

Land Acquisition and Resettlement Plan

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Georgia: Climate Smart Irrigation Sector Development Program

Kvemo Samgori Left Main Canal Irrigation Scheme (Main Canal)

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**Georgia: Climate Smart Irrigation Sector Development Project
Modernization of Kvemo Samgori Left Canal Irrigation Scheme (Output 2)**

Main Canal, associated with the Area 1 (Section 1)

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ABBREVIATIONS

ADB	Asian Development Bank
AHHs	Affected households
APs	Affected persons
CBO	Community-based organization
DMS	Detailed measurement survey
ESIA	Environment and social impact assessment
GoG	Government of Georgia
GA	Georgian Amelioration company
GRC	Grievance Redress Committee
IA	Implementing agency
PIC	Project Implementation Consultant
PIU	Project Implementation Unit
PM	Person-month
PMO	Program Management Office
IP	Indigenous People
IVS	International Valuation Standards
LAR	Land acquisition and resettlement
LARF	Land acquisition and resettlement framework
LARP	Land acquisition and resettlement plan
MEPA	Ministry of Environmental Protection and Agriculture
NAPR	National Agency of Public Register
NGO	Nongovernment organization
ROW	Right of way
SES	Socio-economic survey
SPS	ADB's Safeguards Policy Statement, 2009
TRTA	Transactions technical assistance
SSMR	Semi-annual safeguards monitoring reports
WSS	Water supply and sanitation

GLOSSARY

Affected Households	A household consists of one or more people who live in the same dwelling and share meals or living accommodation and may consist of a single or more families. The affected households (AHHs) in this document are applied to the owners and users of lands and other assets that will experience full or partial, permanent, or temporary physical or economic displacement due to the project; compensations and as relevant assistance allowances are calculated for him/her representing the household. All members of an AHHs are referred as APs.
Affected Persons	In this document, the affected persons (APs) are the members of the AHHs. Also referred as displaced persons (DPs) in ADB SPS (2009).
Cut-off-Date	The date after that anyone who will influx to the area, and/or build/alter structures, will not be eligible for compensation. For this project, the IA plans to announce the cut-off date as the last day of the detailed measurement survey which will be conducted based on the final detail engineering design to be prepared in the project implementation. The validity of the cut-off-date in ADB projects typically is 3 years.
Detailed Measurement Survey	With the aid of the approved final DED, this activity involves the finalization and/or validation of the results of the inventory of losses (IOL), the severity of impact, and final list of AHHs during the final LARP preparation. The final resettlement cost will be calculated following the completion of the DMS.
Economic Displacement	Loss of land, assets, access to assets, income sources, or means of livelihoods because of (i) involuntary acquisition of land or other economic assets and livelihoods/income sources, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas.
Entitlements	Range of measures comprising compensations at replacement cost principle, income rehabilitation assistance, transfer assistance, income substitution, and relocation costs which are due to AHHs to compensate and mitigate the impacts, restore, and improve their social and economic living standards. It depends on the type of losses and the degree of impacts and specified in the entitlement matrix.
Inventory of Losses (IOL)	The process of all fixed assets (i.e., lands used for residence, commerce, agriculture, including ponds; dwelling units; stalls and shops; secondary structures, such as fences, tombs, wells; trees with commercial value; etc.) and sources of income and livelihood inside the project right-of-way (ROW), to identified and measured, their owners identified, their exact location pinpointed, and their replacement costs calculated. Additionally, the severity of impact to the affected assets and the severity of impact on the livelihood and productive assets of AHHs will be determined.
Physical Displacement	Physical relocation, loss of residential land, or loss of shelter because of (i) involuntary acquisition of land and/or other properties, or (ii) involuntary restrictions on land use or access to legally designated parks and protected areas.
Rehabilitation assistance	Additional support provided to AHHs losing productive assets, incomes, employment, or sources of living, to supplement payment of compensation for acquired assets to restore the living standards and quality of life of APs to at least the pre-project level.
Replacement cost	Value enough to replace the affected assets and cover other relevant uncured/or incurring costs such as transaction and registration costs for the replaced lands as compensation, and without deducting depreciation for such assets as well as cost of salvage materials, any taxes and transportation costs.
Severely Affected	This refers to affected households who will permanently lose 10% or more of their total productive land and/or assets, and/or will be physically relocated.
Vulnerable households	Low-income households, female-headed households, the elderly headed household, households headed by physically disabled persons, landless or non-titleholder affected households. These households are at risk of being disproportionately affected by the project due to their vulnerable status.

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EXECUTIVE SUMMARY

1. **Introduction.** This Land Acquisition and Resettlement Plan (LARP) is prepared under the proposed Climate Smart Irrigation Sector Development Program (Program) that Asian Development Bank (ADB) considers to finance in Georgia. The Program will support policy reforms and develop institutional capacity in water resources management and delivery of climate-smart irrigation services. The program is aligned with the following impact: agriculture production and food security improved (Irrigation Strategy). The outcome will be sustainable, productive, and resilient agriculture system in eastern Georgia strengthened. Output 1: Institutional, governance, management, and financial management enhanced. Policy reforms are required to create an enabling environment for outputs 2 and 3; (ii) Output 2: Irrigation schemes modernized; and (iii) Output 3: Innovative agriculture production systems demonstrated.

2. Output 1 has no physical works to cause land acquisition and resettlement (LAR) impacts. The Policy Matrix include involuntary resettlement safeguard measures. Output 2 that will support modernization of the dilapidated, under-utilized Kvemo Samgori left canal irrigation scheme in Kakheti region in eastern Georgia, is expected to LAR impact. Output 3 will introduce innovative on-farm technological improvement demonstration works (including drip and/or sprinkler irrigation and laser land leveling) in one or more areas to be selected to be modernized by the project. All works will be done on a voluntary basis (or maybe paid via an honorarium) for interested farmers. Farmers will be recruited to act as lead farmers and trainers on innovative packages, compensated for their time and engagement in training other farmers, and managing the demonstration visits to their farms. They will also benefit from acquiring climate-smart equipment/technologies on grant bases from the project investment funds. Hence, Output 3 is not expected to cause resettlement impact.

3. The Executive Agencies (EAs) are the Ministry of Finance for Policy component (Output 1) and the Ministry of Environment Protection and Agriculture (MEPA) for Investment component (Output 2 and 3). Existing Project Implementing Agency (PIU) under the MEPA will be the implementing agency for outputs 2 and 3 and overall responsible resettlement tasks.

4. The project preparation and modernization of the irrigation scheme is planned in two phases and through design-build contract. Phase 1 includes modernization of irrigation distribution networks defined as Areas 1-4, and Phase 2 includes modernization works in Areas 5 and 6 (Figure 1, main text). At this stage, there is design available for the part of the Main Canal associated with the Area 1 (G-23 to G-33), and concept design for the Area 1 distribution network. For other areas, designs are not yet available.

5. The project is Category B for Involuntary Resettlement (IR) Safeguard as per ADB's Safeguard Policy Statement, 2009 (SPS), as the project does not involve physical displacement and and/or impacting 10% or more of the APs land or productive asset exceeding 200 APs.¹ No indigenous people or any ethnic minority groups as defined in ADB's SPS live in the project area. The project is Category C for Indigenous Peoples impact safeguards.

6. **Scope of this LARP.** This LARP is prepared for the planned modernization works in the part of the Main Canal related to in Area 1 (Ch 313+42 to 397+00) following the ADB's Safeguard Policy Statement (SPS 2009) and laws of Georgia. This LARP is based on DED and it is implementation-ready once approved by ADB. A separate LARP is prepared for

¹ The project impact is deemed significant if 200 or more persons experience major impacts, which are defined as (i) being physically displaced from housing, or (ii) losing 10% or more of their productive (income generating) assets. ADB Operations Manual: Safeguard Policy Statement (F1): OM Section F1/OP Issued on 1 October 2013.

modernization works within the Area 1. A Land Acquisition and Resettlement Framework (LARF) is prepared and disclosed before the project appraisal to address any resettlement impacts of the whole Program. Accordingly, LARP(s) shall be prepared for potential LAR impacts of Areas 2 to 6 based on the DED after the project approval. This LARP further will deal only with the LAR impacts of the Main Canal unless otherwise specified.

7. **Existing situation in the main canal:**² The main canal was constructed in 1961-1971s. The total length of the main canal is 48,850 km, the capacity varies $Q = 21-3 \text{ m}^3/\text{s}$ and it irrigates 17,450 ha. The main canal consists of open trapezoidal cross sections, the slopes and bottoms covered with monolith, which is collapsed in many sections. The headworks of the main canal has been rehabilitated (31,342 meters), however, in the upper tailrace of the headworks there is an excess amount of sedimentary soil requiring maintenance. For more than 50 years of operation no rehabilitation works have been carried out on the facilities except for minor ongoing repairs and cleaning. All facilities are in very poor condition, concrete is obsolete and fragile, mechanical equipment is missing or need replacement. As mentioned above, this LARP is prepared for the main canal section related to the Area 1 (Ch 313+42 to 397+00).

8. **Planned modernization work.** Modernization works will be carried out along the existing alignment of the main canal that is an open concrete canal. Physical works for modernization of the main canal includes restoration of the main canal and galleries, tunnels, bridges, super passages, pipes under the canal, spillways and inverted siphons located on it and include: (i) canal shall be cleaned from thorny bushes, trees and sediments; (ii) rehabilitation of the sections of the main canal by arranging the surface of the canal with shotcrete: a) washing the slopes and bottom of the existing lined canal with water jet; b) drilling of holes on the bottom and slopes of the canal for anchors; c) arranging anchors for steel mesh and expansion joints with bitumen; d) impregnated planks, every 20 meters; (iii) Rehabilitation of obsolete section of the main canal: (a) washing extremely obsolete bottom and slopes of the canal with water jet; b) wetting the bottom and slopes before arranging lean concrete; c) arranging lean concrete at the bottom and slopes of the canal; d) drilling of holes on the bottom and slopes of the canal; e) fasten anchors in the holes with adhesive cement mortar for reinforcement mesh; (iv) Rehabilitation of the canal covered with reinforced concrete slabs; (a) disassemble and dispose broken and damaged slabs; b) remove sediments from the slopes and bottom of the existing lined canal and washing; c) clean existing damaged gaps between slabs and filling them with sandy-cement mortar; d) installing new reinforced concrete slabs to replace the broken ones, and so on. Detail of types of works are described in Section II of this LARP. Modernization works in each area may be implemented within 18-24 months though in each channels section it may take up to one year.

9. **Right of way (ROW) and access roads.** The existing right of way (ROW) is 4 meters width (2 meters each side from centerline) for the main canal and main pipelines alienated permanently based on Article 19, Order #19 of Minister of Urbanization and Construction of Georgia (30 June 2003), and consultation with PIU and TRTA engineers in preparation of this LARP (details in Annex 2). Access roads exist along the whole canal stretches (site photos in Annex 3) as per original design and construction since the Soviet Union time. Some lands have been partially privatized in canal's ROW which are identified as affected by this LARP.

10. **LAR impact scope.** There will be permanently impacted totally 12 land plots (4 private and 8 state lands) making a total **21,372** sqm of lands affected, of which 1, 010.6 sqm private and 20,361.44 sqm state lands. The impact to this **21,372** sqm will be permanent due to the

² Source for this section of this LARP: Agreement #2-497/20. Rehabilitation of the Left Main Canal of Kvemo Samgori Irrigation System at Existing Hydraulic Structures, III Stage (From Pk 313 to Pk. 259+13). Correction/Reconstruction of the Existing Detailed Design. Book 1 General Explanatory Note (Stage III, Part I, Pk. 313+42 ÷ Pk. 397+00), Tbilisi 2022.

requirement for permanent ROW (as mentioned above on ROW requirement). Of total 21,372 sqm affected lands, 21,359 are agricultural and 12.68 sqm is non-agricultural land that belongs to the State Electric System of Georgia LLC (state land), as given in Table 3. All affected land plots except one are registered (Tables 1-4).

11. The scale of impact on all total 12 land plots are as follows: impact to 6 plots is below 1%, to 4 plots below 10% and to 2 plots above 10% (one private plot and one state land plot). All 8 state land plots affected below 1% (or maximum 1.24%) except one affected by 62.61%. The impact to the private lands is mainly insignificant: of total 4 private lands, 3 are impacted in range of 2% to 2.9%, while one is impacted by 65.67% (i.e. 197 sqm of 300 sqm land plot that is unregistered but deem legalizable (Tables 5-7).³ The owner of this land plot (AHH) has another plot in the same area that is 4,437 sqm and registered and not impacted by the project. Since total land area/productive asset of this AHH (owner) will be 4737 sqm (4437+300) and the permanent land impact will be on 197 sqm only, that makes only 4.16% land impact. Therefore, this owner (AHH) is not considered as severely AHH in this LARP. There are no vulnerable AHHs identified.

12. Totally 197 grape vine trees affected on 197 sqm land belonging to 1 AHH. No structures but 20 poles and wires (300 m) supporting grape trees (see photos in figures 4 and 5 in Annex 3) will be affected owned by the same 1 AHH that will lose the above-stated 197 trees (Tables 8-9).

13. No business, workers, crops and any structures are affected neither permanently nor temporarily. In total, 4 landowners/AHHs (with co-owners 12 AHHs) will be affected. The number of affected persons (APs) with counting the family members of 12 owners/co-owners AHHs will be 33 persons. Table 10 presents the summary of all impacts.

14. **Socio-economic survey (SES).** The SES was conducted with 7 AHHs including owners and co-owners (58% of sample of 12 AHHs/owners and co-owners while all (100%) 4 landowners/AHHs). By age group, 3 (42.3%) surveyed AHHs' heads are over 60 years old and 3 (42.83%) are between 51-60. Men are heads in 5 (71.4%) AHHs, and women in 2 (28.6%). By ethnicity groups, all AHHs and APs are Georgian. Heads of 7 surveyed AHHs, 4 men and one woman are married while one man and one woman are widow. Majority heads of AHHs (57% or 4) have secondary education and higher education (43% or 3). All 7 AHHs reported employed as civil servants, in private sector and engaged in agriculture (the same AHHs have one or more income sources). Monthly income for 43% (3) of AHHs is from 800 to 1500 GEL, for 28.6% (2) up to 1500 GEL, and for 28.6% (2) between 300 to 800 GEL.

15. Income sources include civil servant jobs, private sector, agriculture, business and temporary employment. On movable properties, all 100% have TV, refrigerators, cars mobile phones, washing machines. 5 AHHs (71.4%) have internet and 4 (57.1%) have computers. The AHHs have self-reported their monthly expenses amounts and patterns as GEL for food-347, clothes 140, transport 202, utility services 97 GEL. All surveyed 7 AHHs reported have agricultural lands without structures. All AHHs live in own house (85.7%, or 6) and apartments(1%, of 14.3%). No AHHs reported being living in rented or someone else (e.g. relatives) houses. All AHHs reported having livestock and no one reported having no loans. All surveyed 7 AHHs reported have access to electricity, gas and also use woods for energy in combination, have good roads connectivity and local polyclinics nearby; local hospitals and high schools are located about 18 km and 70 km respectively away. All four landowners/AHHs who

³ Whether his claim for the land plot will be accepted and will be registered or not, depends on the decision of the NAPR when the owner will apply for land registration. The owner is expected to provide any documents/records to show he has rightful claim for this unregistered land plot. However, the budget of this LARP include costs for legalization/registration of this land plot.

responded to the question on their perceptions about the project, expressed that they have positive expectation from the project.

16. **Policy and regulation framework.** Principles of ADB SPS and laws of Georgia constitute this LARP. Number of laws and by-laws in Georgia regulate the LAR process (e.g. Constitution, Civil Code and Land Code), which overall provide key principles of (i) state eminent domain to take lands for public needs; (ii) avoiding, minimizing, and mitigating unavoidable LAR impact, and for legal and legalizable affected persons, providing compensation of property and income losses at full market value and before physical or economic displacement, (iii) expropriation only by decision of the court that entered into legal force and after payment of due compensations.

17. ADB SPS's key objective on involuntary resettlement safeguards, is to avoid involuntary resettlement wherever possible; to minimize involuntary resettlement by exploring project and design alternatives; to enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-project levels; and to improve the standards of living of the displaced poor and other vulnerable groups. The SPS requirement on involuntary resettlement safeguard requirements is triggered in case of physical displacement (relocation, loss of residential land, or loss of shelter) and economic displacement (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas. It covers them whether such losses and involuntary restrictions are full or partial, permanent or temporary.

18. Overall the requirements of laws of Georgia and of ADB's SPS on involuntary resettlement safeguards match except of a few gaps. Under the laws of Georgia the AHHs with formal and/or legalizable rights are entitled for full compensation for loss of lands, assets and income, but not AHHs without such legal rights. While ADB's SPS requires the AHHs without formal/legalizable rights to land and assets they possess, shall be compensated at full replacement cost at least for loss of all non-land assets. Also, SPS requires provision of assistance allowances vulnerable and severely AHHs, and relocation assistance to physically displaced AHHs, which are not provided in laws of Georgia.

19. The gaps between the requirements of SPS and national laws have been reconciled in previous ADB-assisted projects in Georgia and those reconciliation measures will be applied under this Program too as provided in this LARP's (Table 1, main body). All AHHs will be eligible for compensations and assistance allowances depending on types of losses and legal status of the lands and assets they have been using and their vulnerability status, according to the Entitlement Matrix (Table 2 in main text). Lack of legal/legalizable rights to lands and assets do not ban the AHHs from receiving compensations at least for all losses other than land and when relevant additional assistance allowances. AHHs without legal/legalizable rights to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for losses of all non-land assets and incomes. Compensations for all types of losses envisaged in this draft LARP include full replacement cost, and amount to be identified by an independent valuation entity and specified in the LARP. AHHs' eligibility for compensations and assistance will be limited by a cut-off date. The cut-off date is set as 7 September 2009 and announced during public consultations held in 5-6 September in the project area, which was conducted following completion of the Detail Measurement Survey (DMS), inventory of losses, and census of AHHs in July to September 2022. Any persons that will be affected due to final DED, will be included in the updated LARP.

20. **Institutional arrangement and capacity.** The existing Project Implementation Unit (PIU) in MEPA will be the PIU for the project with dedicated staff for ADB financed project. PIU currently has one safeguards specialist covering both environment and social safeguards (not dedicated resettlement safeguards specialist) and will employ national resettlement

safeguards specialist to be financed by the project to supervise social and resettlement tasks of the project. The PIU will be overall responsible endorsing and implementing the LARP as approved by ADB, and monitoring and reporting to ADB on project's LAR compliance. A team of international and national project implementation consultants (PIC) will be financed from the ADB project loan to support the PIU to manage the project and implement project activities in relation to Output 2 and 3 including on social and resettlement safeguards tasks. The PIC will (i) finalize the DED and any changes thereto for the Area 1 for which a separate draft LARP is prepared, proposed by the contractor and assist the PIU to update that LARP accordingly, (ii) provide overall assistance to PIU on LARP implementation and (iii) conduct LAR training as per ADB SPS' requirements for staff of PIU, GA, contractors and authorities to ensure efficient LARP implementation.⁴

21. ADB will guide the PIU in LARP implementation, approves the PIU's endorsed LARP, semi-annual safeguards monitoring reports (SSMRs), and have project review missions to the project sites to ascertain the status of the LARP implementation and safeguards compliance. ADB will issue clearance for start of construction works upon ADB's approval of LARP compliance completion report to be submitted by PIU. If safeguards related non-compliances cases will be identified, ADB will guide the PIU in taking corrective actions as per the approved LARP and safeguard covenants provided in the program financing agreement and ADB's SPS.

22. **Project-level Grievance Redress Mechanism.** PIU will set up a project-level Grievance Redress Mechanism (GRM) proposed below, following the ADB's SPS and laws of Georgia. The project GRM aims to resolve grievances of any affected persons associated with the project implementation, and related to the project's involuntary resettlement and environmental impacts, and consultations and information disclosure process. PIU has overall responsibility for the GRM during the project duration and evaluation, and resolve grievances in efficient and mutual consensus manner. PIU will involve relevant agencies and independent experts as needed by each case. The project's social safeguard specialist contracted by PIC under the PIU's will serve as the GRM focal person.

23. A two-tiers GRM is proposed for the project: (i) 1st Tier to be set up at the local project level with an engagement of local project team (representatives of the contractor and construction supervision consultant) and relevant municipality representatives; and (ii) 2nd Tier will be set at PIU's central level including the Grievance Redress Commission with representatives of relevant agencies, to resolve the grievances/issues that cannot be resolved at the 1st Tier or the complainant is not satisfied with the decision.

24. If the GRM cannot resolve the grievance or the complaining party is not satisfied with the decision, it shall be resolved as per law or court order of Georgia, which will be outside of the project's GRM scope. The GRM does not impede access to the country's judicial or administrative remedies. The aggrieved persons reserve their rights to appeal to the Court of Georgia at any stage of the grievance resolution. Also, if not satisfied with the resolution of the issue by the project GRM, the affected person can send complaint to ADB's Accountability

⁴ Other stakeholders include: (i) local municipal government to support the LARP implementation, liaison with project Affected Households (AHHs), communities and other state agencies at district level, (ii) Ministry of Finance to allocate budget for LARP based on the request of the PIU, (iv) National Agency of Public Registry under the Ministry of Justice to register any changes in land and property titles of AHHs (after the impact), and also transfer the land title through purchase agreement from landowners to the state and MEPA will have right to use it for the project needs, (v) Ministry of Economy and Sustainable Development issues a decree confirming the expropriation needs, if required, and assigning the MEPA PIU as the expropriator authorized to initiate expropriation, (vi) Court, in case of expropriation, and (vii) Interested NGOs may participate in monitoring, public consultations, implementing LARP and resolving grievances (detail discussed in Section on Institutional Arrangement hereto).

Mechanism, after making good faith efforts to resolve the grievance by the project GRM, as described in the main body of this LARP.

25. **Consultation, Participation and Disclosure.** ADB's SPS requires that AHHs must be meaningfully consulted and given opportunities to participate in resettlement planning, compensation options and LARP implementation. Public consultations and disclosure should be carried out also following national laws. In preparation of this LARP, 4 public consultations were conducted in four project communities (covering also the Area 1) on 6-7 September 2022. In total 67 persons participated. Power Point presentation about the project, expected LAR scope and compensation and mitigation measures as per the draft LARP, GRM and contact information, and ADB's Accountability Mechanism (AM) and criterion for filing grievance to the ADB AM, were presented. The questions raised were about the project design and timeline: (i) when modernization works will start and be completed, and (ii) request to include the other areas in the project design (details in Table 11 in main body of this LARP). List of participants and photos from public consultations are in Annex 5.

26. LAR information booklets in Georgian language were distributed to participants. The APs have also been individually consulted during LAR impact assessment, APs census and socio-economic surveys conducted during June to August 2022. The APs were informed to about accessing the copies of LAR booklets left in the offices of the village administrations and by contacting the PIU through the contact information.

27. PIU will ensure information disclosure and meaningful consultation held throughout the project implementation. ADB will disclose the approved safeguard documents (LARF, LARP, social monitoring reports, and others as relevant) in its website in English. PIU will disclose these safeguard documents in its website in Georgian language.

28. **Monitoring and Reporting.** As per ADB SPS requirements, PIU shall ensure regular internal monitoring during the project implementation and submitting the social safeguards semi-annual monitoring reports (SSMRs) to ADB for review and clearance. Monitoring will assist to assess the progress of implementation of the LARP, grievances resolution, identify any unanticipated involuntary resettlement impact and take corrective actions on-time to avoid delays in the project implementation. PIU will report in SSMRs the LARP implementation up-to-date, any unanticipated impacts and issues that arise during the project implementation or operation and propose corrective actions. PIU will submit for ADB approval the LARP compliance implementation reports, prior the handover of the site to contractor (sectional approach maybe agreed in the final LARP, as needed).

29. **Budget.** The total estimated budget of the LARP is 11,425 GEL (4,021 USD).⁵ This includes costs for (i) compensations of all losses and assistance allowances to AHHs, (ii) administrative costs 10%, (iii) valuation cost, (iv) land registration/legalization cost for one plot, and (v) 20% contingency to ensure timely implementation of the LARP in case of any unanticipated LAR task. Breakdowns of the LARP costs are in tables 12 to 16 and budget summary in Table 17. Table 18 further shows the implementation schedule and PIU actions on requestion/securing LARP budget. PIU will cover all LARP costs/budget from the government funds, and ensures timely allocation of the LARP budget for on-time payment of compensations and assistance to AHs and LARP implementation overall.

30. **Implementation arrangements.** The LARP implementation will start after the PIU endorses and ADB approves it. The PIU will plan all LAR activities to ensure that all AHHs will receive full compensations and allowances before acquiring their lands and commencement of the construction works. The PIU will inform the AHHs about their rights and compensation

⁵ 1 USD = 2,8412 GEL as per rate of the National bank of Georgia, accessed on 19 September 2022. <https://nbg.gov.ge/en>.

options and clarify any issues and concerns the AHHs may have, and sign compensation agreements with AHHs. PIU will transfer the compensation and assistance allowance amounts to the bank account of each AHH according to the bank payment information provided by the AHHs. PIU will prepare and submit the LARP compliance implementation report to ADB for approval before issuing no-objection to start construction works in LAR affected sites. PIU is responsible for the LARP budget and will ensure its timely allocation. Table 18 shows in main body of this LARP a tentative implementation schedule and key tasks for LARP implementation (the green marked actions are completed during the TRTA). The schedule shall be updated as necessary, and streamlined with schedule of construction works.

I. INTRODUCTION

A. Project Description

1. This Land Acquisition and Resettlement Plan (LARP) is prepared for the proposed Climate Smart Irrigation Sector Development Program (Program) that Asian Development Bank (ADB) considers to finance in Republic of Georgia. The Program will support policy reforms and develop institutional capacity in water resources management and delivery of climate-smart irrigation services. The project will modernize the irrigation system in the Kvemo Samgori left main canal (KSL) irrigation scheme, introduce innovative and climate resilient agricultural production and irrigation technologies to increase agricultural productivity, improve degraded land and increase water security. The project will develop the capacity of the Ministry of Environmental Protection and Agriculture (MEPA) and Georgian Amelioration (GA) state company to implement policy reforms and better manage water resources and irrigation infrastructure and service delivery. The project will be financed through an ordinary capital resources (OCR) regular policy-based loan (PBL) to support policy reforms and an OCR regular project loan to support investments in the modernization of the KSL scheme and establishment of demonstrations of innovative agricultural production and irrigation technologies. Executive Agencies (EAs) are the Ministry of Finance for Policy component (Output 1) and the MEPA for Investment component (Output 2 and 3).

B. Impact, Outcome and Outputs

2. The Program is aligned with the following impact: food security in Georgia improved (Irrigation Strategy). The outcome will be sustainable, productive, and resilient agriculture system in eastern Georgia strengthened. The Program will have three outputs. The policy-based loan will support water resources management and irrigation reforms under Output 1. The Program will support modernization of irrigation systems under Output 2, and the demonstration of climate-smart irrigation and agricultural production technologies under Output 3.

3. **Output 1: Institutional, Governance, Management, and Financial Management Enhanced.** The output will support MEPA to strengthen its water resources management and irrigation policies, institutional capacity, and financial management. It will improve the irrigation subsector and increase its contribution to the economy and development objectives of Georgia. The policy actions under the policy-based loan focus on (i) enhanced legal and institutional framework to achieve irrigation policy outcomes and ensure a sustainable management of water resources; (ii) pricing and contracting change to ensure improved efficiency of water use and financial sustainability of irrigation systems in face of current and expected impact of climate change on water resources; and (iii) enhancing governance and management controls to increase the Georgian Amelioration accountability, transparency, and efficiency of its service delivery. The policy reforms will create an enabling environment for Outputs 2 and 3. Output 1 has no physical works to cause land acquisition and resettlement LAR impacts. The Policy Matrix include involuntary resettlement safeguard measures.

4. **Output 2: Irrigation schemes modernized.** It will support the modernization of the dilapidated, under-utilized Kvemo Samgori left main canal irrigation scheme (KSL) in Kakheti region in eastern Georgia. Modernization of the scheme includes repairs to the main canal and installation of pressurized pipe on-farm irrigation network.⁶ Figure 1 shows the areas to be modernized according to the distributaries serving each area and the reaches of main canal

⁶ The detailed design of Kvemo Samgori modernization activities is accessible from the list of linked documents in Appendix 2 of the report and recommendation of the President.

to be modernized. Phase 1 areas are net command areas based on the detailed concept design for each area. Phase 2 areas are gross areas based on GA estimates. Table 1 lists the areas to be modernized in each phase.

5. Modernization of the main canal will include changes to meet the needs of the area modernization design concept. The main canal will be also modernized in two phases in two phases (Figure 1). The first section of 8.4 km (Ch 313+42 to Ch 397+00) is required to serve Areas 3 (G-38) and 4 (G-39) in Phase 1 of modernization. The second section of 9.2 km (Ch 397+00 to Ch 488+66.7) will serve Areas 5 (G-41) and 6 (G-42) in Phase 2 of modernization.

