Draft Resettlement Plan

Project Number: 55135-001
January 2023

Uzbekistan: Samarkand Solar Power Project


This resettlement plan is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature. Your attention is directed to the "terms of use" section of ADB's website.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.
Samarkand Solar PV Project

Livelihood Restoration Plan

Masdar

Project number: 60667132

January 2023
Quality information

Prepared by
James Askwith
Principal Social Consultant

Checked by
Katerina Koshcheeva
EIA Consultant
Alessandra Awolowo
Associate Social Consultant

Verified by
Iain Bell
Regional Director, Environment and Sustainability, UK&I

Approved by
Iain Bell
Regional Director, Environment and Sustainability, UK&I

Revision History

<table>
<thead>
<tr>
<th>Revision</th>
<th>Revision date</th>
<th>Details</th>
<th>Authorized</th>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>20-10-2022</td>
<td>DRAFT</td>
<td>Y</td>
<td>Iain Bell</td>
<td>Regional Director, Environment and Sustainability, UK&amp;I</td>
</tr>
<tr>
<td>02</td>
<td>25/11/2022</td>
<td>DRAFT</td>
<td>Y</td>
<td>Alessandra Awolowo</td>
<td>Associate Social Consultant</td>
</tr>
<tr>
<td>03</td>
<td>07/12/2022</td>
<td>DRAFT</td>
<td>Y</td>
<td>Iain Bell</td>
<td>Regional Director</td>
</tr>
<tr>
<td>04</td>
<td>23/12/2022</td>
<td>DRAFT</td>
<td>Y</td>
<td>Iain Bell</td>
<td>Regional Director</td>
</tr>
<tr>
<td>05</td>
<td>17/01/2023</td>
<td>Following lenders’ comments</td>
<td>Y</td>
<td>Iain Bell</td>
<td>Regional Director</td>
</tr>
<tr>
<td>06</td>
<td>24/01/2023</td>
<td>Draft for Disclosure</td>
<td>Y</td>
<td>Iain Bell</td>
<td>Regional Director</td>
</tr>
</tbody>
</table>
## Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOI</td>
<td>Area of Influence</td>
</tr>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
</tr>
<tr>
<td>CCTV</td>
<td>Closed Circuit Television</td>
</tr>
<tr>
<td>CLO</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>EHS</td>
<td>Environmental, Health and Safety</td>
</tr>
<tr>
<td>EMA</td>
<td>Environmental Management Authority</td>
</tr>
<tr>
<td>EPs</td>
<td>Equator Principles</td>
</tr>
<tr>
<td>ESIA</td>
<td>Environmental and Social Impact Assessment</td>
</tr>
<tr>
<td>ESMS</td>
<td>Environmental and Social Management System</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organisation</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GHG</td>
<td>Green House Gas</td>
</tr>
<tr>
<td>GIIP</td>
<td>Good International Industry Practice</td>
</tr>
<tr>
<td>GW</td>
<td>Gigawatt</td>
</tr>
<tr>
<td>ha</td>
<td>Hectare</td>
</tr>
<tr>
<td>HV</td>
<td>High Voltage</td>
</tr>
<tr>
<td>ID</td>
<td>Identification Number</td>
</tr>
<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organisation</td>
</tr>
<tr>
<td>km</td>
<td>Kilometres</td>
</tr>
<tr>
<td>LRP</td>
<td>Livelihood Restoration Plan</td>
</tr>
<tr>
<td>Ltd</td>
<td>Limited</td>
</tr>
<tr>
<td>m</td>
<td>Metre</td>
</tr>
<tr>
<td>mm</td>
<td>Millimetre</td>
</tr>
<tr>
<td>MPI</td>
<td>Multidimensional Poverty Index</td>
</tr>
<tr>
<td>MV</td>
<td>Medium Voltage</td>
</tr>
<tr>
<td>MW</td>
<td>Megawatt</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>OTL</td>
<td>Overhead Transmission Line</td>
</tr>
<tr>
<td>PAP</td>
<td>Project Affected Person</td>
</tr>
<tr>
<td>PS</td>
<td>Performance Standard</td>
</tr>
<tr>
<td>PV</td>
<td>Photovoltaic</td>
</tr>
<tr>
<td>SCA</td>
<td>Social Compliance Audit</td>
</tr>
<tr>
<td>SCNP</td>
<td>State Committee for Natural Protection</td>
</tr>
<tr>
<td>SEP</td>
<td>Stakeholder Engagement Plan</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
</tr>
</tbody>
</table>
# Table of Contents

1. Introduction ................................................................................................................. 9
   1.1 Project Background .............................................................................................. 9
   1.2 Livelihood Restoration Scope and Objectives ....................................................... 9
   1.3 Limitations ........................................................................................................... 10

2. Project Description and Land Aspects ........................................................................ 10
   2.1 Project Location .................................................................................................. 10
   2.2 Project Components .......................................................................................... 12
   2.2.1 Solar PV Site ................................................................................................... 12
   2.2.2 Overhead Transmission Line (OTL) ................................................................. 12
   2.2.3 Land Take Requirements ............................................................................... 12
   2.2.4 Exclusions ....................................................................................................... 13
   2.3 Project Programme ............................................................................................. 13
   2.4 Minimising Resettlement .................................................................................... 13
   2.4.1 Alternatives Considered .................................................................................. 13
   2.4.1.1 No project-Alternative ............................................................................... 13
   2.4.1.2 Site selection ............................................................................................... 13
   2.4.1.3 Boundary adjustments ............................................................................... 14
   2.4.1.4 Transmission Route Selection ................................................................... 14

3. Legal & Policy Framework ......................................................................................... 15
   3.1 The Legal Framework .......................................................................................... 15
   3.1.1 The Constitution of the Republic of Uzbekistan .................................................. 15
   3.1.2 Land Code ....................................................................................................... 15
   3.1.3 Labor Code (21 December 1995) ..................................................................... 15
   3.1.4 Civil Code ......................................................................................................... 15
   3.1.5 Resolution 911 “About Additional Measures to Guarantee Property Rights of
        Individual Persons and legal Entities and to Improve Procedures of Land
        Acquisition and Compensations” ......................................................................... 15
   3.1.6 Resolution of the Cabinet of Ministers 146 “About the Measures of Improvement
        the Order of Provision of Land Plots for Implementation of Urban Development
        Activity and for Other Non-Agricultural Needs” ................................................ 16
   3.1.7 The Law of the Republic of Uzbekistan 552 “About Privatization of Non-
        Agricultural Land Plots” .................................................................................... 16
   3.1.8 Resolution 3857 of the Government of Uzbekistan “On Measures on
        Improvement Efficiency of Preparing and Implementation of Projects funded by
        International Financial Institutions and Foreign Governmental Financial
        Organizations” ..................................................................................................... 17
   3.1.9 Law 336 of Uzbekistan on Protection of Private property and Guarantees of
        Ownership rights .................................................................................................... 17
   3.1.10 Resolution of the President of Uzbekistan “About the Measures for Basic
        Improvement of Investment Climate in the Republic of Uzbekistan” ..................... 17
   3.1.11 Resolution of the Government of Uzbekistan “About Approval of the Procedure
        of Accumulating and Use of Funds of Centralized Stocks for Compensation of
        Damages to individual Persons and Legal Entities Due to Acquisition of Lands
        for Public Needs” .............................................................................................. 17
   3.1.12 The Law “On Appeals of Physical and Legal Persons” .................................... 18
   3.1.13 Resolution of the Cabinet of Ministers 1047 “On the procedure for the formation
        and use of centralized funds for the compensation to affected individuals and
        legal entities due to land acquisition for the state or public needs” of 26th
        December 2018 .............................................................................................. 18
   3.1.14 The National Construction Standards and Rules # KMK 2.10.08-97. “Land
        allocation standards for construction of 0.4 – 750 kV power networks” ............... 18
3.1.15 The Law “about procedures of seizure of land for social needs with compensation” of 29 June 2022 No. ZRU-781 .......................................................... 18

3.1.15.1 The purpose of this law is establishment of procedures of seizure of land and their parts belonging to physical persons and legal entities. This newly applied law is understood to be applied to the Project, however, this law has no impact on the outcomes of the LRP and is streamlining national governance requirements. The Law About Valuation Activities (2009 as amended to date) 18

3.1.15.2 The Law of the Republic of Uzbekistan on Pasture Land No 538 (21 May 2019) (currently being updated) .......................................................... 18

