

REPORT N° FINAL VERSION

# KOTAYK SOLID WASTE MANAGEMENT PROJECT

LAND ACQUISITION AND LIVELIHOOD  
RESTORATION FRAMEWORK

CONFIDENTIAL

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## LAND ACQUISITION AND LIVELIHOOD RESTORATION FRAMEWORK

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# TABLE OF CONTENTS

1	Introduction .....	1
2	Project Overview .....	2
2.1	Project Description .....	2
2.2	Summary of Project Impacts .....	4
3	Legal and Regulatory Framework.....	5
3.1	Armenian Legislative Framework .....	5
3.2	EBRD Requirements.....	6
3.3	Gap Analysis .....	6
4	Land Acquisition and Livelihood Restoration Objectives and Principles.....	9
4.1	Objectives.....	9
4.2	Principles.....	9
5	Land acquisition and Livelihood Restoration Process.....	10
5.1	Overview of the Process .....	10
5.2	Census of Affected People and Assets.....	11
5.3	Socio-economic Survey .....	12
5.4	Entitlements Matrix .....	12
5.5	Valuation.....	17
5.6	Payment of Compensation.....	17
5.7	Livelihood Restoration .....	17
5.8	Development of a Detailed Land Acquisition and Livelihood Restoration Plan.....	18
6	Baseline Data and Inventories.....	18
6.1	Land Acquisition and Land Use.....	18
6.2	Livelihood Impacts.....	19
7	Disclosure of Information, Participation and Consultation.....	21
8	Grievance Mechanism .....	21
9	LALRF Implementation, Budget, Monitoring and Reporting.....	21

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## TABLES

<i>Table 3-1</i>	<i>GAP Analysis</i>	<i>8</i>
<i>Table 5-1</i>	<i>Entitlements Matrix</i>	<i>13</i>
<i>Table 6-1</i>	<i>Price of Recycled Material</i>	<i>20</i>
<i>Table 9-1</i>	<i>Monitoring Indicators</i>	<i>22</i>

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## APPENDICES

A p p e n d i x	A	Grievance form
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# 1 INTRODUCTION

The European Bank for Reconstruction and Development (EBRD) is providing finance for an EU compliant solid waste management facility in the Republic of Armenia. The Ministry of Urban Development (MUD) of the Republic of Armenia previously approached the EBRD with a request to prepare and finance a regional sanitary landfill in Kotayk Region. This would be the country's first sanitary landfill. Kotayk Region was selected due to its proximity to Yerevan, with the intention of creating a demonstration project for the entire country. The Project would mitigate environmental hazards and would counter pollution and adverse impacts on land and water resources. The MUD intended to build seven regional sanitary landfills to serve the whole country. Institutional changes in July 2014, transferred responsibility to the Ministry of Territorial Administration and Emergency Services (MTAES) as it was considered logical for MTAES to be the project co-ordinator as the communities were under their jurisdiction in the ministry.

The Project will be the first solid waste project to be financed by the EBRD in Armenia, and would be part of the national plan to modernise the country's waste management sector. It is proposed that Sevan town located in Gegharkunik Region, close to the northern border of Kotayk Region and the main road, will be also be part of the Project. Sevan city is closer to the Hrazdan landfill site than to the existing municipal dumpsite of Sevan city near Chkalovka village. The project will now also include two waste transfer stations, located in the Gegharkunik Region (possibly Gavar District and Martuni District), although the locations have not been selected as yet. The project will comprise the upgrade of an existing dumpsite in Hrazdan into a regional sanitary landfill, the closure of the six remaining dumpsites in the region, purchase of waste transfer and collection vehicles, bins and equipment for waste management and support in tendering for waste collection services and setting up a Landfill Operating Company. Institution building support will focus on establishment of the operating company and development of its capacity to function as a sustainable commercial unit. Subject to due diligence, private participation in collection of waste will be established through tendering of collection services.

Changes to the project are being considered including the option to include all residential areas of Gegharkunik Region and Kotayk Region into a combined Solid Waste Management System. This will potentially improve collection of municipal solid waste and its transportation with disposal at the new regional Hrazdan landfill site to be designed and operated in accordance with the EU standards. In Gegharkunik Region, waste is currently disposed of at 5 major dumpsites. If the region is included in the Kotayk Solid Waste Project, it is assumed that closure of existing dumpsites will be undertaken with a soil layer covering the sites and enforcement to prevent further waste disposal once the Hrazdan landfill becomes operational, the same as is planned for the existing dumpsites in the Kotayk Region.

This document is a Land Acquisition and Livelihood Restoration Framework (LALRF) for the Project and it describes the objectives, principles and the planned approach to land acquisition, economic displacement and livelihood restoration. Physical displacement may be necessary but currently there is incomplete information on the footprint of the project relating the new Hrazdan landfill site boundary, the Sanitary Protection Zone (SPZ) and the potential routings of pipes and cabling to provide services to the Hrazdan landfill site (not defined as yet). This LALRF sets out the principles to be applied when developing and implementing a plan to cover physical displacement as well should it be required due to the SPZ and associated infrastructure. The LALRF differs to a Land Acquisition and Livelihood Restoration Plan (LALRP) because it provides a framework to guide the overall process and the standards that livelihood restoration and compensation process must meet in the future, rather than providing specific details of the management of livelihood impacts. A detailed LALRP will have to be developed for the Project and the relevant baseline data on affected waste pickers and land acquisition will have to be established first.

The LALRF has been prepared to comply with Armenian legislation and the EBRD requirements as set out in the EBRD's Environmental and Social Policy (2014), notably Performance Requirement (PR) 5 on Land Acquisition, Involuntary Resettlement and Economic Displacement. Actions related to the LALRF are included in the Environmental and Social Action Plan (ESAP) under PR 5. This LALRF document fulfils, partially fulfils or identifies the next steps to take for current ESAP Actions 5.1.1 to 5.3.4, which have been modified accordingly.

PR 5 states that 'involuntary resettlement refers both to physical displacement and to economic displacement as a result of project-related land acquisition or restriction of access to natural resources'.