6. **Output 3: Innovative agriculture production systems demonstrated.** Output 3 will support farmers to modernize and improve their irrigation and agricultural production technologies. The output will:

- (i) Demonstrate innovative irrigation and agricultural production technologies. The potential benefit of introducing such technologies will be assessed in terms of both improved water productivity and incremental financial and economic returns, for instance from diversification to high value crops. For farm irrigation, demonstration of gravity feed and solar powered systems, where practical, for water distribution.
- (ii) Provide capacity development for farmers and scheme stakeholders through training in technology implementation that will facilitate adoption of successful technologies.
- (iii) Identify constraints and means of addressing them such as access to finance, market information, adoption of new technologies, smart farming technologies, and mobile technologies and applications to aid decision making by farmers and other value chain actors.
- (iv) Establish pilot windbreaks to address soil erosion and to enhance crop protection. Demonstrations will be established on areas modernized in the Kvemo Samgori scheme.⁷

⁷ The detailed design of demonstration activities is accessible from the list of linked documents in Appendix 2 of the report and recommendation of the President.

Figure 1. Modernization works areas and phases

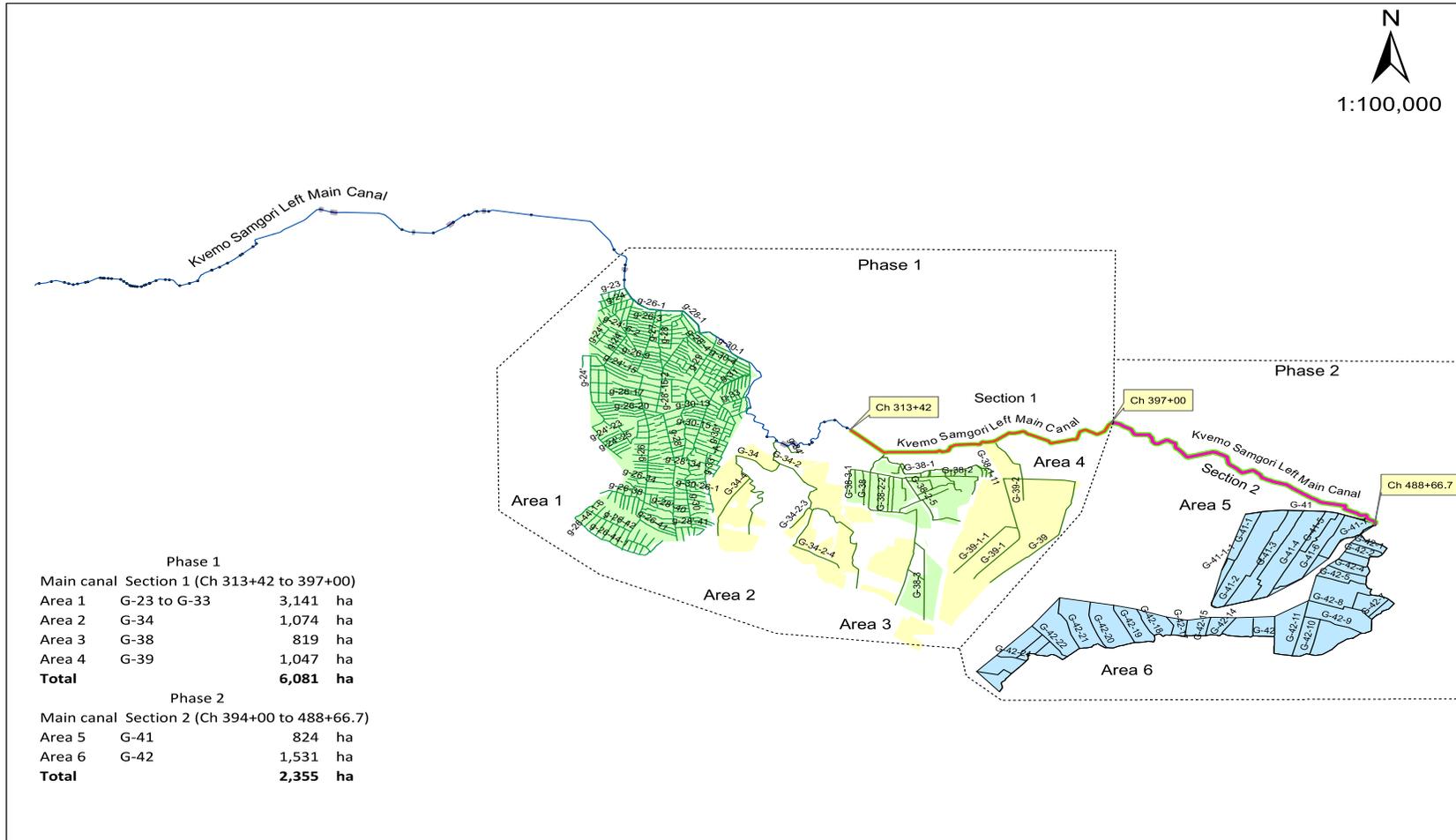


Table 1: Kvemo Samgori Phasing and Areas to be Modernized

Phase/Area	Gross Area (ha)	Net Area (ha)
Phase 1		
Area 1 (G-23 to G-33)	3,141	2,600
Area 2 (G-34)	1,074	766
Area 3 (G-38)	1,252	1,057
Area 4 (G-39)	1,047	949
	6,514	5,373
Phase 2		
Area 5 (G-41)	824	680
Area 6 (G-42)	1,531	1,263
	2,355	1,943
Total Phases 1 and 2	8,869	7,316

Note: Gross areas are based on GA estimates except for Area 3 for which the GA estimate was lower than the net area identified by the concept design for that area. The gross area for Area 3 is based on the TRTA consultants' estimate. Net areas for Areas 5 and 6 are based on the ratio of net area to gross area for Phase 1 areas since concept designs have been completed only for Areas 1 to 4 prior to implementation.

Figures may not sum due to rounding.

Source: Georgian Amelioration and TRTA-6648 GEO consultants.

7. Output 3: Innovative Agriculture Production Systems Demonstrated. Output 3 will support farmers to modernize and improve their irrigation and agricultural production technologies. The output will:

- (i) Demonstrate innovative irrigation and agricultural production technologies. The potential benefit of introducing such technologies will be assessed in terms of both improved water productivity and incremental financial and economic returns, for instance from diversification to high value crops. For farm irrigation, demonstration of gravity feed and solar powered systems, where practical, for water distribution.
- (ii) Provide capacity development for farmers and scheme stakeholders through training in technology implementation that will facilitate adoption of successful technologies.
- (iii) Identify constraints and means of addressing them such as access to finance, market information, adoption of new technologies, smart farming technologies, and mobile technologies and applications to aid decision making by farmers and other value chain actors.
- (iv) Establish pilot windbreaks to address soil erosion and to enhance crop protection. Demonstrations will be established on areas modernized in the Kvemo Samgori scheme.⁸

⁸ The detailed design of demonstration activities is accessible from the list of linked documents in Appendix 2 of the report and recommendation of the President.

8. **Scope of this LARP.** There is design for the Main Canal part related to Area 1 and concept design for the Area 1. This implementation-ready LARP is prepared for modernization works for the **Main Canal** (part related to Area 1, "Main Canal" hereinafter). Another draft LARP is prepared for modernization works in the Area 1. A Land Acquisition and Resettlement Framework (LARF) is prepared to address potential land acquisition and resettlement (LAR) resettlement impacts for the whole Program. LARP(s) shall be prepared for any LAR impacts to be caused by modernization works in Areas 2 to 6 based on the final detail engineering design (DED) after the project approval and implemented before the start of construction works. Further, this LARP will deal only with the LAR impacts related to the Main Canal unless otherwise specified.

C. Methodology

9. Methodologies for preparation of this LARP include:

- (i) LAR impact and detailed measurement survey (DMS) conducted within the ROW of 4 meters width along the existing alignment of the main canal. It is based on the project detailed design, cadastre documents, site visits and stakeholders' consultations including the PIU and Affected Persons (APs);
- (ii) Census of AHHs (100%); and Socioeconomic Survey (SES, 58% sample of 7 of 12 AHHs/owners and co-owners while covering all (100%) 4 landowners/AHHs, for collecting data on APs' baseline living standards, held from June to September 2022 along with the SES of APs for the Area 1 LARP;
- (iii) Valuation by independent valuation expert to estimate compensation amounts based on the principle of full replacement cost of losses, and valuation standards and approaches applied in Georgia; and
- (iv) Information disclosure and consultations with AHHs held individually during the AHHs' census and surveys, and public consultations during June to September 2022.

II. Description of the Subproject: Modernization of the Main Canal in Area 1

A. Conditions of the Main Canal in Kvemo Samgori Left Canal Irrigation System

10. The length of Kvemo Samgori left main canal is 48,850 meters of which 31,342 meters are rehabilitated.⁹ The construction of the left main canal was implemented in 1961-1971s.¹⁰ The capacity of the canal varies at $Q = 21-3 \text{ m}^3/\text{s}$, irrigates 17,450 ha. The main canal is an open concrete canal and include structures such as: open trapezoidal and rectangular concrete canal, (ii) tunnels, (iii) spillways, inverted siphons and mechanical equipment, (iii) distributaries (outlets) and mechanical equipment, (iv) bridges and super passages, and (v) pipes under the canal. The project considers rehabilitation works at the inlet and outlet areas of inverted siphons and on facilities. Inspection of the tunnels was carried out only partially due to the large sedimentary soil and water accumulated in the tunnel. Partial inspections revealed damaged areas of the tunnel that need to be fully rehabilitated. The general condition of the main canal that requires rehabilitation is described below and photos are in Annex 1:

- (i) The main canal is of trapezoidal cross sections, covered with monolith concrete, which is collapsed in many sections, the slopes and bottom of which are faced with monolith concrete, extremely obsolete, eroded and concrete is broken. In some areas, gaps/joints are filled with monolith concrete; the slopes of the canal are covered with monolithic concrete on which reinforced concrete slabs are laid, gaps/joints of slabs should be cleaned and filled with concrete;
- (ii) Sedimentary soil up to 50 cm is deposited in many sections, slopes and bottom of the transition sections are eroded;
- (iii) The canal under the bridges is sedimented, walls need rehabilitation with concrete $V=1.5 \text{ m}^3$ and shotcrete; transition sections are eroded, and guide walls are badly damaged; Slabs are collapsed to a length of 4 m in the galleries, often entire length of the galleries are covered with sediment, and walls, floor and ceilings are eroded, and reinforcement is exposed;
- (iv) Both berms of the canal to be cleaned from shrubs. There is sedimentary soil on the surface of the super passages and there are trees at the guide walls. The slopes and bottom of the transition section of the channel are eroded. The walls of the super passage and pillars are eroded;
- (v) Sedimentary soil observed at the bottom of the super passage and in the transition sections. Pillars and carriageway of the super passage are heavily eroded. The left slope of the transition section is collapse;
- (vi) There are no concrete slaps laid on old concrete in some sections of the canal. The concrete of the slopes has collapsed in some places and has holes, $V = 17 \text{ m}^3$ of concrete will be needed to fill them, sedimentary soil is deposited at the bottom of the canal and shall be cleaned;
- (vii) Berms of the spillway, main canal and transition section are covered with thick shrubs; monolithic concrete surface of slopes and bottom of the transition section is obsolete, there are washed out areas with holes across the canal and on the walls of the spillway chamber;
- (viii) Walls of the chambers are cracked, exist holes at the bottom and walls exist, and berms of the canals are covered with shrubs.

⁹ Source of section hereto: TRTA documents: Agreement #2-497/20. Rehabilitation of the Left Main Canal of Kvemo Samgori Irrigation System at Existing Hydraulic Structures, III Stage (From Pk 313 to Pk. 259+13). Correction/Reconstruction of the Existing Detailed Design. Book 1 General Explanatory Note (Stage III, Part I, Pk. 313+42 ÷ Pk. 397+00), Tbilisi 2022.

¹⁰ The headworks of the main canal was rehabilitated and suitable for operation, however, in the upper tailrace of the headworks there is an excess amount of sedimentary soil requiring maintenance. For more than 50 years of operation no rehabilitation works have been carried out on the facilities except for minor ongoing repairs and cleaning. Currently all facilities are in very poor condition, concrete is obsolete and fragile, mechanical equipment is missing and whatever is present-needs restoration or dismantling and installation of new equipment.

B. Modernization works in the Main Canal (Area 1)

1. Canal sections

11. Subject to this LARP are works in the left main canal section related to Area 1 (Ch 313+42 to 397+00) which make approximately 8,358 meters. Modernization works will be carried out along the existing alignment of the Main Canal and include restoration of the main canal and galleries, tunnels, bridges, super passages, pipes under the canal, spillways and inverted siphons located on it. The following types of works will be implemented:

- (i) Prior to commencements of works, the entire line of the canal will be cleaned from thorny bushes and after tree cutting the canal cleaned from sediments;
- (ii) Rehabilitation of the canal sections by arranging the surface of the canal with shotcrete and will include:
 - Washing of the slopes and bottom of the existing lined canal with water jet;
 - Drilling of holes on the bottom and slopes of the canal for anchors;
 - Arrangement of anchors for steel mesh;
 - Wetting of slopes and bottom of the canal before starting shotcrete;
 - Shotcreting of the bottom and slopes of the main canal with wet-mix shotcrete (thickness 7 cm) on reinforcement mesh 150/150/5/5;
 - Arrangement of expansion joints with bitumen impregnated planks, every 20 meters.
- (iii) Rehabilitation of obsolete section of the main canal and will include:
 - Washing extremely obsolete bottom and slopes of the canal with water jet;
 - Wetting of the bottom and slopes before arrangement of lean concrete;
 - Arrangement of lean concrete at the bottom and slopes of the canal;
 - Drilling of holes on the bottom and slopes of the canal;
 - Fastening of anchors in the holes with adhesive cement mortar for reinforcement mesh;
 - Wetting of the bottom and slopes of the canal before starting shotcrete;
 - Shotcreting of the bottom and slopes of the main canal with wet-mix shotcrete (thickness 7 cm) with addition of active materials on reinforcement mesh 150/150/5/5;
 - Arranging expansion joints with bitumen impregnated planks, every 20 meters.
- (iv) Rehabilitation of the canal covered with reinforced concrete slabs will include:
 - Disassembly and disposal of broken and damaged slabs;
 - Disassembly of fallen slabs and further installation;
 - Removal of sediments from the slopes and bottom of the existing lined canal and washing;
 - Cleaning of existing damaged gaps between slabs and filling them with sandy-cement mortar
 - Arrangement of expansion joints with bitumen impregnated planks, every 20 meters;
 - Installation of new reinforced concrete slabs instead of existing broken ones.
- (v) Rehabilitation of the main canal with cast-in-situ concrete and will include:
 - Demolition of existing damaged concrete from the bottom and slopes of the canal and disposal;
 - Gravel preparation on the bottom and slopes, thickness 10 cm;
 - Rehabilitation of the canal with cast-in-situ concrete B-20, thickness-15 cm on reinforcement mesh 200/200/8/8;
 - Arrangement of expansion joints with bitumen impregnated planks, every 20 meters; In all of four above-mentioned sections restoration of existing curbs

and arrangement of new curbs (with thickness of 15 cm and width of 30 cm) are considered by the project.

- Since the calculated flow rate along the entire length of the main canal $Q = 21 \div 3 \text{ m}^3/\text{s}$ changes six times, accordingly the typical cross-section is changing as well. Inclination of the main canal slopes is the same for all sections and is equal to $m = 1.5$, the width of the canal B is variable-2 m at the beginning, 1.5 m in the middle and 1.0 m at the bottom, and the height of the canal varies from 2.8 m to 1.5 m.

2. Galleries and Tunnels

12. By on-site observation of tunnels, the following conditions were detected:

- No chainage in the tunnels, which makes it impossible to determine the area of existing defects, which in its way will affect the volume of design solutions;
- The base of the tunnels is covered with loam, sand, gravel, boulders and other types of sediment. In tunnels No. 11 and 4 the thickness of loam reaches from 0.5 m to 1m, sticks to feet and it is practically impossible to go through the tunnel. Under these conditions, the technical condition of the tunnel base cannot be determined, which has a great and serious impact on the assessment of the sustainability of the existing condition of the tunnel;
- Colonies of bats are observed near the outlet portals of the tunnels, and this is an important obstacle for research work in the tunnel, from psychological point of view as well as from the perspective of sanitary conditions.
- Considering all the above factors, a thorough study of the tunnels should be carried out during the construction process.

13. In rehabilitation of the galleries and tunnels, first tunnel cleaning activities shall be done, water should be pumped out and the bottom cleaned from sediments and wastes. In cleaning process, temporary ventilation and lighting systems should be arranged to create normal sanitary conditions in the tunnel. The tunnel should be divided into 10-meter sections and marked with chainage, the survey of the existing situation conducted. The works include:

- (i) Tree cutting and removal of thorny bushes from transition sections, inlet and outlet portals;
- (ii) Removing sediments from transition sections, inlet and outlet portals and tunnels;
- (iii) Washing of transition sections, inlet and outlet portals with water jet, drilling of holes in concrete, fastening of anchors with adhesive mortar, arrangement of reinforcement mesh 150/1505/5 and shotcreting with wet-mix shotcrete (thickness 7 cm) with addition of active materials;
- (iv) Raising of the transition sections and portals with cast-in-situ concrete;
- (v) Filling of cavities with cast-in-situ concrete;
- (vi) Washing inlet and outlet portals with water jet and plastering with sandy-cement mortar with addition of active materials;
- (vii) Pumping of water from the outlet portals of tunnels if necessary;
- (viii) Installation of temporary power supply and ventilation in tunnels. Dismantling of power supply and ventilation materials and equipment after completion of underground works;
- (ix) As there is no power transmission line across the main canal, power supply should be provided using portable power stations;
- (x) Removal of sedimentary soil and construction waste from the tunnel.

3. Bridges and Super Passage

14. Damages on bridges and super passage are identical and the works include:
- (i) Removing thorns and bushes from the transition sections and tree cutting;
 - (ii) Cleaning of the transition sections and structures from sedimentary soil;
 - (iii) Demolition and disposal of existing damaged nodes;
 - (iv) Rehabilitation of existing walls, wings and parapets;
 - (v) Filling of cavities in transition sections and structures with cast-in-situ concrete;
 - (vi) Raising of existing walls, wings and parapets with cast-in-situ concrete;
 - (vii) Drilling of holes (d=250mm) in concrete wall;
 - (viii) Installing steel pipe d=219 mm and filling the opening with sandy-cement mortar;
 - (ix) Excavation of a trench, installation of steel pipe d=219mm in the finished trench with normal anti-corrosion insulation;
 - (x) Installation of well d=1,0 m (flooring slabs, wall-mounted rings and roofing slabs) with precast concrete ring at the beginning of the outlet;
 - (xi) Washing of walls, wings and parapets with water jet, wetting and plastering with sandy-cement mortar (thickness 2 cm) with addition of active materials;
 - (xii) Washing slopes and bottom of transition sections, walls and bottom of structures with water jet, arrangement of reinforcement mesh 150/150/5 and shotcrete with wet-mix shotcrete (thickness 7 cm) with adding active material.

C. Right of way, access roads and impact avoiding/minimizing measures

15. The right of way (ROW) is 4 meters width (2 meters each side from centerline) for the main canal and main pipelines alienated permanently based on Article 19, Order #19 of Minister of Urbanization and Construction of Georgia (30 June 2003). The ROW taken for LAR impact assessment was also concurred with PIU (details in Annex 2). The ROW of 4 meters width corridor (2 meters each side from the centerline) is expected to provide sufficient space for the contractor's works and besides, there are available spaces with no trees and crops (or structures) along the main canal. Further, the contractor may arrange the works from either side of the canal as will deem necessary during the construction works for each location, to limit the impacts within the RoW, therefore no more permanent or temporary impact is expected besides those in the ROW corridor.

16. Access roads exist along the whole canal stretches (site photos in Annex 3) as per original design and construction since the Soviet Union time. Some lands have been partially privatized in canal's ROW which are identified as affected by this LARP. PIU shall include in the Contractor's contract provisions about involuntary resettlement safeguards and mitigation measures the Contractor should comply with (e.g., reports on grievances and keeping the GRM Logbook, following the ROW during the construction works, not block the AHHs' adjacent no-impacted lands, inform AHHs about the schedule of construction works that can affect their activities). Any damages and impacts, shall be mitigated as per provisions of entitlement matrix defined under this LARP.

III. SCOPE OF LAND ACQUISITION AND RESETTLEMENT IMPACT

A. Resettlement impact scope

17. There will be totally affected 12 land plots (4 private and 8 state lands) making a total **21,372** sqm of lands affected, of which **1,010.6** sqm private and **20,361.44** sqm state lands. The impact to this **21,372** sqm will be permanent due to the requirement for permanent ROW (as mentioned above on ROW requirement). Tables 1 and 2 show the impacted lands by ownership, types and scale of impact on plots. Figure 1 shows the map of the project alignment and the affected land plots. The ROW of 4 meters width corridor (2 meters each side from the centerline) is expected to provide sufficient space for the contractor's works and besides, there are available spaces with no trees and crops (or structures) along the main canal. Further, the contractor may arrange the works from either side of the canal as will deem necessary during the construction works for each location, and therefore, no more permanent or temporary impact is expected besides those in the ROW corridor.

Table 1. Affected lands by ownership

#	Property type	No. of plots	Impact area, sqm
1	State land	8	20,361.44
2	Private land	4	1,010.6
	Total :	12	21,372

Table 2. Details of land impacts (private land marked in bold and have co-owners)

Plots No.	ID of AHHs/ owner/co-owners	Registration status	Land purpose	Total area of plot, sqm	Affected area, sqm	Impact scope %
1	State Electric System of Georgia LLC	Registered	non-agricultural	20,25	12,68	62,61
2	01	Registered,	agricultural	15 908,88	452,24	2,84
	02					
	03					
	04					
	05					
	06					
3	SSI, Sagarejo Municipality	Registered	agricultural	623,942,85	4 362,64	0,70
4	State	Registered	agricultural	8 743,20	81,62	0,93
5	State	Registered	agricultural	43,993,09	28,90	0,07
6	State	Registered	agricultural	546 535,39	4 553,03	0,83
7	07	Registered	agricultural	6,701,34	138,99	2,07
	08					
8	09	Registered	agricultural	10,629,48	222,34	2,09
	10					
	11					
9	State	Registered	agricultural	252 640,59	3,144,69	1,24
10	State	Registered	agricultural	78 119,44	73,36	0,09
11	State	Registered	agricultural	1,428,178	8104,53	0,57
12	12	Unregistered	agricultural	300	197	65,67
	Total			3,015, 712	21,372	

Figure 2. Main Canal (Area 1) project alignment and affected land plots

Texts (legend) in the Figure 2 are zoomed in Figures 2.1. and 2.2 below.

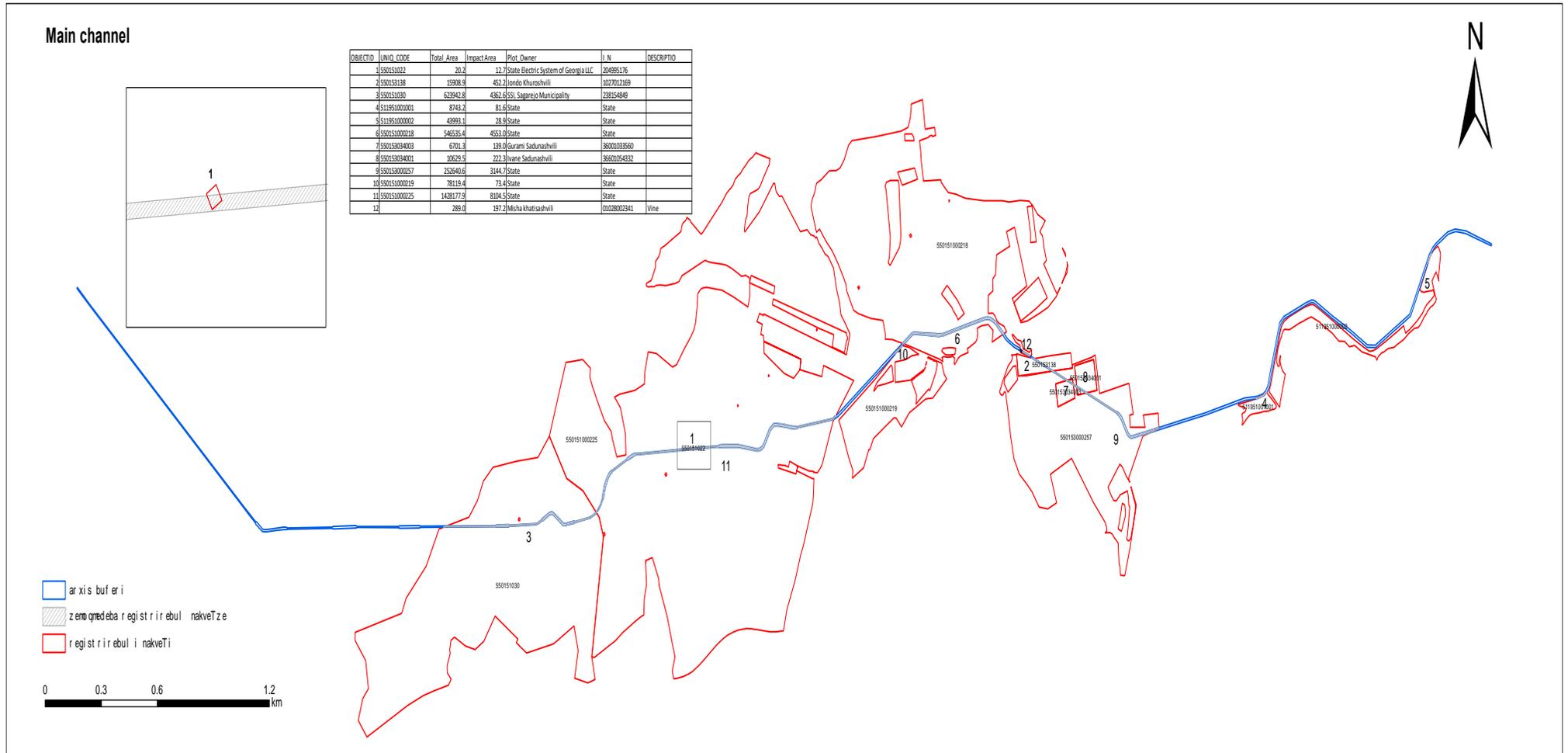
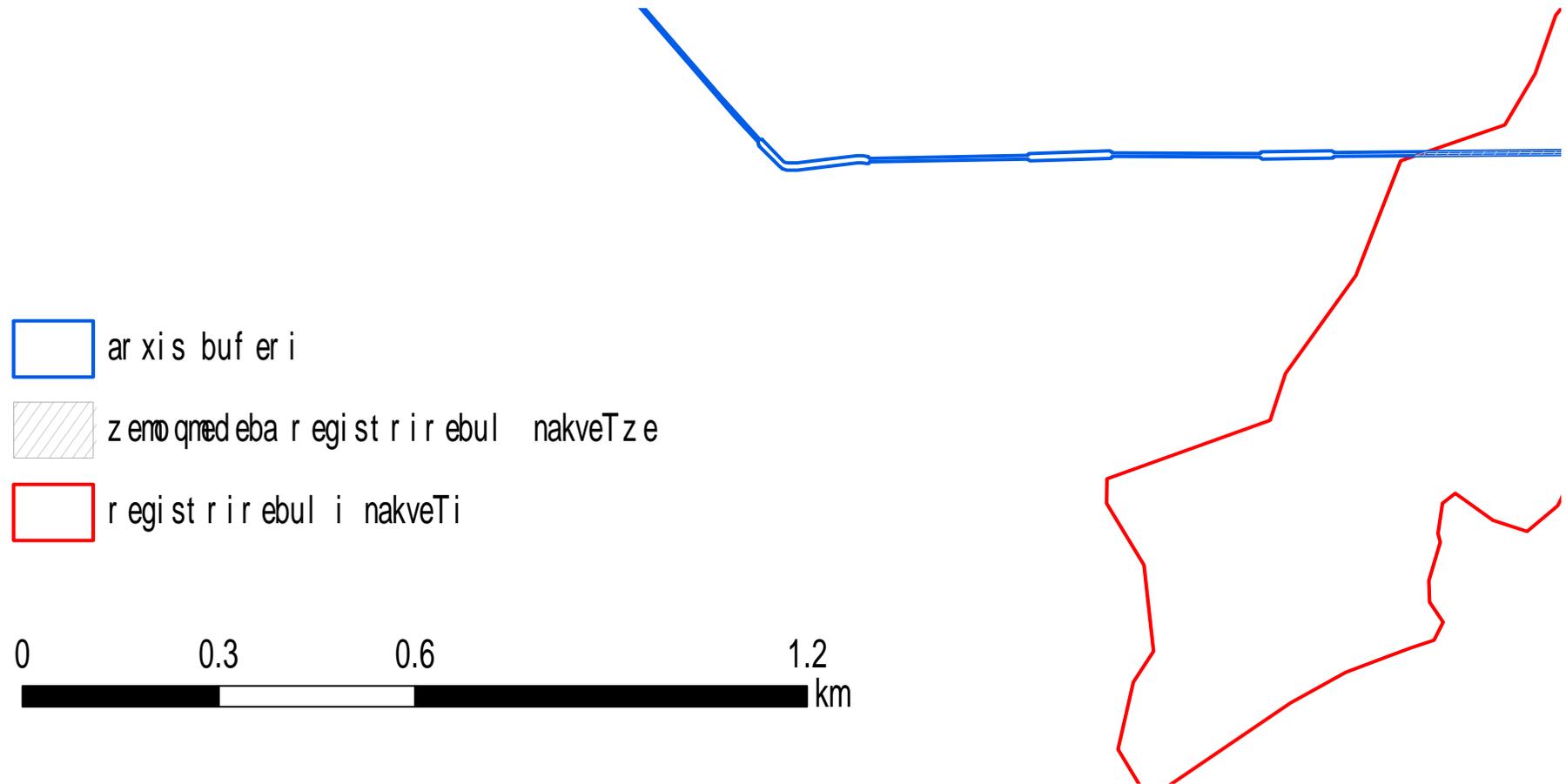


Figure 2.1.