4. Stakeholder Engagement .......................................................... 35

4.1 Approach Overview .................................................................. 35

4.2 LRP Stakeholders and Priority .................................................. 35

4.2.1 Gender Inclusion .................................................................. 35

4.3 Previous Engagement ............................................................... 36

4.3.1 ESIA Scoping Phase – September 2020 ................................... 36

4.3.1.1 Methods ......................................................................... 36

4.3.2 ESIA Phase ........................................................................... 37

4.3.2.1 Methods ......................................................................... 37

4.3.2.2 Outcomes ........................................................................ 38

4.3.3 LRP Survey & Consultation Phase ........................................ 38

4.3.3.1 Methods ......................................................................... 38

4.3.3.2 Outcomes ........................................................................ 39

4.3.4 ADB Site visit ........................................................................ 40

4.3.5 Cut-off date Announcement .................................................... 40

4.3.6 LRP Verification ..................................................................... 42

4.3.7 Full Engagement Record ........................................................ 44

4.4 Future planned engagements as part of Livelihood Planning .......... 51

4.4.1 LRP Disclosure ..................................................................... 51

4.5 Grievance Mechanism ............................................................... 53

4.5.1 Overview ............................................................................. 53

4.5.2 Responsibilities ..................................................................... 53

4.5.3 Implementation of the Grievance Mechanism ......................... 54

4.5.4 Publicizing Grievance Management Procedures ...................... 55

4.5.5 Implementing the grievance mechanism .................................. 55

4.5.6 Submitting a Complaint .......................................................... 55

4.5.7 Receiving and Acknowledging Complaints and Grievances ........ 56

4.5.8 Screening and assessing the Grievance ..................................... 56

4.5.9 Define Grievance Resolution Approach and Responses ............ 56

4.5.10 Request feedback .................................................................. 57

4.5.11 Appeals and other recourse .................................................... 57

4.5.12 Monitoring and reporting of grievance mechanism .................. 57

5. Socio-Economic Baseline ........................................................... 58

5.1 Local Socio-Economic Setting .................................................... 58
5.1.1 Administration, Population and Ethnicity ................................................................. 59
  5.1.1.1 Formal Administration .............................................................................................. 59
  5.1.1.2 Population ................................................................................................................. 59
  5.1.1.3 Ethnic composition .................................................................................................. 59
  5.1.1.4 Economy .................................................................................................................. 60
5.2 The Project Area: Solar PV Area .................................................................................... 60
  5.2.1 Historic Leaseholders .................................................................................................. 60
  5.2.2 Herders ....................................................................................................................... 65
  5.2.3 Feed collection ........................................................................................................... 67
5.3 The Project Area: Overhead Transmission Line .............................................................. 68
  5.3.1 Livestock Rearing under the Overhead Transmission Line ........................................ 74
5.4 Vulnerable People .......................................................................................................... 74
6. Assessment of Resettlement Impacts .............................................................................. 75
  6.1 Leaseholders .................................................................................................................. 75
    6.1.1 The Solar PV Area ....................................................................................................... 75
    6.1.2 The Overhead Transmission Line ............................................................................... 76
    6.2 Informal Land Users ..................................................................................................... 77
    6.2.1 Herders and feed gatherers ......................................................................................... 77
    6.3 Affected Structures ....................................................................................................... 78
    6.4 Economic Trees and Crops ......................................................................................... 78
    6.5 Farmworkers ................................................................................................................. 78
    6.6 The project access route ............................................................................................... 78
7. Eligibility & Entitlements ................................................................................................ 79
  7.1 Eligibility Exclusions ..................................................................................................... 79
  7.2 Entitlement Framework ................................................................................................ 80
8. Valuation & Compensation ............................................................................................ 85
  8.1 The valuation regulations in Uzbekistan ....................................................................... 85
  8.2 Valuation principles for this LRP .................................................................................. 85
  8.3 The valuation process .................................................................................................... 85
  8.4 The compensation process ............................................................................................ 87
  8.5 Summary of valuation results ....................................................................................... 88
9. Safeguarding Vulnerable People .................................................................................. 89
10 Livelihood Restoration .................................................................................................. 93
11 Implementation ............................................................................................................... 99
  11.1 Roles and Responsibilities ............................................................................................. 99
  11.2 Composition of the LRP Committee .......................................................................... 100
  11.3 Implementation Schedule ............................................................................................ 101
  11.4 Implementation budget ............................................................................................... 101
12 Monitoring & Reporting ................................................................................................ 104
  12.1.1 Internal Monitoring .................................................................................................. 104
  12.1.2 External Independent Monitoring .......................................................................... 104
  12.1.3 Indicators .................................................................................................................. 104
  12.1.4 LRP Completion Audit ............................................................................................ 108

Figures

  Figure 2-1 – Samarkand Solar PV Project Location .............................................................. 11
  Figure 3-1: Main elements of the Social Protection System (Source: ILO, UNICEF, World Bank (2020)) ........................................ 20
  Figure 4-1 Engagement with historical leaseholder ......................................................... 50
  Figure 4-2 Engagement with professional herders .......................................................... 50
Tables

Table 1-1. Key Project characteristics ........................................................................................................................................... 9
Table 3-1: Institutional framework of land privatisation in Uzbekistan .............................................................................................. 16
Table 3-2. Comparison between national legislation in Uzbekistan and international requirements of the project 28
Table 4-1 stakeholder group, stakeholders and priority in stakeholder engagement ........................................................................ 35
Table 4-2 - Stakeholder Groups Engaged During Site Visit ........................................................................................................... 38
Table 4-3- Stakeholders identified and engaged with in LRP site visits ............................................................................................. 38
Table 4-4. Stakeholder engagements that took place in the LRP process ............................................................................................ 44
Table 4-5. Responsible Persons and Contact Details .......................................................................................................................... 54
Table 5-1. Nearest Settlements to the Project .................................................................................................................................... 58
Table 5-2 – Historic Landowners ...................................................................................................................................................... 62
Table 5-3. Household Count of Education Attainment ........................................................................................................................ 70
Table 5-4. Affected Leaseholders Financial Circumstances ................................................................................................................ 71
Table 5-5. Summary socio-economic status of affected leaseholders along the OHTL ................................................................. 72
Table 5-6. Comparative Plot Size of Affected Leaseholders in OTL: .................................................................................................... 74
Table 6-1 – Summary of impacts on historic leaseholders ............................................................................................................... 75
Table 6-2 – Project land take of leaseholders along the OTL ............................................................................................................. 77
Table 7-1 – Eligibility Framework .................................................................................................................................................... 79
Table 7-2: Entitlement Framework .................................................................................................................................................. 81
Table 8-1 – Summary of valuation results ........................................................................................................................................ 88
Table 9-1 – Vulnerability categories .............................................................................................................................................. 89
Table 9-2 – Vulnerability Analysis ................................................................................................................................................ 91
Table 10-1 – Livelihood restoration measures, key risks and next steps for practical implementation .............................................. 94
Table 11-1 – LRP Roles responsibilities ....................................................................................................................................... 99
Table 11-2 – Draft Compensation Costs ....................................................................................................................................... 101
Table 11-3 – Livelihood Restoration Costs .................................................................................................................................. 101
Table 11-4 – LRP Management Costs ........................................................................................................................................ 102
Table 12-1. Input indicators to monitor the impacts of the compensation and livelihood restoration activities .................................. 105
1. Introduction

1.1 Project Background

The Government of Uzbekistan aims to develop up to 12 gigawatts (GW) of solar and wind power by 2030 through the development of privately financed and operated renewable energy projects. Scaling Solar is a World Bank Group program that assists governments to procure and develop large solar projects with private financing. The first solar photovoltaic (PV) plant, with 100 megawatt (MW) capacity, developed through Scaling Solar Program, is being constructed in Navoi region at the time of publication of this report.

World Bank Group’s Scaling Solar Uzbekistan Round 2 program aims to add over 400 MW of clean and renewable PV energy to the country’s energy mix. As part of this round, two sites — in Samarkand and Jizzakh regions have been identified for development.

This report covers the development of a 220 MWac solar PV project in Kattakurgan District, Samarkand region of Uzbekistan, referred to as “the Project”. The project site is approximately 20 km from Kattakurgan and approximately 50 km from Samarkand. The Project site area is 426 ha.

The Project will also comprise a 4.5 km overhead transmission line (OTL) from the on-site substation to the existing Ishtihan substation.

Table 1-1. Key Project characteristics

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>Kattakurgan District, Samarkand region, Republic of Uzbekistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSTALLED CAPACITY</td>
<td>220 MWac</td>
</tr>
<tr>
<td>SOLAR PV SITE AREA</td>
<td>426 ha</td>
</tr>
<tr>
<td>OVERHEAD GRID CONNECTION LINE</td>
<td>4.5 km 220 kV Steel lattice towers (23 towers)</td>
</tr>
<tr>
<td>NATIONAL GRID SUBSTATION</td>
<td>Ishtihan</td>
</tr>
</tbody>
</table>

Further details about the Project design, construction and operation are provided in Chapter 2.

1.2 Livelihood Restoration Scope and Objectives

This document considers any potential economic displacement that will be created by the Project including the Overhead Transmission Line (OTL) and any consequent temporary land restriction. The land within the proposed Solar PV Site boundary (PV Area) currently belongs to the Government land reserve but has been subject to a Land Acquisition Audit (LAA) into historical land use which may have already been cleared from the project area.

As the Project will need future international financing for its development, lenders will require the application of ADB’s Safeguard Policy Statement (SPS), including Involuntary Resettlement Safeguards. Therefore, the objectives of this LRP are to:

- Define national and international requirements for economic displacement.
- Outline procedures for the land acquisition and compensation to be carried out by State parties.
- Identify PAPs and understand the socio-economic characteristics of affected households.
- Evaluate and assess the socio-economic activities that are located within the Project Site.
- Define appropriate levels and means of compensation for losses resulting from the Project in line with National Law and ADB standards.
- Identify other assistance and measures to enable affected households to restore and improve their livelihood.
- Define roles and responsibilities of key parties in the Project.
- Propose an appropriate grievance resolution mechanism.
- Evaluate and address disclosure and consultation requirements required by the Project lenders.
1.3 Limitations
At the time of writing this draft (Version 04) of the LRP, not all engagements and the surveys for the LRP process has been completed. Still outstanding are:

- The LRP document has yet to be formally disclosed online and in the nearby communities.
- The valuation study is almost complete and a valuation is included in this LRP however it may be subject to some minor adjustments following disclosure.
- One leaseholder along the OTL did not provide all socio-economic data.
- One historical leaseholder is not based in Uzbekistan and therefore engagement was carried out by conference call.
- The boundaries of the Solar PV Area changed since the majority of fieldwork was conducted have only been fixed shortly before the completion of this draft. The boundary was confirmed not to trigger any additional displacement that is not included in this LRP. The changes to the boundary have been reflected in this document has far as possible.

2. Project Description and Land Aspects

2.1 Project Location
The proposed site is in the Kattakurgan District, Samarkand region, in the Republic of Uzbekistan. The nearest communities are Bulakchi and Damkhodzha. The Project Site is approximately 20km from the city of Kattakurgan and approximately 50km from Samarkand. The site can be accessed via a road at the south end of the facility. The project location is shown below in figure 2-1.

The Project Site area is approximately 426ha.

The Site Coordinates are:

<table>
<thead>
<tr>
<th>Geographic (WGS 84)</th>
<th>WGS 84 UTM 42N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longitude</td>
<td>66° 26’ 50” E</td>
</tr>
<tr>
<td>Latitude</td>
<td>39° 51’ 46” N</td>
</tr>
</tbody>
</table>

The OTL route is 4.5km, connecting the Project to the existing national grid substation Ishtihan.
Figure 2-1 – Samarkand Solar PV Project Location
2.2 Project Components

2.2.1 Solar PV Site

This is the area containing the Solar PV modules, inverters, transformers, grid connection interface and site office.

A brief function of the Solar PV components is described below:

- **Solar PV Modules** – These convert solar radiation into electricity through the photovoltaic effect in a silent and clean process that requires no moving parts.
- **Inverters** - These are required to convert the DC electricity to alternating current (AC) for connection to the utility grid.
- **Module Mounting Systems** - These allow PV modules to be securely attached to the ground at a fixed tilt angle, or on sun-tracking frames.
- **Step up transformers** - The step-up transformer takes the output from the inverters to the required grid voltage.
- **The grid connection interface** - This is where the electricity is exported into the grid network.