This LALRF is structured as follows:

Section 2: Project Overview – describes the Project and summarises the potential impacts related to economic displacement

Section 3: Legal and Regulatory Framework – describes national legislative framework and EBRD requirements and identified gaps that need to be addressed

Section 4: LALRF Objectives and Principles

Section 5: LALRF Process – describes the process of LALRF implementation

Section 6: Baseline Data and Inventories – presents information required on eligibility, entitlements and valuation methods

Section 7: Public Disclosure and Consultation

Section 8: Grievance Mechanism

Section 9: LALRF Implementation, Budget, Monitoring and Reporting

## 2 PROJECT OVERVIEW

### 2.1 PROJECT DESCRIPTION

The Ministry of Urban Development (MUD) of the Republic of Armenia previously approached the European Bank for Reconstruction and Development (EBRD) with a request to prepare and finance a regional sanitary landfill in Kotayk Region of Armenia. This would be the country's first sanitary landfill located at the existing Hrazdan dumpsite. Kotayk Region was selected due to its proximity to Yerevan, with the intention of creating a demonstration project for the entire country. See Figure 2-1 below. The Project would mitigate environmental hazards and would counter the pollution and adverse impact on land and water resources. The MUD intended to build seven regional sanitary landfills to serve the whole country. Institutional changes in July 2014, transferred responsibility to the MTAES as it was considered logical for MTAES to be the project co-ordinator as the communities were under their jurisdiction in the ministry.

Figure 2-1 Map of Armenia

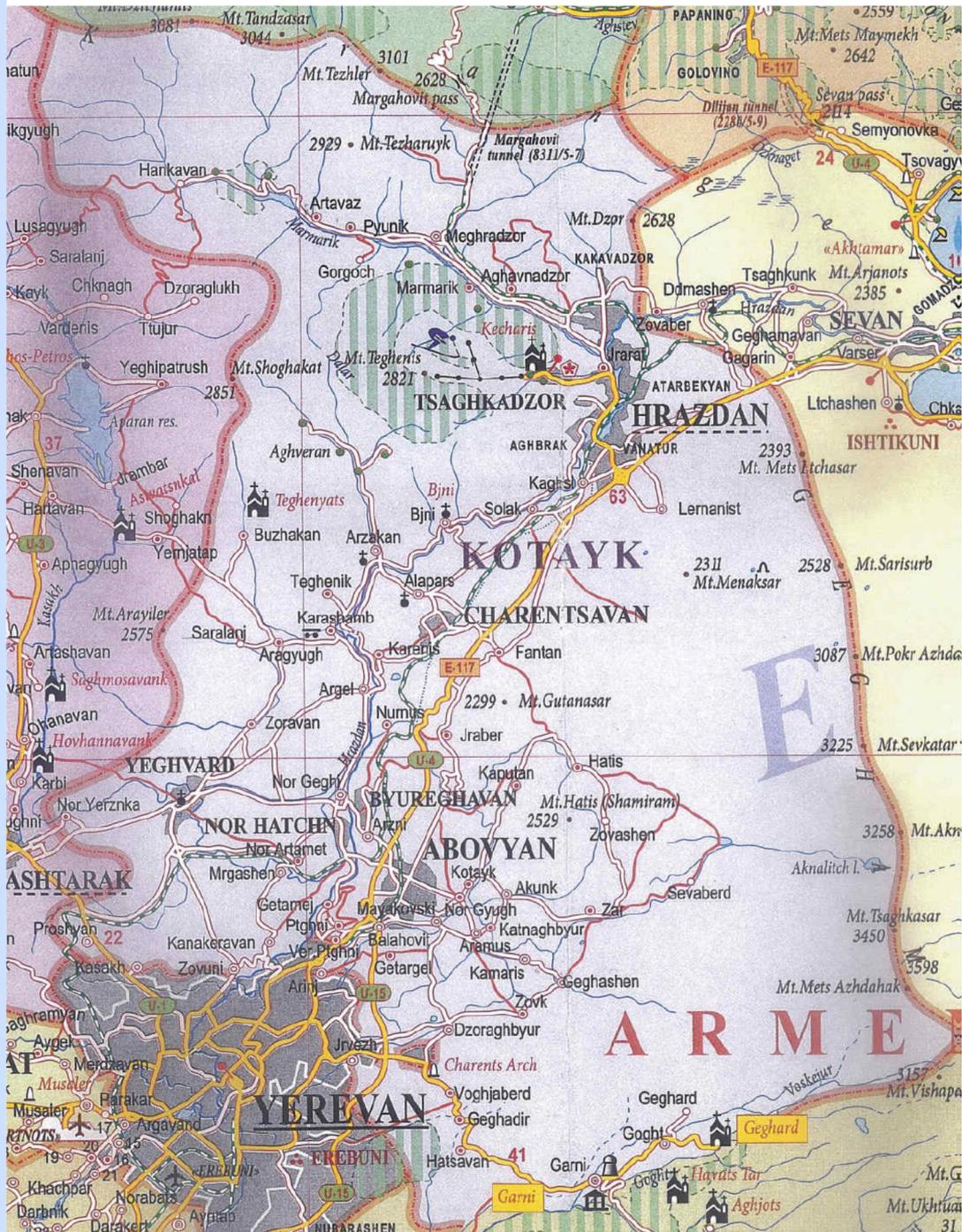


The Project will be the first solid waste project to be financed by the EBRD in Armenia, and would be part of the national plan to modernise the country's waste management sector. It is proposed that Sevan town located in Gegharkunik Region, close to the northern border of Kotayk Region and the main road, will also be part of the Project. Sevan city is closer to the Hrazdan landfill site than to the existing municipal dumpsite of Sevan city near Chkalovka village. The project will now also include two waste transfer stations, located in the Gegharkunik Region (possibly Gavar District and Martuni District), although the locations have not been selected as yet. The project will comprise the upgrade of an existing dumpsite in Hrazdan into a regional sanitary landfill, the closure of the six remaining dumpsites, purchase of waste transfer and collection vehicles, bins and equipment for waste management and support in tendering for waste collection services and setting up a Landfill Operating Company.

Changes to the project are being considered with the option to include all residential areas of Gegharkunik Region and Kotayk Region into a combined Solid Waste Management System. This will potentially improve collection of municipal solid waste and its transportation with disposal at the new regional Hrazdan landfill site to be designed and operated in accordance with the EU standards. In Gegharkunik Region, waste is currently disposed of at 5 major dumpsites. If the region is included in the Kotayk Solid Waste Project, it is assumed that closure of existing dumpsites will be undertaken with a soil layer covering the sites and enforcement to prevent further waste disposal once the Hrazdan landfill becomes operational, the same as is planned for the existing dumpsites in the Kotayk Region.

The Project is located in the Kotayk Region as shown in Figure 2-2 below.

Figure 2-2 Map of Kotayk Region (Marz)



## 2.2 SUMMARY OF PROJECT IMPACTS

The new Hrazdan waste management facility will enhance solid waste collection and management in the Kotayk Region and Sevan. In terms of land acquisition and livelihoods, the Project site was selected carefully to avoid any impacts on settlements and utilises a site next to an already existing dump site, thus minimising visual and land use impacts.