OBJECTID	UNIQ_CODE	Total_Area	Impact Area	Plot_Owner	I_N	DESCRIPTIO
1	550151022	20.2	12.7	State Electric System of Georgia LLC	204995176	
2	550153138	15908.9	452.2	Jondo Khuroshvili	1027012169	
3	550151030	623942.8	4362.6	SSI, Sagarejo Municipality	238154849	
4	511951001001	8743.2	81.6	State	State	
5	511951000002	43993.1	28.9	State	State	
6	550151000218	546535.4	4553.0	State	State	
7	550153034003	6701.3	139.0	Gurami Sadunashvili	36001033560	
8	550153034001	10629.5	222.3	Ivane Sadunashvili	36601054332	
9	550153000257	252640.6	3144.7	State	State	
10	550151000219	78119.4	73.4	State	State	
11	550151000225	1428177.9	8104.5	State	State	
12		289.0	197.2	Misha khatisashvili	01028002341	Vine

Figure 2.2.



Note: English translation of legend in Figure 2.2.:blue color- right-of-way, grey color- impact on registered landplot, red color -registered landpl

18. Of total 21,372 sqm affected lands, 21,359 are agricultural (vineyard) and 12.68 sqm is non- agricultural land is on balance of the State Electric System of Georgia LLC for use rights (state land), as given in Table 2 above. All affected land plots except one is registered (Table 2). No high voltage transmission lines and towers on the state land to be impacted identified. The affected state lands will be given to the GA for use rights for the project needs. The loss of trees and crops on the state land will be compensated to the land users (AHHs using the state land adjacent to their land plots) as provided in this LARP.

19. The scale of impact on all total 12 land plots are as follows: impact to 6 plots is below 1%, to 4 plots below 10% and to 2 plots – one state owned and one-private owned is above 10% (Table 3).

Table 3. Scale of impact on land plots (state and private lands)

Total no. of land plots	State land plots	Private land plots	% impact < 1	% impact <1 и > 10	% impact> 10
12	8	4	6	4	2 (1 private and 1 State land)

20. All 8 state land plots affected below or 1.24% except one affected 62.61% (Table 4).

Table 4. Scale of impact in state lands

No. of plots	Owners	Registration	Land purpose	Total plot area, sqm	Affected area, sqm	Impact scale %
1	State Electric System of Georgia LLC	Registered	non-agricultural	20,25	12,68	62,61
2	SSI, Sagarejo Municipality	Registered	agricultural	623 942,85	4 362,64	0,70
3	State	Registered	agricultural	8 743,20	81,62	0,93
4	State	Registered	agricultural	43 993,09	28,90	0,07
5	State	Registered	agricultural	546 535,39	4 553,03	0,83
6	State	Registered	agricultural	252 640,59	3 144,69	1,24
7	State	Registered	agricultural	78 119,44	73,36	0,09
8	State	Registered	agricultural	1 428 177,92	8 104,53	0,57
	Total			3 015 712,42	21 372,02	

21. The impact to 3 private lands (out of 4) is insignificant, impacted in range of 2% to 2.9%. One land plot is impacted by 65.67% (i.e. 197 sqm of 300 sqm land), which is unregistered considered legalizable land plot (Table 5).¹¹ The owner of this land plot (AHH) has another plot in the same area that is 4,437 sqm and registered, and this plot is not impacted by the project. Since total land area/productive asset of this AHH (owner) will be 4737 sqm (4437+300) and the permanent land impact will be on 197 sqm only, that makes only 4,16% land loss. Therefore, this owner (AHH) is not considered as severely AHH in this LARP (no assistance allowance for sever impact is provided for this landowner/AHH in budget section hereto). This AHH has not yet confirmed if he would like to sell also the residual land (i.e. 103 sqm meter remained from his 300 sqm land plot). However, the budget includes 20% contingency in case the whole land plot would be acquired by the project.

¹¹ Whether his claim for the land plot will be accepted and will be registered or not, depends on the decision of the NAPR when the owner will apply for land registration. The owner is expected to provide any documents/records to show he has rightful claim for this unregistered land plot. However, the budget of this LARP include costs for legalization/registration of this land plot.

Table 5. Scale of impact in private lands

No. of plots	Registration status	Land purpose	Total plot area, sqm	Affected plot area, sqm	Impact scale, %	No. of AHs – 4 (12 with co-owners)	No. of APs (with family members of AHHs)
1	Registered	agricultural	15 908,88	452,24	2,84	6	17
1	Registered	agricultural	6,701,34	138,99	2,07	2	5
1	Registered	agricultural	10,629,48	222,34	2,09	3	8
1	Unregistered	agricultural	300	197	65,67	1	3
			33,539,70	1,010,6		12	33

22. Totally 197 grape vine trees were affected on 197 sqm land belonging to 1 AH (Table 6).

Table 6. Affected trees

#	Type	sqm area	quantity	age	No. of AHHs
1	Vine	197	110	26	1
Total:		197	110	26	1

23. No structures but 20 poles and wires (300 m) supporting grape trees (see photos 4 and 5 in Annex 3) will be affected owned by the same 1 AH that will lose above-stated 197 trees (Table 7).

Table 7. Structures

#	Type	sqm area	quantity	Price, GEL	No. of AHH
1	Poles (pieces)	110	20 pc	10/pc	1
2	Wiring (meter)	110	300 m	0,40 /m	
Total:		110			1

24. No business, workers or any structures, and neither crop are affected neither permanently or temporary. No squatters are identified. No severely affected, and no vulnerable AHHs are identified. Table 8 presents the summary of all impacts. The project is Category B for Involuntary Resettlement (IR) Safeguard following ADB SPS (2009). No indigenous people or any ethnic minority groups as defined in ADB SPS (2009) live in the project area. The project is Category C for Indigenous Peoples impact safeguards.¹²

¹² A proposed project is classified as category B if it includes involuntary resettlement impacts that are not deemed significant. A resettlement plan, including assessment of social impacts, is required. Project is assessed as Category C for Indigenous People Safeguards following ADB Safeguards Policy Statement (SPS 2009). No indigenous people or any ethnic minority groups live in the project area and ADB SPS requirements on indigenous people safeguards are not triggered, and no actions will be required. ADB Operations Manual: Safeguard Policy Statement (F1): OM Section F1/OP Issued on 1 October 2013.

Table 8. Summary of all impacts

Type of Impact, total	No.	Remarks
Private lands affected permanently	1, 010.6	Sqm
State lands affected permanently	20,361.44	Sqm
Total affected land	21,372	Sqm
<i>Including:</i>		
Agricultural land plot	11	Vineyard
Non-agricultural land	1	State land
Unregistered/legalizable plot	1	Private
Affected land plots total	12	Including 8 state and 4 private lands
No. of AHHs	4	12 with owners/co-owners (4 private land plots co-owned by 12 persons/AHHs)
No. of APs	33	Family members of 12 AHHs
Affected trees	197	All grape vine trees
Poles	20 pc	Supporting grape trees
Wire, meters	300 m	Supporting grape trees

IV. SOCIO-ECONOMIC INFORMATION

25. In preparation of this draft LARP, the census of all AHHs (100%) and socio-economic study (SES) with the sample socioeconomic survey (SES) of 58% sample of 7 of 12 AHHs/owners and co-owners, while covering all (100%) 4 landowners/ AHHs has been conducted in June to September 2022 (along with conducting assessment and surveys for the LARP for the Area 1). It provides an analysis of the main socio-economic characteristics of the AHHs, including on followings:

- Social and economic characteristics of AHHs, including the demographic and gender disaggregated data on age, educational levels
- Information on vulnerable groups for whom additional assistance shall be provided in LARP besides the compensation of losses;
- Baseline information on AHHs' livelihoods, income sources from both formal and informal jobs, AHHs' monthly incomes and monthly expenditures levels,
- Occupations of AHHs' members, and their primary and secondary income sources
- Standards of living of AHHs including their housing conditions, access to water, electricity, education and health facilities) of the displaced population;

26. The SES was conducted with 7 AHHs (58% of sample of 12 AHHs) from 4 villages of the project area (Table 9).

Table 9. Total No. of surveyed in AHS

Province	Municipality	Village	No. of AHS SES	No. of APs
Tbilisi			1	3
Kakheti	Sagarejo	Kakabeti	4	9
Kakheti	Sagarejo	Chailuri	1	3
Kakheti	Sagarejo	Khandaura	0	2
		Total	7	17

27. By age group, 3 (42.3%) surveyed AHHs' heads are over 60 years old and 3 (42.83%) are between 51-60. Of total 15 APs, 5 (23%) are over 60 years old and per 5 AHHs(33.3%) in range of 36-50 years old (Tables 10).

Table 10. Age of surveyed heads of Ahs and APs

AHS			APs		
Age groups	No. of head of AHS	%	Age Group (years)	No. of APs	APs %
Up to 20	0	0	Up to 20	0	10.7
21-35	0	0	21-35	0	
36-50	1	14	36-50	5	23.1
51-60	3	43	51-60	5	33.3
> 60	3	43	> 60	5	33.3
total	7	100.0	Total	15	100

28. By gender, of total surveyed 7 AHHs, men are heads in 5 (71.4%) AHHs, and women in 2 (28.6%). Out of total 15 APs, 53% (8) are women and 46.7% (7) are female. By ethnicity groups, all AHH and APs are Georgian (Tables 11-13).

Table 11. Gender of Heads of AHS

Gender of head of AHS	No. of AHS	%
Male	5	71.4

Gender of head of AHs	No. of AHs	%
Female	2	28.6
Total	7	100.0

Table 12. Gender by APs

Gender APs	No. of APs	%
Male	7	46.7
Female	8	53.3
Total	15	100.0

Table 13. Ethnicity of AHs

Head of AHs	No. of AHs	%
Georgian	12	100

29. Heads of 7 surveyed AHHs, 4 men and one woman are married while one man and one woman are widow. Among the 30 APs, 6 men and 5 women are married, one man and two women are widows, and one women is single (Tables 14-15).

Table 14. Marital status head of AHs

head of AHs	No. of AHs			
	Male	%	female	%
married	4	80	1	50
Divorced	0	0	0	0
widow	1	20	1	50
is not married	0	0	0	0
total	5	100	2	100

Table 15. Marital status of APs

Marital status of APs	APs			
	Male	%	female	%
married	6	85.7	5	62.5
Divorced	0	0	0	0
widow	1	14.3	2	25
is not married	0	0	1	12.5
total	7	100	8	100.0

30. On education, majority head of AHHs (57% or 4) have secondary education, while 43% or 3) have higher education. The APs also majority have secondary education (46.7% or 7) while 53.3% (8) have higher education (Table 16).

Table 16. Education

Education status	Head of AHs		APs	
	No.	%	No.	%
preschool	0	0		
elementary	0	0		
middle	4	57	7	46.7
technical	0	0	0	0
higher	3	43	8	53.3
total	7	100.0	15	100

31. All surveyed 7 AHHs reported that are employed as civil servants, or in private sector and engaged in agriculture). For APs, 7 (100%) reported having income from agricultural activities (Table 17). The same AHHs can have one or more income sources.

Table 17. Employment patterns

Type of employment, occupations	Head of AHHs	
	No.	%
civil servant	1	14.3
private sector	1	14.3
Agriculture	7	100
pensioner	3	42.9
Help from relatives	1	14.3
temporary employment	0	0

32. On movable properties, all 100% have TV, refrigerators, cars mobile phones, washing machines. 5 AHHs (71.4%) have internet and 4 (57.1%) have computers. (Table 18).

Table 18. Movable properties of AHHs

Key facilities /items	No. of AHHs	%
TV	7	100
Fixed phone	0	0
mobile	7	100
Internet	5	71.4
radio	0	0
computer	4	57.1
washing machine	7	100
refrigerator	7	100
Motorcycle	0	0
car	7	100

33. About 43% (3) of AHHs make average monthly income from 800 to 1500 GEL, 28.6% (2) make average 1500 GEL, and 28.6% (2) make income from 300 to 800 GEL (Table 19). Income sources include civil servant jobs, private sector, agriculture, business and temporary employment.

Table 19. Self-reported monthly income

Monthly income (GEL)	No. of AHHs	%
0-300	0	0
300-800	3	42.9
800-1500	2	28.6
1500 and more	2	28.6
Total	7	100

34. The AHHs have self-reported their monthly expenses amounts and patterns as GEL for food-347, clothes 140, transport 202, utility services 97 GEL (Table 20).

Table 20. Households' Average Monthly Expenses self-reported

Expenses patterns	Average GEL
food	511
clothes	114
communal	99
drinking water	14

Expenses patterns	Average GEL
Health care	104
Education	0
transport	247
Internet	49
Total	1138

35. All surveyed 7 AHHs reported have agricultural lands without structures (Table 21).

Table 21. Landholdings of AHs /Agrilands

No. of AHs	Agricultural	Plot with infrastructure
7(100%)	7	0

36. All AHHs have own and live in own house (85.7%, or 6) and apartments(1%, of 14.3%). No AHHs reported being living in rented or someone else (e.g. relatives) houses (Table 22).

Table 22. Housing of AHs

Description	No. of AHs	%
Live in own house	6	85.7
Live in own apartment	1	14.3
Live in rented house/apartment	0	0
Live with someone house/apartment (relatives, friends)	0	0

37. All AHHs reported having livestock such as cows, sheep, goats chicken (Table 23).

Table 23. Livestock and poultry of AHs

Types	No. of livestock	No. of AHs	% of AHs
cow	3	1	33.3
sheep	0	0	0
goat	0	0	0
pig	4	2	50
horse	0	0	0
Donkey	0	0	0
Chicken	46	4	8.7

38. All surveyed AHHs reported have no loans (Table 24).

Table 24. Unpaid loans of AHs

No. of Ahs	Have loans
7 (100%)	0

39. All surveyed 7 AHHs reported have access to electricity, gas and also use woods for energy in combination (Table 25).

Table 25. Energy resources

No.of AHs	Electricity	Natural gas	Gas cylinder	Wood	Other
7 (100%)	7	7	0	7	0

40. AHHs reported to have good roads connectivity and local polyclinics nearby; local hospitals and high schools are located about 18 km and 70 km respectively away (Table 26).

Table 26. Distance to education, medical and utility facilities (distance km)

No. Of AHs	Local polyclinics	Local hospital	District or city hospital	kinder garten	school	High school	Local road	Central highway
7	0	18	18	0	0	70	0	0

41. Four AHs responded to this question and expressed that they have positive perceptions and expectation from the project (Table 27).

Table 27. Perceived Project Benefits and Disadvantages

No. of AHs	Very negative	Negative	Neither positive no negative	Positive
4	0	0	0	4

V. POLICY AND LEGAL FRAMEWORK

42. This LARP is based on requirements of ADB's SPS, laws of Georgia and LARF endorsed for the Program by the PIU and ADB.

A. Laws and Regulations of Georgia

43. The laws regulating the LAR process include the followings.

- (i) **Constitution of Georgia** (24 August 1995, as amended in 2020). It guarantees private ownership, privatization, freedom of economic activities and legal protection of all forms of ownership, and bases for eminent domain and expropriation of lands and properties for public needs only after full compensation. It provides information disclosure and public access to information.
- (ii) **Civil Code of Georgia** (26 June 1997, as amended in 2022). Among the other norms, (i) defines the legal status of all participants of civil and economic relations, (ii) contractual obligations, (iii) principles of compensation of losses of assets, income and income opportunity due to LAR to legal/legalizable owners/users, and (iv) provisions about the servitude rights establishment.
- (iii) **Law of Georgia on the Rules for Expropriation of Ownership for Necessary Public Needs** (23 July 1999, as amended in 2020). It specifies (i) bases and rules about expropriation of land and properties for emergency and public needs and full and fair compensations of losses of owners/users, as well as rules on enforcing expropriation, (iii) type of activities (projects) of public needs and eligible for acquisition and expropriation such as electricity transmission and distribution lines, water and irrigation systems, roads, and so on.
- (iv) **Law of Georgia on Recognition of the Property Ownership Rights Regarding the Land Plots Owned by Physical Persons or Legal Entities** (11 June 2007 as amended in 2021). It provides terms and conditions for recognizing property rights of lawfully possessed (used), as and informally used lands, and in the process of recognition of such property rights.
- (v) **Law of Georgia on Ownership Rights to Agricultural Land** (22 March 1996, amended by 2019), regulates ownership, agricultural land rights, and LAR process.
- (vi) **Law of Georgia on State Property (2010 as amended in 2021)**. The law regulates the relations related to management, disposal and use of state property of Georgia
- (vii) **Law on Public Register** (19 December 2008, as amended in 2021). It determines the organizational and legal basis for maintaining a public registry, and the rights and duties of the National Agency of Public Registry, a body operating under the Ministry of Justice of Georgia and responsible for maintaining the public registry.
- (viii) **Labour Code of Georgia**, (25 May 2006, as amended in 2021). The code regulates the labor and contractual relations of the employers and employees, emphasizing on protecting employees' rights. The employees would be entitled for indemnity allowances for premature termination of their employment contracts. The employees indemnity allowances would vary depending on years of services.
- (ix) **Decree of the Minister of Urbanization and Construction of Georgia** (#19, 30/06/2003) on Construction Norms of the Amelioration System Right of Way. It sets out the procedures for the protection of irrigation lines including the parameters (area,

distances, width, clearances) of the protective zones, access roads, protection zones/RoWs.

- (x) **Regulation of the Prime Minister of Georgia #409, 31/12/2013** on the Technical Norms of the Operation of the Amelioration Canal. It sets the norms of canal operation activities and rule for management of the canal by Georgian Amelioration.
- (xi) **Regulation of the Prime Minister of Georgia #440, 31/12/2013** On Water Protection Norms of the Operation of the Amelioration Canal. It sets water protection norms of canals and how these zones should be protected.

44. **Key principles of laws:** In summary, legislation of Georgia provides key principles of (i) state eminent domain right allowing LAR for public needs; (ii) avoiding, minimizing and compensating unavoidable LAR impacts, loss of assets and incomes at full value and before physical or economic displacement, but for AHHs with legal/legalizable land and property rights.

45. If PIU cannot reach agreement with owners of land and no other solution can be found land may need to be expropriated for the project only by the order of the Minister of Economy and Sustainable Development of Georgia, confirming the acquiring the land for public needs by the expropriating entity is required before the EA can apply to court for land expropriation. Further, expropriation is allowed only based on the decision of the court entered the legal force and after payment of due compensation to AHHs. The court decision should also include a detailed inventory of the assets to be expropriated and compensation amount to be paid to AHHs for their land and other types of losses. Under no circumstances should the EA PIU take the land and initiate physical and/or economic displacement until: (i) the proper judicial process as defined by the law is initiated, (ii) a court order has been obtained and properly communicated to AHHs, and (iii) compensation (and assistance allowances if affected households is eligible) are paid, and/or deposited in an escrow account as relevant from case to case. However, these principles are envisaged for AHHs with legal and legalizable land and property rights (compensations legalizable properties can be compensated after their state registration and legalization), but not for AHHs without legal/legalizable land and property rights.

46. Civil Codes allows negotiating servitude establishment on private lands when required. If the AHHs and the PIU cannot come to an agreement about the LAR process, servitude, and/or compensation rates, expropriation by court can be initiated following the laws of Georgia and procedures set out in the Civil Code Article N180 (26.06.1997 as amended by 20 and the Law of Georgia “On the Rules for Expropriation of Ownership for Necessary Public Need” from July 23, 1999 (as amended by 2020).

47. Registration of land and property rights are required by law for compensating the loss of lands and assets/incomes to AHHs who do not have formal registered lands and property rights but whose claims for such rights can be recognized and legalizable. The LARP shall identify any legalizable AHHs and define the process, roles and tasks of the PIU to assist for free the AHHs with legalization process, in order to become eligible for land compensations. PIU shall cover legalization costs, and the LARP includes budget for relevant costs.

B. Involuntary Resettlement Safeguards Requirements of ADB SPS (2009)

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

49. **Scope and Triggers.** The involuntary resettlement safeguard requirements cover physical displacement (relocation, loss of residential land, or loss of shelter) and economic displacement (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas. It covers them whether such losses and involuntary restrictions are full or partial, permanent or temporary.

50. **Key Policy Principles.** Resettlement planning is an integral part of the project design for all ADB projects associated with LAR and shall be started in the early stage of the project cycle, considering the key policy principles or involuntary resettlement, as follows:

- (i) Screen the project impact at an early stage to determine past, present, and future involuntary resettlement impact and risks. Determine the scope of resettlement planning through a survey and/or census of affected households, including a gender-related resettlement impact.
- (ii) Carry out meaningful consultations with affected households, host communities, and concerned nongovernment organizations. Inform all displaced persons of their entitlements and resettlement options. Ensure their participation in planning, implementation, and monitoring and evaluation of resettlement programs. 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. Establish a grievance redress mechanism to receive and resolve the DPs' concerns. Support the social and cultural institutions of affected households and their host population. Where involuntary resettlement impact and risks are highly complex and sensitive, compensation and resettlement decisions should be preceded by a social preparation phase.
- (iii) Improve, or at least restore, the livelihoods of all affected households through (a) 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, (b) prompt replacement of assets with access to assets of equal or higher value, (c) prompt compensation at full replacement cost for assets that cannot be restored, and (d) additional revenues and services through benefit-sharing schemes where possible.
- (iv) Provide physically and economically affected households with needed assistance, including the following: (a) 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; (b) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (c) civic infrastructure and community services, as required.
- (v) Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards. In rural areas provide them with legal and affordable access to land and resources, and in urban areas provide them with the relevant income sources and legal and affordable access to adequate housing.
- (vi) Develop procedures in a transparent, consistent, and equitable manner if the land acquisition is through a negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.
- (vii) Ensure that DPs without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.
- (viii) Prepare a resettlement plan elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule.
- (ix) Disclose a draft LARP, including documentation of the consultation process on time, before project appraisal, in an accessible place and a form and language(s)

understandable to affected households and other stakeholders. Disclose the draft and final LARP to affected households and other stakeholders.

- (x) Conceive and execute involuntary resettlement as part of a development project/program. Include the full costs of resettlement in the presentation of the project's costs and benefits. For a project with significant involuntary resettlement impacts, consider implementing the involuntary resettlement component of the project as a stand-alone operation.
- (xi) Pay compensation and resettlement entitlements before physical or economic displacement. Implement LARP under close supervision throughout project implementation.
- (xii) Monitor and assess resettlement outcomes, their impacts on the standards of living of AHHs, and whether the LARP has achieved its objectives considering the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.

51. ADB's SPS provides three categories of AHHs with variable compensation entitlements:

- (i) **AHHs with legal titles:** AHHs with formal legal rights to land/land use right lost in its entirety or in part.
- (ii) **AHHs with legalizable rights:** AHHs without formal legal rights to land in its entirety or part but who have claims to such lands that are recognized or recognizable by law.
- (iii) **AHHs without legal titles:** AHHs who have neither formal legal rights nor recognized/recognizable claims to lands which they lost in its entirety or part.

52. For AHHs in categories (i) and (ii) above, compensation should be paid for loss of a land use right and compensation at full replacement cost for structures, land improvements and relocation assistance. For AHHs in category (iii) (informal settlers), the borrower/client shall compensate all assets other than land (i.e., buildings, trees, crops, businesses) at full replacement cost. The risk of opportunistic encroachment on land designated for acquisition by the project is managed through a cut-off date to be established at the final date of the AHHs census and DMS of affected assets.

53. Compensation for loss of land may be in the form of replacement land (if feasible and preferred by the AHHs) or in cash at replacement cost that is based on the fair market value of the affected asset and includes also any other cost such as: (i) transaction costs; (ii) interest accrued if payment delayed; (iii) transitional and restoration costs; and (iv) other applicable payments, if any. Compensations for all other assets is to be provided in cash at replacement cost without deductions for amortization, salvaged materials, and transaction costs.

C. Comparison and Reconciliation of Gaps

54. Overall the requirements of laws of Georgia and of ADB's SPS on involuntary resettlement safeguards match except of a few gaps. The key gap is that under the legislation of Georgia the AHHs with formal and/or legalizable rights are entitled for full compensation for loss of lands, assets and income, but not the AHHs without such legal rights. While ADB's SPS requires that the AHHs without formal rights/legalizable rights to land and assets they possess, shall be compensated fully at replacement cost at least for loss of all non-land assets. SPS also requires to provision of assistance allowances to vulnerable and severely AHHs, and relocation assistance to physically displaced AHHs. The gaps between the requirements of ADB's SPS and national laws have been reconciled in previous ADB-assisted projects in Georgia and those reconciliation measures will be applied under this Program too (Table 27). Compensations for all types of losses provided hereto shall be paid at full replacement cost, as be identified by an independent valuation entity.

Table 27. Comparison of Georgian laws and ADB SPS, and reconciliation measures

Georgia Laws	ADB SPS 2009	Reconciliation Measures
Land compensation only for titled AHHs. In practice legalizable landowners are also compensated after they register their ownership with the National Agency of Public Register.	Lack of title should not be a bar to non-land loss compensations and rehabilitation assistance. Non-titled land users shall receive compensation at replacement cost for all losses, any structures and assets they may have on the land. They are entitled for additional rehabilitation assistance if relevant (i.e. severely affected, vulnerable or in case of physical relocation).	AHHs with no legal/legalizable land/property rights will be compensated at least for all non-land assets/income losses. In addition, one-time cash assistance allowance to be paid to eligible AHHs (vulnerable, for severe affected, and those who will be physical relocation) before displacement occurs. PIU will assist AHHs to register/legalize their land and property rights to get compensations. The contractor will be responsible for compensating damages occurred due to contractor's performance (not LAR) and the PIU shall monitor and guide the processes.
Only registered houses/buildings are compensated for damages/demolition due to the project's LAR impacts	Compensation at replacement cost shall be paid to AHHs for affected houses/buildings, regardless of legal status	PIU will assist the AHHs to register/legalize their land and property rights to get compensations. The contractor will be responsible for compensating damage that occurred due to contractor's performance (not LAR) and the PIU shall monitor and guide the processes.
Compensation for structures, crops and trees provided only to AHHs who has registered/ legalizable land/property rights	Compensation at replacement cost shall be paid to all AHHs regardless of legal status (even unregistered landowners, shall be compensated for all non-land losses at least)	Compensations shall be paid to all AHHs even unregistered landowners, for all non-land losses at least;
Executing agency is the only pre- litigation final authority to decide about complaints. Complaints are reviewed through procedures established by the Administrative Code of Georgia. There is no project-level grievance redress mechanism.	IA shall set up an efficient project level GRM to resolve complaints of AHHs (or other affected persons/entities) in timely and consensus manner; IA shall form a grievance redress committee (GRC) with representatives of the IA, local governments, AHHs/ complainants, NGOs and/or local community-based organizations (CBOs). ADB has Accountability Mechanism (AM) for reviewing the complaints not resolved at the project level GRM. IA shall inform AHHs and public about the project GRM and ADB's AM.	PIU shall set up a project-level GRM to receive, register and resolve grievances from AHHs/APs in timely and consensus manner. PIU shall form a GRC with the representatives of the executing agency, local governments, AHHs/complainants, nongovernment organizations and/or local CBOs. If solution could not be found at the project-level GRM or the complainant is not satisfied, the case shall be resolved according to the national judicial system; the AHHs/complainant can also bring the case to attention of ADB's AM. PIU shall inform AHHs and public about the project GRM and ADB's AM.
LAR process and information are discussed only between the AHHs and the agency acquiring land for the project. ¹³	Safeguard documents (LARF and LARPs, social monitoring reports) shall be publicly disclosed; IA shall conduct public consultation with AHHs and interested stakeholders	ADB will disclose the LARF, LARP social monitoring reports on its website and encourages the executing agency to disclose them on its website too;
No provision for income/livelihood rehabilitation,	Additionally assistance allowances for vulnerable and severely AHHs, and relocation and rehabilitation	PIU will pay additional assistance allowances for vulnerable and severely AHHs, and relocation and rehabilitation

¹³ Although Georgian laws allow everyone to request any agreement registered In the National Agency of the Public Registry.