To prevent unauthorised access, the perimeter of the PV power plant will be fenced with an approximate 2.5 m high welded wire fabric fence with 0.5 m coil of razor wire mounted above. Gated access to the facility will be located at the south end of the facility, as well as the project sub-station. Pole mounted internal facing closed circuit television (CCTV) cameras will be installed around the perimeter of the site. Lighting of the fence shall be sufficient for the operation of the security CCTV system. The fencing and CCTV system is described in further detail in section 2 of the ESIA. At the time of writing, the project layout has been confirmed as fixed but the design within the Solar PV Area is still ongoing. Any further changes to the boundary of the Solar PV Area or OTL which cause additional displacement related impacts will require an addendum to this LRP.

2.2.2 Overhead Transmission Line (OTL)

The OTL will carry the electricity generated to the substation where it will be fed to the national grid. Along the OTL steel lattice towers will be used.

These towers are illustrated in Figure 28 of the Samarkand Solar PV ESIA.

The following safety and environmental aspects were considered in the design and route of the OTL to the extent possible:

- Avoid tracing the transmission line through protected areas, other environmentally sensitive areas or through mature forest stands.
- Avoid cultural and heritage sites.
- Place transmission line towers at high points in the terrain so that conductors can be chained over valleys, thus eliminating the need to remove trees.
- Locate the OTL along the base of mountain slopes, rather than in the centre of valleys where heavy birds might contact conductors.
- Locate the transmission line to avoid passing through settlements.
- Minimize the need to build new access roads whenever possible.
- Use existing roads and access roads whenever possible.
- Ensure that minimum distances between cables and the ground, highways, roads, railway lines, buildings, communication systems, etc. are complied.
- Avoid farm and residential structures and infrastructure in consultation with leaseholders along the line.

Further information about the project components can be found in chapter 2 of the Samarkand Solar PV ESIA.

2.2.3 Land Take Requirements

The type of land impacts can be divided into three categories:
• Permanently affected areas include the Solar PV Area and the OTL footprints. These areas of land will be required by the project during construction and operation and will only become available to the community following the decommissioning of the project.

• Temporarily affected areas are required during the construction phase and include the tower assembly areas adjacent to each tower footprint and an 18m wide right of way along the OTL required for the suspension of power cables. Access to each tower will be obtained via this right of way. The sterilization Zone includes land 32m meters either side of the OTL. The land inside the sterilization zone will not be occupied by the project however users of this land will be required to abide by safety conditions, in particular structures or trees over 6m tall cannot be present in this area. All other farming activities can continue inside this zone.

2.2.4 Exclusions

This LRP excludes the following project components which are still being finalised:

• The worker accommodation camp will not be located on site but rather workers will stay in existing accommodation at nearby settlements. It is not anticipated that there will be any displacement as a result of worker accommodation but if any are identified, this will trigger the need to update or addendum to this LRP.

• The access to the Solar PV Area is still not finalised and will be finalised prior to construction. The access route will however utilise the existing road network and is not expected to cause any displacement. Any displacement identified during final design of the access road will result in the need for an update or addendum to this LRP.

2.3 Project Programme

At the time of writing (November 2022), the final Project design is yet to be completed but the overall site layout, including the OTL line route is fixed. Construction will start once all the required permits and licences have been granted by the relevant authorities. Construction of the PV power plant will take approximately 12 months to complete. A further one and a half months will be required to commission and test the installation before the PV power plant can start supplying the grid in the first quarter of 2024.

The key stages of construction, from mobilisation of workforce to commercial operation date are detailed in section 2.5 of the Samarkand Solar PV ESIA.

2.4 Minimising Resettlement

2.4.1 Alternatives Considered

2.4.1.1 No project-Alternative

The first alternative considered for any new project is a no development option, which means not adding a low carbon (solar) generation capacity into the country’s energy mix. Uzbekistan has vast natural gas reserves, and over 85% of electricity here is being produced from natural gas (International Energy Agency, 2020).

Presidential Decree No. PP-4477 of 4 October 2019 approved the Strategy for the Transition of the Republic of Uzbekistan to the Green Economy for the Period 2019–2030 (The President of the Republic of Uzbekistan, 2019). Priority goals of the Strategy include reducing specific GHG emissions per unit of GDP by 10% of the 2010 level and raising the share of the renewable energy sources in total electricity generation to more than 25% by 2030.

With the projected growing electricity demand, increasing the share of low-carbon energy generation, like solar, in the national energy mix is vital for carbon emissions reduction and mitigation of global climate change. Owing to its geographical location and climate Uzbekistan has significant solar potential. In case of a no development option, the opportunity to contribute to the achievement of the strategy goals will be missed.

2.4.1.2 Site selection

In identifying a suitable site for solar energy developments, various elements need to be considered. These include factors such as:

• Solar resource

• Environmental designations

• Residential properties
• Site access
• Grid connection

With these criteria in mind, the Government of the Republic of Uzbekistan identified several potential sites for the utility scale solar PV facilities throughout the country, including Samarkand region. Following site screening visits by the engineering company TYPSA and decisions by the Government of the Republic of Uzbekistan, the Solar PV Site subject to this report was carried forward and selected for further studies.

It should be noted that the site was presented to potential bidders by the Government of Uzbekistan and as a result there was no opportunity for Masdar (the developer) to influence site selection however Masdar have influenced the boundary design of the Solar PV Area and the route of the OTL in order to avoid unnecessary environmental and social impacts including unnecessary displacement. Further information on the site selection is provided in the ESIA.

2.4.1.3 Boundary adjustments

Masdar, AECOM and its local subconsultant Green Business Innovation (GBI) worked with the local cadastral office to ensure that the boundary of the Solar PV Area did not overlap with any existing leaseholds (not including historical leaseholds that had already been terminated as detailed in section 5.2.1). The local cadastral office provided a map of leaseholds to AECOM and Masdar that were held in the area. GBI, AECOM, Masdar and the local cadastral office then worked together to revise the project boundaries from the ones originally provided to Masdar by the MoE to ensure no further displacement of leaseholds occurred within the solar PV area.

2.4.1.4 Transmission Route Selection

The primary route for the OTL was designed in consultation with affected leaseholders along the route of the line in order to avoid structures, high value crops or other social receptors where possible.
3. Legal & Policy Framework

3.1 Legal Framework

3.1.1 The Constitution of the Republic of Uzbekistan

Art. 105 of the Constitution recognises mahallas as self-governing bodies whose chairs and advisers are elected by citizens for terms of two and a half years. This is relevant because this type of organisation is an important channel for the decision-making process of local communities. Mahallas carry out general initiatives and measures, including those connected with ecology, directly in villages, regions, districts and cities. The main principles of mahalla are democracy, publicity, social justice, humanism and mutual aid. A mahalla is responsible for taking decisions regarding problems of local importance, including issues of improving and development of infrastructure, arrangement of khashars (voluntary unpaid work on Sunday) and provision of social aid to low-income families, among others.

3.1.2 Land Code

The Land Code was adopted in 1998 and regulates: (i) withdrawal and provision of land plots for non-agricultural needs, (ii) compensation for losses of agricultural production, (iii) ownership and rights on land, (iv) responsibilities of various state authorities related to land management, (v) rights and obligations of land possessor, user, tenant and owner, (vi) land category types, (vii) land acquisition and compensation, (viii) resolution of land disputes and land protection, (ix) terms for the termination of rights to land plots, (x) seizure and land acquisition of land plot for state and public needs, (xi) terms of seizure of land plot in violation of land legislation.

It recognises (i) land tenants, (ii) lessees, (iii) landowners, and (iv) land users as eligible for compensation for losses and damages in case of land acquisitions.

Generally, all land in Uzbekistan is state property. However, in March 2020 the Law on Privatization of Non-Agricultural land Plots came into effect (see 3.1.7).

3.1.3 Labor code (21 December 1995)

Regulates labor relations of all forms of employment relations and mandatory for all employers and employees including the Uzbekistan nationals, foreign nationals stateless persons and employees of the foreign international organisations and legal entities. Among other norms, the Code has provisions about (i) protection of the interests and occupational health and safety of employees, and (ii) indemnity compensation for the loss of employment to be paid by the employers. In involuntary resettlement cases, the project proponents pay compensations. This does not guarantee compensation to informal employees and therefore does not guarantee that all APs lose jobs receive compensation.

The land acquisition as a result of this Project will not result in the loss of a job by anyone affected by the Project. Therefore, compensation as a result of job loss is not applicable and this is not something that will be considered when conducting a gap analysis between national requirements and lender standards.

3.1.4 Civil Code

The Civil Code regulates (i) property, (ii) property objects, (iii) basics of termination of property rights, (iv) right for compensation payments in case of property right loss, (v) rights on intellectual property, (vi) general rules for property acquisition, (vii) calculation of property cost and rights for compensation, and (viii) terms of rights termination.

It states that losses unless governed by another legal document may be claimed as compensation in full this includes necessary expenses to restore the rights, loss or damage to any property, lost revenues. Additionally, the aggrieved party may claim any revenue made by any other party based on the violated rights.

Furthermore, the code states that any rights to property are subject to state registration.

3.1.5 Resolution 911 “About Additional Measures to Guarantee Property Rights of Individual Persons and legal Entities and to Improve Procedures of Land Acquisition and Compensations”

This resolution from the Cabinet of Ministers defines procedures for the compensation of individuals and legal entities affected by land acquisitions for public needs and investment projects. It applies to residential land plots, houses, building and structures of individuals and legal entities. It does not apply to privatized land plots.

The general principles are as follows:
• Acquisition of a land plot for public needs shall be carried out with the landowner’s consent or in agreement with the land user, by a resolution of Councils of People’s Deputies as well as resolutions of the President and Cabinet of Ministers of Uzbekistan.

• Following such a resolution, local government offices (Khokimiyats) issue their resolution for demolition of buildings on the acquired land. These are subject to review and approval of local justice departments.

• Compensation agreements are to be prepared and signed by initiator of the acquisition and the land users. These have to be certified by a notary and any demolition can only start after the agreed compensation has been paid in full.

• Existing land allocation resolutions cannot be altered or terminated to facilitate further acquisition of land.

• Furthermore, it sets out a framework consisting of acceptable purposes for land acquisitions and their processes, including elements that are to be compensated and compensation modalities.

3.1.6 Resolution of the Cabinet of Ministers 146 “About the Measures of Improvement the Order of Provision of Land Plots for Implementation of Urban Development Activity and for Other Non-Agricultural Needs”

Mainly focused on agricultural lands, this resolution regulates (i) procedures for providing land plots for urban development and other non-agricultural uses, and (ii) procedures for compensating affected parties. The latter highlights that before any changes are made to the plot the compensation process has to be concluded. It also establishes a fund for the compensation of agricultural land losses that is based on a soil quality indicator.