The Project is likely to result in some physical displacement, depending on the width of the Sanitary Protection Zone (SPZ) following project specification of the site boundary of the new Hrazdan Landfill boundary and associated routes of any roads, cabling or pipes (that may be needed). The size of the SPZ will play a crucial part in determining land needs and physical

displacement. Property and land uses may be impacted such as a small property with a summer orchard and fence situated next to the entrance of the existing Hrazdan dumpsite and agricultural land around the Hrazdan site. This may fall within the SPZ. The agricultural lands around the Hrazdan site are likely to be owned by residents of the nearby settlements and used for small scale self-subsistence farming. The summer orchard is also likely to suffer some adverse impacts resulting from construction, but physical displacement cannot be confirmed at this stage.

The Project will result in economic displacement, i.e. the loss of assets or access to assets that generate income or a means of livelihood for informal waste pickers. The Project will impact on six smaller waste dumps located in the Kotayk Municipality in Abovian, Charentsavan, Hrazdan, Sevan, Tsaghkazdor and Yerghvard. The current Hrazdan dumpsite will be closed and the new EU compliant facility will be located on the site next to the existing Hrazdan dumpsite. The closure of the existing dumpsites and the restricted access to the new Hrazdan waste management facility will result in lost access to livelihoods and income for approximately 20-25 people who collect and recycle waste at those sites. The other five smaller dumpsites will be closed down and sealed with a layer of soil once the new Hrazdan landfill site is operational, thus preventing access to the waste. This will adversely impact on the livelihoods of waste pickers currently engaged in recycling activities at those sites.

The closing of dumpsites will impact on the employees of the solid waste management companies who undertake maintenance works at the dumpsites. It is likely that solid waste management companies will downsize their workforce due to the lack of landfill sites to manage. The extent to which employees will be affected are unknown at this stage. Also the future employment situation of those employees is dependent on external factors and wider systemic changes in the Armenian solid waste management systems.

Interviews with waste pickers at some of the dumpsites revealed that they have been engaged in waste picking at these sites for decades and waste recycling is the only income generating activity for them. Further details of affected people and livelihood restoration can be found in Section 6.

## 3 LEGAL AND REGULATORY FRAMEWORK

The Project will be structured so as to meet requirements and standards of national legislation and EBRD policies, notably EBRD's PR 5 on Land Acquisition, Involuntary Resettlement and Economic Displacement.

### 3.1 ARMENIAN LEGISLATIVE FRAMEWORK

The Constitution of the Republic of Armenia (adopted in 1995 and amended in 2005) contains the 31<sup>st</sup> Article stipulating that 'no one shall be deprived of property except for cases prescribed by law in conformity with the judicial procedure'. The private property may be alienated for the needs of the society and the state only in exceptional cases and with prior equivalent compensation.

Land acquisition and compensation issues are discussed in the Land Code Article 102, 104, the Civil Code (1998), Article 218 and in the Law on the Alienation of the Private Property for Public and State Needs adopted in 2006.

The compensation for the land and /or structures being acquired should be established by an agreement between the MTAES and affected people (APs) taking into account the market value and damages, including consequential damages, and may include exchange of land

and/or structures. Adequate compensation shall be paid to the owner against alienation of his/her property. The compensation consists of the market value of the alienated asset plus additional 15% of its market rate.

Valuation of the real estate or the real estate rights shall be made in accordance with the procedure defined in the Law on Valuation of Real Estate adopted in 2005. The law defines the fundamentals of real estate valuation process and regulates the relationships concerning real estate valuation. The activity of real estate valuation requires licensing, thus the activity must be carried out by legal entities and individuals after acquiring a license for real estate valuation as prescribed by the Law on Licensing.

## 3.2 EBRD REQUIREMENTS

The EBRD PR 5 Land Acquisition, Involuntary Resettlement and Economic Displacement states that 'involuntary resettlement refers both to physical displacement and to economic displacement which result from project-related land acquisition or restriction of access to livelihoods and natural resources'.

'Resettlement is considered involuntary when affected individuals or communities do not have the right to refuse land acquisition which results in displacement'.

'Displaced persons may be classified as persons: i) who have formal legal right to the land (including customary and traditional rights recognised under national laws); ii) who do not have formal legal rights to land at the time of the census, but who have a claim to land that is recognised or recognisable under the national laws; or iii) who have no recognisable legal right or claim to the land they occupy'<sup>1</sup>.

The objectives of PR 5 include:

- to avoid or, at least minimise, involuntary resettlement wherever feasible by exploring alternative project designs

- to mitigate adverse social and economic impacts from land acquisition or restrictions on affected persons' use of and access to land by: i) providing compensation for loss of assets at replacement cost; and ii) ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected

- to improve or, at a minimum restore the livelihoods and standards of living of displaced persons pre-project levels, through measures that can be wage based and/or enterprise based, so as to facilitate sustainable improvements to their socio-economic status

- to improve living conditions among displaced persons through provision of adequate housing with security of tenure at resettlement sites

## 3.3 GAP ANALYSIS

There are a number of differences between the national legislation and EBRD's requirements. The key differences centre around the recognition of and compensation for informal residents, tenants and land users as well as a focus on livelihood restoration for vulnerable affected people. On the other hand, while EBRD requires compensation for assets and properties at market value, the national legislation stipulates the amount of compensation at market rate or replacement including a 15% extra charge. Table 3-1 below summarises the key differences

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<sup>1</sup> EBRD PR 5: 'Those with no recognizable legal right or claim to the land they occupy may include customary users, pastoralists, internally displaced persons or squatters who claim or make use of land without formal legal rights, and others, who may have usufruct or customary claims to affected land or other resources not recognized or recognizable under national laws.'

between national legislation and EBRD's requirements and identifies the proposed measures that should be implemented. Where there is a difference, the EBRD's requirements should be followed or Armenian Law if it is more beneficial for the affected people and households.