Georgia Laws	ADB SPS 2009	Reconciliation Measures
allowances for vulnerable and severely AHHs	assistance to physically displaced AHHs shall be paid.	assistance to physically displaced AHHs, as per Entitlement Matrix in LARP.
No specific plan and requirements for public consultation	AHHs must be meaningfully consulted and given opportunities to participate in project implementation, consulted in an appropriate and timely manner on LAR planning and compensation options, and LARP implementation.	Public consultation process will be conducted as per ADB SPS requirements and guidelines before and during LARP and project implementation.
Recognition and compensation for business (officially registered) losses resulting from LAR due to the project based on official tax declaration	All AHHs, regardless of impact on formal and informal business, shall be compensated for loss of income during business disruption (if impact is temporary) and/or business loss if impact is permanent.	All AHHs experiencing LAR impact on business (formal and informal) shall be compensated for loss of income during business disruption (if impact is temporary) and/or business loss if impact is permanent.
No specific plan LARP preparation and disclosure to AHHs.	PIU shall prepare and implement LARP and disclose it to AHHs.	PIU shall prepare and implement LARP and disclose it to AHHs.

LAR = land acquisition and resettlement, LARF = land acquisition and resettlement framework, LARP = land acquisition and resettlement plan, PIU = project implementation unit.

D. Resettlement and Compensation Policy of the Program

55. The project design preparation and LAR process, compensations and assistance to AHHs to mitigate unavoidable LAR impacts shall be based on principles of ADB's SPS and laws of Georgia and the project shall:

- (i) Avoid and/or minimize the LAR impact as much as possible by engineering design options.
- (ii) Where impacts will be unavoidable, prepare and implement a LARP with provisions to compensate AHHs and mitigate impacts to ensure the AHHs improve or at least regain their pre-project social and economic conditions.
- (iii) Conduct information disclosure and meaningful consultations with AHHs continuously about the LAR planning and compensation options and assistance and ensure their participation in the project implementation and monitoring.
- (iv) Provide additional assistance to vulnerable and severely AHHs.
- (v) Assist the AHHs with income restoration and rehabilitation activities, in case of severe impact, and physical displacement.
- (vi) Pay AHHs with no legal and/or legalizable rights to land and assets (informal land and property users) full compensations at replacement cost at least for all non-land losses (e.g., buildings and structures, trees and crops, formal/informal business and employment).
- (vii) Disclose the LARP to AHHs in their local language.
- (viii) Pay full compensations at replacement cost and rehabilitation assistance to AHHs according to the final approved LARP before physically acquiring lands and commencement of construction works by the contractor in the impacted sites.
- (ix) Set up a project-level GRM that will be in place and accessible to AHHs and any other affected persons and public during the project implementation and evaluation.
- (x) Restored temporarily affected lands to its previous use and allow the AHHs to continue their cultivation after completion of civil works.
- (xi) Set up a cut-off date and inform publicly that people moving in the project area, and/or altering their assets will not be entitled to any compensation and assistance.

- (xii) Conduct regular monitoring and reporting of the social and resettlement safeguards performance and take corrective actions as needed.

1. Eligibility

56. All AHHs are eligible for compensations and assistance depending on types of losses and legal status of the lands and assets they have been using. Lack of legal/legalizable rights to lands and assets do not ban the AHHs from receiving compensations at least for all losses other than land and when relevant additional assistance allowances. As per ADB SPS involuntary restatement requirements, AHHs without legal /legalizable rights to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for losses of all non-land assets and incomes.

57. AHHs eligible for compensation and rehabilitation assistance under the program are:

- (i) AHHs who have certified and/or formal rights to use the occupied land;
- (ii) AHHs who do not have formal legal rights to land at the time of the DMS or census completions but have legitimate right to claim to such land or assets—provided that such claims are recognized under the laws of Georgia;
- (iii) AHHs who have no legal possession or are not eligible to claim for recognizable legal right to the land they occupy.

2. Establishment of Cut-Off-Date

58. AHHs' eligibility for compensations and assistance will be limited by a cut-off date, as defined 7 September 2022 as declared on the last day of public consultations in the project villages upon conducted LAR impact assessments, Detail Measurement Survey (DMS), during June and September 2022 in preparation of the LARP based on the project detail design. The announcement of the cut-off date informed the public and AHHs that anyone who will settle in the project affected areas and/or construct/alter any buildings or business after the cut-off date will not be eligible for compensation of the incurred costs and assistance allowances by the project. However, they shall be given the notice to vacate premises and dismantle affected structures. The dismantled materials will not be expropriated and the AHHs will not pay any fine or suffer any sanction. However, if any prove living or having livelihoods activities in the project impacted area but were not identified during the preparation of this final LARP, and/or any newly identified AHHs due to any changes in the project design will be entitled for compensation and if eligible, also for assistance allowances.

3. Payments of compensations before displacement

59. PIU will plan all LAR activities to ensure that all AHHs will receive full compensations and if eligible also allowances before imposing their lands and commencement of the construction works. PIU will prepare and submit the LARP compliance implementation report to ADB for review and approval before issuing no-objection for commencement of construction works in LAR affected areas.

4. Payments of compensations before displacement

60. All AHHs with unregistered/legalizable land/property rights, will be entitled to compensation of all losses, in the same principle as those with legal registered rights. PIU will assist these AHHs to register/legalize their land rights as required by law (Annex 4).

E. Entitlement Matrix

61. Compensations and assistance allowances to individual AHHs will depend on their lost assets, the severity of impacts and individual social and economic conditions and vulnerability. The Entitlement Matrix (EM) in this LARP envisages provisions about compensations and additional assistance allowances for eligible AHHs (Table 28).

Table 28. Entitlement Matrix

Type of Loss	Application	Definition of AH/APs	Compensation Entitlements
Land			
Agricultural Land: Permanent landloss, access or damage.	AHHs losing productive land regardless of impact severity	<u>Registered Owner/Legal:</u> Owner with full registration	Cash compensation at full replacement cost based on current market value. If the residual plot becomes unviable for cultivation, the project will acquire it if the owner so desire.
		<u>Legalizable Owner:</u> (APs with title formalization pending and APs who are not registered but legitimately use the land and have residential land or agricultural plots Adjacent to the residential land)	The ownership rights of these APs will be recognized, the land registered in NAPR and the APs provided with cash compensation at full replacement cost. Registration costs will be paid by the Project.
		<u>Non-legal/Informal Settler:</u> APs that are not legitimate land users or squatters	Non-legalizable APs losing agricultural land plot, which is the only land plot owned by AH and provides main source of income for AH, will be compensated with one-time allowances in cash equal to 6 months of subsistence wage for an average consumer ¹⁴
		Agricultural Tenant	Full Compensation of income of lost crops x the remaining years (up to 4 years) of lease. In case of tenancy no crop compensation will be given to the landowner.
Non-Agricultural Land	AHHs losing their commercial/ residential land	<u>Registered Owner/Legal:</u> (Owner with full registration)	Cash compensation at full replacement cost.
		<u>Legalizable Owner:</u> (The owners legalizable according to active legislation)	The ownership rights of these APs will be recognized, the land registered in NAPR and the APs provided with cash compensation at full replacement cost. Registration costs will be paid by the Project.
		<u>Non-legal/Informal Settler</u> (Without registration/valid documents using land permanently.)	Non-legalizable APs losing land plot, which is the only land plot used for residence or providing main source of income for AH, will be compensated with one-time self-relocation allowances in cash equal to 1 year of subsistence wage for an average consumer.
Temporary Impact on land plot	AHHs lose crops/livelihoods on productive land	During construction works	Temporary land impacts will be compensated based on the productive value of the plot during the period of impact until their use will be re-established at the pre- impact productive conditions.
Permanent servitude for irrigation systems operation and maintenance,	Land under servitude will not be acquired by the project and can be used by the	<u>Legal and Legalizable landowners</u>	One-time cash compensation to offset the decreased value of the all types of affected land plots due to land use restrictions imposed by servitude establishment. The cash compensation for land affected by servitude shall be based on difference of the market value of the land at present (before the

¹⁴ Six-month subsistence wage for an average consumer: the amount will be checked and updated, if required, at the time of compensation, to reflect current rate.

Type of Loss	Application	Definition of AH/APs	Compensation Entitlements
causing land use restrictions	AHHs, with certain land use restrictions described in LAR impact section of this LARP. This will diminish the value of lands and shall be compensated.		<p>project) and after the project impact (land use restrictions imposed by servitude), based on valuation of the independent certified valuation specialist for the affected land value.</p> <p>For lands that will be under the servitude, the PIU shall negotiate and sign servitude agreements with the respective landowners according to the Civil Code (envisages covering the costs of landowners if their land/crops and properties will be damaged due to any works for systems operations and maintenance in future).</p> <p>Restore lands to the previous condition at least with the saved topsoil;</p> <p>AHHs landowners) whose land plots will be encumbered with 10% or over servitude impact, will be entitled for additional one-time cash assistance allowance for severely AHHs;</p>
Buildings and Structures			
Residential and non-residential structures/assets	Affected structures, including improvements, such as fences, gates, poles etc.	All AHs regardless of their legal ownership/ registration status (including legalizable and Informal Settlers)	Cash compensation for building/structures losses at full replacement costs free of depreciation and transaction costs.
Loss Of Community Infrastructure/Common Property Resources			
Loss of common property resources	Community/Public Assets	Community/Government	Reconstruction of the lost resource/asset in consultation with community and restoration of their functions
Loss of Income and Livelihood			
Crops	Affected standing or agricultural land used for crops	All APs regardless of legal status (including legalizable and Informal Settlers)	Crop compensation in cash at market rate by default at gross crop value of standing crops or loss crop due to loss of cropping season.
Trees	Trees on affected lands including the vinegrapes	All APs regardless of legal status (including legalizable and Informal Settlers)	Cash compensation at market rate on the basis of type, age and productive value of the trees (expected yield of the tree, multiplied by the number of years required to grow a tree of equivalent productivity).
Business/ Employment	Business/ employment loss	All APs regardless of legal status (including legalizable and Informal Settlers)	<p><u>Owner:</u></p> <p>(i) Permanent impact: cash indemnity of 1-year net income or in the absence of income proof, One time an average consumer subsistence allowance in cash up to 12 months;</p> <p>(ii) Temporary impact: cash indemnity of net income for months of business stoppage. Assessment to be based on tax declaration or, in its absence, an average consumer subsistence allowance for months of business stoppage;</p> <p>(iii) Permanent worker/employee: indemnity for lost wages equal to one-</p>

Type of Loss	Application	Definition of AH/APs	Compensation Entitlements
			time six-month subsistence wage for an average consumer. Business income shall also cover all individual value- added activities beyond direct consumption/sale of agricultural produce (i.e. informal business activities at household level which are currently unaccounted for due to the lack of economic activity data for the affected populations). There will be a verification process during the LARP implementation to fully account for such activities.
Allowances			
Severe Impacts	>10% income loss	All severely affected AHs including informal settlers	Agricultural income: 1 additional crop compensation for 1 year's yield of affected land and/or, for other incomes: an allowance covering six-month subsistence wage for an average consumer
Relocation/ Shifting	Transport/ transitional costs	All AHs to be relocated	An allowance covering transport and livelihood expenses for the transitional period (200 GEL as vehicle hire charge + six-month subsistence wage for an average consumer).
Vulnerable People Allowances		Households who might disproportionately suffer or face the risk of being marginalized from LAR impacts, such as (i) female-headed households with and/or without dependents; (ii) disabled household heads; (iii) poor households as defined by the official poverty line; (iv) elderly households with no means of support; (v) households without security of tenure; (vi) cultural or ethnic minorities; and (vii) refugees or internally displaced people.	Six-month subsistence wage for an average consumer and employment priority in project- related jobs where feasible. Additional assistance in kind will be provided to facilitate relocation or transition – this may include (logistics, relocation planning, assistance with replacement housing search, as appropriate).
Any unanticipated impact in project implementation	Includes any temporary/ permanent income	All APs	Compensation to be assessed and paid for identified impacts based on the above provisions and the requirements of SPS 2009.

Affected private lands

62. **Permanent loss of private lands** (agricultural, residential, and commercial): Cash compensation for affected land at replacement cost identified by an independent certified valuation specialist. If the remained part of the affected land that after the impact may be too small and not viable to use as per its purpose or difficult to access, PIU shall acquire the remained (residual land) with the consent of the landowner and compensate it at replacement cost.

63. **Legalizable land parcels.** PIU shall assist the AHHs in registration/legalization of their legalizable land plot, including preparing the cadaster drawings required for legalization of project affected land parcels the AHHs have been using, and all costs covered by PIU. Once legalization and registration of ownership title is accomplished at the NARP, land acquisition will be undertaken and the legalizable AHHs will receive cash compensation at full replacement cost as envisaged for the AHHs with legal titles in the LARP.

64. **Non-legalizable land parcels.** AHHs who are not legitimate land users/have no legalizable legal rights or claims to the land they are occupying, shall be compensated at least for loss of all non-land assets and incomes.

Loss of trees and crops

65. **Loss of trees.** Cash compensation at market price of income from tree based on type, age, tree-productivity for the number of years needed to regrow the tree to the productive stage. It will be based on income based on an annual yield capacity of a mature fruit bearing tree multiplied by the market price of the fruit (Kg/GEL) and multiplied to the number of years required to grow a new tree to the same productivity age. In addition, each fruit bearing tree will be compensated for purchase of saplings, transportation and planting labor. The formula below is for calculating cash compensation for fruit bearing trees:

$$\{(B \times D) \times C\} + A$$

A – Price of sapling of a specific fruit tree, transportation and planting labor

B – Market price of a specific fruit GEL/Kg)

C – Number of years to be compensated

D – Annual yield capacity of a fruit tree (Kg/yr/tree).

- (i) *Immature trees.* Cash compensation at the replacement cost, including the costs for saplings, planting and growing trees to the same age, to be defined by an independent valuation entity;
- (ii) *Timber trees.* Cash compensations based on the market value of dry wood volume defined by an independent valuation entity;
- (iii) *Decorative trees:* Cash compensation based on the market value identified by an independent valuation entity.

66. Additionally, all AHHs regardless of legal land use rights status will have all the felled trees without any deduction from their compensations.

67. **Loss of crops.** Crop compensation in cash at market rate by default at gross crop value of standing crops or loss of crops due to loss of cropping seasons. This was evaluated by market price based on the area and the total current market value of the affected crops. The compensation for the affected annual crops was calculated by lost income method obtained based on the productivity of each species and the current market price of 1 kg of product. The source of statistic of the yield of different annual crops in the project area is the National Statistics Office of Georgia (2022), as well as reference books developed by agro-technicians with the permission of the Ministry of Agriculture of Georgia.

Affected structures

68. Cash compensation shall be paid for affected structures at replacement cost including all costs necessary for constructing the same building/structure and quality at least equal to those affected, based on current market value of materials without deduction of depreciation cost as per replacement cost principle of ADB SPS 2009. In case of partial impacts, full cash assistance to restore the remaining structure will apply or to repair a partially affected structure fully at least to the pro-project impact level. If partial impact/demolition of a section of the building creates the structures' deterioration or safety risks, the entire structure/building shall be acquired and cash compensated including for the affixed assets.

69. AHHs shall be entitled to keep the salvage materials after the demolition of the structures without deduction from compensations. All compensations shall be paid free of any deduction for any fees, costs of salvageable materials, depreciation and transaction costs.

Additional allowances

70. **Severe affected allowance:** No AHH with severe impacted is identified in this LARP. However, the principle is envisaged hereby for AHHs losing 10% or more of agricultural lands or other income-generating assets permanently (in case of unanticipated impact during the project implementation), are entitled for one-time cash assistance allowance equal to six-month subsistence wage for an average consumer (198 Gel x 6 months = 1,188 GEL).¹⁵ In addition, will be given priority for employing family members in the project construction and operations jobs as per skills.

71. **Transportation allowance:** transportation cost sufficient to cover transporting family members, movable assets/belongings (200 GEL).

72. **Vulnerability allowance:** Vulnerable AHs will receive (i) additional one-time cash allowance equal to six-month subsistence wage for an average consumer (198 Gel x 6 months = 1,188 GEL), and (ii) priority for employing family members in the project construction works.

73. **Transportation allowance:** transportation cost sufficient to cover transporting family members, movable assets/belongings (200 GEL based on the estimated cost to be updated in the LARP update).¹⁶

74. **Land registration cost.** Land registration costs, any costs and fees for notary services, fees for legalization, and registration at the NAPR, shall be covered by the project/PIU.

Exemption from Fees and Taxation

75. AHHs shall not be liable for any taxes (such as income Tax and VAT) associated for cash compensation paid due to involuntary resettlement cases envisaged in the LARP. Neither the AHHs shall be liable to pay transaction costs and fees for notary services, fees for legalization, lands sub-division and registration at the NAPR, and fees for bank charges related to compensation payments, which shall be covered by the project and the PIU.¹⁷

76. Any other unforeseen impacts that may occur during the project implementation, shall be assessed and compensated as per principles of this LARP, LARF, ADB SPS, and laws of

¹⁵ 198 GEL is a subsistence wage for an average consumer as of December 2021.

¹⁶ Georgia: Livable Cities Investment Project for Balanced Development Arrangement of Municipal Park in Dighomi Floodplains in Tbilisi, <https://www.adb.org/sites/default/files/linked-documents/53118-001-rpab-03.pdf>

¹⁷ AHHs who decide to lodge the claim to the court or hire independent appraiser for alternative valuation of project affected assets, shall pay the court application/valuation cost respectively.

Republic of Georgia, whichever is more stringent. No other specific income restoration and rehabilitation program are developed related to this LARP.

VI. INCOME RESTORATION AND REHABILITATION

77. The project will cause no physical displacement and neither significant impact. Therefore, no income restoration and rehabilitation program are developed as part of this LARP. The AHHs will receive compensations at replacement cost for their losses.

VII. INSTITUTIONAL ARRANGEMENTS

A. Implementing Agency

78. The Ministry of Finance is the executing agency for the Output 1 and MEPA will be the implementing agency for the CSISDP. MEPA implement the project through its existing PIU in Tbilisi. The PIU under the MEPA is the executing agency for outputs 2 and 3. The PIU is currently implementing the Irrigation and Land Market Development Program financed by the World Bank and the Dairy Modernisation and Market Access Project financed by the International Fund for Agricultural Development (IFAD).¹⁸ The PIU is fully financed by MEPA utilizing funds provided through donor-financed projects. PIU professional staff are contracted to MEPA as consultants and MEPA finances all PIU operating costs (office space, office administration, vehicles and equipment operating costs, etc.). Staff and operating costs are financed on a shared basis for expenditures applicable to all projects and directly by individual financiers for expenditures specific to each financier's project. The PIU will implement CSISDP on the same basis. Figure 3 shows the organization structure of the PIU including the ongoing World Bank and IFAD projects and CSISDP.

79. The PIU is managed by a Project Director, who is supported by a team of subject matter specialists. The PIU currently has a safeguards specialist for both environmental and social tasks. PIU will employ a dedicated national resettlement safeguard specialist (60 person-months) for the duration of the project to be financed by the project. The PIU will be responsible for updating, endorsing and implementing the LARPs as approved by ADB, and monitoring and reporting to ADB on the project's LAR compliance.

80. PIU as implementing agency is overall responsible for implementing the LARP and all LAR related tasks, in coordination with government agencies, ADB and other stakeholders, and monitoring and reporting to ADB on project compliance with the involuntary resettlement safeguard requirements.

81. The PIU shall ensure that all LARP related tasks are implemented according to Georgian laws and ADB's SPS including:

- (i) Endorse the LARP, submit for ADB's approval, and ensure timely allocation of budget for LARP implementation;
- (ii) Implement the approved final LARP prior to the start of civil works; payment of all compensations and assistance to affected households prior to the start of civil works;
- (iii) Ensure that no physical or economic displacement will take place until the approved LARP is implemented, all compensation and assistance are paid to affected households, and monitoring report on the LARP's implementation is prepared by PIU

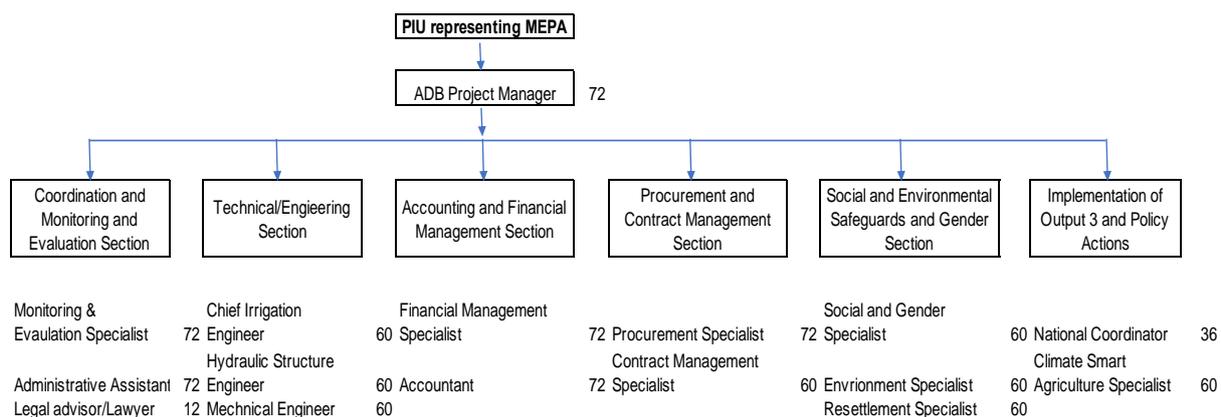
¹⁸ The PIU has been implementing the World Bank project since 2015 (including the original project and the 2019 additional financing). It has been implementing the IFAD Dairy Modernisation and Market Access Project since 2018. It also implemented the Agriculture Modernization, Market Access and Resilience Project, which was completed in 2021.

- for review and approved by ADB, and until ADB will provide clearance for the commencement of the construction works on the impacted lands;
- (iv) Provide information disclosure and meaningful consultations to AHHs and communities about the project and involuntary resettlement documents, principles, including GRM and ADB's Accountability Mechanism in the project implementation;
 - (v) Engage the licensed valuator and state agencies to update (if required, e.g. compensation payment is delayed over one year) valuation of affected assets, incomes and livelihoods and ensure that the valuations are conducted and compensations are paid following the replacement cost principle of ADB SPS ;
 - (vi) Ensure the project-level GRM is in place and coordinate with the relevant agencies to resolve grievances in consultative and timely manner;
 - (vii) Include in the Construction Contractor's contracts provisions about LAR safeguards and mitigation measures the Contractor shall comply with (e.g., reports on grievances and keeping the GRM Logbook, following the ROW during the construction works, not block the irrigation supply to farmers affected households' adjacent non-impacted lands, inform affected households about the schedule of constructions that can affect their farming works);
 - (viii) Monitor the Contractors social safeguards performance including implementation of mitigation measures related to temporary land acquisition, ensure that the Contractor will comply with the contractual obligations on LAR safeguards;
 - (ix) Conduct regular monitoring and submit semi-annual social safeguard monitoring reports (SSMRs), LARP implementation compliance report for ADB's approval;
 - (x) Ensuring that the GRM is operational to effectively handle environmental and social. Grievances, and access to information and consultation concerns of affected persons.
 - (xi) In case of unanticipated temporary and/or permanent involuntary resettlement impact, prepare and endorse a LARP for the new impact according to national laws and ADB SPS, implement it and submit the LARP implementation report to ADB for review and approval before commencing any physical works on the affected site.
 - (xii) Any other tasks and correction action plans as may be required to ensure resettlements safeguard compliance according to ADB's SPS and national laws.

B. Project implementation consultants

82. A team of international and national project implementation consultants (PIC) will be financed from the ADB project loan to support the PIU to manage the project and implement project activities in relation to Output 2 and 3. The PIC will include one national and one international Resettlement Specialist to (i) support PIU in all resettlement tasks including those mentioned above, and (ii) provide capacity building training for staff of PIU, GA, contractors and relevant authorities on ADB SPS' LAR requirements, the Program LARF and LARPs compliance implementation.

Figure 3: Project Implementation Unit Structure



Note:

1. The implementation period is 6 years (72 months) from counting from ADB's approval date.
2. Number in the table indicates person months required. PIU staff and their costs may be shared with the World Bank and/or European Investment Bank financed projects.
3. The number represents person months.

C. Other Agencies

83. **Representative of Mayor in Local Community.** Community level Representative of Mayor in village is the executive branch of self-government headed by Mayor Representative. Mayor Representative has the primary role in the process of legalization and registration of land parcels. Mayor Representative confirms ownership of affected land plots, parameters of land plots and endorses the cadastral maps and related data prepared for case of legalization. Mayor Representative plays important role for legalization of non-rightful owners (owners in possession before the enactment of current law on privatization of land in Georgia without prior permission of the government). Mayor Representative has power to authorize details of the occupied land parcel and verify its usage pattern as the first-hand verification and authorization for further consideration in the Property Rights Registration Commission (PRRC) as a basic step for registration with the Public Registry. Neighbors of applicants for legalization have roles in the authorization process.

84. **National Agency of Public Registry (NAPR).** NAPR is under the Ministry of Justice will register any changes in land and property titles of AHHs (after the impact), and also transfer the land title through purchase agreement from landowners to the state and MEPA will have right to use it for the project needs.

85. **Local Governments.** Local administration especially at municipal level has direct jurisdiction for land administration, verification of land rights for legalizable land plots registration through engagement of designated officials from the regional administration (Mayor Representative in the village) and representatives of each affected village/community administration (representatives of all affected community/village).

86. **Civil Works Contractor.** Contractor will be responsible for mitigating impacts resulting from the construction activities. The construction activities shall be monitored closely by the PIU to ensure compliance to the temporary mitigating measures. The construction contractor is responsible for fulfilling the obligations set forth by the LARP, preventing damages on private property not covered by the LARP, and if such an event occurs, reimbursing the loss with its own funds. Contractor shall also be obliged to provide compensation to the affected persons if the construction deadline is unreasonably delayed, the supervisor will ensure the compensation to be paid by the construction company. Contractor should register and report about grievances status in monthly progress reports submitted to PIU, the later will reflect this in the semiannual social safeguard monitoring reports that will be submitted to ADB.

87. **NGOs/civil society organizations.** Interested NGOs in the area will participate in monitoring, public consultations and planning and implementing LAR tasks and resolving grievances as needed.

88. **Asian Development Bank.** ADB will guide PIU in (i) preparing final LARP and will approve the final LARP, (ii) review its implementation the social safeguards semi-annual monitoring reports (SMRs), (ii) project review missions to the project sites to ascertain the status of the LARP implementation and involuntary resettlement safeguards performance of the PIU and Contractor, (iii) issue clearance for start of construction works upon compliance LARP implementation, (iv) in case of non-compliances will be identified, guide PIU in taking corrective actions following the final LARP and safeguard covenants of financing agreement and documents and SPS.

VIII. GRIEVANCE REDRESS MECHANISM

A. Project-level Grievance Redress Mechanism

89. PIU will set up a project-level Grievance Redress Mechanism (GRM) following the ADB's SPS and laws of Georgia to resolve grievances and issues raised by the project affected persons related to the project's resettlement and environmental impacts and consultations and information disclosure.

90. PIU has overall responsibility for the well-functioning of the GRM during the project duration and evaluation, inform about it the AHHs in the project area, and resolve grievances in efficient and mutual consensus manner. will involve relevant agencies and independent experts as needed by cases. National Resettlement Specialist engaged through PIC to support PIU will serve as the GRM focal person. A two-tiers project GRM is proposed:

91. **Tier 1 at local level:** PIU will form a Grievance Redress Group (GRG) at the local level in the municipality. GRG members include the (i) PIU Safeguard Specialist for the project, (ii) representatives from municipality authorities, (iii) Contractor's safeguard specialists (social and environmental safeguard specialist, OHS specialists), (iii) safeguard specialist of the CSC and the PIC, (iv) representatives from the GA, and (v) at least one member should be from the village of the person who submitted the grievance (assuming all are not family members), and/or NGO. Other experts such as valuers, accountants, attorneys, and so on shall be invited as case may require.

92. This GRG shall put efforts to resolve the complaints at local level and consultation with the complaining parties. GRG shall conduct investigations and require documents from the stakeholders including the AP for any documents supporting the claim, as needed. At this stage, after the grievance is received and registered, GRG will consider the grievance to resolve it quickly within 10 days or maximum 30 days according to Administrative Code, in consultative manner with the person who made the complaint. Minutes of discussions and decisions shall be recorded and signed by GRG members. If the grievance is not resolved at this stage, it will proceed to Tier 2. Also, if the person who made the complaint does not agree to the decision and or actions of GRG in Tier 1, the complaint will go to Tier 2.

