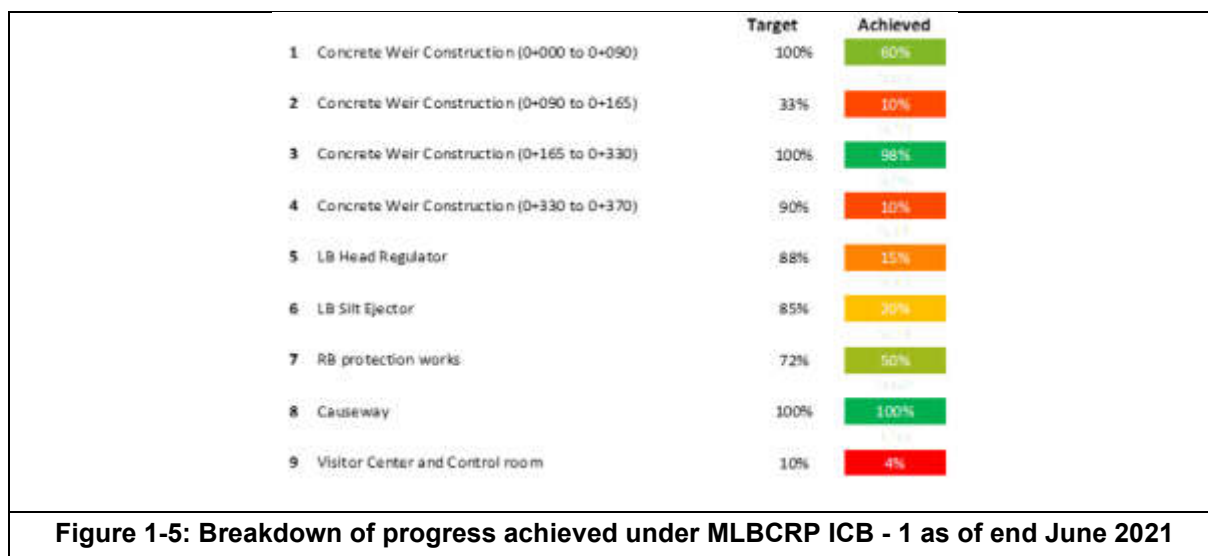
Figure 1-4: Breakdown of progress achieved under MLBCRP-NCB-3 by June 2021

1.3.3 MLBCRP-ICB-1

20. The MLBCRP-ICB-1 package is for heightening of the existing Minipe anicut by about 3.5 m and constructing water control facilities at the anicut related to LB and RB canal water issuance. China Gezhouba Group Co Ltd (CGGC) commenced construction on 10 May 2018.

21. The intended completion date as per the approved EoT expired by 21 May 2021, and the Employer is entitled to claim for delay damages as per the Conditions of the Contract as there are substantial balance work remaining. If the Contractor adheres to the deadlines conceded by the Employer to complete construction by end December 2021, the contractor has to show an extensive progress but there is no indication of progress improvement. The Engineer forecasts that construction will not be completed until Q2 or Q3 2022.

22. Further, the contractor has regularly had delays in submitting construction programmes, flow management plan, and in ensuring the quality assurance of the works being carried out by their main sub-contractor (AMSK). **Figure 1-5** shows the breakdown of work completed by end June 2021.



2 ENVIRONMENTAL MONITORING IN MLBCRP

2.1 Organizational set up for MLBCRP Environmental Monitoring & Reporting

23. The Resident Engineer (RE) appointed for MLBCRP under the PMDSC assumes primary responsibility for ensuring the implementation of Contractor's Environmental Management Plan (CEMP) through the Contractor. The relevant required actions are guided by the ES and Environmental Monitoring Specialist (EMS) of PMDSC.

24. The environmental monitoring of the all MLBCRP packages, including review of Method Statements (MSs), attending relevant meetings, and all package-specific additional surveys on active and future packages under MLBCRP are handled by the EMS of PMDSC located in the RE office in Hasalaka until January 2021. With the award of the long tunnel (24 km) under Upper Elahera Canal Project (UECP-ICB-2A construction package), the EMS transferred to CRE office Dambulla to attend environmental safeguard related work in both UECP-2A and MLBCRP area. Once the EMS allocated for North-Western Province Canal Project (NWPCP) was resigned by June 2021, the EMS responsible for MLBCRP area was again shifted to Polipithigama (NWPCP-ICB-2 RE office), and since June 2021, he is looking after NWPCP-ICB2, NWPCP-ICB-1 with the MLBCRP related environmental safeguard work due to insufficient professional resources under PMDSC, while recruitment of the replacement EMS is pending. The Environment Specialist (ES) of PMDSC also handed over her resignation with effect from end July 2021, completing her 5 and half year continuous inputs to PMDSC of MWSIP. Hence, PMDSC now in the process of recruiting one new EMS and ES.