Table 3-1 GAP Analysis

ITEM	ARMENIAN LAWS	EBRD ENVIRONMENTAL AND SOCIAL POLICY (2014)	PROPOSED MEASURES TO FILL THE GAPS
Land owners and tenants	Land compensation only for titled land owners and tenants	Lack of title is not a bar to compensation and/or rehabilitation. Non-titled landowners shall receive compensation for non-land assets	Adopt measures to recognise the rights of informal tenants, land users and informal incomes and identify appropriate compensation and livelihood restoration measures
Land users	Crop losses compensation provided only to registered landowners	Entitled to compensation for crops regardless of formal title and income must be restored to pre-project levels at least	Recognise crops and livelihoods from land cultivated by people who have no legally recognisable claims or rights to the land
Houses and other structures	All affected houses/structures are compensated for damages/demolition caused by the project, with the exception of unregistered structures	Compensation for unregistered structures and informal owners as well	Recognise houses and structures owned or occupied by owners who have no legally recognisable claims or rights to the property and identify appropriate compensation measures at full replacement cost that includes any transaction fees and taxes that might occur
Land valuation	Land valuation based on current market value plus 15% of the assessed value	Land valuation based on current market rate at replacement cost including all registration fees, transaction costs and taxes that might occur during the land acquisition process	Land valuation measures will allow for full replacement cost of the land including all registration fees, transaction costs and taxes that occur during the land acquisition process
Livelihood restoration	No provision for income/livelihood rehabilitation, allowances for severely affected APs and vulnerable groups or relocation expenses	Rehabilitation for severe losses, and for expenses incurred by the APs during the relocation process, irrespective of APs' legal title	Develop a Livelihood Restoration Framework and later a detailed Plan according to EBRD requirements focusing on both formal and informal livelihoods that are adversely impacted by the Project
Resettlement Action Plan (RAP) development	No requirement for RAP preparation or approval	Requires the preparation, approval and monitoring of RAP	If applicable, develop a RAP according to EBRD requirements
Public consultation and disclosure	No requirement for consultation with affected people only information dissemination through public hearing	Requires disclosure and consultation with affected people during RAP/LRP preparation, as well as disclosure of the final RAP/LRP version	Develop a Stakeholder Engagement Plan in line with EBRD's requirements that allows for meaningful participation of affected people through all stages of Project implementation
Grievance mechanism	Presentation of applications, complaints, objections and suggestions to the acquirer and to the state authorised body at every stage of the alienation process, as well as appeal to the court according to the requirements of the Republic of Armenia legislation	Requires the establishment of a grievance mechanism to respond to APs questions and concerns regarding the resettlement process	Develop and adapt a grievance mechanism according to EBRD's requirements and provide opportunities for affected people and the general public to raise comments, complaints and grievances related to the Project throughout all stages of Project implementation

## 4

## LAND ACQUISITION AND LIVELIHOOD RESTORATION OBJECTIVES AND PRINCIPLES

### 4.1 OBJECTIVES

The objectives of the land acquisition and livelihood restoration process will be as follows:

- avoid or minimise resettlement, economic displacement and land acquisition;
- consider feasible alternative project designs;
- mitigate adverse social and economic impacts from land acquisition;
- provide timely compensation for loss of assets at replacement cost; and
- improve or, at a minimum, restore the livelihood and standards of living.

### 4.2 PRINCIPLES

Key principles which will guide the land acquisition and livelihood restoration process will be:

Land acquisition, livelihood restoration and compensation of APs shall be carried out in line with Armenian legislation and EBRD requirements;

Both physical and economic loss should be taken into account and mitigated;

Short term impacts related to temporary occupation of land for construction purposes may also entail compensation or other assistance etc;

Entitlements of all categories of affected peoples (including informal land users) shall be established;

Robust methods will be used to value affected assets or resources, or the access thereto and livelihood impacts, involving independent qualified parties;

Affected properties and structures shall be compensated regardless of formal title;

Livelihoods and standards of living of affected persons shall be improved or at least restored to pre-project levels;

All owners, occupants and users of affected land and structures at the time of the cut-off date with or without fully recognised ownership rights are eligible for compensation, livelihood restoration and/or assistance;

Procedures will also be adopted to compensate APs with recognisable right to land and property where owners remain unknown at the cut-off date;

Compensation shall be provided prior to any relocation or access to land;

MTAES will fund compensation and any activities established under the LALRF and the detailed Land Acquisition and Livelihood Restoration (LALRP) if land acquisition is an issue;

All transactions to acquire land rights, as well as compensation measures, livelihood restoration activities and other assistance shall be documented;

APs will be provided opportunities to participate in decision making processes through inclusive and meaningful public consultation processes;

Specific grievance management mechanism shall be set up for APs and all questions, queries or grievances shall be recorded in a grievance log; and

Monitoring and evaluation procedures shall be set up to measure the effectiveness of livelihood restoration and resettlement measures.

# 5

## LAND ACQUISITION AND LIVELIHOOD RESTORATION PROCESS

### 5.1

#### OVERVIEW OF THE PROCESS

The land acquisition and livelihood restoration measures will be undertaken in accordance with national legislation and EBRD PR5 requirements. This section describes the planned process of LALRF implementation, which in summary involves the steps detailed below.

The full detailed designs of the Hrazdan solid waste facility were not available at the time of the development of the LALRF, regarding the site boundary, the SPZ boundary and any associated infrastructure such as roads, cable or pipeline routes that may be required and therefore related land acquisition could not be confirmed. Under the Armenian Regulations 245-75 "Sanitary norms and rules" the SPZ would be automatically prescribed to be 300m for all regional and municipal landfills. Therefore, it is considered likely that land acquisition will cover some agricultural land and also likely the summer orchard at the entrance of the current Hrazdan landfill site. The actual number of affected waste pickers is only an estimate, based on figures in an original study by COWI and illustrated by the information gathered during the interviews with some of the waste pickers, employees of solid waste management companies and relevant government authorities.

This LALRF is a framework only that sets out the principles of land acquisition and livelihood restoration and its aspects. As soon as full detailed designs are ready and the relevant baseline data confirms the number of waste pickers there will be a need to develop a Land Acquisition and Livelihood Restoration Plan (LALRP) according to the steps explained below.

- i) Identification of Project impacts and affected people involving:
  - Mapping of the Project area and affected households/land plots including the class of land, owners and land use patterns, private and communal land, businesses and assets and location of natural resources by communities;
  - Census of affected assets and persons to establish a list of people with formal and informal land rights and livelihoods and to identify those who will be eligible for compensation and/or assistance. The initial number of affected waste pickers are already included in previous project documents, however, there is a need for a more detailed census to establish eligibility for entitlements;
  - Socio-economic survey to complement the census data and gather detailed information on the socio-economic background of affected people and evaluate the impacts on their livelihoods in order to establish fair compensation and livelihood restoration measures. This will also help to identify any vulnerable individuals or groups who may need additional assistance. The socio-economic survey will also cover formal and informal landowners and land users whose land will be subject to acquisition for the Hrazdan facility or associated infrastructure;
  - Inventory of affected assets, land plots, properties and structures based on mapping and census work that will be used to monitor land acquisition and livelihood restoration activities;