3.1.7 The Law of the Republic of Uzbekistan 552 “About Privatization of Non-Agricultural Land Plots”

The law allows the privatisation of non-agricultural land specifically for citizens of Uzbekistan and resident legal entities. Previously all land was inherently owned by the state of Uzbekistan. This law represents the start of a land privatisation reform in the country and allows for the privatisation of land plots that fall outside of the following definition of agricultural land according to article 8 of the Land Code:

“Land provided for agricultural needs or designated for such purposes. It includes irrigated and rain-fed lands, croplands, lands with hayfields, permanent grassland, permanent crops and vineyards”

As the privatisation process has only started in 2020, it is understood that a substantial amount of land is still held either in lifelong inheritable possession, permanent use, temporary use, or lease and joint possession and use. These use rights can be revoked in cases of constant violation of stipulated land use.

There are six kinds of arrangement for rural land (FAO, 2022):

• Household plots, consisting of the house and a small garden.

• Tamorka, a private parcel of land usually adjacent to the house meant for subsistence. The size is regulated to be 0.35 ha of irrigated land and 0.5 ha of non-irrigated land. This is however subject to availability as the land is often taken from the land reserves of collective farms (type 3).

• Shirkats, collective farms who are structured as joint stock enterprises that occupy most of the agricultural land. These contract fields to farmers each year stipulating crop types and production levels.

• Individual farms, these are often set up on long-term leases lasting up to 50 years. These are the result of a process overseen by the agricultural authority and the local government.

• Dekhan, peasant farms which are small family-run operations from 0.35 ha to 1 ha on land of one of the Shirkats, that are the result of a process overseen by the Shirkats. These can be inherited but may only be worked by family members.

• Collective gardening land. These are limited to 0.006 ha per member for garden-vineyard companies and 0.08 ha per member for kitchen-gardening companies.

Additionally, the law covers multiple scenarios of how privatised land can be nationalised again.

It also establishes an institutional framework that is outlined in Table 3-1.

Table 3-1: Institutional framework of land privatisation in Uzbekistan

<table>
<thead>
<tr>
<th>Institution</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PreparedFor: Masdar

AECOM
Cabinet of Ministers
- Development, approval, and publication of documents regarding urban planning
- Establish the legal procedure to privatise vacant plots of land
- Establish fee payment amounts and methodologies
- Establish procedures for determining market value of the land plots

State Committee of the Republic of Uzbekistan on Land Resources, Geodesy, Cartography and State Cadastre (also referred to as Gosgornzemgeodescadastre or GKZGDK)
- Registration of rights to land plots
- Management of land plot inventory
- Definition of spatial characteristics of plots
- Preparation of documentation for land plots

Fund for Urbanization Development
- Run e-auctions to sell the plots
- Safekeep money generated by privatisation of land plots
- Use funds for urbanisation processes

Local Municipalities (also referred to as Khokimiyats)
- Identify land plots to privatise
- Identify land plots to transfer to the Fund for Urbanization Development
- Take relevant decisions on plot privatisations

Agency for State Assets Management
- Organise e-auctions and ensure their proper execution

Source: Kosta Legal (2019)


This resolution regulates that any compensation due to projects funded by international donors must adhere to the rules of the international donor if such exist.

3.1.9 Law 336 of Uzbekistan on Protection of Private property and Guarantees of Ownership rights

This law regulates the right for owners of private property to receive full market value compensation should their property be acquired or damaged for state needs. Additionally, it states that for any changes to the owner’s rights to occur, the compensation process has to be concluded, including any potential appeals.

3.1.10 Resolution of the President of Uzbekistan “About the Measures for Basic Improvement of Investment Climate in the Republic of Uzbekistan”

The resolution requires the consultation with affected parties before the acquisition of land. Additionally, it reinforces the need to conclude the compensation process before the acquisition. Additionally, it covers reimbursements in case of illegal acquisition orders by government bodies. Furthermore, it lists the valid reasons for involuntary land acquisitions: State defence and public security, protected natural areas, establishment and operation of free economic zones, implementation of obligations arising from international treaties; discovery and development of mineral deposits, construction (and reconstruction) of roads and railways, airports, aerodromes, air navigation facilities and aviation centres, railway transport facilities, bridges, subways, tunnels, energy systems and power lines, communication lines, space activity facilities, trunk mains, engineering and communication networks.

3.1.11 Resolution of the Government of Uzbekistan “About Approval of the Procedure of Accumulating and Use of Funds of Centralized Stocks for Compensation of Damages to individual Persons and Legal Entities Due to Acquisition of Lands for Public Needs”

The resolution establishes the Republican Centralized Fund (RCF) responsible for the funding of the compensations necessary for land acquisitions for public and state needs.
3.1.12 The Law “On Appeals of Physical and Legal Persons”
This law regulates requirements and processes for appeals and grievances to government bodies. It also provides a time frame for reviewing resolving these: 15 days with the option to extend to one case on the basis of case complexity. Resolution of Cabinet of Ministers “About Approval of Rules of Protection of Power Supply Facilities”

The resolution regulates land issues regarding the land needs of power supply facilities, covering the physical objects but also access to them for maintenance or repair. In this capacity it also regulates compensation for any damages that arise from these. It also forbids land users to construct or plant anything that would disrupt the safe operation of the power infrastructure. There is no right to compensation for damages incurred by the process of returning the power infrastructure and surrounding land to the intended state.

3.1.13 Resolution of the Cabinet of Ministers 1047 “On the procedure for the formation and use of centralized funds for the compensation to affected individuals and legal entities due to land acquisition for the state or public needs” of 26th December 2018

This resolution defines the sources of compensation payments based on the type of projects. The allocation of funds for compensation is decided by the Supervisory Board of the Republican Centralized Fund (RCF).

3.1.14 The National Construction Standards and Rules # KMK 2.10.08-97. “Land allocation standards for construction of 0.4 – 750 kV power networks”

This document specifies width of land strips and size of land plots to be temporarily and permanently allocated for construction of 0.4 – 750 kV power supply lines, transmission towers, transformer substations and switchyards. It provides the following formula for the permanent land requirements of (i) double column transmission towers:

\[ F = \pi \times R^2 \]

where \( F \) is the land area occupied by the tower, \( n \) is the number of towers, and \( f \) represents an 1 to 1.5 m (depends on soil type) land strip around the tower. Land need for (ii) tricycle towers is calculated according to the following formula: \( F = \eta \times (F_0 + f) \times \pi + R_2 \), where \( \eta \) is the number of columns, and \( R \) is a 1.5 m circle around the tower columns. The temporary land needs for (iii) power line installation varies from 8 m for 1.0 kV line towers and communication line towers to 32 m for double-chain 220 kV lines. The construction of switchyards and substations ranges from 50 m\(^2\) to 25 ha depending upon project requirements.

3.1.15 The Law “about procedures of seizure of land for social needs with compensation” of 29 June 2022 ZRU-781

3.1.15.1 The purpose of this law is establishment of procedures of seizure of land and their parts belonging to physical persons and legal entities. This newly applied law is understood to be applied to the Project, however, this law has no impact on the outcomes of the LRP and is streamlining national governance requirements. The Law About Valuation Activities (2009 as amended to date)

This Law envisages that valuation is a licensed activity and the valuators should be licensed and independent (article 4). It envisages the events when valuation is mandatory including in case of acquisition of assets (article 11).

3.1.15.2 The Law of the Republic of Uzbekistan on Pasture Land No. 538 (21 May 2019) (currently being updated)

This law is designed with the purpose for the protection of pastures and regulations regarding field usage in Uzbekistan.

3.2 Institutional Framework
The Constitution and legislative norms and rules of the Republic of Uzbekistan determine the legislative, state and executive authority’s environmental and social responsibilities, and also the responsibilities of private developers. The Preamble of the Constitution recognises the “priority of the generally accepted norms of the international law” (UZINFOCOM, 2022). It is therefore considered that international conventions and ratifications will prevail over national legislation whenever the former are more stringent.

The supreme executive body responsible for nature protection in Uzbekistan is the State Committee for Nature Protection (SCNP), subordinated and accountable to Oliy Majlis (Parliament). It defines state policy, takes legislative acts, coordinates and manages the activity of ministries and agencies regarding E&S issues. The Cabinet of Ministers is the executive body responsible for the implementation of state nature protection policy, coordinate development and realization of state programs of socio-economic development. The Cabinet controls their execution and is responsible for registration and evaluation of nature resources. Obligations of regions regarding environmental protection are put to the Soviets of National Deputies, headed by the Leader of Administration (khokims). Regional and local government are responsible for registering and evaluating the condition of nature resources, ecologically harmful facilities and are responsible for control, nature protection and usage of nature resources.

Execution of nature protective measures, control function and responsibility regarding nature protection rests on a number of ministries and agencies. Responsibilities of these bodies include provision of stable system of state service, development and
realization of specialized programs, strategies and plans of actions and sustainable nature management. Regional departments and agencies are generally lower executive bodies of the SCNP and other responsible ministries on regional and district levels. Organizations at the regional level have the same structure as the republican level.

Public meetings (mahalla) are an independent mechanism of self-government, which carries out general initiatives and measures, directly in villages, regions, districts and cities.

3.3 Social Protection System

The country’s social protection system is largely inherited from the Soviet Union and is focused on the principles of full employment, universal childcare, and guaranteed old age income security. Its main components are the social insurance, social assistance, social care services, and labour market interventions.

The individual protection schemes are reported to have good vertical implementation but is lacking in terms of horizontal integration of schemes. Additionally, there is ambiguity how utilisation of one scheme may impact the eligibility to another. Another core problem is providing adequate information and access to the various schemes. This is illustrated by statistics showing that only half of the population and more importantly one-third of the lowest income households were not taking advantage of any scheme in 2020. This is mostly the responsibility of the mahallas and district-level employment centres who are also responsible for allocating the limited resources according to need.

Figure 3-1 shows the main elements of Uzbekistan’s social protection system and their financing. For a detailed assessment of the social protection system of Uzbekistan please see the report published by the International Labour Organization (ILO) in collaboration with UNICEF and the World Bank (ILO, UNICEF, World Bank, 2020).

It is important that the LRP builds on and utilises the existing social protection systems. Vulnerable individuals identified as part of this project will be encouraged to seek support from the existing social protection systems as well as receiving additional support from the project.
Figure 3-1: Main elements of the Social Protection System)

3.4 International Best Practice Guidelines

International lenders who are signatories to the Equator Principles (EPs) require projects that they finance to meet environmental and social management international standards. Beyond Uzbek legal requirements, the following international guidelines, regulations and policies applicable to involuntary resettlement will be followed and applied to the Project development and implementation:

- (IFC, 2007a).
- (IFC, 2007b).