93. **Tier 2 at PIU level.** At Tier 2, a Grievance Redress Commission (GRC) will be set at PIU's central level, represented by (i) PIU's Manager, Safeguard Specialist, (ii) Resettlement Specialist contracted by PIC, (iii) engineers and representatives of GA, (iv) municipality, (v) NGO/civil society and community based organizations (as available). Other relevant agencies will be engaged as experts as individual cases can require. The GRC shall resolve the grievances within 30 days in consultative manner with the person who made the complaint.

94. PIU shall coordinate with respective agencies and formalize setting the GRG and GRC at both tiers, with nominated representatives of respective agencies and stakeholders. The national resettlement safeguard specialist contracted through PIC under the PIU will be a focal person for registering and handling the grievances, coordinating their resolution with the GRC, ensure that all grievances and their resolution status will be documented in the Grievance Logbook at the offices of the Contractor, local authorities, monitored and reflected in the project's progress reports.

95. If the project-level GRM will not be able to resolve the grievance or the complaining party is not satisfied with the decision, it shall be resolved as per law and court order of Georgia, which will be outside of the project GRM scope. The project GRM should not impede access to the country's judicial or administrative remedies. The aggrieved persons reserve their rights to appeal to the Court of Georgia at any stage of grievance resolution.

96. Also, if not satisfied with the resolution of the issue by project-level GRM, the complaining party can send complaint to ADB's Accountability Mechanism discussed below, after making good faith efforts to resolve the grievance by the project-level GRM.

97. Accessibility and awareness of the AHHs and persons about the GRM is important for its effective functioning. During the project implementation, PIU shall inform the project AHHs and communities about the project GRM and contact information of responsible persons (e.g. staff of PIU, contractor, local authorities, and ADB Georgia Resident Mission's Safeguard Officer) for the project GRM (through public consultations, individual meetings, information leaflets, local media with approaches to facilitate participation of women and vulnerable groups). This will ensure that people are aware about the project-level GRM and have contact information of responsible staff if they have inquiries or grievances. Consultation about the GRM shall be in language of affected households and persons.

98. At this stage, the APs may submit their concerns and complaints to the following address. This contact information shall be updated during the project implementation and as soon as the PIC and CSC will be in place and the GRG will be established.

Ministry of Environmental Protection and Agriculture of Georgia

Address: Didube Bus Terminal 4 Transport Street, Tbilisi, Georgia, Hot line 1501; Telephone + 995(32) 2 47 01 01+ 995(32) 2 37 80 09
E-mail: info@mepa.gov.ge

B. ADB's Accountability Mechanism

99. Affected households and people in the project areas shall also be informed about the ADB's Accountability Mechanism, and that they should at first put good faith efforts for resolving the complaints on the project level-GRM and the project implementing agencies in the country. Two or more affected households (can be from the same family) can submit their complaint to the ADB's Accountability Mechanism (AM). The AM is a last resort mechanism. The project-affected households shall first address the issue with the project-level GRM, and then they shall make good faith efforts to address the issue with the relevant ADB operations department. Certain complaints will not be eligible, such as:

- about actions not related to something ADB did or not do in formulating, processing, or implementing an ADB-assisted project;
- about an ADB-assisted project for which two or more years have passed since the loan or grant closing date;
- about matters those complainants have not made good faith efforts to address with the operations department concerned; and
- about decisions made by ADB, the borrower/executing agency, or the private sector client on the procurement of goods and services, including consulting services; and allegations of fraud or corruption in ADB-assisted projects (these will be managed by other facilities).

100. The complaint may be submitted by mail, fax, email, or in-person:

Complaint Receiving Officer (CRO), Accountability Mechanism

Asian Development Bank Headquarter, 6 ADB Avenue, Mandaluyong City 1550, Metro Manila, Philippines (+632) 632-4444 loc. 70309 (+632) 636 2086 amcro@adb.org

101. Alternatively, complaints may be submitted through ADB office in Tbilisi,¹⁹ which will forward the complaint to the CRO.

¹⁹ Address: 1 Galaktion Tabidze St, Tbilisi, Georgia

IX. CONSULTATION, PARTICIPATION AND DISCLOSURE

A. Public Consultations

102. ADB's SPS requires that AHHs must be meaningfully consulted and have opportunities to participate in resettlement planning, compensation options and LARP implementation. Public consultations and disclosure should be carried out also following national laws. In preparation of this LARP, 4 public consultations were conducted in four project communities (covering also the Area 1) on 6-7 September 2022. The public consultations for the preparation of LARPs for the Area 1 and the Main canal (section related to the Area 1) were conducted jointly as these are the adjacent areas in distribution network and location of affected land plots nearby. In total 67 persons (including one women) participated although the information about the public consultations were disseminated through the local municipalities four days before the consultations dates. In addition, APs were consulted individually during the APs' census, social-economic surveys and inventory of loss assets in each land plot during June-September 2022. Power Point presentation about the project, expected LAR scope and compensation and mitigation measures as per the draft LARP, GRM and contact information, and ADB's Accountability Mechanism (AM) and criterion for filing grievance to the ADB AM, were presented. The questions raised were about the project design and timeline: (i) when modernization works will start and be completed, and (ii) request to include the other areas in the project design (Table 29). List of participants and photos from public consultations are in Annex 6.

103. LAR information booklets in Georgian language were distributed to participants (Annex 6). The APs have also been individually consulted during LAR impact assessment, APs census and socio-economic surveys conducted during June to August 2022. The APs were informed about accessing the copies of LAR booklets left in the offices of the village administrations or by contacting the PIU through the given contact information.

Table 29. Questions and response

#	Key issues	Responses
1	What about unregistered lands?	The unregistered/legalizable land will be compensated at the same principle as registered lands. One private plot is identified unregistered. The PIU will assist the respective AHHs with registration/legalization of their unregistered land plots (i) covering the registration costs, and (ii) facilitation with the registration authority (NAPR) following the state the process of registration/legalization of unregistered/legalizable lands, as in Annex 4.
2	When is planned the project implementation? When the works will start and completed?	It is not known exactly yet. The project has to be approved by ADB and the Government, and tender process shall be carried out. Might be in one or 1,5 years. You will be informed through new consultations about the project timelines.
3	What will be diameters of the pipes ?	Approximately 110-300 mm diameters in the secondary and tertiary channels, and 600-700 mm diameters for the main pipelines. This to be confirmed by the detail designing. Detail design not prepared yet.
4	The existing system is old and wastes a lot of water. In some sites lots of water spilled on ground surface while in other sites unavailable.	The proposed project modernization works aiming to address this issue.
5	The land plots in upper part of the village are not covered by the project.	The project design include proposed works in these 6 Areas of irrigation distribution networks we have

#	Key issues	Responses
	During Soviet time pumps worked which are broken now. Farmers use drinking water for irrigation. We request you to cover in the future modernization works that part too. If modernization works will be done there, drinking water will not be wasted.	presented to you. We will take note of this request and reflect in our reports for any future interventions of MEPA or GA in your area.
6	Who is implementing agency	Existing PIU under the MEPA. At operational stage will be managed by GA.
7	What can stop the project besides any tender issues?	The project will be studied financially and technically, and any risks will be measures before approval and implementation.

104. PIU will ensure information disclosure and meaningful consultation held throughout the project implementation. ADB will disclose the approved safeguard documents (LARF, LARP, social monitoring reports, and others as relevant) in its website in English. PIU will disclose these safeguard documents in its website in Georgian language.

X. RESETTLEMENT BUDGET

105. The total estimated budget of the LARP is 11,425 GEL (4,021 USD).²⁰ This includes costs for (i) compensations of all losses in private and state lands and assistance allowances to AHHs, (ii) administrative costs 10%, (iii) valuation cost, (iv) unregistered land registration/legalization cost for one plot, and (v) 20% contingency to ensure timely implementation of the LARP in case of any unanticipated LAR task. Breakdowns of the LARP costs are in tables 14 to 18 and budget summary in Table 19. Table 18 further shows the implementation schedule and PIU actions on requestion/securing LARP budget. An independent valuation specialist was involved and conducted valuation of losses in preparation of this LARP. The valuation methodology is in Annex 8.

106. PIU will cover all LARP costs/budget from the government funds, and ensures timely allocation of the LARP budget for on-time payment of compensations and assistance to AHHs and LARP implementation overall.

107. **Compensation of lands.** It is estimated at 4,345.48 GEL (Table 30).

108. The affected state will be given to the GA for use rights for the project needs. The loss of trees and crops on the state land will be compensated to the land users (AHHs using the state land adjacent to their land plots) as provided in this LARP.

Table 30. Affected lands by ownership

Property type	No. of plots	Impact area, sqm	Unit price, GEL	Amount, GEL
Private lands	4	1,010.6	4.30	4,345.48

109. **Compensation of trees.** Compensation for loss of all trees is estimated 3,190 GEL (Table 31). It is based on the trees' average yield and annual net income multiplied by 3 years.

Table 31. Affected Trees

Type	Area, sqm	No.	Age	Yield, kg/3 years	Price, 1 kg, GEL	Sum, GEL	No. of seed-lings	Unit price, GEL	Seed-lings sum, GEL	Total compensation, GEL
Vine	197	110	26	1,650	1	1,650	110	14,00	1540	3,190
Total:	197	110	26	1,650	1	1,650	110	14,00	1540	3,190

110. **Compensation of structures.** The project will affect only the small poles supporting the vine trees and wires connected to them, owned by one AHH. Compensation cost for loss of poles and wires is estimated 320 GEL (Table 32).

Table 32. Structures

Type	Area, sqm	No.	Price, GEL	Total compensation, GEL	No. of AHHa
Poles (pieces)	110	20	10	200	1
Wiring (meter)	110	300	0,40	120	
Total:	220	320	10,40	320	1

111. **Transportation cost.** One-time additional cash allowance , as 200 GEL (Table 33).

²⁰1 USD = 2,8412 GEL as per rate of the National bank of Georgia, accessed on 19 September 2022. <https://nbg.gov.ge/en>.

Table 33. Transportation cost

Transportation cost	Unit price, GEL	Number	Total cost
1	200	1	200

112. **Cost for land registration/legalization.** The cost is estimated 200 GEL (Table 34).

Table 34. Cost for land registration/legalization

Item	Unit cost, GEL	Number	Total amount
Land plot registration cost	600	1	600

113. **Cost for updated valuation in case of delayed payment of compensations:** If the payment of compensation (and assistance allowance where applicable) envisaged in this LARP will be delayed for maximum one year from 29 September 2022, an updated valuation of losses of AHHs shall be carried out by an independent valuation entity to be engaged by the PIU. For this, a lump sum of 2,078 GEL (20% of budget) is reserved in this LARP budget.

114. The consolidated list of AHHs and impacts, and compensation and assistance allowance amounts are given in Annex 7.

115. Table 35 presents the summary of LARP budget.

Table 35. Budget summary

Description	Total, GEL
A. LAR cost	
Compensation for land	4,345.48
Compensation for trees	3,190
Compensation for structure	320
Transportation cost allowance	200
Registration/legalization cost	600
Subtotal A	8,655
B. Administrative cost (10%)	865.5
Subtotal A+B	9,520.5
Contingency 20% (subtotal A+B)	1,904
Total	11,425

XI. IMPLEMENTATION SCHEDULE

116. The LARP implementation will start after the PIU endorses and ADB approves it. PIU will plan all LAR activities and implement the approved LARP, to ensure that all AHHs will receive full compensations and allowances before acquiring their lands and starting the construction works. Commencement of civil works at the subproject(s) with LAR impact will be conditional to the full implementation of the updated final approved LARP for the impacted lands as verified in a social safeguard monitoring report and LARP implementation compliance report, prepared by PIU and approved by ADB.

117. PIU will inform the AHHs about their rights and compensation options and clarify any issues and concerns the AHHs may have, and sign compensation agreements with AHHs. In case of one unregistered land plot, the PIU will assist the respective AHH with registration/legalization of their unregistered land plots (i) covering the registration costs, and (ii) facilitation with the registration authority (NAPR) following the state the process of registration/legalization of unregistered/legalizable lands, as in Annex 4.

118. PIU will transfer the compensation and assistance allowance amounts to the bank account of each AHH according to the bank payment information provided by the AHHs. If any of the AHHs do not have bank account, the PIU shall guide such AHHs and facilitate the opening the bank account for him/her.

119. PIU will individually inform the AHHs about the time of payment of compensation and assistance allowances into their account. AHHs at own discretions can keep the compensation and assistance allowance amounts in their bank accounts, or withdraw it fully or partially at any time right after the compensation payments' transfers or later.

120. In case of absentee and/or deceased AHHs, and/or other legitimate reasons the AHHs are not able to receive compensation (and assistance allowances for eligible AHHs), the pending compensation payment shall be deposited on the relevant bank's escrow accounts opened by the request of the PIU.

121. PIU will prepare and submit the LARP compliance implementation report to ADB for approval before issuing no-objection to start construction works in LAR affected sites.

122. PIU ensures resettlement safeguard monitoring and reporting during implementation of project until the completion of the civil works and restoration of any temporarily used land.

123. PIU is responsible for the LARP budget and will ensure its timely allocation.

124. PIU will ensure the GRM will be in place throughout the project implementation.

125. Table 36 shows a tentative implementation schedule and key tasks for LARP implementation (the green marked actions are completed during the TRTA). The schedule shall be updated as necessary, and streamlined with schedule of construction works.

Table 36: Implementation schedule

LARP activities	Completed during the TRTA				Months 2023					
	By June-July 2023				Jun	July	Aug	Sep	Oct	Nov
A. Project design										
1.Preparation of the project design										
2.Conducting APs census and social-economic surveys										
3.DMS, LAR impact assessment and valuation										
4.Public consultations and cut-off-date										
5.Preparing the LARP										
6.PIU endorses and ADB approves the LARP										
7.PIU request/secure funds for the LARP budget										
8.Disclosure of the final LARP										
B. Implementation (project approval)										
9.Mobilization of the Resettlement Specialists (PIC)										
10.Setting up formally the GRM and nominate members										
11.Consultations with APs and compensation contract signing										
12.Registration of unregistered land plot										
13.Establishing mandatory servitude by court, if any required ²¹										
14.Payment of compensations and entitlements to AHHS										
15.LARP compliance report submitted to ADB for approval/approved by ADB										
16.Takeover possession of acquired lands										
17.Handover land to contractors										
18.Ongoing consultations with APs/public										
C. Monitoring and Reporting										
19.Internal Monitoring and Reporting by PIU to ADB										

²¹ Compensation payment in such cases shall be reported in the SSMRs and/or corrective action plan report (as applicable) verified by the court and bank payment documents.

XII. MONITORING AND REPORTING

A. Overview

126. ADB SPS requires the borrower/client to monitor and assess resettlement outcomes and impact on the standards of living of the AHHs. The monitoring will assist to assess the progress of implementation of the LARP, grievances resolution, identify any unanticipated involuntary resettlement impact and take corrective actions on-time to avoid delays in the project implementation. PIU shall ensure regular monitoring during the project implementation and submitting the semi-annual monitoring reports to ADB for review and clearance. The monitoring requirements shall be based on the scope of the involuntary resettlement impact of the program. According to the scope of anticipated LAR impact at the project preparation stage, PIU shall conduct an internal monitoring and submit to ADB semi-annual social safeguard monitoring reports throughout the project implementation.

B. Internal Monitoring and Reporting

127. PIU will conduct regular internal monitoring and provide Semi-Annual Monitoring Reports to ADB for review and approval for the entire duration of the project to monitor and report on any emerging LAR issues and complaints during the project implementation. The approved monitoring reports will be posted on ADB's website. To confirm completion of specific milestones in LARP implementation, the PIU will submit to ADB for review and approval (i) SMRs during the program implementation, (ii) one LARP implementation compliance report upon the LARP implementation, and disbursement of compensation payments as well as payment of allowances to eligible affected households, which will be one of the conditions for allowing construction works to commence in the areas/components with LAR impacts, (ii) one land restoration completion report at the end of construction to confirm if land is restored and affected households wherever relevant are able to resume their livelihood/agricultural activities. At the end of the project, a LARP completion and evaluation report should be prepared summarizing the experience in the entire program.

128. The indicators to be used for monitoring include (i) payment of compensations and assistance according to the Entitlement Matrix, (ii) information disclosure and meaningful consultations and participation, (iii) grievance redress, (iv) budget and timeframe, and (v) other provisions of the final LARP. The monitoring reports shall reflect the progress in compensation payments and implementation of the LARP up-to-date, as well as any problems encountered and suggestions for corrective actions. ADB will review the monitoring reports and when approved, will issue a notice to proceed with the construction works.

129. Information for monitoring will be collected directly from the field through AHHs' about the progress of LARP implementation including (i) payment of compensations and assistance according to the Entitlement Matrix, (ii) information disclosure and meaningful consultations and participation, (iii) grievance redress status, (iv) budget and compensation payment timeframe, and (v) any unanticipated LAR impact identification, (vi) information and consultations, and as per other issues and provisions of the final LARP. Consultant will assist the PIU in monitoring and reporting the LARP implementation, and as needed implement corrective actions as needed. PIU will inform promptly ADB about (i) any unanticipated impacts arise during the project implementation or operation (information shall include a detailed description of the event and proposed corrective action plan); and (ii) any incurred or potential breach related to LARP compliance implementation with the proposal of measures and actions to address the breach.

Annex 1. Photos of condition of the main canal that requires rehabilitation





Source of photos: Report: *Left Main Canal of Kverno Samgor Irrigation System (From Pk. 0+00 To Pk. 488+50= First Line (And Other) Distribution Branches (G-1-G42) Inventory*. Ta-54014-002 GEO: Preparing the Water Resources Sector Development Program – Project Design Consultants.

Annex 2. Methodology and concurrence with PIU the ROW for LAR impact assessment

Concurrence of the ministry of environmental protection and agriculture on right-of-way and land acquisition and resettlement impact assessment methodology



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08/06/2022

To: Gizo Chelidze, Head of the Hydro-melioration and Land Management Department

CC: Lali Durmishidze, Director, Project Implementation Unit, MEPA

TA 6648-GEO: Climate Smart Irrigation Sector Development Project

Re: Approach for defining Right of Way (ROW) for modernization works and land acquisition and resettlement impact surveys and assessment in the distribution Area 1 of Kvemo Samgori left main canal

Dear Mr. Gizo Chelidze,

It is our pleasure to work with you for the preparation of the Climate-Smart Irrigation Sector Development Project proposed for financing by the Asian Development Bank (ADB). The project includes the modernization of Kvemo Samgori Left Main Canal irrigation scheme. Based on preliminary assessments, modernization works will cause temporary land impact and, as such, expected loss of crops and trees (and possibly other livelihoods) in privately owned and used lands. According to the requirements of Safeguard Policy Statement (SPS, 2009) of ADB as well as national laws, the affected persons shall be compensated and assisted, wherever applicable, for any such losses. The losses of affected persons shall be assessed within the right-of-way (ROW) to be used for the project modernization works, and a resettlement plan shall be prepared accordingly which, among others, will include a detailed inventory of losses, affected persons, and mitigation and compensation measures, and budget.

We have attached the proposed approach for defining the ROW for modernization works and land acquisition and resettlement impact surveys and assessment in Area 1 of Kvemo Samgori left main canal, for your feedback and concurrence. We look forward to hearing from you on or before 10 June 2022.

Your timely response will be highly appreciated and helpful to commence the land acquisition and resettlement impact assessment and surveys and preparing the Land Acquisition and Resettlement Plan to avoid delays in processing of the project by ADB and the Government of Georgia.

Please do not hesitate to contact us if you have any question or comment..

Yours sincerely,

A handwritten signature in black ink, appearing to read 'A. Trowell'.

Alex Trowell
Water Specialist, Environment and Water Division, Landell Mills Ltd.

Attachment

Approach of defining Right of Way (ROW) for modernization works and land acquisition and resettlement impact surveys and assessment in the distribution Area 1 of Kvemo Samgori left main canal (4 June 2022)

A. Background

1. Asian Development Bank (ADB) considers to finance the proposed Climate Smart Irrigation Sector Development Program (Program) in the Republic of Georgia (Georgia). The Program will support policy reforms and develop institutional capacity in water resources management and delivery of climate-smart irrigation services, and will modernize the irrigation system in the Kvemo Samgori left main canal (KSL) irrigation scheme. The project preparation and modernization of the irrigation schemes (under output 2 of the Program) is planned in two phases and through design-build contract, and detail design will be finalized after the construction contract award. Phase 1 includes modernization of irrigation networks in Areas 1-4, and Phase 2 includes modernization of irrigation networks in Areas 5 and 6 (Figure 1). There is concept design for the Area 1 distribution network at the feasibility level. For Area 2, the concept design preparation is in progress. There is also detail design available for the main canal associated with Area 1). The Ministry of Environmental Protection and Agriculture of Georgia (MEPA) and Georgian Amelioration (GA) are the executing and implementing agencies for the project.

2. The project is assessed as Category B for Involuntary Resettlement (IR) Safeguard following ADB Safeguard Policy Statement (SPS 2009).²² Modernization works will cause land acquisition and resettlement impact (LAR), namely temporary impact on lands along the existing channels alignments, in approximately 510 hectares (ha) of lands of state and private lands (areas of private and state lands to be confirmed). All the impacted plots are agricultural. The most part of the affected agricultural plots (about 60%) is used for cultivation of perennials-grape trees and other fruit trees and about 40% for cultivation of annual crops. There may also be need for establishing servitude right for the GA (for schemes operations and maintenance) on some private lands to be confirmed and defined by the GA based on the final detailed design. LAR impact to residential or commercial buildings or businesses are not expected affected. The only structures that could be affected and are subject for compensation are fences, gates and the poles used to support the grape trees. Due to this expected LAR impact, it is required by ADB SPS (2009) to prepare a resettlement plan (RP) and compensate the loss of crops, trees and other livelihoods and/or assets of affected landowners and land users, according to findings of the LAR surveys and impact assessment to be conducted.

3. The LAR surveys and impact assessment will include activities such as site visits and impact examination on the site, detailed measurement surveys (DMS), and land ownership and land-use rights verification, inventory of losses and valuation (for replacement cost compensations to be paid prior to land acquisition and site access) of assets/livelihoods affected land owners/land users and other affected persons who may experience any economic and/ or physical displacement, census of affected persons, and socio-economic surveys of affected persons including through face-to-face interviews and statistical data, and public consultations with affected persons. For the subject project, these LAR impact assessment activities will be conducted as per the Terms of Reference (TOR) and Methodology

²² A proposed project is classified as category B if it includes involuntary resettlement impacts that are not deemed significant. A resettlement plan, including assessment of social impacts, is required. ADB Operations Manual: Safeguard Policy Statement (F1): OM Section F1/OP Issued on 1 October 2013. Project is assessed as Category C for Indigenous People Safeguards following ADB Safeguards Policy Statement (SPS 2009). No indigenous people or any ethnic minority groups live in the project area and ADB SPS requirements on indigenous people safeguards are not triggered, and no actions will be required.

(Appendix 2) by a local surveying company (Eco-Spectri Ltd, hereinafter referred as “Sub-contractor”) to be engaged and guided by TRTA resettlement safeguard specialists. The executing agency has ownership for LAR impact assessment and preparation of RP, and ADB TRTA assist the executing agency in carrying out these activities and prepare the RP as per ADB SPS (2009) requirements. The RP is to be implemented and compliance implementation to be reported to ADB and the RP compliance report to approved by ADB, prior to land acquisition and site access.

B. Approach for LAR surveys and impact assessment in preliminary defined ROW of pipelines

4. The LAR impact assessment is commonly conducted within the area of the project’s and construction works’ ROW (commonly area acquired permanently, and/or temporary for construction works and needs). This approach is prepared for the planned modernization works in distribution network in Area 1. According to the Order #19 of Minister of Urbanization and Construction of Georgia (dated 30 June 2003), the ROW for the main pipes (100-600 mm outer diameter) will be 4 meters (per 2 meters each side from the pipeline centerline), but for the secondary and tertiary channels (underground pipes of 80-200 mm outer diameter) this shall be defined in each project case (i.e. no regulation exist). The engineering design is not yet detailed and final at this stage of the project preparation to provide exact locations for laying underground the pipes and define the exact ROW and corridor of LAR impact. However, based on preliminary assessment of the engineers of the GA and the project’s Transactional Technical Assistance (TRTA), for the construction works/machines movement (with new work technology) 2 meters corridor would be sufficient.²³

5. Considering the above, the following approach will be applied for using the preliminary ROW and corridor of impact for land acquisition and resettlement (LAR) assessment at this stage of the project preparation:

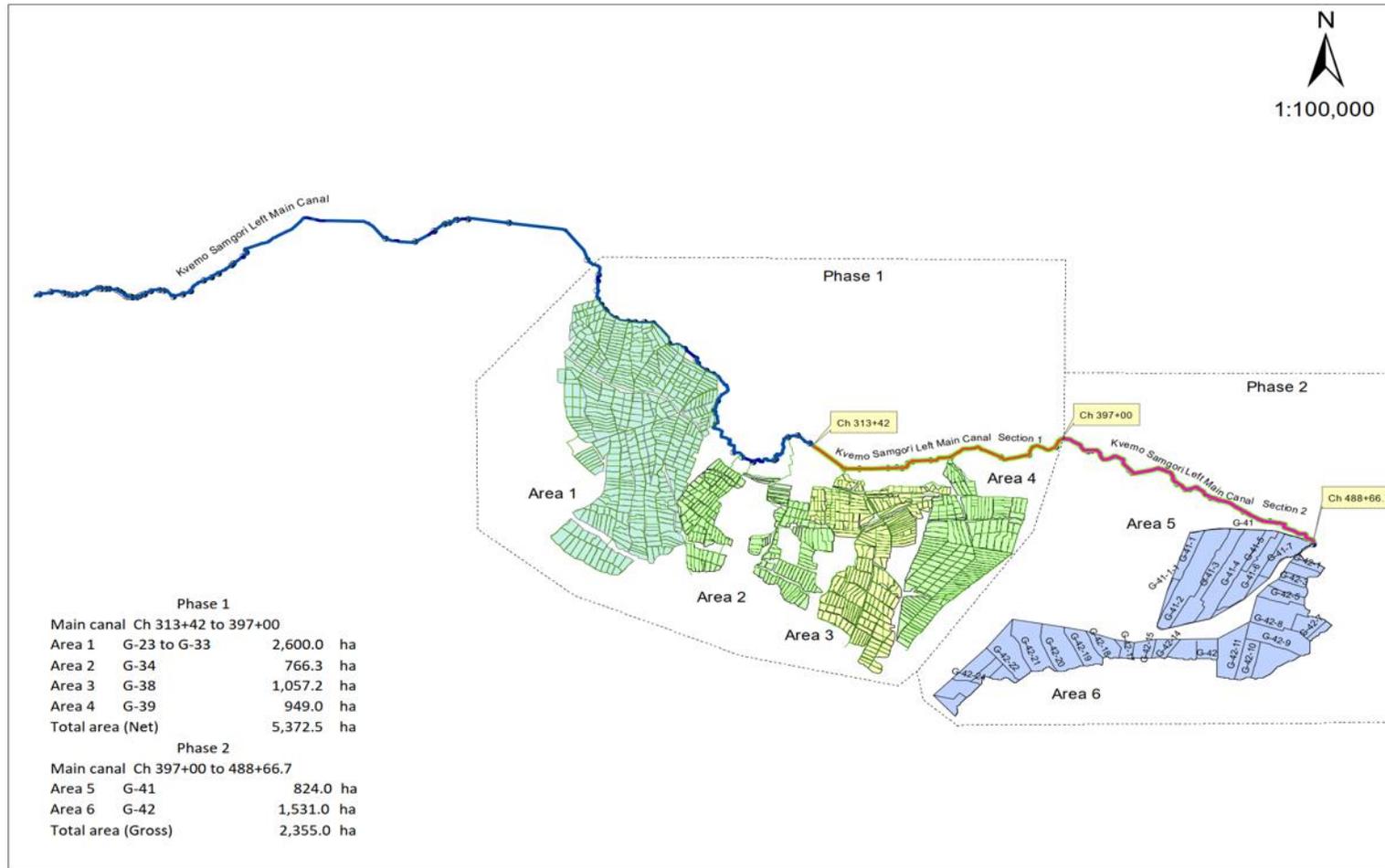
- (i) 4 meters corridor (per 2 meter each side from the pipeline centerline) for underground main pipes of 100-600 mm diameter;
- (ii) 2 meters corridor (per 1 meter each side from the pipeline centerline) for secondary and tertiary channels with underground pipes of 200-300 mm;²⁴
- (iii) GA shall confirm before or by 7 June 2022 if need to establish servitude in any private lands for pipelines/irrigation systems’ operations and maintenance; and
- (iv) the above clauses (i), (ii) and (iii) shall be reconfirmed based on the final detailed design showing the exact locations of the pipelines and modernization works, and LAR impact all over the pipelines’ length before commencing construction works, and LAR impact shall be updated if it will extend beyond the 2 and 4 meters accordingly, and for any emerging changes on servitude need.