25. In addition, overall guidance for the contractor's Environmental Officer (EO) to identify issues through self-monitoring, attending to required mitigation measures, obtaining required license and approvals, awareness and training for the environmental related aspects are handled by the EMS under the coordination and assistance by the ES-PMDSC.

26. Any environmental issues, especially any non-compliance events observed by EMS during routine site monitoring, as well as through the public complaints, are duly informed to the RE for appropriate communication to the Contractor to attend required corrective actions with the guidance of EMS and ES of PMDSC.

27. The Contractor is guided to implement required mitigation measures in the updated EMP for the generic environmental issues, and for the site-specific issues comments are made on the submitted MSs, Environmental Incident Reports (EIRs), Non-Compliance Report (NCRs), and through letters. In addition, periodical environment meetings, joint inspections are being used to deliver verbal instructions where necessary by PMDSC, PIU and PMU.

28. The key meetings, inspections and surveys carried out by the EMS and ES PMDSC related to NWPCP are summarized in the **Table 2-1**.

Table 2-1: Key meetings, stakeholder consultations and joint inspections attended by EMS in MLBCRP

Date	Location	Participants	Objective
24 Aug 2021	ICB 1	IEMS, EMS, HSO, SEO-PIU, EO, SO	Quarterly Progress Review by the Independent Environment Monitoring Specialist
21 Sep 2021	ICB 1	ES-PMU, EMS, HSO, SEO-PIU, EO HO, SO, Safety Engineer	HSE joint inspection by ES-PMU
29 Sep 2021	CRE Office, Dambulla	ES-PMU, ES-PMDSC, HS FP, All EMSs, Relevant PMU / PIU staff	Review session on environment, health & safety performance
05 Oct 2021	ICB 1	ES-PMDSC, EMS, SEO-PIU	ICB 1 anicut site and soil excavation area inspection
18 Nov 2021	Theripaha Reforestation land ICB 1	Representative of Minister of Wildlife and Forest Conservation, PD-PIU & other PIU staff, EMS & other PMDSC staff,	Reforestation site inspection and awareness meeting.
26 Nov 2021	Online	ES-PMU, ES-PMDSC, SEO, EMS, EO, RTL, ADB representative	Discussion on reforestation by Contractors & follow up maintenance
12, 13 & 14 Dec 2021	All packages including reforestation lands	IEMS, EMS, HSO, SEO-PIU, relevant EO etc.	Year-end Progress Review by the Independent Environment Monitoring Specialist
04 Jan 2021	NCB 3	EMS, SEO-PIU	Naminioya & Hibiliyakada soil excavation area joint inspection
05 Jan 2021	ICB 1 & NCB 1	EMS, SEO-PIU	Joint inspection
19 & 20 Jan 2021	Asamodagamya - ICB 1	DWC representative, EMS, SEO-PIU, EO & RTL	Asamodagamya reforestation land final joint inspection – Sampling work
26 Jan 2021	ICB 1	EMS, SEO-PIU	Joint inspection on removal of 4 trees near head regulator
15 Feb 2021	ICB 1	EMS, SEO-PIU, EO	Joint inspection on removal of 4 trees near head regulator
24 Feb 2021	Theripaha Reforestation land-ICB 1	EMS, EO, RTL	Joint inspection of reforestation land
4 Mar 2021	ICB 1	ES-PMDSC, EMS, HSFP, EO, Safety Engineer, HO, SO	Joint inspection & EHS meeting
23 Mar 2021	Asamodagamya - ICB 1	EMS, PIU representative, EO & RTL	Asamodagamya reforestation land final joint inspection – Tree count
29 Apr 2021	Theripaha Reforestation land-ICB 1	EMS, SEO-PIU, EO, RTL	Joint inspection of reforestation land
7 May 2021	Asamodagamya - ICB 1	EMS, PIU representative, EO & RTL	Asamodagamya reforestation land final joint inspection – Tree count

2.2 Monitoring Records in MLBCRP (July to July 2021)

29. The MLBCRP-ICB-1 package construction was continued throughout the reporting period, and the construction work of the NCB packages was limited to the water closure period from 10 August 2020 for NCB-1 and -2 areas and from 20 July 2020 for NCB-3, and -4 areas up to the early October 2020. Due to the prolonged water closure in the LB canal, the surrounding well water level depletion was experienced, and the PD-PIU made necessary arrangements to distribute water through alternative sources.

30. The Quarterly Environmental Progress Review by the Independent Environmental Monitoring Specialist (IEMS) was carried out from 17-27 August 2020 with the participation of environment safeguard team representing PMDSC, PIU, PMU and the contractor's relevant officers including MLBRP area.

31. Following sections summarize the contractor's environmental safeguard compliance status as per the monitoring records of EMS during his monitoring visits, and meetings held with the contractor's representatives.

2.2.1 MLBCRP-ICB-1





32. MLBCRP-ICB-1 environment safeguard compliance recorded as moderately satisfactory due to several lapses noticed, during the construction, and material borrowing activities. Three (3) Environmental Non-compliance Reports (E-NCR) and two (2) Environment Incident record letters raised during the reporting period (July 2020 to July 2021) are summarized in **Table 2-2**.