Further detail relating to the IFC Performance Standards and Asian Development Bank Integrated Safeguards System are provided below.

3.4.1 Equator Principles and IFC Performance Standards

The Equator Principles (EP) apply to all new project financings with total capital costs of USD10 million or more across all industry sectors globally. The EPs represent a framework for project financing, which is underpinned by the revised IFC Performance Standards (PS).

The extent to which the EPs apply to a project depends on whether the country in which the project is located is “Designated” or “Non-Designated”. Projects within Non-Designated countries such as Uzbekistan are required to follow the standards and guidelines as set out in the IFC PSs and World Bank Environmental Health and Safety Guidelines.

The IFC PS of relevance to involuntary resettlement are detailed below:

- IFC PS 5 – Land acquisition and involuntary resettlement.

PS 5 is generally considered the global benchmark for the management of involuntary resettlement and this therefore of particular importance to this LRP. PS 5 includes key principles such as: providing compensation. The majority of principles of PS 5 are shared with the ADB Safeguard Policy Statement.

The key provisions of PS 5 are:

- The Project design will consider feasible options to avoid or minimize physical and/or economic displacement, while balancing environmental, social, and financial costs and benefits.
- Where such displacement cannot be avoided, the Developer will offer displaced communities and persons compensation and/or resettlement assistance to help them improve or restore their standard of living or livelihoods.
- The Developer will engage directly with affected communities and persons through a process of stakeholder engagement through the planning, implementation, monitoring, and evaluation of the resettlement process.
- The Developer will establish a grievance mechanism to receive and address specific concerns about compensation and relocation raised by displaced persons or members of host communities in a timely fashion.
- Where involuntary resettlement is unavoidable, the Developer will be required to prepare a Resettlement Action Plan (RAP) (in the case of physical displacement) and/or a Livelihoods Restoration Plan (in the case of economic displacement). The RAP/LRP must provide a comprehensive action plan for addressing resettlement impacts. It should describe the procedures and activities that will be taken to mitigate adverse project impacts, compensate for all losses, and provide development benefits to those who will be resettled or displaced because of the project. The Project Developer must be fully responsible for the resettlement process.
- In the development of the RAP and/or LRP, the Developer will be required to conduct a census to determine eligible peoples and an inventory of their assets as a basis of determining their asset holdings. Both will be linked to a suitable development moratorium.
- Where affected persons are required to be relocated, the Developer will offer feasible resettlement options, including adequate replacement housing or monetary compensation where appropriate.
Replacement housing will be provided with security of tenure. Security of tenure does not necessarily refer to leasehold or freehold title but may also refer to traditional rights provided by traditional authorities as may be argued to provide a higher degree of security of tenure in certain circumstances.

Economically displaced persons who face loss of assets or access to assets will be compensated for such loss at full replacement cost, and as assistance to improve, or at least restore, their means of income-earning capacity, production levels, and standards of living. Replacement value is defined as the cost of restoring an asset, with new materials, including labour, transport, taxes, and any/all transaction costs. In applying this method of valuation, depreciation of structures and assets should not be considered. Preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based.

Particular attention must be given to the needs of vulnerable persons and groups. These are defined as households with all members unable to participate in the subsistence, informal or wage economy by virtue of being landless, elderly, chronically ill, single-headed household, children, indigenous groups, ethnic minorities, disabled, orphaned, or otherwise disadvantaged. In particular, the RAP/LRP must provide additional targeted assistance (e.g. credit facilities, training, job opportunities) and opportunities to improve or at least restore their income-earning capacity, production levels and standards of living. Where feasible, ensure that economic benefits of the project accrue to the displaced people through local content mechanisms including local training, hiring, local business development and local procurement policies and procedures.

Where feasible, ensure that economic benefits of the project accrue to the displaced people through local content mechanisms including local training, hiring, local business development and local procurement policies and procedures.

Ensure access to communal natural resources, such as grazing land, fishing, hunting, gathering and other forms of natural resource extraction are restored in a sustainable manner.

Critical to the above requirements is the recognition of affected persons with different land tenures. Displaced persons, under the IFC Performance Standards include persons (1) who have formal legal rights to the land or assets they occupy or use; (2) who do not have formal legal rights to land or assets but have a claim to land that is recognized or recognizable under national customary law, or (3) who have no recognizable legal tenure.

PS 1 establishes the importance of assessment to identify the environmental and social impacts associated with development, effective community engagement and project information disclosure and consultation with local Project affected communities and environmental and social management measures. This LRP and the project ESIA has therefore been carried out to meet the requirements of IFC PS1 as applicable to this stage of assessment.

The remaining IFC PS set out objectives and requirements to avoid and minimize potential environmental and social adverse effects on the environment and to offset/compensate any residual effects. PS 2 to 8 have therefore been considered as part of the assessment process and discussed where relevant within the topic specific sections below. PS7 has been scoped out of the assessment due to the absence of indigenous peoples in this area.

3.4.2 ADB Requirements

Through the Safeguard Policy Statement (SPS) the ADB recognises the need for project-related land acquisitions and restrictions on land use and their potential for adverse effects on the existing communities and people. One major aspect of this are involuntary resettlement safeguards. The overarching goal of these are to avoid or minimise the negative effects of project-related changes to land ownership, access, and use. To this end the following objectives are named:

- Avoid involuntary resettlement wherever possible.
- Minimize involuntary resettlement by exploring project and design alternatives.
- Enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to the pre-project levels.
- Improve the standards of living of the displaced poor and other vulnerable groups.

Importantly, the ADB recognises both physical and economical displacement as adverse effects. These may stem from either permanent or temporary, full or partial, involuntary acquisition of land or involuntary restriction on land use or access.

Resettlement is considered involuntarily when the displaced persons have no right to refuse the land acquisition. This occurs in cases of (i) lawful expropriation or temporary or permanent restrictions on land use and (ii) negotiated settlements in which the buyer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail.

The ADB recognises the following three types of persons as eligible for compensation:
- Displaced persons with legal rights, generally defined by those holding duly registered titles to the land.
- Displaced persons with no formal or legal right to the land but whose claim is recognised under national laws. This includes states who do not issue titles but where land ownership is recognised and regulated by other means.
- Displaced persons without any formal legal rights but whose livelihood depends upon the land in question.

The core requirements are fair compensation, assistance and benefits for displaced people, compensating at full replacement cost; conducting a thorough social impact assessment; preparation of a resettlement plan; safeguarding the fairness of negotiated land acquisitions; information disclosure on the ADB website; consultation and participation with the affected people and communities; establishing a grievance redress mechanism; monitor and report safeguard compliance, in some cases by external experts or NGOs; continuous monitoring for unanticipated impacts and subsequent update to the project; special considerations for indigenous people.

### 3.4.3 European Bank for Reconstruction and Development Requirements

The European Bank for Reconstruction and Development (EBRD) has outlined its impact mitigation requirements in the Environmental and Social Policy (ESP) (2019) and, relevant for this LRP the accompanying Performance Requirement (PR) 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement addresses impacts on land acquisition.

Some of the key requirements detailed in PR5 are summarised below:

- An environmental and social assessment should be undertaken early on to identify if there will be economic or physical displacement due to the Project. The Project should also consider whether additional land will be required at a later stage.
- If displacement is to occur due to the Project, there should be socio-economic baseline established in order to determine the extent and significance of impacts, as well as taking into account the views of project affected persons and stakeholders, through meaningful consultations.
- If risks and impacts are likely from physical or economic displacement due to the Project, the client will engage resettlement experts in the process to develop resettlement planning documentation. This should be designed to provide measures to address impacts on anyone displaced by the Project. EBRD will determine the nature of the document through the environmental and social assessment process. Alternatives should also be considered in resettlement documentation, and the detail of the plan will be proportionate to the size and impacts of the Project.
- Avoidance of displacement where applicable (unless adverse health impacts are likely) , or minimization of displacement if this is not possible.
- Negotiated settlements to acquire land should take place, even if it has legal means to gain access without the consent of the seller. This can be achieved through providing fair and appropriate compensation to those affected by the Project.
- Special considerations should be made for vulnerable groups, especially, at the time of socio-economic baseline surveys, for a vulnerability analysis, during stakeholder consultations, when planning assistance measures, during impact assessment as well as mitigation and monitoring. Measures should be put in place for meaningful participation of women, and the Project should seek to understand differential impacts of land acquisition, land use restrictions and involuntary resettlement on men and women. Delivery and establishment of compensation shall take into account gender issues. Provisions will be made where national law does not recognise the rights of women, to ensure women can have security of tenure, where possible. During consultations, women’s views shall be represented fairly and factored into planning and implementation. Women’s and men’s preferences for compensation and asset replacement should be documented. Furthermore, any opportunities arising from the Project should be made equal to both men and women affected by the Project.
- A census of the Project area should be carried out by the client, to determine who will be affected by the Project, and who will be entitled to compensation and assistance. An inventory of affected assets should be completed, for further valuation of such assets. A cut-off date for eligibility should also be established as part of the Project, based on legislation or the end date of the census. The cut-off date will be well documented and shared throughout the Project area regularly.
- Valuation of affected assets should be at full replacement cost and performed by qualified valuators. The details of how the replacement cost was calculated should also be documented.
- Affected persons can be classified as persons with formal right to the land or assets, persons who do not have formal rights to the land at the time of the census but have a claim to the land that is recognised under national law, or persons who have no recognisable claim to legal assets or land they use.
- Compensation for affected persons should be provided where assets or other natural resources cannot be replaced as part of the land acquisition or land use restrictions process. Compensation should be full replacement cost along with any other assistance deemed necessary. Resettlement assistance should be provided for economically displaced persons. The three
categories for compensation include: in-kind or cash for legally held property or other assets, provision of legal support for affected persons to obtain recognition of their claim to land, compensation for any structures or developments on land (e.g. crops and trees), income loss and other livelihood sources. Compensation should be provided before displacement or land access restrictions are applied.

- If livelihood of displaced persons are land based, the client shall offer land based compensation. If compensation is rejected by displaced persons, the client should work with relevant government authorities in conflict resolution to providing compensation at full replacement cost, resettlement assistance and livelihood improvement.

- Where a project contributes to loss of community facilities, these should be replaced to an equal or improved service level following the Project activities.

- There should also be an effective grievance mechanism put in place as early as possible, which is impartial, to address concerns regarding compensation, relocation or livelihood restoration.