6. The MEPA PIU on its email (09.06.2022) to TRTA Consultant (Landell Mills) letter from 02/06/2022, concurred the proposed methodology for preliminary defined ROW of pipelines and LAR impact assessment including the clauses (i), (iii), (iii) and (iv) above. This approach is a part of the project’s design documents for modernization of irrigation systems.

²³ As per the TRTA and GA’s engineers assessments, the minimum corridor to work in should be about 2m, does not need to be centered on the pipeline but could be either side. In some areas even less, if necessary. On the other hand, if the circumstances allow, e.g., while laying the pipeline next to a road on public land, the Contractor might take a wider corridor for their convenience. The Contractor should be liable to reinstate anything that gets damaged or dismantled during the installation, e.g., fences, ditches, access roads etc., depending on what is prescribed in their contract documents.

²⁴ Annex 2 includes two kmz files which show the areas of the main pipelines and secondary and tertiary channels.

Figure 1: Kvemo Samgori Areas to be Modernized



Annex 1.

I. Terms of reference²⁵

1. Background

The Asian Development Bank (ADB) considers to finance a Climate Smart Irrigation Sector Development Program (Program) in the Republic of Georgia. The Program will support policy reforms and develop institutional capacity in water resources management and delivery of climate-smart irrigation services. The program will modernize the irrigation system in the Kvemo Samgori left main canal (KSL) irrigation scheme, introduce innovative and climate resilient agricultural production and irrigation technologies to increase agricultural productivity, improve degraded land and increase water security. The project preparation and modernization of the irrigation schemes under the project output 2 is planned in two phases. Phase 1 includes modernization of irrigation networks illustrated in green (Area 1, Area 2, Area 3, Area 4) and Phase 2 includes modernization of irrigation networks illustrated in blue (Area 5 and Area 6) in Figure 1. Under Phase 1, for the Area 1 irrigation network the TRTA team has developed a concept design at the feasibility level. For Area 2, the concept design preparation is in progress. There is detail design prepared for the main canal under Area 1.

The project is Category B for Involuntary Resettlement (IR) Safeguard following ADB SPS (2009). A draft RP preparation is required for the Area 1 (prioritized) and possible Areas 2, Area 3, Area 4, before the project approval and by the Fact-Finding Mission of ADB (dates to be confirmed). Therefore, the detail measurement Survey (DMS) and inventory of losses of AHHs, AHHs' census and socio-economic survey (SES) as well as valuation of losses and identifying compensation costs are required for preparing the draft RP for Area 1 (prioritized), Area 2, Area 3, and Area 4 shall be conducted within June and 2022 and collected analyzed and data tabulated by the first week of July 2022. A LARF is prepared to address any potential IR impacts due to the modernization works. For Area 5 and Area 6, based on the detailed design after the project approval.

The project envisages installation of the network of channels, which are in fact buried pipes. Construction activities include laying pipes along the channel, trenching, laying pipes, backfilling and reinstatement. As per preliminary assessment (to be confirmed upon the LAR impact assessment), under the Area 1, there will be temporary land will impact in total 510 hectares (ha) of lands, including state and private lands. All the impacted plots are agricultural. The most part of the affected land (about 60%) is used for cultivation of perennials – grape trees and other fruit trees and about 40% for cultivation of annual crops. There may also be a need to establish servitude for schemes operations and maintenance on private lands (area to be identified). No residential or commercial buildings or businesses are expected to be affected by the project but possibly fences, gates and poles used to support the grape trees.

2. Specific tasks of the Sub-Contractor

The objective of engagement of the Sub-Contractor is conducting the census and socio-economic survey (SES) of the project Affected Households (AHHs), Detail Measurement Survey (DMS) and inventory of losses of AHs, and valuation of losses of AHHs and identifying compensations rates and amounts for each of the AHHs and for each type of loses, as per specific tasks provided below and the Methodology for LAR surveys and Assessment, followed after hereby, for preparation of the RP for the project. The collected information shall be provided in Excel, database and analysis prepared in tabulated forms with gender disaggregated data as relevant. The Sub-contractor shall:

²⁵ Presented approach in this TOR has been actually applied during the preparation of this draft LARP.

- (i) Identify affected lands, affected households (AHHs), affected persons (APs)
- (ii)** Conduct inventory of losses and Detail Measurement Survey on impacted lands;
- (iii) Collect existing cadastral and land parcel maps and orthophotos from the central and municipal level Public Registry offices. The layouts of the irrigation channel and rights-of-way (ROW) corridor (2m width corridor, or 4 meters width as relevant) as will be defined in the design documents or kmz files, shall be superimposed on the cadastral map and orthophoto to identify the affected plots and owners;
- (iv) Conduct field survey to collect/update the maps: compare the actual configuration of the registered land parcels with the land registration drawings. The land parcels not registered but actually used by private users should be measured and mapped;
- (v) Prepare the precise maps of the entire affected land parcels and the portion of the parcels within ROW. Cadastral and land parcel maps and name of the owners shall be certified by the municipal level Municipal Government;
- (vi) Following the identification of the affected land plots and owners (Affected Households (AHHs)) conduct DMS and inventory of losses, identify category of affected land parcels, structures, trees and annual crops within the ROW;
- (vii) In close coordination with MEPA PIU and Georgian Melioration, identify and measure the areas where the servitude will be required for irrigation schemes operations and maintenance (after construction works);
- (viii) Conduct valuation of losses for assets and livelihoods/income of AHHs for compensation, including for servitude (possible land use restrictions) impact on value of affected lands for compensation (compensation due to possible decrease of land value as relevant);
- (ix) Identify AHs and APs (APs are referred as members of AHHs in this document), conduct consultations with the Local Government, municipal offices of NAPR, and Property Recognition Commission, local residents, and public meetings;
- (x) Determine the legal status of owners/users including title holders, legalizable owners and informal users or non-titled settlers, tenants of affected agricultural land parcels and employees of affected businesses. Relevant documents as proof of tenancy and employment shall be reviewed and copies of the same will be collected. The affected part of land (entire plot and the portion within right of way) shall be measured and recorded;
- (xi) Prepare tabulated analysis for preparation of RP by ILF and Land Mills;
- (xii) Other tasks relevant to data collection and analysis and valuation of losses of assets/livelihoods for compensations to AHHs, required for RP preparation.

1.

Detail Measurement Survey

Preparation of cadastral map

- (i) Collect current cadastral maps Identify of affected land plots, AHHs. Collection of the household contact information (address of residence, phone number, etc.);
- (ii) Superimposing ROW Alignment on Existing Cadastral Maps; Consultations with the Local Government, Municipal offices of NAPR and Property Recognition Commission, Local residents; Public meetings;
- (iii) Collection of Cadastral Profile for affected land parcels (individual number/index, area, land category, use, legal status of ownership and use, tenants);
- (iv) Detailed measurement survey for measuring affected lands (entire plot and affected part);
- (v) Update cadastral maps with precise maps of the affected land parcels (entire plots);
- (vi) Update profile of cadastral maps for affected land parcels (entire and affected part);
- (vii) Identify titled, legalizable (rightful and non-rightful) and non-legalizable owners (for private and state land), and tenants and sharecroppers of affected land (if any).

Ownership documentation/updating

- (i) Review existing ownership documents for each affected land plot (in NAPR, Archives and assist Atos in local Sakrebulos);
 - (ii) Assist Owners/Users of affected plots in collecting/updating ownership documents. Preparation of information and recommendations for legalizing the land parcels owned/used without land ownership rights (including all specific cases);
 - (iii) Provision of precise map of land parcels affected by the project;
 - (iv) Assist Owners/Users of affected plots in registering/updating ownership with NAPR (by providing maps and detailed instructions).
- 2.

Inventory of Losses

- (i) Identify and assess all assets, trees, crops, structures (main structures, secondary structures and ancillary structures such as sheds, etc.) on affected land parcels (within right of way and/or non-viable residual land plots) with records with appropriate units (e.g., ha, sqm, floor area (m²), volume (m³), length (m), construction materials, etc.);
- (ii) List standing trees and crops on the affected lands by type, area, species, age, variety and productivity. Photo document the affected land parcels with structures, trees and crops will be taken for each land parcel for records. Crops cultivated during recent years will be considered in case if no crops are standing for the moment of survey;
- (iii) Review ownership documents of owners/users of affected land and businesses and assist. Collect copy of the documents including the ID cards of the owners (titled, legalizable and informal users);
- (iv) Identify legalizable owners and informal users, tenants and employees (tax documents for business owners and employees);
- (v) All documents shall be scanned and computerized for RP;
- (vi) Generate tables for each type of losses and summary loss tables for preparing the RP.

Valuation of Land and Assets

- (i) Based on assessment of affected lands and assets during the DMS and inventory of losses, value and identify the replacement cost for affected lands (including areas where will be servitude impact on lands due the project), assets and losses of AHHs (based on valuation methodologies that ensure replacement cost and market value of the affected assets), and loss of land value due to servitude to be imposed restrictions, according to ADB SPS (2009) requirements. The replacement cost shall include the current market rates, possible taxes, fees and any other costs the AHHs have incurred or/and may incur;
- (ii) Prepare valuation methodology and comparisons of official statistic data and current market rates and prepare compensation rates and tables for all type of losses including the lands under the servitude for preparing the RP.

Census and Socioeconomic Survey

- (i) Conduct census of 100%²⁶ possible of AHHs with detail of their households and LAR losses, identify any vulnerable and severely AHHs/APs;
- (ii) Conduct socio-economic survey of total 20% of AHHs. Gender, age, disability and ethnicity of households' head and members, education, age, etc. and more general information about the household in terms of economic activities, tenancy, cropping pattern, consumption pattern, and possession of durables, indebtedness, access to water and power, sanitation, and access to basic social infrastructure, shall be collected and analysed among other data;

²⁶ 100% is assumed from the total amount of AHHs available or those that could be found and reached during the realistic period of RP preparation.

- (iii) A structured questionnaires will be used for the census of affected households and to conduct socio-economic survey;
- (iv) DMS ID numbers shall be assigned for each AHs reference;
- (v) Along with ADB TRTA consultant assist in project information disclosure and consultation with AHs, during the AHs' census and socio-economic survey;
- (vi) Prepare analysis and tabulated analysis of collected data in AHs' census and socio-economic survey in Excel for RP preparation.

1. Logistics

The Sub-Contractor will organize the mobilization and demobilization of its experts itself. This includes organizing any necessary local travel, insurance, accommodation, and providing the expert with enough money for per diems for their trip.

2. Expected outputs

The following outputs/deliverables are expected from the Subcontractor. The Methodology proposed by the Subcontractor is also appended with this Sub-Contract Agreement.

Identification of affected lands, assets, AHs and ownership status

- (i) List of AHs²⁷ (including owners of affected land parcels, structures, trees and crops, informal users of land, tenants of affected agricultural land, employees of affected businesses) and vulnerable affected persons;
- (ii) Inventory of affected land parcels (each land parcel) and assets (loss profile) entered on to the excel data entry sheet;
- (iii) Socio-economic information for each AHs entered on to the Excel data entry sheet;
- (iv) Protocols of land and asset valuation and proposed rates for compensation;
- (v) Photographs of affected land, structures, trees and crops;
- (vi) Identification documents of owners/affected persons (ID Cards);
- (vii) List of specific cases including AHs refusing to move, absentee AFs and those cannot be compensated for some administration reason;
- (viii) Loss and entitlement profile of AHs;
- (ix) ACS matrix integrating list of AHs, loss profile, compensation entitlements;
- (x) Data entry sheets integrating all sociological information and inventory of losses;
- (xi) Package of documents for each land parcel (inventory of losses and SES data);
- (xii) Provide recommendations for assisting the legalizable AHs in legalizing the land parcels owned/used without land ownership rights.

Valuation of assets and compensation rates

- (i) Measurement of area of affected land through DMS (including non-viable residual land)
- (ii) Measurement of volume of affected structure by category through DMS;
- (iii) Counting affected trees by species and age and affected standing crops by DMS;
- (iv) Evaluation of current market price of land and compensation rates due to potential land value decrease due servitude (for agricultural, residential/commercial lands as relevant);
- (v) Evaluation of replacement value of structures, trees, crops, etc. and provide final of replacement cost got all impacted assets/livelihoods, and assistance allowance (if vulnerable or severely affected) for each owner/AHs;
- (vi) Preparation of loss inventory for each owner/land plot (losses file);
- (vii) Identification of severely affected households eligible for additional allowances;
- (viii) Calculate compensation and entitlement for each owner/plot (entitlement file).

²⁷ Identified titled, legalizable (rightful and non-rightful) and non-legalizable owners (for private and state land), and tenants and sharecroppers of affected land (if any).

I. Methodology for LAR Surveys and Assessments

The Methodology and the Approach for ROW for modernization works where to be conducted the LAR impact surveys is shown in Schedule 8 of the Sub-Contract Agreement.

The Affected Households' Census Questionnaire and Socioeconomic Survey Questionnaire (SES) are also both appended with which the Subcontractor must follow.

1. Introduction

As per the preliminary data, the Project will have an impact on both privately owned and unregistered land plots. According to the initial analysis, 878 registered plots of land and about 90 unregistered plots, making total approximately of 968 plots, will be affected. Each plot has on average 2.5 owners.

Under the preliminary agreement, the Company must accomplish the following activities within the scope of the project: (i) the assessment of the privately owned property under the impact: (ii) detailed measurement survey (DMS), and (iii) socio-economic survey of the affected persons.

In order to complete the given assignment, 3 groups will be staffed. Below, we give the methodology to be used by each group.

1.1 Detail Measurement Survey

The process of the detailed measurement survey (DMS) will be managed by a Certified Real Property Surveyor, Mr. David Kaviladze. The "Eco-Spectri" Ltd will collect existing cadastral and land parcel maps and orthophotos from the National Agency of Public Registry. The detailed design of the alignment (including interchanges and other road infrastructure facilities) will be superimposed on the cadastral map and orthophoto and field survey will be carried out to update the maps and identify affected land parcels. Precise maps of the entire affected land parcels and the portion of the parcels within the project area will be prepared.

Following the identification of the affected land plots, owners of affected land parcels, structures, trees, crops and businesses on land within or affected by the project area will be identified. Identification of the affected households and persons will require consultations with the Local Government, Municipal offices of National Agency of Public Register (NAPR), Municipal Services of Archive and Property Recognition Commission, as well as local residents, and include public meetings. The legal status of owners/users will be determined including title holders, legalizable owners (rightful and non-rightful), and informal users or non-titled settlers. The tenants of affected agricultural land parcels and employees of affected businesses will also be identified. Relevant documents as proof of tenancy and employment will be reviewed and copies of the same will be collected in collaboration with valuation team. Information on non-registered businesses or enterprises will also be collected. The affected land (entire plot and the portion within right of way) will be measured and recorded.

The legalizable owners will be assisted for legalization of their ownership by providing cadastral drawings and maps.

1.2 Support to Design Consultant for Preparation of Land Acquisition Plan

With the results of detail measurement survey, Eco-Spectri Ltd. will assist Design Consultant in preparation of resettlement plan (RP). The survey team will assist the process of legalization by providing precise cadastral maps of affected land parcels and the list of affected land parcels (supplemented with land acquisition maps and certification of Municipal Government).

1.3 Specific activities of Eco-Spectri Ltd

1.3.1 Detail Measurement Survey (DMS)

Preparation of cadastral maps

- (i) Collection of Existing Cadastral Maps identification of Affected land plots, Persons (AP) and Households (AH). Collection of the household contact information (address of residence, phone number, etc.) - Superimposing ROW alignment on Existing Cadastral Maps; Consultations with the Local Government, municipal offices of NAPR and Property Recognition Commission, Local residents; Public meetings.
- (ii) Collection of Cadastral Profile for Affected Land parcels (individual number/index, area, land category, use, legal status of ownership and use, tenants)
- (iii) Detailed Land Measurement survey for measuring affected land parcel (entire plot and affected part)
- (iv) Update cadastral maps with precise maps of the affected land parcels (entire plots)
- (v) Update profile of cadastral maps for affected land parcels (entire and affected part)
- (vi) Identify titled, legalizable (rightful and non-rightful) and non-legalizable owners (for private and state land), and tenants and sharecroppers of affected land (if any)

Ownership documentation/updating

- (i) Review existing ownership documents for each affected land plot (in NAPR, Archives and assist valuation team in local Sakrebulo)
- (ii) Assist Owners/Users of affected plots in collecting/updating ownership documents. Preparation of information and recommendations for legalizing the land parcels owned/used without land ownership rights (including all specific cases)
- (iii) Provision of precise map of land parcels affected by the project
- (iv) Assist Owners/Users of affected plots in registering/updating ownership with NAPR (by providing maps and detailed instructions)

Deliverables:

- (i) List of affected land parcels
- (ii) List of affected owners and up to date ownership documents (from NAPR, Archives, local Sakrebulo)
- (iii) Precise map of the entire land parcels (Cadastral Plan)
- (iv) Precise map of affected land parcel(s) showing the portion within project right of way.

1.3.2 Inventory of losses

The property evolution team will be led by Mr. Zurab Revazishvili, a Certified Real Property Appraisal Specialist. Impacts on affected land plots will be assessed, viability of the residual land will be analyzed and appropriate consultations with the landowner conducted in that regard. The land within the right of way and any land rendered non-viable as a result of the right-of-way will be considered as "affected land" and subject to acquisition and compensation. All structures (main structures, secondary structures and ancillary structures such as sheds, animal pens etc.) on the portion of affected land parcels (within right of way and/or non-viable residual land plots) will be assessed and the following information recorded: Standing trees and crops on the portion of the affected land parcel within project area will be assessed by type, species, age, variety and productivity. Photographs of the affected land parcels with structures, trees and crops will be taken for each land parcel and documented as part of the

record taking. Crops cultivated during recent years will be considered in case if no crops are standing for the moment of survey.

Permanent Impact on lands: In the area where the affected privately-owned plots are situated, market values of land vary depending on the type of land and location. The calculation of compensation will be carried out in accordance with the Entitlement and Compensation Matrix, according which:

- (i) Cash compensation at replacement cost based on the market value of the affected land and other costs, including cost of preparation of the land to the level equal to the affected land, if needed;
- (ii) Costs for land parcel sub-division, transaction and registration fees (as relevant), which shall be covered by the EA;
- (iii) EA shall assist the AHs for free-of charge in registration/legalization of their legalizable land rights, including preparing the cadaster drawings required for legalization of project affected land parcels the AHs have been using;
- (iv) If the residual land plot after the impact becomes unviable and/or inaccessible, the whole or part land plot shall be acquired and compensated with the consent of the owner.

Loss of trees: Cash compensation will be calculated at current market value and according to type, age, and productive value of the tree.

Fruit trees. Income based on an annual yield capacity of a mature fruit bearing tree multiplied by the market price of the fruit (Kg/GEL) and multiplied to the number of years required to grow a new tree to the same productivity age. In addition, each fruit bearing tree will be compensated for purchase of saplings, transportation and planting labor. The formula below is for calculating cash compensation for fruit bearing trees:

$$\{(B \times D) \times C\} + A\}$$

A – Price of sapling of a specific fruit tree, transportation and planting labor

B – Market price of a specific fruit GEL/Kg)

C – Number of years to be compensated

D – Annual yield capacity of a fruit tree (Kg/yr/tree).

Immature trees. Cash compensation at the replacement cost, including the costs for saplings, planting and growing trees to the same age, to be defined by an independent valuation entity;

Timber trees. Cash compensations based on the market value of dry wood volume defined by an independent valuation entity;

Decorative trees: Cash compensation based on the market value identified by an independent valuation entity.

Servitude establishment. Areas of the land for servitude establishment (for construction, and operation and maintenance needs) shall be identified by the Sub-Contractor hereto. Lands where servitude may be needed within the pipelines' ROW will not be acquired by the project. The servitude impact will cause restrictions of land use rights and diminish land's value. For lands that will be under the servitude, the EA shall negotiate and sign servitude agreements with the respective landowners. Compensation for land affected by servitude shall be calculated based on difference of the market value of the land at present (before the project) and after the project impact (land use restrictions imposed by servitude) as follows:

- a) Agricultural land: one-time cash compensation equal to 30% of the affected land value.
- b) Residential/commercial land: one-time cash compensation equal to 70% of the affected land value.

Impacted land areas including for servitude needs (if any) shall be identified, valued and compensation identified and presented in tabulated forms for RP budget. Valuation reports as per the valuation standards shall be prepared for records.

1.3.3 Census and Socioeconomic Survey of Affected Persons

During the project implementation and preparation of the RPs, the census of all AHs (100%) and socio-economic study (SES) with the sample survey of 20% of AHs will be conducted and collected data will be analyzed as baseline data in the RP. SES of AHs including (not exhausted list) on followings: (i) demographic (household composition by age, gender, relationship, ethnicity, education levels); (ii) social (corporate groups such as family, lineage, clan, community, and noncorporate such as caste, class, ethnic, religious groups); (iii) income and assets (individual, corporate, or collective incomes as well as ownership land, livestock, fishing boats, shops, wood lots, among households) as well as expenditures; (iv) occupation (farmers, teachers, shopkeepers, artisans, laborers, transporters, students, spiritual leaders, etc.); (v) access to public services (health care, water supply and sanitation, education, transport, etc.); (vi) gender roles and issues; and (vii) perception and preferences on resettlement.

The socio-economic survey/census must be linked with each household losing land or assets in a clear and methodical manner. It is imperative that the households losing land identified through the DMS be easily linked by survey/DMS ID numbers to the socio-economic information collected for that household.

The questionnaires provided hereto the TORs for the assignment will be used at the AHs census, socio-economic surveys and measurement and assessment of affected land and each type of losses, and findings shall be analyzed and presented in tabulated forms.

The survey team will assist the design consultant to organize public consultations with AHs and local residents and focused groups discussions, for resettlement planning and compensation measures developing purposes, and for project and LAR information disclosure.

The Sub-contractor will generate output tables for use in preparing RPs for each contract.

Annex 2. Two kmz files (sent electronic)

7/1/22, 11:52 AM

Gmail - RE: LAR impact survey - concurrence with proposed approach

vaxo_gardapkhadze@yahoo.com; Gurgenedze, Giorgi <Giorgi.Gurgenedze@ifl.com>
Subject: LAR impact survey - concurrence with proposed approach

Dear Gizo and Lali,

I hope you are both well.

Please find attached a letter detailing the proposed approach for defining the ROW for modernization works and land acquisition and resettlement impact surveys and assessment in Area 1 of Kvemo Samgori left main canal, for your feedback and concurrence. This has been formulated in consultation with ADB. We would greatly appreciate your concurrence by 10th June so that the LAR impact surveys and assessments may commence.

I have copied in our International Resettlement Specialist, Ms. Nargis Halimova, should you have any technical queries. A hard copy of this letter will be delivered to you both today.

Best regards,
Alex

Alex Trowell

Water Specialist

Landell Mills Ltd, Bryer Ash Business Park, Bradford Road, Trowbridge, BA14 8HE, UK

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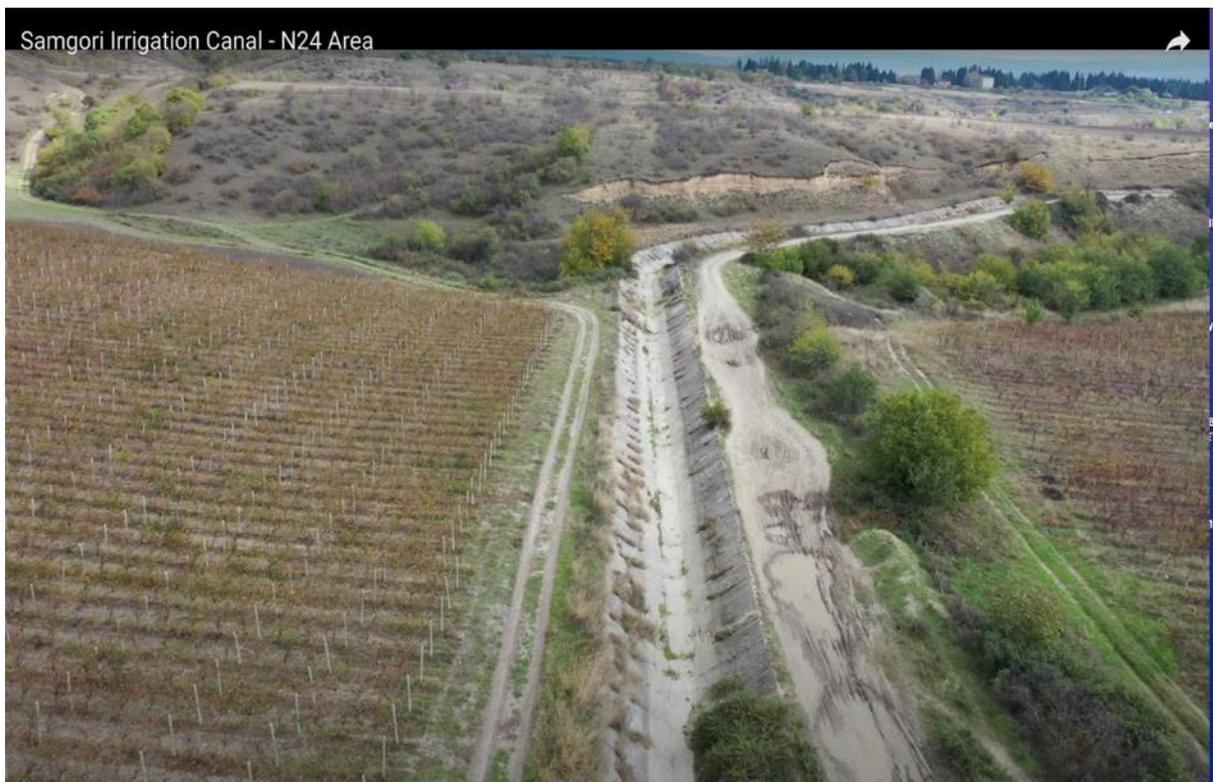
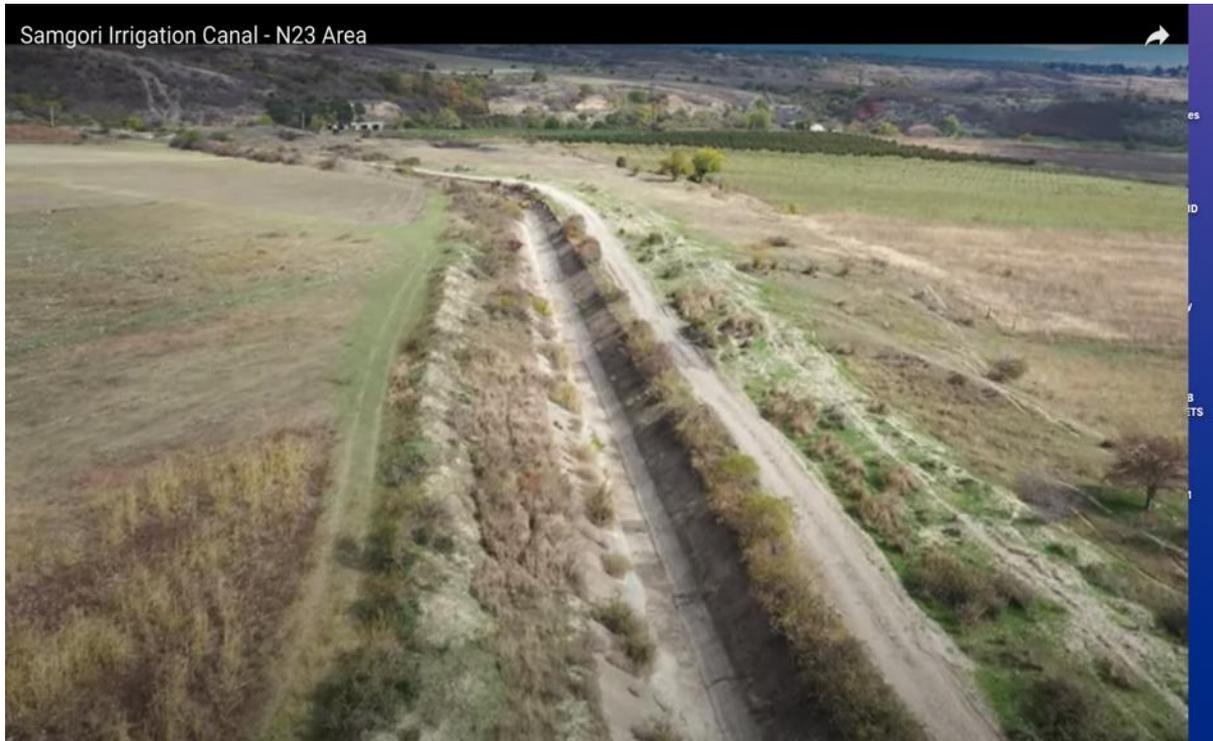
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<https://mail.google.com/mail/u/0/?ik=10d8b870fe&view=pt&search=all&permthid=thread-f%3A1735050119021542230%7Cmsg-f%3A1735155631892426462...> 2/3

Annex 3. Photos of the site and existing access roads along the canal alignment.