Table 2-2: Summary of Environmental Non-compliances recorded during the reporting period

#	Issue	Date of Record	Incident summary, Corrective Actions taken and progress summary with the dates
i.	Absence of E-flow arrangement at environmentally sensitive area.	28 Aug 2020	<ul style="list-style-type: none"> Installation of temporary environmental flow tube to sensitive area at the D/S to LB silt ejector, as conditioned in the CEA conditional approval has been neglected by the Contractor. The Contractor's reply was not acceptable (on the E-NCR issued on 28.08.2020) and a letter sent to CGGC on 22.10.2020 (letter ref: PMDSC-ML-Site/ICB-1/CGGC/727), in addition to verbal instructions given. No permanent solution except watering time to time during dry season
ii.	Release of wastewater mixed with grout to the river upstream,	04 Aug 2020	<ul style="list-style-type: none"> Corrective action taken by 5 Aug with restoration of affected area
iii.	The Contractor neglected to restore the soil excavation site in LB canal bund road (Ch 11+350-11+650) and had left the excavation site without performing any restoration work. Severe soil erosion and sedimentation in canal bed observed.	24 Nov 2020	<ul style="list-style-type: none"> New borrow site opened in the Canal Bund Road Ch 11+300 to 11+650 approved by ID and GSMB, was not attended with required mitigation measures to control dust, safe access to the community. The Contractor informed through a letter on 08.10.2020 followed by joint site monitoring, and as no response, Contractor informed through a letter on 11.11.2020 (letter ref: PMDSC-ML-Site/ICB-1/CGGC/770), E-NCR issued on 24.11.2020 (letter ref: PMDSC-ML-Site/ICB-1/CGGC/807), and the contractor started restoration work in end December, by digging a drain but left the site even without removing loose soil resulted due to digging of the drain. Residents of the area complained about access difficulties to their homes due to partially completed drain. The Consultant jointly inspected the site with PIU on 20th January 2021 and decided to refill the drain excavated by the Contractor. The drain has been filled by the contractor without compacting the soil and leaving loose soil along canal bund. By June 2021, most of areas covered with grasses except road surface. The Contractor verbally reminded several times, finally on 25.06.2021, but not yet satisfactorily restored the affected areas
iv.	Use of unauthorized site as a disposal site located at the Minipe pond reservation neglecting		<ul style="list-style-type: none"> The Contractor has used an unauthorized site as a disposal site located at the Minipe pond reservation neglect-

#	Issue	Date of Record	Incident summary, Corrective Actions taken and progress summary with the dates
	the instruction given by the Consultant		<p>ing the instruction given by the Consultant since 2018 (approval sheet ref. MA-ICB 1-MS-05-C dated 29.08.2018, EIR 002 dated 17.12.2018 and letter PMDSC-ML-Site/ICB-1/CGGC/134 dated 09.01.2019).</p> <ul style="list-style-type: none"> 05.01.2021 (In response to PD-PIUs letter), the Contractor instructed to submit an incident report on this issue (letter ref PMDSC-ML-Site/ICB-1/CGGC/848 dated 12.01.2021). The Contractor has replied through a letter (CGGC-MIN-IPE/ICB-1/ RE/1433 dated 17.01.2021). They have not performed any restoration work or implemented any soil conservation method. In mid-February they have disposed few loads of boulders to the site. The Contractor instructed to display clear notice near disposal yard prohibiting dispose any material under MLBCRP (04.03.2021)
v.	Ignorance of PMDSC instructions by EO		<ul style="list-style-type: none"> The Contractor completely ignored IEMS visit and neglected even to perform their routing maintenance work of the site such as site cleaning and watering for dust control on 12.12.2020. A warning letter issued regarding rough negligence of the Contractor on 17.12.2020 (letter ref: PMDSC-ML-Site/ICB-1/CGGC/833). No explanations received from the Contractor until end December

23. **Figure 2-1** provides photographic evidence related to the environmental issues notified related to the MLBCRP-ICB-1 site.

	
	
The soil excavation site in LB canal bund road (Ch 11+350-11+650) in Oct 2020	The soil excavation site in LB canal bund road (Ch 11+350-11+650) in July 2021

 	 
<p>Unauthorized site used as a disposal site located at the Minipe pond reservation (status in Jan 2021 above, July 2021 below)</p>	<p>Remaining waste concrete at field concrete testing area (above) and useful concrete products made using waste concrete (below)</p>
	
<p>An attempt to release polluted water from excavations near LB head regulator area to the environmentally sensitive area – July 2021</p>	<p>Poor house keeping of the site in June 2021</p>

Figure 2-1: Photographic evidence for environmental monitoring findings during reporting period

2.2.2 MLBCRP NCB packages


24. There were no major issued reported as most of the rehabilitation work was within the existing LB canal, and the reported issued were not significant and reversible, except One NCR issued to NCB -1 contractor as per the particulars provided in **Table 2-3**.