- The client should implement a resettlement plan, which reflects the scale of risks and impacts of the Project. The plan should include up to date and reliable information regarding: the Project and potential impacts on displaced or affected groups, compensation entitlements for each category of displaced persons, appropriate mitigation for any impacts identified, legal arrangements for effectively carrying out resettlement, a budget for resettlement proportional to mitigation measures.

- Resettlement planning documents must be incorporated into an environmental and social management system. Resettlement planning documents will be submitted with the ESIA required for category A projects, and some category B projects deemed to have significant impacts by EBRD.

- Where government agencies are responsible for land acquisition and resettlement from a privately owned project, they should be involved from an early stage, play an active role in land acquisition processes as well as planning and monitoring. The client should identify gaps between government and local legislation and address these gaps in a way acceptable to EBRD and the relevant government.

- A resettlement plan should be developed for government managed private sector land acquisition projects. This should include description of entitlements of displaced persons, actions to address gaps between PR5 and those entitlements, and financial responsibilities of the government agency and/or client in the implementation of the resettlement plan.

- The client should ensure monitoring procedures are in place, specifically of the land acquisition and resettlement process, and that this will involve participation of key stakeholders. Monitoring should be commensurate to the scale of impacts of the Project. The client has responsibility for providing EBRD with monitoring reports even if third parties complete them.

- If the impacts of the Project are significant, EBRD may require periodic external compliance reviews, or an external completion audit of land acquisition and resettlement activities. These reports may be required to be disclosed by the client (even if completed by third parties) if impacts are significant.

- When physical displacement cannot be avoided, the resettlement plan should cover the requirements of PR5 at a minimum. The plan should implement areas for monitoring and evaluation during the process of displacement, and should pay special attention for needs of vulnerable groups and genders. The client should offer a choice between property of equal or higher value with security of tenure, or cash replacement cost as an alternative. Any resettlement sites should offer similar or improved living conditions and access to services. Where communities are affected, mitigation measures should be put in place.

- If the Project will affect livelihoods or income, measures should be put in place to maintain or improve income from that prior to Project implementation. Special considerations should be taken for vulnerable groups and gender aspects. Measures should be planned to include evaluation once being incorporated. Once a completion audit establishes, affected persons have received assistance they are deemed eligible for receiving, then mitigations for economic displacement can become closed out actions.

- Livelihood restoration measures should include where applicable: compensation for affected businesses, compensation for the cost of relocation of business activities, compensation for loss of net income in transitional periods and costs of machinery installation and transfer to alternative locations. For project affected persons with legal claims to land, they should be provided replacement land at equal or higher value, or compensation at equal or higher cost. For project affected persons with no legal claim to land, they should be compensated for assets from the land (e.g. crops), at full replacement cost. If community resources are affected, in-kind or cash compensation should be provided along with enhancement of existing resources to minimise impacts. Livelihood restoration measures could also include provision of assistance measures to restore or improve income earning capacity, production levels and standards of living. Measures should be designed to support transitional periods for economically displaced persons and provide appropriate benefits of the Project to local communities.
3.4.4 Asian Infrastructure and Investment Bank Requirements

The Asian Infrastructure and Investment Bank (AIIB) are an additional lender of the Project. In order to comply with international lenders requirements, the Project will be compliant with the AIIB Environmental and Social Framework. Within this framework, there is an Environmental and Social Standard 2: Land Acquisition and involuntary Resettlement. This standard will be applied to the Project, therefore Masdar are required to undertake the following actions:

- **Planning** – this includes determining the extent of Involuntary Resettlement through asset and land surveys, census of displaced persons, and evaluation of socioeconomic conditions (including risks, impacts and gender differentiated source of livelihoods).

- **Land Acquisition and Resettlement Plan** – This should be explicit regarding displaced persons’ entitlements, income and LR strategy, monitoring, grievance mechanisms, schedule, budget and institutional arrangements. As part of the LRP, there should be a land survey and establishment of clear cut-off dates for eligibility. Claims of displaced persons should be followed up with processes achieving a resolution. Data should be collected disaggregated from age and gender and include information about vulnerable groups. This document will supplement findings of the ESIA relating to social impacts of the Project, however, will contain technical information regarding involuntary resettlement. If resettlement is economic, then AIIB requires an LRP to be prepared.

- **Land acquisition and Resettlement Planning Framework** – In circumstances where activities involving resettlement are not fully defined, then Involuntary Resettlement activities should be conducted under the Environmental and Social Policy (ESP) phased approach. The LARP should be prepared as soon as possible.

- **Proportionality** - the Preparation of the LARP should be in conjunction with the degree and extent of impacts of the Project which is considered based on scope of physical and economic displacement, and vulnerability of displaced persons.

- **Use of land Aggregators** – Clients who use a local land aggregator (or other third party) for acquiring project land or addressing resettlement processes need prior approval from the bank. The client will still maintain responsibility for compliance with ESS2 and takes full responsibility for establishing a Grievance Redress Mechanism (GRM). The client will also be responsible for the process of land acquisition, even if a third party is to deliver compensation and pay any associated costs.

- **Consultation** – Consultations should take place associated with livelihood restoration and land acquisition which should be meaningful and welcoming of communities and non-government organisations where applicable. Any persons classed as displaced from land acquisition should be consulted in planning, implementation, monitoring and evaluation of the future LRP. This process should take into consideration anyone classed as vulnerable and put in place additional measures to ensure there is a means for open participation from all stakeholder groups.

- **Grievance Mechanism** – The grievance mechanism should be implemented to be a transparent and understandable process. Special considerations should be made for gender specific and GBV related concerns, and appropriate channels of anonymous reporting should be put in place, which allows for confidentiality. There should be a mixture of verbal reporting and written procedures.

- **Social Support** – Social considerations should be made where impacts are likely from the restoration process, particularly in the case of vulnerable groups. This can be achieved through implementation of social preparation such as from engaging in consultations and affected populations prior to resettlement and compensation decisions in the Project.

- **Livelihood Restoration** – The Project should be commissioned with the aim to improve or as a minimum, restore livelihoods of project displaced persons. This should be achieved through
  - Land based resettlement strategies or cash compensation for replacement value of land
  - Replacement of assets of equal or higher value
  - Compensation at full replacement cost for assets which cannot be recovered
  - Programs designed to improve utilisation of resources in the community and enhance the availability to livelihood sources alternative to those diminished by the Project.

These measures should be made available to any project affected persons, differentiated to their individual requirements. Transaction costs should be included in establishing compensation. Opportunities for additional services should be explored depending on the manner of the Project itself.

- **Resettlement Assistance** – This should be provided to those displaced by the Project, including:
  - Security of tenure for those relocated, with secure housing and access to employment, as well as any benefits from the Project
- Support and development assistance (for example, employment opportunities)
- Community services, where needed
- Special measures put in place to assist women and vulnerable groups

- Standards of Living – The Project should be designed and implemented to improve standards of living for displaced persons classed as poor or vulnerable, to as a minimum, national standards including ensuring access to social protection systems, access to land or income resources where appropriate, and adequate housing.

- Compensation and entitlements – Compensation and entitlements for involuntary resettlement should be paid before physical or economic displacement occurs due to the Project. Considerations should be made for gender issues. Provisions should be made to ensure women’s right of tenure, even if national law does not recognise this, where applicable.

- Person without title or legal rights – Anyone classified in this group by the Project should be provided with resettlement assistance or compensation for lost assets, in accordance with cut-off dates. They should also be included in consultations regarding land acquisition and resettlement. Compensation should not be granted however for land settled illegally.

- Negotiated resettlement – Procedures should be generated to be transparent and fair for land acquisition. Anyone entered into negotiations for settlements should maintain or get improved income after the Project implementation.

- Disclosure – The draft livelihood restoration and land acquisition documentation should be included in the consultation process in the affected area of the Project.

- Implementation, monitoring, and supervision – Involuntary resettlement should be communicated as part of the Project, and should be considered to be an additional Project, should it be a substantial element. Supervision of the land acquisition and resettlement process should be maintained throughout implementation, and experienced experts should monitor whether objectives of the process have been met. Monitoring should also determine extent of any additional impacts of the Project.

- Third parties – The client is expected to engage with responsible organisations where the government acts as a third party, early in the land acquisition process, and support them in the process. The client should perform a gap analysis of local and government legislation and address any gaps to satisfy the AIIB policy on land acquisition. The land acquisition and resettlement documentation of the client should be designed to complement those of the third party where appropriate.

3.4.5 European Investment Bank (EIB) Requirements

The European Investment Bank (EIB) are also a principle lender of the Project. The EIB has specific requirements for a Project such as this, including a part of their Environmental and Social Standards. This includes, Standard 6 – Involuntary Resettlement. The following section summarises these requirements which Masdar will apply to the Project where applicable:

- Masdar is expected to ensure they consider feasible project alternatives, designs and/or locations with the aim to avoid and/or minimise physical and/or economic displacement.

- Masdar should limit buffer zone size or rights of way to avoid or minimise resettlement

- To be classed as displaced or a PAP, the following criteria will apply:
  - Persons with formal legal rights to land or assets under national laws
  - Persons who do not have formal legal rights to land and/or assets but who have claims to land or assets that are recognised or recognisable under national laws
  - Persons who occupy/use the land and/or assets but have no recognisable legal rights or claim to it/them

- Masdar should conduct a socioeconomic census and baseline survey to identify PAPs who will be physically or economically displaced and eligible for compensation and/or assistance

- The census should cover the total population of PAPs and include an inventory of all losses. The socioeconomic baseline survey should include the current socioeconomic profile of the PAPs, a vulnerability assessment and the need for special arrangements to be made. Data should be disaggregated by gender and other parameters relevant to the Project.

- There should also be a cut-off date for eligibility which should be well documented and distributed throughout the Project area. This cut-off will be valid for the period given in national laws or the period specified in resettlement planning documents, or for
a reasonable time period from the census or inventory date. Those who encroach on the Project area after the cut-off date are not required to be compensated by Masdar.

- Masdar should offer all PAPs a choice of either compensation in kind or monetary compensation at full replacement cost.

- In case of physical displacement, in the case of alternative housing, the new residence’s value should be equal or improved compared to the previous one. Masdar should ensure arrangements are made where required for PAPs to gain security of tenure. Cash compensation should reflect the valuation of all affected assets if this is offered.

- Regarding economic displacement, replacement land should be equal or higher quality and located close as possible to the original location. When community resources are affected, measures should be taken to ensure equivalent resources are made available, which should take into account cultural aspects. If this is not possible, Masdar should provide justification to EIB and provide assistance to offset loss of access to lost resources. Valuation for cash compensation for affected assets should be at full replacement cost. Anyone whose livelihoods or income is adversely affected should be provided with targeted assistance and transitional support to as a minimum restore livelihood.