- Public consultation meetings to provide information on the Project, scheduling, land acquisition, procedures, peoples' rights and the process for establishing entitlements, compensation and livelihood restoration measures. APs will be provided opportunities to discuss the approach to compensation and livelihood restoration and ask any questions they may have regarding the processes; and
  - Based on the collected information the eligibility criteria will be established covering formal and informal land owners and users, informal waste pickers and the employees of solid waste management companies who are likely to seek alternative employment once the smaller dumpsites close down. In case the agricultural land acquired provides the primary income or significant proportion of the total household income, then the owners of such land will be eligible to participate in the offered livelihood restoration activities.
- ii) Entitlements matrix and compensation framework will be established and updated based on the information from the above steps in line with the national legislation and EBRD's requirements.
- The entitlements matrix will establish the categories of APs and the assistance, compensation and livelihood restorations they are entitled to receive. Public consultation meetings shall inform the development of AP categories and entitlement measures;
  - A cut-off date will be established for eligibility according to EBRD's requirements and national legislation. Information regarding the cut-off date will be widely publicised throughout the Project affected area.
- iii) Valuation of land and compensation including structures, buildings, crops, interrupted economic activities and lost access to natural resources and compensation offers will be made.
- The procedure of valuation shall be undertaken in line with legislation of the Republic of Armenia, however, in line with EBRD requirements, the valuation of assets will not take account of asset depreciation. Whilst the approach shall aim to achieve appropriate compensation levels, in cases where affected people reject compensation offers, appeal and legal procedures in line with national legislation can be initiated.
- iv) Payment of compensation made by MTAES prior to land acquisition or lost access to economic activities and natural resources. Methods for compensation payment will be discussed with APs during the consultation events.
- v) Livelihood restoration assistance targeted at waste pickers and other informal people who establish their livelihood based on access to the waste dumps that will be closed down. The LALRF will aim at maintaining or improving the livelihoods of people affected by the Project regardless of formal employment.

In addition the overall Land Restoration process will involve the following elements that will be discussed in more detail in the LRP:

- On-going public consultation and information disclosure (see Section 7)
- Establishment of a Grievance mechanism (see Section 8)
- Monitoring and Evaluation of LALRF implementation (see Section 9)

## 5.2

### CENSUS OF AFFECTED PEOPLE AND ASSETS

A detailed census of all affected people, households, properties and other assets is necessary before the start of construction and before the existing dumpsites are closed. The census should be undertaken by MTAES or a third party company with experience in census and survey activities. The census will collect information on cadastral identification and coordinates of land plots, assets, category of land, size of the plot and any cultivated crops, trees and structures that will be affected by the Project. The census will aim at recording all informal waste pickers on the Hrazdan site and on the closing dumpsites.

Further investigations may be needed to identify any informal owners and land users of the affected land plots. The socio-economic survey will provide detailed information on formal and informal livelihoods, assets, activities and structures. All affected people regardless of having formal title to the land who are recorded during the census will be eligible for compensation in accordance with national legislation and EBRD's requirements set out in this LALRF.

### 5.3 SOCIO-ECONOMIC SURVEY

A socio-economic survey will be undertaken to identify:

- All affected people with both formal and informal livelihoods, especially the waste pickers – including men and women;
- Patterns of land ownership and use, crop cultivation and use of natural resources; etc
- Livelihood and income levels of APs, especially income from lost land;
- Vulnerable people who require additional attention in order to equally benefit from the Project;
- Any gender differences in the use of resources, employment opportunities and access to livelihoods;
- Household level data on the socio-economic background of affected people and Project impacts on their finances and economic activities ;
- Employment patterns and alternative economic activities undertaken to complement incomes from primary economic activities; and
- Assessment of skills and qualifications to establish livelihood restoration measures and future training needs to enhance employability.

### 5.4 ENTITLEMENTS MATRIX

This section contains the provisional Entitlements Matrix that identifies the categories of affected people and the compensation measures they are entitled to. The Matrix is provisional because it identifies all possible scenarios and groups of affected people. The detailed LALRP will contain a refined and tailored Entitlements Matrix reflecting the categories of affected people identified during the census and survey questionnaire. The provisional Matrix presented below in Table 5-1 contains entitlements in line with EBRD's PR 5. This means that compensation will be provided to people with legally recognisable formal claims to land, property and assets, as well as, to people who do not have formally recognisable claims but are users, tenants and sharecroppers in the affected properties. The Entitlements Matrix also identifies economic losses and Project impacts on livelihoods. These losses comprise lost employment, lost agricultural land and any lost income as a result of the Project. The compensation measures will cover any relocation assistance, transaction costs and training to restore livelihoods. The eligibility for compensation will be established based on census data. The date of the census will serve as a cut-off date for eligibility, however, people with legally recognisable formal claims will have the chance to receive compensation after the cut-off date.

Table 5-1 Entitlements Matrix

AFFECTED PERSON CATEGORY	NO OF AFFECTED HOUSEHOLDS AND PEOPLE*	ENTITLEMENTS		
		HOUSING, LAND AND INFRASTRUCTURE	CASH COMPENSATION	OTHER RESETTLEMENT ASSISTANCE
Owners of land and property with legally recognisable formal claims	At least 1 owner	Land for land compensation in the area Support in identifying comparable land plots in the area Replacement property at the new land plot Moving allowance	OR Compensation for the land at replacement cost Compensation for the purchase of new seedlings to farm the new land plot sufficient to buy at least 1 year's supply Cash compensation for any installation used for agricultural production that cannot be moved from the land The right to harvest the yield of cash compensation for perennial trees, plants at replacement value of affected trees The right to harvest annual crops or cash compensation Compensation for the lost property at replacement cost	AND Access to job training and participation in other livelihood restoration activities Support with the purchase of new land
Owners of land and property without legally recognisable formal claims	No data available	Registration of land according to the Armenian legislation prior to acquisition free of charge Land for land compensation in the area Replacement property at the new land plot Moving allowance	OR Cash compensation for the land at replacement cost Compensation for the purchase of new seedlings sufficient to buy at least 1 year's supply Cash compensation for any installation used for agricultural production that cannot be moved from the land The right to harvest the yield of cash compensation for perennial trees, plants at replacement value of affected trees The right to harvest annual crops or cash compensation Compensation for the lost property at replacement cost	AND Access to job training and participation in other livelihood restoration activities Support with the purchase and registration of new land
Users of agricultural land with legally recognisable formal claims	No data available	Not eligible	Cash compensation for the crops or the right to harvest the crops Compensation for the purchase of new seedlings sufficient to buy at least 1 year's supply	AND Access to job training and participation in other livelihood restoration activities Support with relocating installations and assets that can be moved from the land
Users of agricultural	No data available			