Table 2-3: Summary of Environmental Non-compliances recorded under NCB -1 during the reporting period

#	Issue	Date of Record	Incident summary, Corrective Actions taken and progress summary with the dates
i.	NCB 1- Operation of batching plant without a valid EPL for 8 months, and not following required Environmental mitigation measures.	21 Oct 2020	<ul style="list-style-type: none"> The contractor has disassembled the plant. Restoration partially completed by end of reporting period

25. **Table 2-4** summarizes the environmental monitoring findings recorded during reporting period in other NCB packages.

Table 2-4: Environmental Monitoring findings in NCB packages of MLBCRP

	Incident	Corrective Action
NCB-1	<ul style="list-style-type: none"> Feb 2020 - EPL of batching plant had expired on 22nd February 2020 Letter issued to remind the renewal of EPL on 20 May 2020 Though the Contractor pretended that they are not using the plant further, they have operated it time to time until Oct 2021. E-NCR issued after inspection by ES-PMDSC and EMS on 22 Oct 2021 (Letter ref: PMDSC-ML-Site/NCB-1 /E&C/445) 	<ul style="list-style-type: none"> The contractor disassembled the plant. Restoration of the land partially completed  <p>View of the land in June 2021</p>
NCB-3	<ul style="list-style-type: none"> E-NCR issued on 1st November 2019 regarding following issues <ol style="list-style-type: none"> Stockpiles along the canal bank without proper environmental safeguard measures, and coffer damming with loose soil in the canal bed without applying standard methods. Batching plant area – no proper method implemented to dispose sludge, and the sedimentation tank in the batching plant not functioning properly which cause increase of alkalinity in soil and water in the adjacent areas. Oil spill from a construction vehicle (crane) on the road & near the canal bank unattended for months. 	<ul style="list-style-type: none"> Most of previously identified environmental issues were unattended by the Contractor & continuing work with negligence.

	Incident	Corrective Action
	<p>d) No environmental Officer on site.</p> 	
	<ul style="list-style-type: none"> The Contractor neglected restoration of the Namini Oya Tank soil excavation site violating the conditional approval from Dept. of Agrarian Services Oct-Nov 2020: 	<ul style="list-style-type: none"> During rainy period in December 2020 borrow area submerged and restoration possible upon depletion of water during next dry season Dec 2020: 
	<ul style="list-style-type: none"> EPL of the batching plant has expired on 27 March 2021 and renewal delayed due to CEA office closure due to Covid 19 restrictions. 	<ul style="list-style-type: none"> Renewal in progress and renewed, license to be received

3 PROGRESS OF REFORESTATION IN THE MLBCRP

26. A total of 144 ha has to be reforested under the MLBCRP through the Contractors under the Provisional Sum Budget (PSO) allocated for additional environmental mitigation measures, including 58 ha through ICB-1 package. All the lands reforested under the NCB contract packages (86 ha) has been handed over to the PD-PIU in MLBCRP area by end of April 2020

27. The summary of the reforested lands under MLBCRP under the management and coordination through PMDSC environmental team is given under **Table 3-1**.

Table 3-1: Summary of the reforested lands and extents under MLBCRP

Package	Site Location	Extent (ha)	Final Inspection date	Handed over date
NCB-1	Alukumbura & Asamodagamyaya lands (Canal Reserv.) and Sangabhodhi school land	1.006	22.10.2019	30.12.2019
NCB-2	Udawela, Ulpothagama & R. Premadasa school lands	1.2121	30.12.2019	07.01.2020
NCB-3	15 land plots (14 along canal reservation & 1 at Maraka Wewa)	15.0	24.10.2019	09.12.2019
NCB-4	Amuneyaya FD land (PSO 2)	62.5	09.01.2020	07.02.2020
	Lediayangala Primary School and Gamburuoya FD land (PSO 1)	1.43	19.02.2020	27.05.2020
	Handungamuwa, Medakanda, and Weheragalayaya school lands and Ladiyangala ID land (PSO 3)	4.86	02.03.2020	27.05.2020
ICB-1	Asamodagamyaya in VRR sanctuary under DWC	5.00	June 2020	Not yet
	Theripeha in VRR sanctuary under DWC	53.0	Pending	
Total under MLBCRP through PMDSC/ Contractor		144.008		

28. However, the maintenance after handing over is not satisfactory due to not establishing proper O&M budget through the Employer. The plants planted in the school premises are maintained by the school principal with the support of the parents, but the planted areas in the irrigation reservation need more attention through the Irrigation Department.

29. **Table 3-2** summarizes the details related to the reforestation progress in the MLBCRP area which was carried out through the contractor under the Provisional Sum item allocated for the implementation of additional environmental mitigation measures as recommended in the IEE.