Photos from drone aerial videos taken over the area of the main canal sections' areas, available at:

<https://www.youtube.com/channel/UCDOCEmr4IrlLIYOW6pT-TIA/videos>



Samgori Irrigation Canal - N25 Area



Samgori Irrigation Canal - N26 Area



Samgori Irrigation Canal - N26 Area



Samgori Irrigation Canal - N27 Area



Samgori Irrigation Canal - N28 Area



☰ Samgori Irrigation Canal - N29 Area









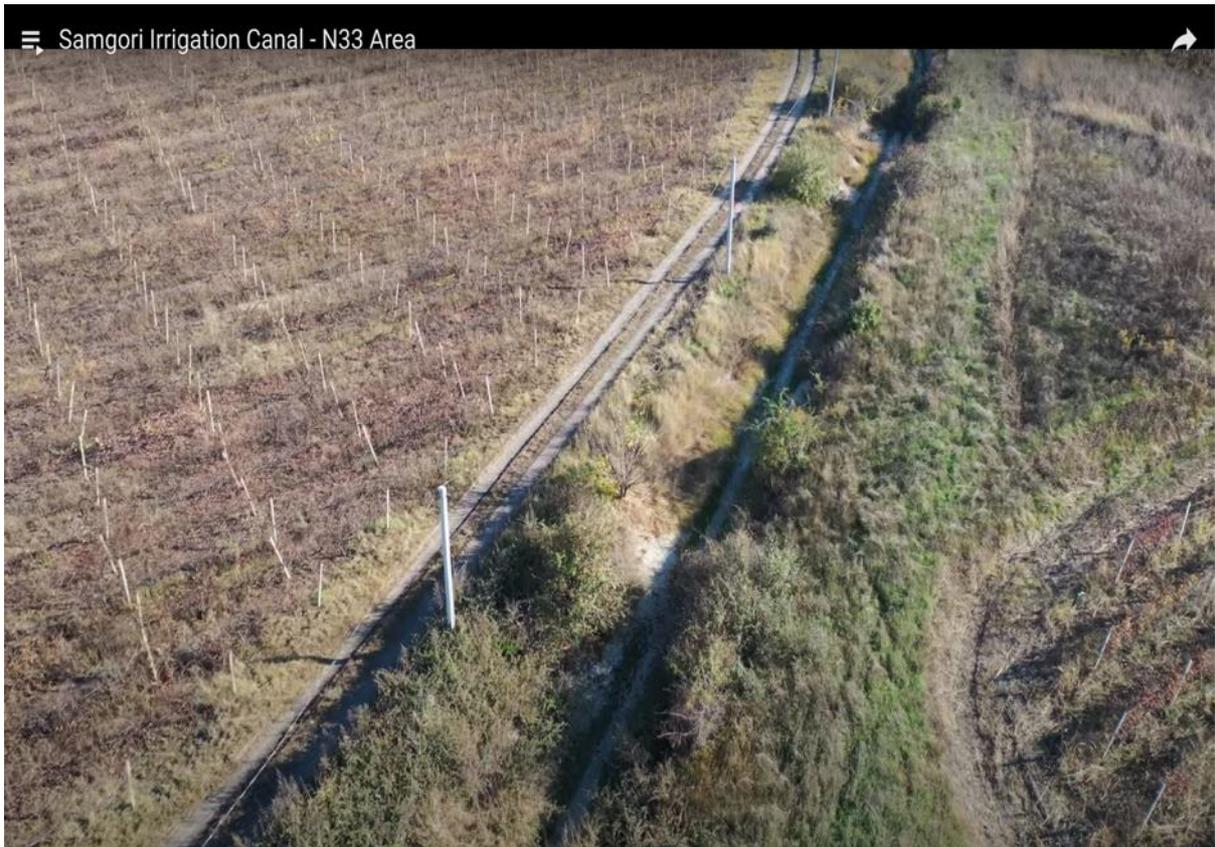


Figure 4. Photos of poles and wires supporting the grape trees



Figure 5. Photos of wires supporting the grape tree



Annex 4. Process of registration/legalization of unregistered/legalizable lands

C. Introduction

Correct and accurate initial registration of ownership rights is the required for undertaking voluntary acquisition or mandatory expropriation of real property. Pursuant to article 312 of the Civil Code of Georgia the records at the Public Registry are considered accurate until their inaccuracy is not proved. Therefore, throughout the presumption of the article 312 of the Civil Code of Georgia the inaccurate data available at the Public Registry shall be corrected with precise data. Therefore, landowners shall carry out precise demarcation and legalization of his/her land parcel(s) through proper procedure. The landowners have to apply to the National Agency for Public Registry (NAPR) of the Ministry of Justice with necessary documents as proof of the ownership and description of land, Cadastral Map with precise survey data and documents verifying ownership right (Receive-Delivery Act, or Registration Certificate, or the extract from the land distribution list issued by the local self- government body, or the statement on the landowner's registration as a taxpayer in 1992-2001).

D. Status on registration of lands

The registration land parcel without structure has not been -stopped. However, in practice, most of the owners are not initiating any new land registration for the pure land because; (i) there is no requirement for them for new registration as buying and selling of pure land is not so prevalent in present situation (ii) these owners are using their respective plots based on the mutual understanding among the neighbors.

In reality, some of these land parcels and owners can still be converted into legal owners provided the initiation for land registration for pure land is taken by the owners. These cases under the current situation are considered as Legalizable Owners. Currently, there is no problem associated with urban and residential plots. Also, there is some cases pending in the court related to land registration, which needs to be addressed. The current ownership of land can be broadly categorized as follows:

Legal Owner/ Title Holder: Owners and users of land having their title registered in NAPR.

Legalizable Owner:

Rightful Owners — the owners with old document proof although not having registration in the Public Registry under the Laws of Georgia on Privatization of State-owned Agricultural Land, (July 8, 2005) and The Law of Georgia on Public Register (No820 –lis; December 19 of 2008); (the current legislation).

Non-rightful owners - unauthorized land users having right to legalize landownership rights provided by the current legislation. The legalization of landownership rights, under the current legislation is allowed for following cases:

The state owned agricultural or non-agricultural land plot with residential house or supporting structures on it - occupied by the physical or legal person without permission before the current law came in force in 2007.

Land plot occupied by person without permission is adjacent to the land parcel rightfully owned or used by this person, taking into account that the illegally occupied land parcel should be of less area than the legally owned adjacent land parcel.

However, there are certain restrictions on privatization of land⁶ (attachment-2).

Non-Legalizable Landowners: Illegal/Squatters having no right to legalize landownership rights under the current legislation. Persons having no document of possessing the land in concern before the enactment of the current law in 2007 are not legalizable.

Legalization of Rightful Landownership rights is executed directly by municipal Registration Offices of NAPR. The applicants should submit old documents proving ownership rights and precise cadastral maps of the land plot and structures on it.

Legalization of Non-rightful Landownership rights is authorized by Property Recognition Commission (in each municipal) through reviewing the application documents, evaluating eligibility against the restriction lists given in the law and local land use development plans. In case of positive decision and upon payment by the applicant of relevant amount of money to a special account, if applicable, the Commission issues certificate on ownership right. Based on that certificate the municipal Registration Office of NAPR will register the ownership rights on land plot and structures.

According to the Law of Georgia On Privatization of Agricultural Land Existing in State Ownership (Article 2, Clause 3), the following categories of State-owned lands are not subject to privatization: (a) Pasturelands other than those leased out before the enactment of this law which under the act issued by the competent state or local government (self-government authority) are duly allotted to the buildings and premises located thereon which are the private property of individuals or legal entities or the property of the state; (b) Cattle transfer routes; (c) The first zone (zone of strict regime) in sanitary protection area around water supply units; (d) Lands of forest funds, which are used for agricultural purposes; (e) Recreational lands; (f) Lands occupied with historical, cultural, natural and cult- religious monuments; (g) Lands of protected territories; (h) Agricultural lands that are used by the Budget-funded institutions and legal persons of public law in form of usufruct. The lands indicated in b, c, d and e may be privatized only if significant projects are implemented, on which government of Georgia, based on the suggestion of the Ministry of Economic Development of Georgia, shall take special decision. At the same time the land indicated in c may be privatized if the conditions of sanitary protection are met. (26.10.2007).

Municipal Map/Archives: issues related to the exact ownership, boundary of each plot and its due recognition.

E. Land acquisition and resettlement surveys and documentation for the project

As the land acquisition and resettlement (LAR) activities at the feasibility study (FS) level were based on tentative alignments and existing imprecise cadastral maps, and since there was no detail estimate of losses and ownership at FS, fresh land acquisition and resettlement surveys have been being carried out through detail measurement survey, valuation survey, census survey and socioeconomic survey. The project alignment as per final engineering design is being superimposed on the updated cadastral map of Registered land plots obtained from Municipal NAPR and aerial photo (ortho-photo) of concerned area. Each of the affected Registered land plots in the project right of way are being identified along with its dimensions on the ortho- photo. The affected plots are being listed up and cadastral details collected from Municipal NAPR, and local government offices as applicable.

Based on this, the survey team proceeded to the sites for field survey which included identification of each plot and verification of the details shown in the National Survey Map (National Cadaster Map) and the reality on the ground. The verification survey process includes title searching through review of available documents and discussions with the owners about land parcel boundary and further discussion with the local government, the representative of the NAPR (local archives are currently transferred to NAPR municipal offices) for its cross verification. Based on these methods final details of each parcel and ownership will be confirmed. This will help to identify the legal owners, the legalizable owners (rightful and

non-rightful) and the illegal occupants of state owned land. The list of various categories of ownership will be recorded with the help of local government.

The FS noted that some of the owners of affected land parcels have the land documents (old documents) as proof of ownership obtained during the post-soviet period. These landowners did not register their land parcels in the municipal level registration office as it was not mandatory for them. As general estimation registered landowners in Georgia constitute 10-15% of all the legalizable landowners/users.

1. Registration Of Rightful Owners

Recognition of ownership rights in relation with the rightfully owned/used land plot is executed through registration of ownership right directly in the Public Registry. For that purpose, the applicant has to submit:

- Documents confirming rightful ownership of the land plot (annex 3).
- Precise cadastral maps of the land plot.
- Document confirming payment of the fee for the property recognition (51 Gel).
- Identification documents of the applicant.

The procedure for registration of Rightful Owners needs complete the steps as follows:

Step 1 Preparation of fresh and precise cadastral map by the owners through private agencies. The map will include all the dimensions of plots and geometrical details. The cost of preparation of map ranges from 0.06 GEL to 0.10 GEL per sqm of land to be recognized. The duration for preparation of map will be approximately a week time. However, within the project frame, the consultant will prepare precise cadastral maps for the affected land plots and these maps along with required land descriptions will be given to the legalizable and other landowners free of charge.

Step 2 In case the owner does not have available ownership proving documentation (annex-3) or in case there is any doubt regarding the plot, the owner has to apply to the local community level self-government (Sakrebulo and Gamgeoba) and local Rayoon NAPR Office (where Archives are kept) for the proof and cross verification of the land details.

Step 3 After the verification from NAPR municipal Office, the owners will take the endorsement from the community municipal office (Gamgeoba).

Step 4 Following the authorization from Gamgebeli the owners will approach to the Municipal level Registration Office of the NAPR. The owners will provide all the above proof to the registration office. The registration office will verify the completeness of all required application documents. The owners have to submit both the soft copy and hard copy of the plot maps along with its coordinates for record in the Public Registry office. The registration process will take 4 working days in normal situation and the property recognition fee will be 51 GEL per registration. In case of urgency, the owners have to pay 150 GEL to get the registration done in one working day and 200 GEL, if the registration needs to be done immediately. However, the registration office for affected legalizable owners will not charge the urgency cost and will be able to complete each case in maximum 6 days. After the finalization of registration, the Public Registry office will compile the land records and will update the cadastral details. The updated details will be sent to the central Public Registry for centralized record.

In case, there remains further dispute related to ownership, the case may be referred to the court. The project authority may estimate the price of that particular land and may deposit the amount in the State Budget allocated for the Project. The payment to the real owner will be executed from the State Budget according to the court decision upon confirmation PIU. The case will be resolved in the Municipal Court.

2. Registration Of Non-Rightful Owners

For recognition of the ownership rights on non-rightfully owned land plot the owner/user should submit to Property Recognition Commission application letter through the Office of Sakrebulo with the following supplementary documentation:

- (i) Document confirming the fact of non-rightful ownership/use of the land plot (see annex 3) or attestation of witness (neighbors etc.).
- (ii) Precise cadastral maps of the land plot
- (iii) Information needed for determination of the fee for property recognition
- (iv) Copies of the identification documents of the applicant

The process and procedure for registration of Non-Rightful Owners needs the following steps:

Step 1: Preparation of precise cadastral map by the owners through private agencies. The map will include all the dimensions of plots and geometrical details. The cost of preparation of map ranges from 0.06 GEL to 0.10 GEL per sqm of land to be recognized. The duration for preparation of map will be about a week time. However, within the project frame, the consultant will prepare precise cadastral maps for the affected land plots and these maps along with required land descriptions will be given to the legalizable and other landowners free of charge.

Step 2 : The map and its details will be authorized and the land usage pattern will be verified by the neighbors. The community local administration (Gamgeoba) may also certify the authorization.

Step 3 Following the authorization from the neighbors, the same has to be notarized. Cost of notarian confirmation of neighbors witness will be 15 GEL for each case.

Step 4 The landowner/user will approach to the Property Recognition Commission through Office of Sakrebulo with a package of documents confirming eligibility for legalization of the land plot according to the current legislation. This includes ownership documents (see annex-3) related to the adjacent land plots owned by the applicant rightfully.

Step 5 In case if, the owner does not have available documentation proving ownership rights on the adjacent land plot or in case there is any doubt regarding the plot, the owner will apply to the local NAPR Archives for the proof and cross verification of the land details.

Step 6 After the verification, the Office of Sakrebulo will endorse the application and authorize the case for recognition.

Step 7 Following the authorization from Sakrebulo, the owners will approach to the Property Recognition Commission. The owners will provide all the above proof to the Commission. The Commission will verify the documents, make physical verification and organize an open disclosure meeting on site with prior notice to the concerned community peoples. If the documents are clear and the land is free from any dispute from anybody, then the Commission will notify the applicant to deposit payment for the land (if applicable). After payment, or if the payment is not applicable, the commission will issue certificate on ownership right to the owners.

Step 8 Based on the above steps, the owners will go to the Public Registry at their respective municipal for registration. The owners have to submit both the soft copy and hard copy of the plot maps along with its coordinates. The registration process will take 4 working days in normal situation and the property recognition fee will be 51 GEL per registration. In case of urgency, the owners have to pay 150 GEL to get the registration done in one working day and 200 GEL, if the registration needs to be done immediately. However, the registration office for affected legalizable owners will not charge the urgency cost and will be able to complete each case in maximum 6 days. After the finalization of registration, the Public Registry office will compile the land records and will update the cadastral details. The updated details will be sent to the central NAPR for centralized record.

In case of dispute related to ownership; the case may be referred to the court. The project authority may estimate the price of that particular land and may deposit the amount in the State

Budget allocated for the Project. The payment to the real owner will be executed from the State Budget according to the court decision upon confirmation of PIU.

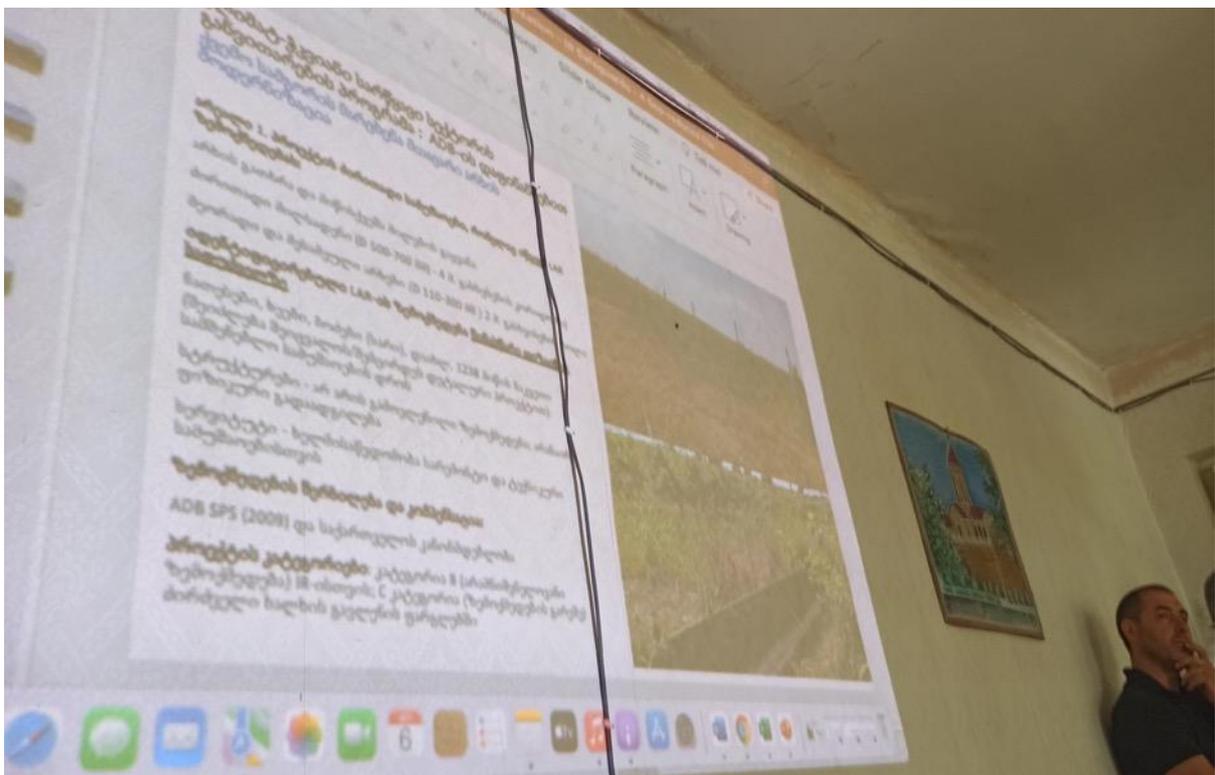
F. Responsibility on LARP implementation

There is one unregistered land and owner has been identified during LARP assessment in LARP preparation. Upon project and LARP approval by ADB approval, PIU will ensure and the PIC's Safeguard Specialist will collaborate with the concerned landowner, registration and local government offices, survey and audit agency to verify the ownership/registration status of the subject land and owner, as per final engineering design of the project, and facilitate the completion of registration of the one identified unregistered land plot affected by the project.

There one unregistered land and owner has been identified through extensive title search, who shall be provided with the detailed cadastral maps and case-specific instructions on further steps for legalization.

The registration will be completed for the legalizable owners during the implementation of LARP and prior to the disbursement of compensation. The registration cost will be reimbursed from the Project during LARP implementation. The affected legalizable owners have to initiate the land registration at their own cost in the beginning with such assurance from the PIU.

Annex 5. Photos and list of participants of public consultations





List of participants of public consultations, 6-7 September 2022
(English translation follows)

Climate Smart Irrigation Sector Development Program
Public Consultations 07.09.2022 - Village Chailuri

List of attendees

#	სახელი გვარი Name Surname	საკონტაქტო ინფორმაცია Contact Information	ხელმოწერა Signature
1	მუსხიშვილი	555-26-81-08	მუსხიშვილი
2	ვახაშვილი	555-22-47-62	ვახაშვილი
3	მუსხიშვილი	555-93-16-93	მუსხიშვილი
4	მუსხიშვილი	558-73-66-41	მუსხიშვილი
5	ხოსოშვილი	568-22-02-37	ხოსოშვილი
6	მუსხიშვილი	555-71-19-33	მუსხიშვილი
7	ვახაშვილი	595-000-141	ვახაშვილი
8	მუსხიშვილი	599-54-55-78	მუსხიშვილი
9	მუსხიშვილი	593-52-74-60	მუსხიშვილი
10	მუსხიშვილი	599-92-57-93	მუსხიშვილი
11	მუსხიშვილი	599-92-89-64	მუსხიშვილი
12	მუსხიშვილი	596-99-87-87	მუსხიშვილი
13	მუსხიშვილი	595-75-62-37	მუსხიშვილი
14	მუსხიშვილი	557-54-66-78	მუსხიშვილი
15	მუსხიშვილი	558-38-89-78	მუსხიშვილი
16	მუსხიშვილი	594-400-855	მუსხიშვილი

Climate Smart Irrigation Sector Development Program
Public Consultations 07.09.2022 - Village Manavi

List of attendees

#	სახელი გვარი Name Surname	საკონტაქტო ინფორმაცია Contact Information	ხელმოწერა Signature
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3	გაბრიელ მარაშვილი	568.84.87.32	
4	მისა ყვარაძე	18-67-12.598.	
5	გიორგი მარაშვილი	555.52.09.37.	
6	ვინო მარაშვილი	598.13.68.03	
7	ნიკოლოზ მარაშვილი	599 64 99 67	
8	მარტინი მარაშვილი	599 42 63 92	
9	მედი მარაშვილი	555.26.81.08.	
10	მარი მარაშვილი	577 - 18 - 12 - 91	
11			
12	Nargis Kalimani	7 46 722 4649	
13	მარტინი მარაშვილი	899 979749	
14			
15			
16			

Climate Smart Irrigation Sector Development Program
Public Consultations 06.09.2022 - Village Kandaura

List of attendees

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3	მამუკა აგუაძე	577 60 59 52	
4	კვიციანი	595.56.23.30	
5	მამუკა სამუკაძე	599.26.40.19	
6	მინა, ნინო	595.72.21.23	
7	გია აგუაძე	592.22.54.95	
8	გია ნინო	551.14.51.64	
9	მამუკა გიორგი	599.33.18.43	
10	გიორგი გიორგი	599.413.013	
11	საბა ქვიციანი	551.80.88.44	
12	გია აგუაძე	551.82.82.37	
13	ნინო ვახუშტიანი	599.68.38.90	
14	გია ვახუშტიანი	5 22 22 22 15	
15	Narys Polymou	577 98 21 85	
16	ნინო ვახუშტიანი	599 99 97 48	

Climate Smart Irrigation Sector Development Program
Public Consultations 06.09.2022 - Village Kakabeti

List of attendees

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2	ვახტანგ მანუჩიძე	595254131	ვახტანგ
3	ქუჩაძე ნინო	555224633	ქუჩაძე
4	ვახტანგ მანუჩიძე	591323228	ვახტანგ
5	ნათია შაქაძე	599244139	ნათია
6	მუხამედი ხალიძიძე	593325448	მუხამედი
7	ჩხეიძე ივანე	591-34-07-31	ჩხეიძე
8	ახილიძე დავით	593573813	ახილიძე
9	ქუჩაძე მსხვილიძე	568622112	ქუჩაძე
10	მინდია ქახიანიძე	55811-48-54	მინდია
11	მუხამედი ხალიძიძე	595505543	მუხამედი
12	ნათია ქახიანიძე	59911-51-54	ნათია
13	მინდია ქახიანიძე	598136992	მინდია
14	ქუჩაძე ნინო	599931382	ქუჩაძე
15	ნათია მანუჩიძე	593479156	ნათია
16	ქუჩაძე ნინო	59131-11-11	ქუჩაძე

English: List of participants of public consultations, 6-7 September 20222

Climate Smart Irrigation Sector Development Program Public Consultations 07.09.2022-Village Manavi

List of attendees

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4	Zaza Utsunashvili	598 18 67 12	
5	Givi Labkhazishvili	555 52 99 37	
6	Vano Akhalkatsishvili	598 13 68 03	
7	Rima Terterashvili	599 64 97 67	
8	Malkhazi Dabazishvili	599 42 63 92	
9	Zurab Revazishvili	555 26 81 08	
10	Giga Gvelesiani	577 38 22 32	
11	Nargiz Kalimova	577 38 27 55	
12	Irakli Kviladze	599 97 97 48	

Climate Smart Irrigation Sector Development Program Public Consultations 07.09.2022-Village Chailuri

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3	Nikoloz Matskhashvili	555 93 16 93	
4	Merab Mamukashvili	558 73 66 41	
5	Iago Rostiashvili	568 22 02 37	
6	Nikoloz Gurasidze	555 71 19 33	
7	Besik Kavrishvili	595 00 01 41	
8	Nikoloz Jachvadze	599 54 55 78	
9	Giorgi Ghviniashvili	593 52 74 60	
10	Otar Jachvadze	599 92 57 93	
11	Merab Ghviniashvili	599 92 89 64	
12	Archili Kavrishvili	596 99 87 87	
13	Nikoloz Arghniashvili	595 75 62 37	
14	Kimer Arghniashvili	557 54 66 78	
15	Giorgi Sirbiladze	558 38 89 78	
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Climate Smart Irrigation Sector Development Program Public Consultations 06.09.2022-Village
Kandaura

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3	Maka Agulashvili	577 60 59 51	
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6	Mirza Tsivtsivadze	595 79 21 23	
7	Gia Agulov	592 22 54 95	
8	Givi Kharebashvili	551 14 51 64	
9	Mamuka Gikorashvili	599 33 18 43	
10	Giorgi Toreiashvili	599 41 30 13	
11	Paata Kartlelishvili	551 80 88 44	
12	Gia Aduashvili	551 82 82 37	
13	Khvitsa Gikorashvili	599 68 38 90	
14	Giga Gvelesiani	577 38 22 32	
15	Nargiz Kalimova	577 38 27 55	
16	Irakli Kviladze	599 97 97 48	

Climate Smart Irrigation Sector Development Program Public Consultations 06.09.2022-Village
Kakabeti

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2	Giorgi Aznaurashvili	555 25 41 31	
3	Levan Nanuashvili	555 22 46 33	
4	Valery Khenashvili	591 32 32 28	
5	Nodari Margebadze	599 74 41 39	
6	Gurami Bediashvili	593 32 54 78	
7	Ikane Chkheidze	591 31 02 31	
8	Archili Ghviniashvili	599 59 38 13	
9	Zaza Osupov	568 62 21 12	
10	Ziaida Kizikerashvili	558 11 48 54	
11	Mary Atabegashvili	595 50 55 43	
12	Nato Kurdovanidze	599 11 51 54	
13	Shengeli Menabdishvili	598 13 69 92	
14	Vepxvia Nanuashvili	599 93 13 82	
15	Nodari Bagdadishvili	593 43 91 56	
16	Giga Gvelesiani	577 38 22 32	
17	Nargiz Nasimov	577 38 27 55	
18	Zurab Revazishvili	555 26 81 08	
19	Irakli Kviladze	599 97 97 48	

Annex 6. LAR information booklets

In Georgian translation distributed to APs

Land Acquisition and Resettlement Information Booklet



**Climate Smart Irrigation Sector Development Project
Modernization of the Kvemo Samgori
Left Main Canal**

Project Proposed for Financing by the Asian Development Bank

Tbilisi 2022

Information is preliminary.

1. Project Description

130. This information booklet is about potential land acquisition and resettlement (LAR) impact and how it will be addressed under the proposed Climate Smart Irrigation Sector Development Program (CSIDSP) in Georgia that is considered for financing by the Asian Development Bank (ADB). The Program will (i) address policy, institutional, governance and management constraints in agriculture and the irrigation subsector (Output 1); (ii) support the modernization of outdated irrigation schemes in Eastern Georgia (Output 2); and (iii) demonstrate innovative agricultural production systems and develop the capacity of farmers and farmers' organizations (Output 3). The Ministry of Environmental Protection and Agriculture (MEPA) and Georgian Amelioration (GA) will be executing and implementing agencies, through a Project Implementing Unit (PIU) under the MEPA. The project will contribute to economic growth and food security and it is in line with the Socio-economic Development Strategy of Georgia (Georgia 2020) which sets a high priority on increasing the potential of the country's agricultural sector, expanding agricultural output, and increasing rural incomes. Agriculture is important in Georgia, however, poor condition of irrigation systems and unreliable irrigation service hamper farmers' productivity, growth in the agriculture sector and rural development. As of 2015, approximately 112,000 hectares (ha) were irrigated in the country, 43,000 ha of which were in eastern Georgia. The government plans to increase irrigation capacity up to 200,000 ha by 2025.

131. Under the Output 2 the project will support the modernization of the dilapidated, under-utilized Kvemo Samgori left canal irrigation scheme in Kakheti region in eastern Georgia. Modernization of the scheme includes repairs to main, secondary and tertiary canals, and on-farm irrigation networks, which is anticipated to have insignificant Land Acquisition and Resettlement impacts. Project preparation and modernization of the irrigation schemes (output 2) is planned in two phases and through design-build contract. Phase 1 includes modernization of irrigation networks in Areas 1 to 4, and Phase 2 includes modernization of irrigation networks in Areas 5 and 6 (Figure 1).