AFFECTED PERSON CATEGORY	NO OF AFFECTED HOUSEHOLDS AND PEOPLE*	ENTITLEMENTS		
		HOUSING, LAND AND INFRASTRUCTURE	CASH COMPENSATION	OTHER RESETTLEMENT ASSISTANCE
land without legally recognisable formal claims			Cash compensation for any installation used for agricultural production that can not be moved from the land	
Formally contracted agricultural workers working on affected land plots	No data available	Not eligible	Cash compensation to cover the remaining contracting period or sufficient to cover wages until the end of the season	AND Access to job training and participation in other livelihood restoration activities
Informally contracted agricultural workers working on affected land plots				
Owners of properties or land who will lose access to the land temporarily regardless of having legally recognisable formal claims to the land	No data available	Provision of temporary accommodation or cash compensation covering the rent sufficient to bridge the period when the property is not accessible	AND The right to harvest the crops if appropriate and cash compensation for the season or seasons when the land was not accessible	AND Relocation assistance to move to temporary accommodation and back once the property is accessible again
Users of properties or land who will lose access to the land temporarily regardless of having legally recognisable formal claims to the land				
Formal and informal tenants of affected properties	No data available	Assistance to relocate to new location and ensure security of tenure for tenants Moving allowance	AND If notice period is not sufficient to find new accommodation, cash compensation for temporary accommodation for a period of 3 months	AND Access to job training and other livelihood restoration activities
Informal waste pickers who earn more than 20% of their total income at the Hrazdan site or the closing dumpsites at the time of the cut-off date (working	Approximately 20-25	Not eligible	Entitlement to 3 months' worth of average income from the landfill according to the socio-economic survey data	AND Enrolment in vocation training, financial literacy training and other training courses required for employability Assistance in identifying alternative employment opportunities Support with job application process Gender related assistance including child

AFFECTED PERSON CATEGORY	NO OF AFFECTED HOUSEHOLDS AND PEOPLE*	ENTITLEMENTS		
		HOUSING, LAND AND INFRASTRUCTURE	CASH COMPENSATION	OTHER RESETTLEMENT ASSISTANCE
age population)				care and transportation services Support with obtaining personal documentation, social welfare, health care and education Support with inclusion in employment programmes in the Kotayk Region through the Regional Administration
Informal waste pickers who earn more than 20% of the total income at the Hrazdan landfill and the closing dumpsites at the time of the cut-off date (outside the working age including children, student, the elderly)		Not eligible	Not eligible	Support with obtaining personal documentation, accessing social welfare and education Support in mapping out targeted social welfare provided by NGOs and other international organisations Additional assistance such as public transport, financial literacy training
Informal waste pickers who earn less than 20% of their total income at the Hrazdan landfill site and the closing dumpsites at the time of the cut-off date		Not eligible	Not eligible	Enrolment in vocation training, financial literacy training and other training courses required for employability Assistance in identifying alternative employment opportunities Support with job application process Gender related assistance including child care and transportation services Support with obtaining personal documentation, social welfare, health care and education Support with inclusion in employment programmes in the Kotayk Region through the Regional Administration
Employees of solid waste management companies who lose their job as a result of the closing of existing dumpsites	No data available	Not eligible	Not eligible	Enrolment in vocational training, financial literacy training and other identified trainings Assistance in identify alternative employment opportunities Support with job application process

AFFECTED PERSON CATEGORY	NO OF AFFECTED HOUSEHOLDS AND PEOPLE*	ENTITLEMENTS		
		HOUSING, LAND AND INFRASTRUCTURE	CASH COMPENSATION	OTHER RESETTLEMENT ASSISTANCE
				Gender related assistance including child care and transportation Support with accessing social welfare Support with inclusion in employment programmes in the Kotayk Region through the Regional Administration

*\*These numbers are only provision, the actual numbers of affected households and people will be confirmed after the census and survey activities are completed.*

## 5.5

### VALUATION

The valuation of land, crops and assets will be undertaken in line with national legislation. The valuation of lost livelihood should follow international good practice due to the lack of national legislation on the topic. Some information on the value of recycled waste and income from waste picking has been collected during the site visit in May 2015, however, more detailed information should be collected during the socio-economic surveys and interviews with businesses who buy waste from waste pickers to recycle the waste.

The price of land is fixed by the government at a high price and thus market transactions are limited. This fixed price is above the market value and the payable tax after the transactions is significant as well. Leasing land from the state is a widespread tradition in Armenia to avoid paying the higher price and the taxes. Leasing private land to private individuals is uncommon in Armenia, though it might happen on an informal basis. The valuation of land will follow the national legislation and the fixed price where applicable, otherwise EBRD requirements and international best practice will be applied.

## 5.6

### PAYMENT OF COMPENSATION

Payments in cash to the owners or land users will be conducted according to national legislation and EBRD requirements. As this LALRF is following EBRD requirements, all compensation payments and livelihood restoration measures will take place prior to the closure of the affected dumpsites, land acquisition or loss of employment.

Stakeholder meetings will inform the channels for getting the compensation to the affected people according to their needs and preferences. Preferred channels include bank accounts, smaller instalments of cash and land-for-land compensation to avoid mismanagement of compensation payment.

In-kind compensation and other non-monetary compensation measures will be delivered as identified in the LALRP that will be developed as the Project progresses. Unlike the cash compensation, livelihood restoration measures will continue even during the operational phase of the Project, as it will be stipulated in the LALRP if needed.

## 5.7

### LIVELIHOOD RESTORATION

Under EBRD's PR 5 people whose livelihoods are affected by the Project are entitled to livelihood restoration measures aimed at improving or at least restoring their standards of living or livelihoods to pre-project levels.

MTAES will design appropriate livelihood restoration support, which are informed by the findings of the socio-economic surveys undertaken to measure and quantify livelihood, and income related Project impacts. The surveys will provide an understanding of work patterns, incomes, and livelihoods focusing on the informal waste pickers. Compensation measures and activities to facilitate alternative employment for waste pickers will be identified through consultation activities especially focusing on employment on the Project and the new solid waste facility. It has already been established that the Special Purpose Vehicle (SPV) set up to manage the new solid waste facility will require 23 permanent employees responsible for different aspects of the operations. This might be extended with additional opportunities in the closing and sealing of exiting dumpsites, construction of access roads and other permanent and temporary structures.

The livelihood of informal and often stigmatised waste pickers is an important issue and will be handled sensitively. The first alternative that requires the least change in terms of work patterns is to formalise the waste pickers and train them to work in the new Hrazdan solid waste facility or for the solid waste companies responsible for management of other dumpsites in the area. The

waste pickers may be reluctant to declare their employment to acquaintances and family members, thus they may not be interested in a formal job in waste management. The demographics observed at the sites are varied from younger men and women to middle aged and older men. The fact that they claimed to have no other employment – not even seasonal jobs in agriculture and construction – means that they are totally dependent on the dumpsites that will be closed down and on the Hrazdan site that will be modernised with no public access to the waste. It is important to identify opportunities for the waste pickers that reflect their needs and skills through consultation activities.

It is expected that some waste pickers will chose not to be involved in the livelihood restoration measures and there will be a natural migration of waste pickers to smaller dumpsites in the area.