Table 3-2: Progress achieved on reforestation under MLBCRP

Contract Package	Progress
ICB-1	<p>Asamodagamyaya:</p> <ul style="list-style-type: none"> Operation & maintenance work continued until 11 Dec 2020. Final joint inspection conducted during May 2021 and the land handed over to the PIU on 29 May 2021 Total 1691 plants of average height of 71.1 cm available with 67.64% survival rate. <p>Theripaha:</p> <ul style="list-style-type: none"> Started work of 53 ha of land in October 2020 in Theripeha area. The land belongs to the DWC under VRR sanctuary.

Contract Package	Progress												
	<ul style="list-style-type: none"> Assisted Natural Regeneration (ANR) techniques with Sloping Agriculture Land Technique (SALT) adapted for the land. Following planting methods used in Theripaha reforestation land: <table border="1"> <thead> <tr> <th>Planting Methodology</th><th>Total Seedlings Required / estimated seedlings from seeds per ha</th></tr> </thead> <tbody> <tr> <td>Tree seedlings raised in poly bags</td><td>150</td></tr> <tr> <td>Plants established in coir pellet potting medium</td><td>250</td></tr> <tr> <td>Direct sowing of seeds</td><td>500</td></tr> <tr> <td>Addition of forest soil as a seed bank</td><td>500</td></tr> <tr> <td>Total</td><td>1400</td></tr> </tbody> </table> <p>However, addition of forest soil as a seed bank discontinued due to practical difficulties in hilly terrain and as the contractor attempted to use soil in same land for the work.</p> <ul style="list-style-type: none"> The Contractor has planted / prepared to plant large number of trees in unsuitable locations (eg: Kumbuk, Mee). The contractor instructed to remove majority of those plants. Some plant species selected were not suitable for the land (eg: Lavulu, Siyambala, Kos, Sapu) and the contractor instructed to remove those plants. Operation & maintenance work continued until 15 July 2021 and final joint inspection pending due to prevailing Covid 19 situation. 	Planting Methodology	Total Seedlings Required / estimated seedlings from seeds per ha	Tree seedlings raised in poly bags	150	Plants established in coir pellet potting medium	250	Direct sowing of seeds	500	Addition of forest soil as a seed bank	500	Total	1400
Planting Methodology	Total Seedlings Required / estimated seedlings from seeds per ha												
Tree seedlings raised in poly bags	150												
Plants established in coir pellet potting medium	250												
Direct sowing of seeds	500												
Addition of forest soil as a seed bank	500												
Total	1400												
NCB 1	<ul style="list-style-type: none"> Reforestation lands been handed over to PIU in December 2020 Gardening equipment requested by Sri Sangabodhi School purchased through the Contractor and handed over to the school through PIU. 												
NCB-2	<ul style="list-style-type: none"> Reforestation lands been handed over to PIU in January 2020 Gardening equipment requested by Schools purchased through the Contractor and handed over to the schools through PIU. 												
NCB-4	<ul style="list-style-type: none"> Reforestation lands been handed over to PIU in Feb-May 2020 Gardening equipment requested by Schools purchased through the Contractor and handed over to the schools through PIU. 												
NCB 3	<ul style="list-style-type: none"> Reforestation lands been handed over to PIU in December 2019 												

30. Photographic evidence related to the reforestation activities in the MLBCRP area are shown in **Figure 3-1**.



Awareness Meeting for Theripaha Reforestation land on 18 Nov 2020	Potted plants for Theripaha Reforestation land
	
Theripaha Reforestation land by January 2021	
	
Theripaha Reforestation land by April 2021	Theripaha Reforestation land by June 2021
	
MLBCRP-NCB-1 site at Morayaya School (Dec 2020)	Reforested area under MLBCRP NCB 2(Dec 2020)