- Masdar should also provide resettlement assistance to displaced PAPs, paying special attention to vulnerable individuals or groups. Replacement land or cash compensation should be provided before the actual resettlement takes place.

- When relocation sites are to be provided, Masdar should consult PAPs on the choice of sites and offer choices where possible. Relocation sites should meet the criteria specified in the EIB Standard 6 Involuntary Resettlement. The full requirement for consultation and disclosure as part of this standard are described in the SEP.

- Masdar should put in place a grievance mechanism consistent with the EIB Standard 2- Stakeholder Engagement. This process should address concerns related to entitlements, access to information, compensation or relocation which is raised by PAPs, host communities or others.

- Regarding forced evictions, this is not tolerated by the EIB. Eviction can be carried out in exceptional circumstances in full compliance with provisions of international human rights instruments and national law. EIB should be informed prior to eviction taking place, and accompanied with a documented statement that conditions specified in Standard 6 of EIB Environmental and Social Standards have been met.

- Special considerations should be made for genders and vulnerable groups during consultation, planning and implementation. Regarding indigenous peoples, avoidance and minimisation of impacts should be prioritised.

- Planning documents should be prepared for Projects relating to Involuntary Resettlement, which cover the extent and degree of impacts, physical and economic displacement and vulnerability of affected persons. This should include resettlement planning documents in compliance with Standard 6, including:
  - A resettlement framework for projects where exact design, footprint and associated impacts have not been determined, or where individual components are still to be developed. This document should be continuously updated as the Project progresses.
  - A resettlement plan should be prepared for projects leading to significant physical displacement.
  - A livelihood restoration plan (LRP) should be prepared for projects leading to economic displacement. The LRP should be developed to improve or at least restore livelihoods of PAPs.

- When third parties are responsible for preparation and implementation of resettlement, the Project should still comply with the requirements of Standard 6.

- Regarding monitoring and evaluation, Masdar should set up a monitoring system which reflects the scale of resettlement and risks involved. Monitoring reports should be submitted to the EIB, including information about grievances and redress mechanisms. Once all resettlement activities are completed, Masdar should submit an audit report to EIB, and put in place supplementary actions where necessary. Resettlement will be considered complete when the adverse impacts of resettlement have been addressed.

More details on the requirements of the Resettlement Framework as well as the Resettlement Plan and Livelihood Restoration Plan requirements can be found in the EIB Standard 6 – Involuntary Resettlement, in Annex 1a and Annex 1b.
### 3.5 Gap Analysis between National and International Requirements

#### Table 3-2. Comparison between national legislation in Uzbekistan and international requirements of the project

<table>
<thead>
<tr>
<th>Topic</th>
<th>Lender standards associated with resettlement</th>
<th>Requirements under national legislation</th>
<th>Differences identified and actions to address differences</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scope of application</strong></td>
<td>Lender standards apply to land-related transactions that include restriction on access to land or use of other resources including communal property and natural resources such as marine and aquatic resources, timber and non-timber forest products, freshwater, medicinal plants, hunting and gathering grounds and grazing and cropping areas.</td>
<td>The legal and policy framework contains national laws and legislations related to land acquisition and compensation policy in Uzbekistan through the following: (i) Land Code (30.04.1998); (ii) Resolution of the Cabinet of Ministers dated 16.11.2019, # 911 “On additional measures to ensure guarantees of property rights of individuals and legal entities and to improve the procedure for seizing land plots and providing compensation”; (iii) Resolution of the Cabinet of Ministers dated 25.05.2011, #146 “On measures to improve the procedure for granting land plots for urban development activities and other non-agricultural purposes”; (iv) Civil Code (29 August 1996) (v) The Law of the Republic of Uzbekistan “About Privatization of Non-Agricultural Land Plots” (vi) Resolution of the Government of Uzbekistan “On Measures of Improvement Efficiency of Preparing and Implementation of Projects funded by International Financial Institutions and Foreign Governmental Financial Organizations (vii) Law of Uzbekistan on Protection of Private Property and Guarantees of Ownership Rights (viii) Resolution of the President of the Republic of Uzbekistan dated 16.07.2018 #3857 “On measures to improve the effectiveness of training and realizing projects with participation of international financial institutions and foreign government financial organizations”; (viii) Decree of the President of the Republic of Uzbekistan dated on 01.08.2018 #5495 “On measures on cardinal improvement of investment climate in the republic of Uzbekistan”.</td>
<td>The legal and policy framework includes provisions for land acquisition and involuntary resettlement to “land users, tenants and landowners”. However, the Legal and Policy Framework excludes public land for compensation related payment. In the LRP, any crops and infrastructure on the land affected by the project will be compensated. The land is state owned with leaseholds for certain areas. The gaps between the laws of the Republic of Uzbekistan and ADB’s Safeguard Policy Statement (SPS) 2009 can be reconciled through (i) Presidential Resolution No 3857 “On measures to Improve the Effectiveness of Development and Implementation of Projects With the Participation of International Finance Institutions (IFIs) and Foreign Governmental Organizations (FGFOs)” and (ii) Presidential Decree No 5495 “On Measures for Fundamental Improvements of Investment Climate in the Republic of Uzbekistan”, which require preparing and implementing projects funded by International Financial Institutions (IFIs) according to their requirements as well as carrying out meaningful consultations, all gaps have diminished. The gaps between the requirements of ADB SPS (2009) and national laws have been reconciled in previous ADB-assisted projects in Uzbekistan.</td>
</tr>
</tbody>
</table>

PreparedFor: Masdar
<table>
<thead>
<tr>
<th>Topic</th>
<th>Lender standards associated with resettlement</th>
<th>Requirements under national legislation</th>
<th>Differences identified and actions to address differences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(x) Resolution of the Government of Uzbekistan &quot;About Approval of the Procedure of Accumulating and Use of Funds of Centralized Stocks for Compensation of Damages to Individual Persons and Legal Entities Due to Acquisition of Lands for Public Needs (xi) The Law &quot;On Appeals of Physical and Legal Persons (xii) Resolution of Cabinet of Ministers &quot;About Approval of Rules of Protection of Power Supply Facilities (xiii) he National Construction Standards and Rules KMK 2.10.08-97. “Land allocation standards for construction of 0.4 – 750 kV power networks” (Xiv) ZRU 781 - About procedures of seizure of land for social needs with compensation</td>
<td>This is not a requirement under national legislation. The Company have optimised the location of Project infrastructure to avoid, and where avoidance was not possible, minimise social impacts within and in the approximate surrounding location of the project area and enhance positive social impacts.</td>
</tr>
<tr>
<td>Alternative project designs</td>
<td>Clients must consider feasible alternative project designs to avoid or minimise physical and/or economic displacement.</td>
<td>Valuation for buildings and structures is determined by their market value, plus any applicable transaction costs. Any salvaged materials from the land will be the property of the developer, however, the land owner will be able to purchase any salvaged materials of their own accord. Valuation for losses of agricultural and forestry production is carried by the self-financing State Enterprises for Land Surveying and Real Estate Cadastre subordinated to ‘Goscomzemegeodescadastre’ which is a government entity responsible for the cadastre. National law also states that if any changes to owners rights occur then the compensation process must be concluded, and this includes any potential appeals.</td>
<td>There is a potential difference in recognition of compensation between national and legislation since national legislation refers to market value, which may not be perceived to reflect full replacement cost. Masdar will provide compensation for the loss of any crops or infrastructure based on full replacement value which includes market value in addition to elements such as transaction costs, interest accrued, transitional and restoration costs and other applicable payments.</td>
</tr>
<tr>
<td>Compensation and benefits for displaced persons</td>
<td>Masdar must offer displaced communities and persons compensation for loss of assets at full replacement cost, and other assistance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic</td>
<td>Lender standards associated with resettlement</td>
<td>Requirements under national legislation</td>
<td>Differences identified and actions to address differences</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------------------------</td>
<td>----------------------------------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>Timing of Compensation in relation to Resettlement</td>
<td>Where livelihoods are land-based, the client will offer land-based compensation.</td>
<td>Article 41 (Clause 4) of the Land Code (30 of April 1998) requires offering tenants an equivalent land plot (in-kind land compensation) and compensation for lost profits and other losses.</td>
<td>Both Lender Standards and government regulation is matching regarding in-kind land compensation rather than just cash payment. The non-land options may be necessary when replacement land of equal quality is not available or unaffordable, or when the displaced persons make an informed decision to demand compensation in cash</td>
</tr>
<tr>
<td></td>
<td>Masdar will take possession of the relevant area of land and related assets following compensation payments.</td>
<td>Under national legislation, it is not possible to take possession of a plot of land prior to compensation.</td>
<td>Legislation is matching regarding the chronology of land resettlement payments. Masdar will ensure that land compensation payments are made prior to any land acquisition.</td>
</tr>
<tr>
<td></td>
<td>The client will provide opportunities to displaced communities and persons to derive appropriate development benefits from the Project.</td>
<td>Under national legislation, there is no obligation for the property developer to provide opportunities to displaced communities and persons to derive benefits from the Project.</td>
<td>There is no requirement to provide development benefits under National Legislation. However, it is best practice to ensure the local community benefits from the project. To enable this, Masdar will offer employment benefits in the construction and operational phase of the Solar Farm development. Masdar will also develop a Community Development Plan during the construction phase.</td>
</tr>
<tr>
<td>Community engagement</td>
<td>The client will engage with affected communities through stakeholder engagement. This should include information on resettlement options, alternatives, and choices.</td>
<td>Under national legislation there is no obligation to disclose information to the public or with PAPs.</td>
<td>The Legal Policy and Framework does not align with National Legislation here which does not require consultation. However, it is best practice according to Lender Standards to enable community wide benefits and voicing of concerns. Stakeholder engagement has taken place and will continue to take place before, during and after implementation of the project. This will be with a range of affected parties including farmers, herders, community members, and government representatives. Specific details of engagements can be found in Chapter 4.</td>
</tr>
<tr>
<td></td>
<td>Masdar will disclose relevant information during the planning, implementation, monitoring and evaluation of compensation payments, livelihood restoration activities, and resettlement activities.</td>
<td>During land acquisition and implementation, information regarding legal and proposed changes to sub-leases is communicated to PAPs. According to national legislation, there is no requirement to provide information, monitor</td>
<td>National legislation differs from Lender Standards in that only during implementation is there a requirement to displace legal information regarding land acquisition to PAPs. It is however international best practice to</td>
</tr>
<tr>
<td>Topic</td>
<td>Lender standards associated with resettlement</td>
<td>Requirements under national legislation</td>
<td>Differences identified and actions to address differences</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Resettlement and Livelihood Restoration Planning and Implementation</td>
<td>The client will conduct a census to collect appropriate socio-economic baseline data to identify those classified as displaced, and to determine if the displaced person is eligible for compensation and/or livelihood restoration assistance.</td>
<td>National legislation does not require a census survey to be undertaken although a list of the PAPs is created during the process of obtaining a Sub-Lease Agreement. No information on the socio-economic status of PAPs is required.</td>
<td>Socioeconomic surveys are not required under National legislation. Information on the identity of PAPs is held in Sub-Lease Agreements. Masdar has collated information on farmers with sub-lease agreements from inside the project area. Surveys to obtain contact information for farmer and herders has also been collected. To establish a socioeconomic baseline, data has also been collected in preparation of producing the LRP – this is to verify any eligible PAPs regarding compensation and livelihood restoration assistance. During disclosure of the Final LRP, the identity of the farmers and herders considered to be eligible for compensation and assistance shall be checked with representatives from the relevant district.</td>
</tr>
</tbody>
</table>