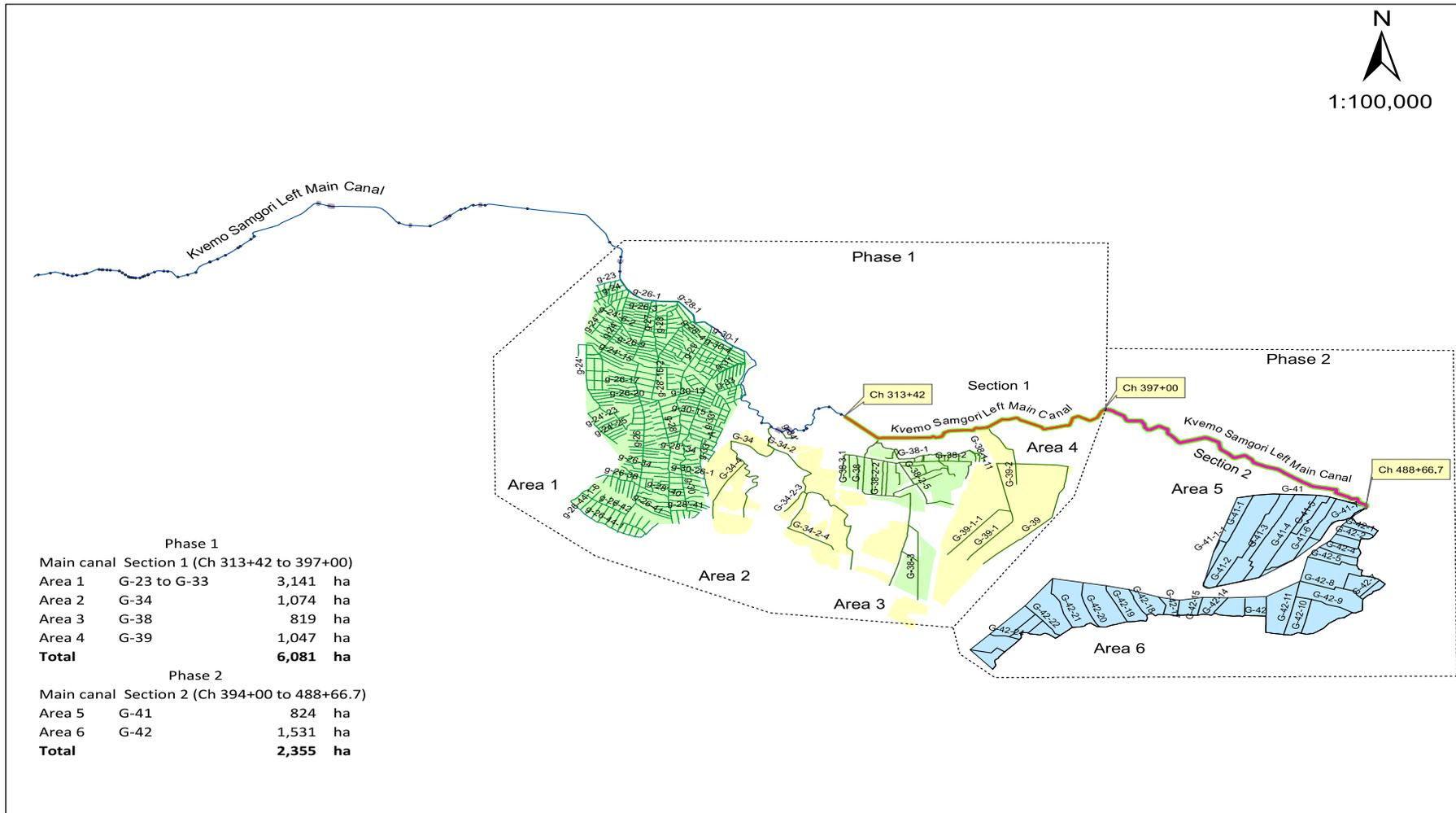
132. A draft LARP is prepared for the planned modernization in distribution network in Area 1 and should be completed after finalizing the detailed design for this area. A LARP has been prepared for modernization works for the main canal associated with the distribution network in Area 1. and will be implemented before commencements of construction works for Areas 5-6. More information about the project can be accessed in ADB at <https://www.adb.org/projects/54014-001/main>

2 Summary of Anticipated Land Acquisition and Resettlement Impact

133. Based on the preliminary assessment, the Kvemo Samgori Left Canal Scheme modernization may cause:

- (i) Temporary LAR impact during modernization works affecting trees and crops within the ROW of 4 meters width corridor in certain sections (to be defined) of the project area as the GA has access road in many of the channels; and
- (ii) Servitude establishment that may impose land use restrictions (in areas to be defined in LARP) during the systems' operations and maintenance.²⁸ The GA needs to confirm its needs for servitude establishment and areas where the servitude will be required based on detail design and confirmed by GA.

Figure 6: Modernization Phases and Areas



4. Resettlement Safeguard Measures and Compensation

134. The policy and legal framework for the LAR process applicable for this Project is based on relevant laws and regulations of Georgia and ADB's Safeguard Policy Statement from 2009 (SPS) on Involuntary Resettlement requirements. The LARP(s) provides principles on LAR process, compensations and rehabilitation entitlements to eligible affected households, to be implemented by MEPA PIU. Measures will be taken to mitigate LAR impact to affected households and pay them replacement cost compensations for their losses based on:

- (i) review of relevant documents on land and property rights,
- (ii) Socio-economic survey and census of affected households,
- (iii) Detailed measurement survey (DMS) of land and other losses,
- (iv) Valuation based on the DMS results, and
- (v) Consultations and meetings with affected households.

Eligibility for Compensation

135. The following affected households are eligible to compensations and assistance:

- (i) persons with formal legal rights to land and/or structures lost entirely or in part;
- (ii) persons who have no formal legal rights to land and/or structures lost wholly or in part but who have claims to such lands that are recognized or recognizable by law;
- (iii) persons who lost the land they occupy in entirety or in part who have neither formal legal rights nor recognized or recognizable claims to such assets. Compensation varies according to the type of displaced persons (see sample entitlement matrix attached).

Cut-off Date for Compensation and Entitlements

136. Compensation and entitlements to affected households (owners, leasers, etc.) will be limited to the established cut-off date (set as the last date of conducted LAR impact assessments and measurements, and census of affected persons). For this project, it is defined as the date of public consultation (7 Sep 2022). People who settle in, build/alter structures in the project area after the cut-off date, will not be compensated for losses due to LAR. affected households who are not identified during the DMS but identified during LARP and/or project implementation, will be eligible for compensation and assistance.

Valuation and Compensation

137. Compensations will be based on valuation results for loss of lands, non-land assets such as buildings and structures, crops, trees permanent loss or temporary interruptions of business and incomes. A sample Entitlement Matrix is in Annex herein.

Land Acquisition and Resettlement Process

138. MEPA PIU shall adhere to the negotiated LAR process with the affected households, through consultations with affected households and disclosure of project and LAR information, consideration of affected households' preference on compensation options, and sign a Land Acquisition Agreement with each affected household. Legalization through state registration of land and property rights are required by law for compensating the assets' losses of legalizable affected households. MEPA PIU shall assist the affected households with legalizable land rights, in state registration and legalization of lands and properties they possess. The LARP shall identify any legalizable affected households and define the process, roles and tasks of MEPA PIU in assisting for free the affected households with legalization

process to become eligible for compensation for loss of lands they possess. The project shall cover the legalization cost to be reserved in the LARP.

139. MEPA PIU ensure disclosure of project and LAR documents, and conducting meaningful consultation with affected households in preparing the LARP and during the LARP and the project implementation. It will be conducted with affected households when LAR impacts are identified based on designs for Kvemo Samgori modernization, following Georgian government guidelines about COVID-19.

Grievance Redress Mechanism

140. MEPA PIU will set up a project-level GRM following the ADB's SPS and laws of Georgia to resolve grievances and issues raised by the project affected households related to the project's resettlement and environmental impacts and consultations and information disclosure. It will be maintained for the duration of the project. The GRM should not impede access to the country's judicial or administrative remedies. The aggrieved persons reserve their rights to appeal to the Court of Georgia at any stage of grievance resolution. The project LARF/LARP shall specify the project GRM and its scope, the GRM tiers, roles and responsibilities of the MEPA PIU, grievance focal person, and contractor, as well as the grievance redress process in details.

141. Also, if not satisfied with the resolution of the issue by project-level GRM, the complaining party can send complaint to ADB's Accountability Mechanism discussed, after making good faith efforts to resolve the grievance by the project-level GRM. Certain complaints will not be eligible, such as:

5. about actions not related to something ADB did or not do in formulating, processing, or implementing an ADB-assisted project;
6. about an ADB-assisted project for which 2 or more years have passed since the loan or grant closing date;
7. about matters those complainants have not made good faith efforts to address with the operations department concerned; and
8. about decisions made by ADB, the borrower or executing agency, or the private sector client on the procurement of goods and services, including consulting services; and allegations of fraud or corruption in ADB-assisted projects (these will be managed by other facilities).

142. The complaint may be submitted by mail, fax, email, or in-person:

Complaint Receiving Officer (CRO), Accountability Mechanism

Asian Development Bank, 6 ADB Avenue, Mandaluyong City 1550, Metro Manila, Philippines. +632 632 4444; +632 636 2086; local 70309; amcro@adb.org

143. Alternatively, complaints may be submitted through ADB office in Tbilisi, which will forward the complaint to the CRO. Contact Information

For any additional information contact the following:

Ministry of Environmental Protection and Agriculture of Georgia

Address: Didube Bus Terminal
4 Transport Street, Tbilisi, Georgia

- Hot line 1501; Telephone
+ 995(32) 2 47 01 01+ 995(32) 2 37 80 09
- E-mail: info@meqa.gov.ge

Contact person: Sophie Berishvili Georgian Amelioration

- Address: 0114, Georgia, Tbilisi, G. Gulua street №6
- Phone: (+995 32) 2 00 10 00
- E-mail: info@ag.ge

Sample Entitlement Matrix

Note: This is a sample. The project specific EM will be developed as part of the project LARP

#	Type of impact	Specifications	Eligible AHHs	Compensation and Entitlements
1	Permanent loss of lands	All types of private land	All AHHs with registered land plots and/or legalizable rights	<ul style="list-style-type: none"> • Cash compensation at replacement cost based and the market value of the affected land ; • If the residual land plot after the impact becomes unviable and/or inaccessible to use as per its purpose, the whole land plot shall be acquired and compensated with the consent of the owner. • PIU assist the AHHs in their project affected lands registration/legalization, preparing cadaster maps and other documents, and cover all registration costs;
2		Non-legalizable land parcels	AHHs who are not legitimate land users or have no legalizable rights or claims to the land they are occupying	<ul style="list-style-type: none"> • Cash compensation at least for loss of all non-land assets and incomes at replacement cost; • If applicable, assistance allowance for sever impact, transportation, and vulnerability as envisaged hereto.
3	Loss trees		All AHHs even those without legal/legalizable rights	<ul style="list-style-type: none"> • Fruit trees (grape trees are affected only): Cash compensation based on income from the expected annual yield of the tree, multiplied by the number of years required to regrow the tree to the productivity, plus cost of saplings.
4	All types of structures/buildings	Impact on structures including partial or full demolition	All AHHs even those without legal/legalizable rights	<ul style="list-style-type: none"> • Cash compensation at replacement cost for the affected structure and it's improvements, free from deduction for depreciation, transaction costs, and state fees for new budling permits (as relevant), identified by an independent valuation entity; • Right to have salvage materials from demolished structures for free without deduction from the compensations; • If partially impacted, cash compensation at replacement cost shall be paid to restore the remained part of the structure including costs for relevant improvements and fixed assets at least to the same level as the structure had before the impact, and new building permits and registration documents; or • If impacted part of the structure becomes unviable and/or unsafe to use, the whole structure shall be acquired and compensated at replacement cost as above; • Cash allowance to transport salvage materials, movable assets as envisaged hereto.
5	Severe impact allowance	Permanent loss of 10% or more of the total productive land and/or assets.	All AHHs even those without legal/legalizable land rights	<ul style="list-style-type: none"> • One-time additional cash allowance equal to six-month subsistence wage for an average consumer (198 Gel x 6 months = 1,188 GEL). The 198 GEL is a subsistence wage for an average consumer as of December 2021. Priority for employing the AP/family members in the project construction jobs as per skills;

6	Vulnerability allowance	AHHs as defined in Glossary of this LARF	All AHHs even those without legalizable land rights	<ul style="list-style-type: none"> • One-time additional cash allowance equal to six-month subsistence wage for an average consumer (198 Gel x 6 months = 1,188 GEL, Table 15). The 198 GEL is a subsistence wage for an average consumer as of December 2021. • Priority for employing family members in the project construction jobs as per skills;
7	Registration costs	Cost and fees for registering land and assets	All AHHs who need registration/legalization	<ul style="list-style-type: none"> • In addition to compensations of losses above, full compensation for all fees needed to register (legalize) the replacement land, structures, business, and/or other assets (including any transaction costs and fees for notary services, fees for legalization, lands sub-division and registration at the NAPR.
8	Exemption from Fees and Taxation		All AHHs	<ul style="list-style-type: none"> • AHHs shall not be liable for any taxes (such as income Tax and VAT) associated for cash compensation paid due to involuntary resettlement cases envisaged in this draft LARP.
9	Any unanticipated impact in project implementation		All AHHs according to this EM	<ul style="list-style-type: none"> • Any other unforeseen impacts that may occur during the project implementation, shall be assessed and compensated as per principles of this LARP and ADB SPS, and laws of Republic of Georgia, whichever is more stringent.

Key Steps of the Resettlement Process

Under the Climate Smart Irrigation Sector Development Project (RRP GEO 54014) proposed for funding by ADB

The steps below can be carried out in parallel

Preliminary Design works Kverno Samgori irrigation schemes modernization:

Measurement of Affected Assets (lands, trees, structures, crops)

- Affected lands, trees, structures, crops (permanent and/or temporary impacted) are measured.
- Presence during the measurement is mandatory. The survey team will inform APs about the schedule of measurements in your land.
- The affected assets are described and recorded for compensation.
- The last day of measurement of affected assets will be **cut-off date** for compensation and entitlements eligibility for affected persons and assets.

Census of Affected Households (landowners, users, etc.)

- All affected households (AHs) and family members will be recorded.

Socio-Economic Surveys (SES)

- SES to be conducted by interviewing 25% of all AHs (to assess the socio-economic condition of AHs at the project baseline and does not affect compensation package). The survey is anonymous.

Conducting Public Consultations in community

- PIU and the project preparation team will conduct public consultations
- **Cut-off date** for compensation/entitlements (for eligibility AHs) will be announced (e.g., as the last day of Measurement of Affected Assets (stage above)).

Preparation and Signing of Protocol for Affected Assets

- Based on land and resettlement impact measurement survey, the affected assets description protocol is prepared.

Valuation and Compensation of Affected Assets

- Based on the property description protocol signed by owner, affected assets will be valued for compensation.
- Everyone can ask questions about the valuation and compensation process during the public consultations.

Preparation of Land Acquisition and Resettlement Plan

- PIU prepare, framework for resettlement policy and process, the LARP which includes summary of the project compensations and entitlement matrix (EM) based on national laws and ADB's SPS 2009, resettlement impacts scope, number of AHs and affected persons, social-economic conditions of AHs' at the project baseline, grievance redress mechanism (GRM), resettlement safeguards monitoring and reporting requirements, institutional responsibility, resettlement/compensation budget.
- Compensation for affected assets and any assistance allowances to eligible AHs will be envisaged in the LARP for each AHs (land users/owner).
- Summary of draft LARP will be presented during the public consultation including the EM, GRM, and cut-off date, with information brochures.
- LARP will be approved by MEPA and ADB for disclosure and implementation.

Payment of compensation and entitlements (LARP Implementation)

- PIU will pay compensations and entitlements as per the approved LARP (LARP implementation)

Preparation and Signing of Compensation Agreements

- PIU prepares and presents the draft agreement for compensation of affected assets and any assistance allowances as envisaged in the project Land Acquisition and Resettlement Plan (LARP).
- PAPs familiarise themselves with the agreement and submit their objections, if any, within the period provided by law
- After agreement is reached and signed the money will be transferred to the bank account.

Monitoring and Reporting

- PIU will submit internal monitoring report on LARP Compliance Implementation, for review and approval of ADB.

Start of Civil Works

- Civil works can be started in resettlement affected areas only upon full compensation and entitlements of AHs as envisaged in the LARP:

Annex 7. Consolidated compensation table

Consolidated table on AHHs and compensations

Ser. No.	No. of plots	No. of owners/ co-woners	AHs IDs numbers for purpose of his LAPP	Status	Affected area, sqm	Value/ sqm, GEL	Land compensation, GEL	Trees No.	Tree unit value, GEL	Pole(wire), meters	Pole/wire compensation amount, GEL	Total compensation, GEL
1	1	6	01	Registered	452.24	4.30	1,944.64					324,11
			02									324,11
			03									324,11
			04									324,11
			05									324,11
			06									324,11
2	1	2	07	Registered	139	4.30	597.68					298,84
			08									298,84
3	1	2	09	Registered	222.34	4.30	956.06					318,69
			10									318,69
		1	11									318,69
4	1	1	12	Unregistered	197	4.30	847.10	110	3,190	20(300)	320	4,357,10
Total	4	12			1,010.6		4,345.48					7,856

Annex 8: Valuation methodology

1. Land valuation

Land was valued with the replacement cost based on average market value. This method is based on the average sales volume of the land of a similar type, location and characteristics. Based on the average market price, the adjustments were made in the following sequence:

- *Property rights conveyed*
- *Financing terms*
- *Conditions of sale*
- *After-sales costs*
- *Sales dynamics on the market (date of sales)*
- *Location*
- *Physical characteristics*
- *Economic characteristics*
- *Use*
- *Presence of real property*

1.1 Calculation of market prices of land plots using the sales comparison method

Market Method (the sales comparison approach) was used as one of the basic approaches envisaged by the International Valuation Standards (IVS-2013, 9th edition) to identify the value of compensation for the damage inflicted to the land owners.

Approach With the Market Method, the Valuer gives his opinion about the value/price by comparing the comparison properties to the valuation properties.

Procedure In applying the sales comparison approach, a Valuer follows a systematic procedure.

The Valuer will:

- *Research the market ...*
- *Verify the information...*
- *Select relevant units (land plots) of comparison...*
- *Compare the sale properties with the subject property using the elements of comparison...*
- *Reconcile the results into a value indication.... “*

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Elements of comparison *Elements of comparison* are the specific characteristics of properties and transactions that explain the variation of prices. Market analysis identifies which elements are especially sensitive.

Elements of comparison include the comparison of the following elements:

- *Property rights conveyed ...*
- *Financing terms....*
- *Conditions of sale....*
- *Costs to be borne immediately after the purchase...*
- *Market conditions...*
- *Location....*
- *Physical characteristics...*
- *Economic characteristics ...*
- *Use ...*
- *Immovable components of sales...*

So, the market or sales comparative analysis method in evaluation of the price of the valuation object relies on its direct comparison to a similar object sold or put on sale in the near past.

In line with the above-mentioned standard, I accomplished the following consecutive actions to identify the market price of the valuation property by using the market method: gathering and analyzing the market data about the similar to the valuation properties, detailed market survey, obtaining reliable information about the factors influencing the price of the valuation object. The obtained information was re-examined to make oneself sure of its accuracy and essence of motivation beyond all transactions; the relevant unit of comparison was identified and comparative analysis was done; the valuation objects were compared with the selected comparison objects with the purpose of correcting their sales prices or excluding the comparison objects from the list and reduce the corrected indices of the value of the comparison to a single value or put them within the market range. The market value of the valuation objects was identified.

As already mentioned, we used the market or sales comparison method to fix the monetary value of the affected land parcels, implying the comparison of the valuation object to other objects with their market values known (the land parcel in question was sold or bought).

The following types were identified in the private land groups subject to compensation;

Market method was used to fix the monetary value of the affected land parcels. This method implies comparing the valuation object to other objects with their market values known (i.e., the land parcel in question was sold or bought).

The valuation land parcels are located within the administrative borders of villages of Sagarejo Municipality: Kandaure, Chailuri, Badiuri. Most parcels are located 2-4 km from the road and are agricultural/arable and sowing plots;

In order to evaluate the land parcels, the relevant market segment and values under the agreements and contracts concluded for similar real estate must be analyzed what was done on the territories of the above-said villages and their adjacent villages.

With the purpose of fixing the market values in the course of evaluation, we obtained the data about similar properties based on the present market proposals and transaction details provided by the National Agency of Public Registry (the source of information is given in the table) what is given in Table 2.

Table 1.

№	Area (sq.m)	Designation	Address/location	Transaction/proposal unit price, Gel	Source of information (ss.ge)
1	2300	Agricultural, arable	Sagarejo, village Chailuri	1.0 sq.m. – 2.79 GEL	Cadaster Code with the National Agency of Public Registry 55.08.60.001.057
2	20 000	Agricultural, arable	Gardabani, village Badiuri	1.0 sq.m. – 3.91 GEL	www. ss.ge. ID : 12236364
3	5330	Agricultural, arable	Sagarejo, village Kandaure	1.0 sq.m. – 5.58 GEL	www ss.ge. ID : 12683364

Table 2. Corrections to the land parcels of the I type to be evaluated located in the impact zone (Gel, unit: 1.00 sq.m.)

N	Elements of comparison	Analog N1	Analog N2	Analog N3
	Area, sq.m.	2300	20000	5330
	Price of 1 sq.m.(GEL)	2.79	3.91	5.58
1	Property rights conveyed	Full	Full	Full
	<i>Correction</i>	0%	0%	0%
	Corrected price	2.79	3.91	5.58
2	Financing terms	Typical	Typical	Typical
	<i>Correction</i>	0%	0%	0%
	Corrected price	2.79	3.91	5.58
3	Conditions of sale	Historical fact	Historical fact	Historical fact
	<i>Correction</i>	0%	0%	0%
	Corrected price	2.79	3.91	5.58
4	Costs to be borne immediately after the purchase	No	No	No
	<i>Correction</i>	0	0	0
	Corrected price	2.79	3.91	5.58
5	Market conditions (time)	July, 2022	July, 2019	July, 2019
	<i>Correction</i>	5%	5%	5%
	Corrected price	2.93	4.11	5.86
6,1	Location	Similar	Similar	Similar
	<i>Correction</i>	0%	0%	0%
	Corrected price	2.93	4.11	5.86
6,2	Access road	Similar	Similar	Similar
	<i>Correction</i>	0%	0%	0%
	Corrected price	2.93	4.11	5.86
7	Physical characteristics			
7,1	Plot area	Average	Average	Big
	<i>Correction</i>	0%	0%	5%
	Corrected price	2.93	4.11	5.86
7,3	Communications	Similar	Similar	Similar
	<i>Correction</i>	0%	0%	0%
	Corrected price	2.93	4.11	5.86
7,4	Restrictions (servitude, etc.)	None	None	None
	<i>Correction</i>	0%	0%	0%
	Corrected price	2.93	4.11	5.86

8	Economic characteristics	Similar	Similar	Similar
	<i>Correction</i>	0%	0%	0%
	Corrected price	2.93	4.11	5.86
9	Immobile sales components	None	None	None
	<i>Correction</i>	0%	0%	0%
	Corrected price	2.93	4.11	5.86

After considering the analogues and studying the data and corrected prices, the value of the unit land was fixed by calculating the mean weighted value.

When agreeing the results of the corrected prices, the analogues being most comparative to the objects to be evaluated and with least corrections were given the highest specific weight.

The market value of the unit land to be evaluated (by using the weighted value) was calculated by us with the following formula:

Where:

Vwa - is the mean weighted value;

Pi – is the corrected price of each analogue;

$\sum R$ – is the sum of the rated weights of the corrected prices of the analogues of comparison;

Ri - is the rated weight of the corrected price of each object of comparison.

Consequently, the calculation of the market value of the object to be evaluated by using the mean weighted value is given in Tables #3.

Table 3. Corrected market prices

Decsription	Pi	Ri	Vi
Price of the corrected analog No. 1	2.93	0.5	0.59
Price of the corrected analog No. 2	3.91	1	1.46
Price of the corrected analog No. 3	5.58	1	2.23
$\sum R$		2.5	
Vwa			4.28
Corrected market value of 1 sq.m. land to be evaluated, Gel (rounded)			4.30

Thus, the market price of 1 sq.m. of agricultural land parcels to purchase along Tokhliauri-Badiauri sections, Sagarejo Municipality, was fixed at 4 GEL, 20 Tetri (4.20 GEL).

2. Valuation of buildings

Buildings are valued at replacement cost based on the direct and indirect market costs needed to build a comparable building. i.e., by considering what the construction of a building with the same parameters would cost today. Depreciation cost is not deductible. The necessary parameters for calculating direct and indirect costs for individual cases are given as follows:

a. Direct costs include:

- (i) Worker's wages
- (ii) Purchasing building materials
- (iii) Preparatory costs
- (iv) Buying/renting equipment
- (v) Builder's profit and overhead expenses
- (vi) Costs of safety measures during the construction / repair works
- (vii) Costs of arranging temporary structures
- (viii) Temporary communications (energy supply, water supply, gas supply and others);
- (ix) Warehouse costs;
- (x) Transportation costs;
- (xi) Other.

b. Indirect costs include:

- (i) Cost of professional services;
 - 1. Architect/designer's remuneration
 - 2. Costs of engineering services;
 - 3. Costs of legal services;
 - 4. Valuer's service remuneration;
 - 5. Other.
- (ii) Permit obtaining costs;
- (iii) Insurance costs;
- (iv) Financing %;
- (v) the security required of the contractor (building the new building) for contract performance;
- (vi) Other.

The project-affected area completely covers the agricultural arable and sowing land areas within the boundaries of Manavi, Didi and Patara Chailuri, Kakabeti, Kandaure

and Badiauri villages in Sagarejo Region, with mainly the auxiliary tools used for viticulture such as vineyard poles, wires are found. and barbed wires, as well as wooden sheds used to have short breaks when working in the vineyard. The value of the affected auxiliary structures and tangible assets is given in the table below.

Table 4. Compensation value of material resources

Name	Material	Height (m)	Diameter (cm)	Price (GEL)
Pole	Steel	2.4	40.0	12.0
Pole	Concrete	2.0 – 2.34	40.0	10.0
Pole	Acacia	2.3-2.42	10.0-12.0	6.0
Building wooden planks, 1cub.m.	Wood		0.3	800.00

Name	Material	length (m)	Diameter (cm)	Price (GEL)
Vineyard wire	Burnt	1404687	2.4	533.65
Barbed wire	Stainless	250	2.5	115.0

3. Compensation for annual crops

This species was evaluated by market price based on the area and the total current market value of the affected crops. Details are given in Table A6. The compensation for the affected annual crops was calculated by lost income method obtained based on the productivity of each species and the current market price of 1 kg of product. The source of statistic of the yield of different annual crops in the project area is the National Statistics Office of Georgia, as well as reference books developed by agro-technicians with the permission of the Ministry of Agriculture of Georgia. Annual productivity, market value and compensation indicators of 1 kg of product are given in table below:

Table 5: Compensation value of annual crops

Crops	Unit	Hectare productivity	Market price of the crops unit, GEL	Compensation value of crops (GEL) per ha	Compensation value of crops (GEL) per sq.m.
Wheat	t	3.5	0.6	2 100	0.21
Barley	t	5	0.65	3 250	0,33
Sunflower	t	2	2.5	5 000	0.5
Maize	kg	10	0.65	6 500	0,65
Watermelon	t	25	0.45	11 250	1.13

Annex 9: Table on AHHs with ID numbers and affected lands

Plots No.	AHHs' ID	Owner/co-owners	Registration status	Land purpose	Total area of plot, sqm	Affected area, sqm	Impact scope %
1		State Electric System of Georgia LLC	Registered	non-agricultural	20,25	12,68	62,61
2	01	Jondo Khuroshvili	Registered,	agricultural	15 908,88	452,24	2,84
	02	Gvantsa Khuroshvili					
	03	Tatia Khuroshvili					
	04	Lado Khuroshvili					
	05	Lasha Khuroshvili					
	06	Nato Khuroshvili					
3		SSI, Sagarejo Municipality	Registered	agricultural	623,942,85	4 362,64	0,70
4		State	Registered	agricultural	8 743,20	81,62	0,93
5		State	Registered	agricultural	43,993,09	28,90	0,07
6		State	Registered	agricultural	546 535,39	4 553,03	0,83
7	07	Gurami Sadunashvili	Registered	agricultural	6,701,34	138,99	2,07
	08	Ilia Sadunashvili					
8	09	Ivane Sadunashvili	Registered	agricultural	10,629,48	222,34	2,09
	10	Malkhaz Sadunashvili					
	11	Ketino Sadunashvili					
9		State	Registered	agricultural	252 640,59	3,144,69	1,24
10		State	Registered	agricultural	78 119,44	73,36	0,09
11		State	Registered	agricultural	1,428,178	8104,53	0,57
12	12	Misha Khatisashvili	Unregistered	agricultural	300	197	65,67
		Total			3,015, 712	21,372	