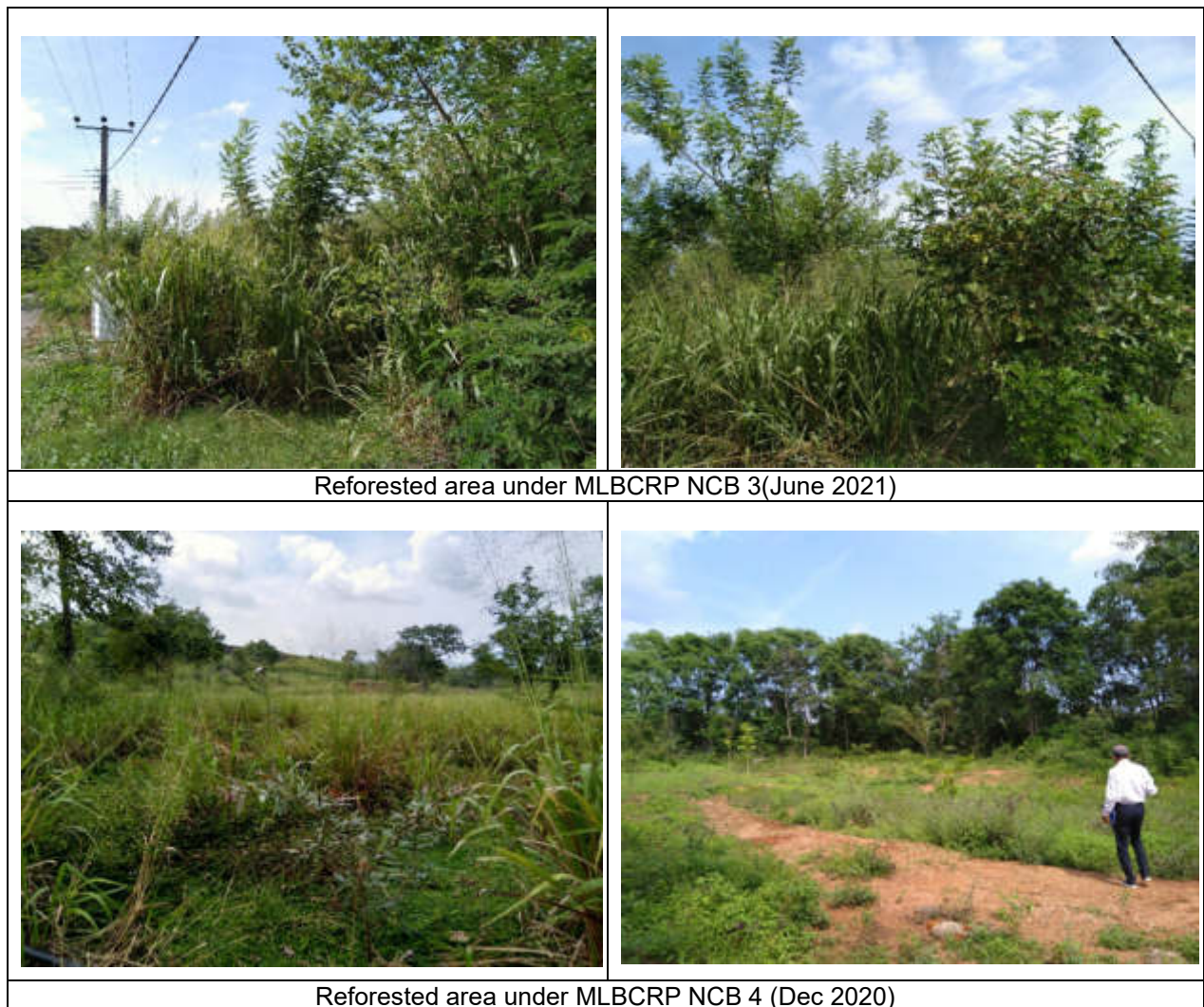


Figure 3-1: Photographic records related to reforestation activities conducted during the reporting period

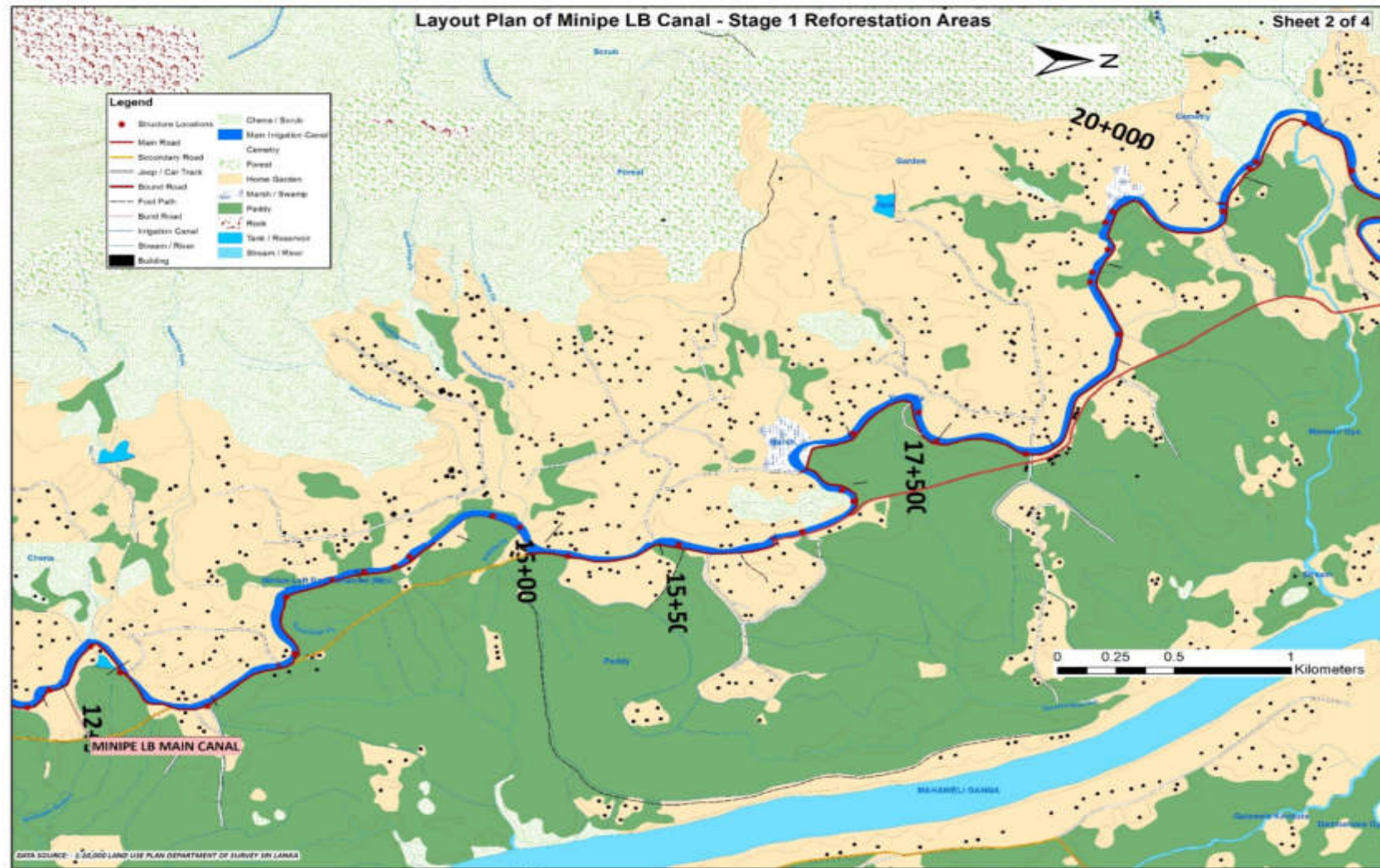
4 PLANNED ACTIVITIES FOR NEXT YEAR (AUGUST 2021 – JULY 2022)