## 5.8

### DEVELOPMENT OF A DETAILED LAND ACQUISITION AND LIVELIHOOD RESTORATION PLAN

Once all the necessary information is collected through the steps detailed below and a detailed LALRP is prepared, independent experts should review the LALRP to ensure that it is sufficient or there is a need to include detailed plans for the land acquisition activities. This plan will be based on this LALRF and will use the details of affected groups, land owners, employees of solid waste management companies and waste pickers and their socio-economic status to determine the appropriate mitigation and livelihood restoration measures.

The detailed LALRP will contain an updated and tailored Entitlements Matrix, consultation activities for waste pickers, implementation arrangements, plans for monitoring and evaluation of livelihood restoration activities. The detailed LALRP will be developed once the detailed full designs of the Hrazdan solid waste facilities are confirmed and surveys provide detailed information on the affected waste pickers. The LALRP will be finalised in consultation with relevant stakeholders before any land negotiation, land acquisition or restriction to access livelihoods start. The detailed designs of the Hrazdan solid waste facility will also inform land needs for the Project and associated infrastructure, as well as the SPZ that is likely to be 300m.

# 6

## BASELINE DATA AND INVENTORIES

Baseline data was collected from previous Project documentation and during the site visits in May 2015. The site visit included visits to five of the waste dumps that will be closed down including the Hrazdan dumpsite which will be sealed once the Hrazdan landfill is built and is operational.

## 6.1

### LAND ACQUISITION AND LAND USE

A residential property, summer orchard and fence was identified adjacent to the current Hrazdan landfill site. It will certainly be impacted by the construction and it is most likely situated within the SPZ. It is likely that physical displacement will be required for this household, however, it should be confirmed at a later stage when the full detailed designs are ready with regard to project specification of the site boundary of the new Hrazdan Landfill boundary, the SPZ boundary and also associated routes of any roads, cabling or pipes (that may be needed).

According to the Armenian legislation it is assumed that the SPZ will be 300m as prescribed in the regulations for all regional and municipal landfills. The orchard is a second home and summer residence providing livelihood from fruits and vegetables, however, it cannot be evaluated if the produce is only for personal use. Based on the size of the land, an estimated maximum 1-2 hectare, it is unlikely that substantial income is derived from fruit and vegetable production. A number of other houses, grill bars and structures next to the highway further from the site were observed. These are at a reasonable distance from the site and are more likely to be outside the

identified SPZ. These businesses are likely to be positively impacted by the increased worker presence at the site. Due to the close proximity to the nearest settlement, 500m, the construction phase is likely to develop services and business activities in the settlement and along the access roads to the site.

Towards the nearest settlement and around the access roads, several land plots have been identified within the planned SPZ. These land plots are likely owned by residents of the nearest settlements and cultivated. At the time of the site visit, there were groups of people manually working on some of the mentioned land plots. Based on the interviews, the cadastre system is strong in Armenia so if a land plot is cultivated, it is either owned by the person who cultivated it or leased from the state. It is highly unlikely that informal land use will be an issue, however, it cannot be fully excluded, especially informal land lease from individuals. The census and survey activities will be timed according to the agricultural seasons to allow for the recording of all land owners and land users including land users informally using or leasing land.

The roads leading to the Hrazdan site are not appropriately paved, the immediate access roads are narrow dirt roads. Apart from the main access road, there are other roads that go through villages that might be used for construction purposes. There might be additional houses along the different access roads and along the main highway that might be affected by the Project. The full detailed designs will confirm the plans for associated infrastructure and routing. This will further inform land acquisition and Project impacts assessments.

Gender issues are likely to emerge in terms of compensation and Project benefits to landowners, as land is usually registered in the name of the husband or inherited by male siblings if the daughter is married. In order to ensure that each member of the household benefits equally from the Project and has access to compensation measures, female members of the family will be included in all steps of land acquisition and livelihood restoration activities to ensure their meaningful participation in decision making.

## 6.2

### LIVELIHOOD IMPACTS

The scope of this LALRF is to focus on the Hrazdan site and waste pickers impacted by the closure of other waste dumps. A selection of dumpsites have been visited that will be closed down once the Hrazdan landfill site is operational and other houses and orchards close to the waste dumps were observed. Those houses will not be disturbed by the Project itself and might benefit from the closure and sealing of the waste dumps next to them. The Mayor who accompanied some of the site visits informally confirmed that these houses are outside the SPZ as stipulated under the relevant law of the Republic of Armenia.

The COWI report and recent research identified approximately 20-25 waste pickers working on the Hrazdan site and the waste dumps that will be closed. Through interviews with waste pickers and workers of the solid waste management company, it was not possible to get a precise number of waste pickers, although it was further estimated to be of the order of 20-25 people.

Based on three interviews with male waste pickers conducted at the Cherentevan, Hrazdan and Abovyan dumpsites, their stories were very similar: they worked in manufacturing and after the collapse of the soviet system became unemployed. As ex blue-collar workers in their 40's, their skills and experiences proved to be unattractive in the labour market, thus they had to search for alternative employment. They claimed to have no other employment, not even seasonal jobs in construction or agriculture and that they have been engaged at the dumpsite for decades. The waste pickers collect mainly plastic, metal, paper and sometimes glass. When asked about income they reported 3000-4000 AMD daily on average, noting that income is lower in winter time and higher in summer time. At the Abovyan dumpsite the reported monthly income was 100,000-150,000 AMD. The waste pickers confirmed that they work on site almost every day. The sorting of waste takes place at the dumpsites and then collection is organised over the phone.

The prices of recycled material based on the interviews are summarised in the Table 6-1 below.

**Table 6-1 Price of Recycled Material**

<b>MATERIAL</b>	<b>UNIT</b>	<b>PRICE</b>
Plastic	Kg or large blue bag	20 AMD or 1500 AMD
Copper	Kg	1500 AMD
Glass	Tonne	27 000 AMD
Paper – cardboard	Kg	15 AMD
Metal (general)	Kg	20-25 AMD

At the Cherentevan site, the interviewed waste picker confirmed that apart from him there are approximately 6-7 people picking waste, some for their livestock – pigs. They live in the houses along the access road opposite the cemetery, while others collect waste to recycle and sell. At the Hrazdan dumpsite, two women pickers outside the dumpsite were observed, and a car with two pickers arriving when the vehicle with the new waste left the site. According to an employee of the solid waste company, there are 2-3 permanent pickers on the site, although they only visit the site once or twice per week.

At the Abovyan site the interviewed waste picker confirmed that 5-7 other people also work on the site.

At the Yeghvard site there was a waste picker who declined the opportunity to be asked questions. The employee of the solid waste management company stated that he is not aware of anyone working formally for the company being engaged in informal recycling.

It was observed that some pickers had mobile phones and used PPE. One of the interviewees claimed to be the manager of the site, which suggests a high level of organisation i.e. organising dumping trucks and where they should dump the waste, as well as calling the collection trucks when there was enough recycled material to sell on. At other sites, the waste pickers claimed to have no influence over dumping and collection times and no communication with the relevant authorities. All interviewees confirmed that the solid waste companies send their staff on a regular basis to maintain the sites and clear access roads, so they might understand the waste picking patterns.