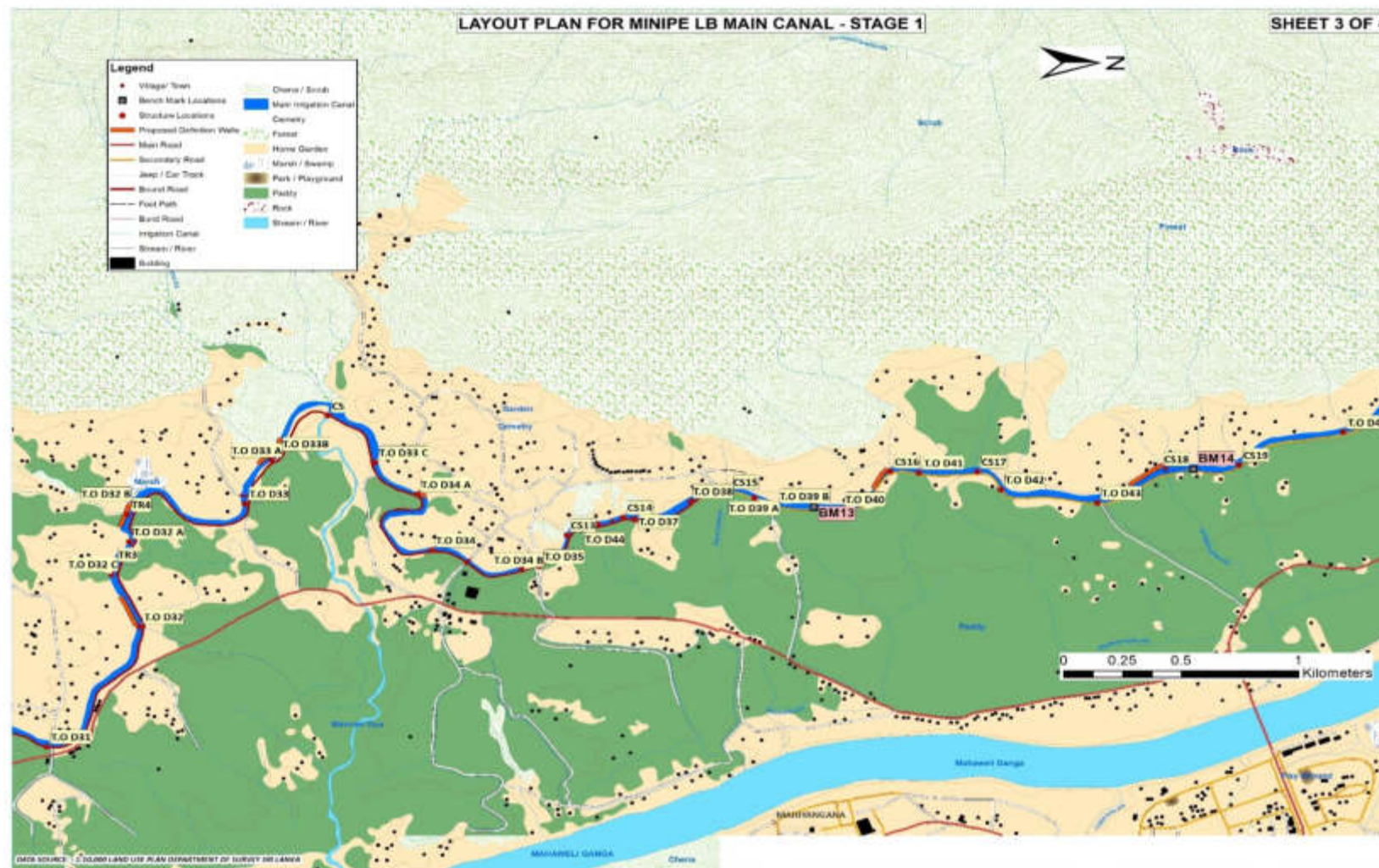
31. In addition to the routine contract management and supervision activities under Task 3, the following additional activities is planned under the PMDSC for next year in MLBCRP area:

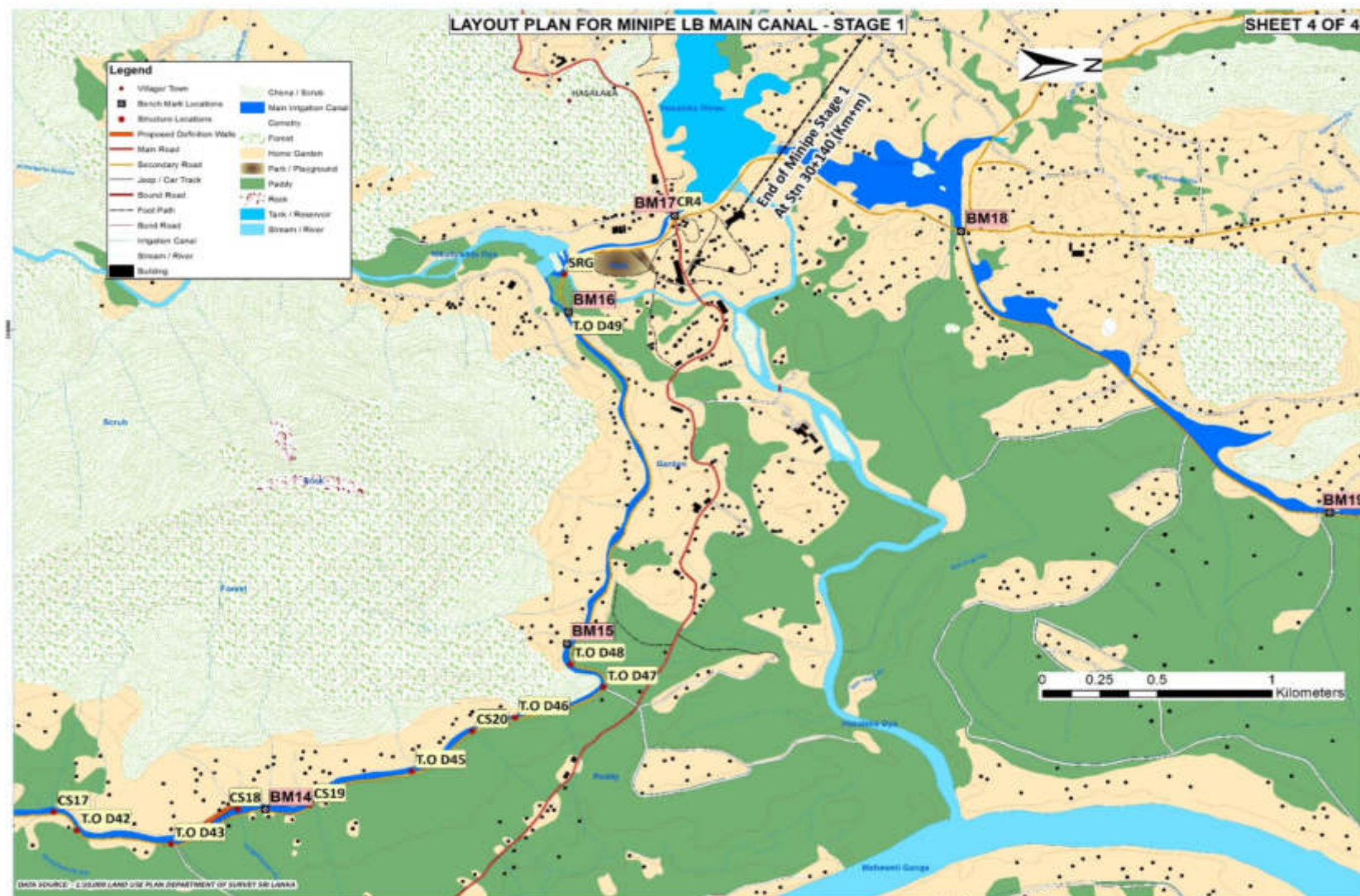
- Continue preparing the environmental completion reports for MLBCRP-NCB-1 and NCB-2, and other packages if completed as scheduled
- Coordinate through the MLBCRP-ICB-1 Contractor (CGGC) to prepare site restoration plans for the Minipe anicut area, and start compensatory tree planting

Annex 1:

MLBCRP-NCB-1 Area with the Land Use







Annex 2:

MLBCRP-NCB-3 Area with the Land Use