A few female pickers were observed at the Hrazdan dumpsite, leaving the landfill area. It was not appropriate to stop them to ask questions about their activities on the site. Although, women and children were not observed at any of the other dumpsites, it is safe to assume that they might be involved in waste picking at least on the Hrazdan landfill site.

All of the interviewees claimed that waste pickers in the cities already recycle the waste received by the dumpsites. It was established that waste picking in the cities and villages is a large scale operation undertaken by numerous individuals and occasional waste pickers. The scope of this document is to focus on the Hrazdan dumpsite and the waste pickers working at the closing dumpsites, thus the LALRF activities will not be applicable to any waste pickers in the cities or villages who do not work at any of these locations.

The team visit provided some useful insights to the livelihoods and work patterns of waste pickers, however it is not comprehensive and more information needs to be collected before the LALRP is prepared.

## 7

## DISCLOSURE OF INFORMATION, PARTICIPATION AND CONSULTATION

Public meetings and stakeholder consultations with representatives of local government of the municipalities will need to be organised in the line with the Stakeholder Engagement Plan (SEP). It is important to conduct interviews and separate meetings with waste pickers, owners and users of land that will be acquired and people who will lose access to their land in the affected area in order to gather insight to preferred livelihood restoration measures. The consultation activities should follow the schedule of the Project and should start prior to the construction activities at the Hrazdan site and closure of dumpsites.

The MTAES is committed to providing the public and affected people with all relevant Project information to enable their informed participation. The LALRF together with other Project documents will be uploaded on the websites of the MTAES and Kotayk Regional Municipality, while hard copies of the documents in Armenian will be available from the local municipalities or mayors' offices.

## 8

## GRIEVANCE MECHANISM

A grievance mechanism set up under the SEP will be used to collect feedback, questions and comments regarding this LALRF and the land acquisition and livelihood restoration process more generally. It will be put in place early in the process to receive and address stakeholder comments and questions in a timely manner and provide further information on compensation and livelihood restoration measures to the people affected by physical or economic displacement.

The MTAES will establish an official system for redressing grievances and will allow affected people to raise complaints (including anonymously) through various channels including e-mails, letters, phone calls, personal visits to representatives and by using the grievance form provided as Appendix A of this document.

Grievances will be recorded in a grievance log with details of the issue, acknowledgement of receipt, actions taken and date of resolution.

## 9

## LALRF IMPLEMENTATION, BUDGET, MONITORING AND REPORTING

MTAES will be responsible for the implementation of all aspects of the LALRF. Parties involved in the different aspects of Project implementation will be required to comply with the requirements set out in this LALRF and later in the detailed LALRP.

The implementation of the detailed LALRP shall start prior to construction activities commencing in Hrazdan and before the dumpsites in the other villages and cities are closed and sealed. In general the LALRP implementation will have three key stages:

1. Public meetings and socio-economic surveys that are conducted and the negotiating process relating to physical and economic displacement starting. The detailed LALRP shall be developed at this stage based on information from the socio-economic surveys. Additional consultations may be necessary to discuss the LALRP with affected people.
2. Provision of property rights, payment of compensation, implementation of LALRP and related activities.
3. Monitoring and reporting process of the LALRP.

The budget needed for the implementation of the LALRP will be established after the completion of the census and survey activities, once the actual number of households, land plots and waste pickers are known. The budget will cover land acquisition, compensation, livelihood restoration, resettlement, monitoring and evaluation as well as contingencies and administrative expenses. The cost of livelihood restoration will be included in the overall costs of the Project.

The specific monitoring measures are included to ensure that income and living standards of affected people are restored to pre-project levels or improved. Table 9-1 below summarises the key indicators and frequencies of monitoring required.

**Table 9-1 Monitoring Indicators**

INDICATOR	DATA TO VALIDATE	FREQUENCY	RESPONSIBILITY
<b>Input indicators</b>			
Spending on land acquisition and livelihood restoration	Financial records of transactions	Annual	MTAES
Number of affected people by category	Census and grievance mechanism	Quarterly	MTAES
<b>Output indicators</b>			
Number of compensation agreements signed, number of affected people enrolled in livelihood restoration measures, number of land agreements signed	Data management systems	Monthly	MTAES/consultants
Number of people received compensation for land or completed training for livelihood restoration, number of people found alternative employment	Data management systems	Monthly	MTAES
LRP or LALRP activities provided	Data management systems	Monthly	MTAES
Grievance mechanism	Grievance log	Monthly	MTAES

On-going monitoring, evaluation and periodic reporting of LALRF and later LALRP implementation (including the indicators provided above) will be undertaken by MTAES and will involve the participation of key stakeholders such as affected communities. A completion audit will be required to evaluate the success of activities under the LALRF and LALRP.

MTAES will include monitoring data and progress reports on LALRF and LALRP activities in quarterly reports during the land acquisition and livelihood restoration process and also summarise relevant information in their annual reports to EBRD as required by the overall Environmental and Social monitoring of the Project. MTAES will also provide monitoring data on livelihood restoration available to the public in these annual reports.

# Appendix A

**GRIEVANCE FORM**

**Ministry of Territorial Administration and Emergency Services**

Government House, Republic Square, Yerevan 0010

Tel: +374 (10) Fax: +374 e-mail: [kotayq.swm@gmail.com](mailto:kotayq.swm@gmail.com)

**Kotayk Solid Waste Management Project**

**FORM for COMMENTS and SUGGESTIONS**

**Contact details of person submitting the comments and suggestions**

We would like you to provide your name, address and e-mail, if possible. If you wish to remain anonymous, this is not a problem. Please just write ANONYMOUS in the box below. Your comments will still be considered by the Ministry of Territorial Administration and Emergency Services. You can write on the reverse side or on additional pages. You do not need to fill in the grey section of this form. It is for our registration of your comment and response to it. After you have filled in this form, it can be submitted by letter, by fax or by e-mail to the Ministry of Territorial Administration and Emergency Services (see the contact details above).

Name

Address

Telephone

E-mail address

**Comments and suggestions concerning the Kotayk Solid Waste Management Project**

Would you like to receive information on the Project developments?  Yes  No

If yes, how would you like to receive it:  TV  letter  poster  e-mail  website

Which contact language you prefer:  Armenian  Russian  English

**STATUS OF COMMENT**

*How was the comment received:*

In person  By phone  At reading room  By mail  By email  Other (please describe).....

Comment registration date:

Comment number:

Registered by:

:

Response required Yes/No

Person responsible for preparing the response:

Response sent (date):

Response registered (date):