<p>| Grievance mechanism | Masdar will establish and implement a grievance mechanism.                                                      | Grievances can be communicated at any time during the process. Any grievances can be delivered via Khokimiyats or any other state representatives for investigation and follow-up. At any time, the PAP (or any other party with a grievance) can approach the courts for a judicial ruling. The grievance process is regulated by law December 3, 2014 No. ZRU-378 about appeals of physical persons and legal entities (as amended on 10-03-2020). A complaint shall be considered within fifteen days from the date of receipt by the state authority, which is obliged to resolve the issue on the merits. When additional study and (or) verification is required, the request for additional documents is up to one month. | Both Lender Standards and National Legislation allow project affected persons to express a grievance through multiple mechanisms. Masdar has already developed a grievance mechanism which is easily accessible and readily available for community members and any other PAPs. Full details of the process can be found in Section 4.6. Masdar is committed to using any information processed regarding grievances to resolve and close any enquiries to continuously improve their social performance. Masdar will ensure project records and surveys are kept up to date and if approached will provide these documents for any individual or group looking to go through the courts to raise a grievance. |</p>
<table>
<thead>
<tr>
<th>Topic</th>
<th>Lender standards associated with resettlement</th>
<th>Requirements under national legislation</th>
<th>Differences identified and actions to address differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uneconomic parcels of Land</td>
<td>Uneconomic parcels of land (often referred to as orphaned land) should be acquired along with the entire land parcel.</td>
<td>National legislation provides the opportunity for a landowner or tenant to request an alternative plot of land which could be selected if the remaining area of land is (in their view) uneconomic.</td>
<td>In-kind compensation is available through National legislation. According to project impacts, no uneconomic parcels of land are expected to be created based on the project.</td>
</tr>
<tr>
<td>Monitoring and Evaluation</td>
<td>Masdar will establish procedures to monitor and evaluate the implementation of the LRP. PAPs will be consulted during the monitoring process.</td>
<td>National legislation does not require monitoring after the implementation of the project.</td>
<td>Although it is not a requirement of national legislation, it is best practice to ensure effective monitoring and evaluation is set up. PAPs will be consulted during future monitoring and evaluation activities. More on this is detailed in Section 11.4.1.</td>
</tr>
<tr>
<td>Establishment of a cut-off date for eligibility</td>
<td>The client will establish a cut-off date for eligibility, after which any land-related improvements will not be eligible for compensation. Information regarding the cut-off date will be documented and communicated to PAPs during the entirety of the process.</td>
<td>National legislation does not specifically mention the adoption of a cut-off date. However, in practice this is represented by the completion of valuation surveys undertaken on the assets to be acquired.</td>
<td>The valuation surveys undertaken as part of the project according to national legislation are formulated with the same premise as a cut-off date. Using the current design of the Project, land surveys have been undertaken at each known location of Project Infrastructure (PV area and OTL) to establish existing land conditions. No physical assets were identified at any of these locations. Farmers within the Project Area have been informed of the location of Project Infrastructure, as well as the purpose of the cut-off date. The farmers were asked to sign a Farmer Acknowledgement Form.</td>
</tr>
<tr>
<td>Completion Audit</td>
<td>LRP implementation will be completed when any adverse resettlement impacts have been addressed according to the Performance Standard. It may be a requirement that an audit of the LRP takes place.</td>
<td>According to national legislation, there is no requirement for the preparation of resettlement planning documents nor for a completion audit to be carried out.</td>
<td>Although there is no requirement for completion audits under national legislation, Masdar will ensure a commission audit is completed to ensure that any actions set out by the LRP are achieved during the implementation process. An independent consultant will carry out the audit as commissioned by Masdar.</td>
</tr>
<tr>
<td>Categories of displaced persons</td>
<td>According to Lender Standards, someone is eligible to be classed as a displaced person if they have legal rights to the land or assets they occupy or use OR someone who does not have formal legal rights to</td>
<td>A displaced person can be classified as someone who has the legal rights to the property they occupy or use under national legislation.</td>
<td>According to national legislation, anyone without formal rights to the land is not classified as a displaced person.</td>
</tr>
<tr>
<td>Topic</td>
<td>Lender standards associated with resettlement</td>
<td>Requirements under national legislation</td>
<td>Differences identified and actions to address differences</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------------------------</td>
<td>----------------------------------------</td>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td>Land Tenant and Sharecroppers</td>
<td>Anyone using land as a tenant or sharecropper is only entitled to compensation in the form of affected assets. These type of PAPs will not be given compensation for the land itself which is being taken over by the project. As part of the LRP, measures should be put in place to enable tenants and sharecroppers to continue their livelihood elsewhere.</td>
<td>There is no requirement under national legislation to put in place any livelihood restoration measures for sharecroppers or tenants of land affected by the project.</td>
<td>Masdar recognises any informal settlers including farmers and herders with leases in the project area as well as those from the wider local community. All of these groups are eligible for compensation if they own assets which are affected by the project or livelihood restoration if their livelihood is impacted.</td>
</tr>
<tr>
<td>Economic displacement</td>
<td>Regarding projects which result in only economic displacement, it is the expectation that the client provides the means to be compensated and this is implemented through an LRP, as well as any other assistance measures. The manner of which any assistance or compensation measures are communicated should be both transparent and comprehensible for PAPs.</td>
<td>According to national legislation, there is not requirement for the preparation of resettlement planning documents.</td>
<td>Although it is not a requirement under national legislation, Masdar is committed to successful and just implementation of the LRP regarding any economic displacement as a consequence of the project. Farmers, herders as well as various community members using the area will be eligible for compensation and/or livelihood restoration measures depending on their eligibility as set out in Chapter 7 of this LRP.</td>
</tr>
</tbody>
</table>

Based on Lender Standards, displaced persons (those with legal rights to land they use or occupy under national law, or informal settlers with a recognisable claim to the use of land under national law) will be compensated through receipt of a property of equal or greater value or cash compensation which covers the full cost of the property/land they have lost. Any informal settlers who do not have recognised claims to land under national legislation will be compensated for assets which have improved the land such as crops and irrigation infrastructure. Compensation for such assets will not be made if the asset was already present in the area prior to the project. National legislation recognises displaced persons who have formal legal rights to the land or assets they occupy or use. It is not a requirement to compensate anyone without any legal claim to land according to national legislation, however, Masdar recognises it is best practice to compensate any individuals or groups affected by the project based on the Lenders Standards in terms of classification of a displaced person. Masdar will ensure any displaced person is compensated accordingly or provided with livelihood restoration measures.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Lender standards associated with resettlement</th>
<th>Requirements under national legislation</th>
<th>Differences identified and actions to address differences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>any assets which have directly resulted in land improvements will be calculated and delivered to ensure this completely replaces any asset lost.</td>
<td>National legislation does not require livelihood restoration measures to be carried out.</td>
<td>restoration based on their eligibility as discussed in Chapter 7 of this LRP.</td>
</tr>
<tr>
<td></td>
<td>Masdar will ensure that those classed as an economically displaced person whereby income or livelihood has been grossly affected by project activities will be provided with opportunities to improve, or restore, income capacity, production and standard of living after the implementation of the solar farm project.</td>
<td>Although it is not a requirement under national legislation, Masdar will provide any economically displaced person (classified by Lender Standards) with the opportunity to generate income, production and have a standard of living which as a minimum is at the level prior to implementation of the project, but can also be at an improved standard.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Any support given by Masdar to any PAPs will be given in a transitional manner which reasonably reflects any time required to implement livelihood restoration measures to baseline levels prior to the project regarding income capacity, production levels and living standards.</td>
<td>This is not a requirement under national legislation.</td>
<td>Not required under national legislation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Due to the very low percentage of land lost during construction there is no need to provide transitional support to farmers and herders.</td>
</tr>
</tbody>
</table>
4. Stakeholder Engagement

4.1 Approach Overview

The purpose of this chapter is to provide a summary of the stakeholder engagement activities that have been undertaken to date during preparation of the LRP; and will be undertaken in the future during future disclosure of the LRP. For further detail of stakeholder engagement throughout the project see the Samarkand Solar PV Stakeholder Engagement Plan.

The purpose of the stakeholder engagement as part of Livelihood Restoration Planning is to:

- Disclose the land acquisition and livelihood restoration process.
- Build and maintain stakeholder relationships.
- Gather information on the local land use in the project area, social issues and understand displacement impacts.
- Provide stakeholders the opportunity to provide feedback into livelihood restoration options.
- Manage grievances.

4.2 LRP Stakeholders and Priority

Table 4-1 stakeholder group, stakeholders and priority in stakeholder engagement.

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>Stakeholders</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional-based Stakeholders (regional – Samarkand)</td>
<td>Deputy Khokim of Samarkand region, Head of construction department of Samarkand region, Chief specialist of the Investments department of Samarkand region, Deputy Khokim of Kattakurgan district on investment, innovation, support of privatized enterprises, free economic and small industrial zones as well the development of tourism, Specialist of Agriculture Department, Kattakurgan district, Chief Engineer, Cadastral officials of Karmania district, Chief Inspectorate of State Committee for Nature Protection of Samarkand Region, Chief Specialist of the Centre for Ecological Expertise, Head of Investment Department of the Kattakurgan Khokimiat, Deputy Khokim on women and family issues</td>
<td>Medium</td>
</tr>
<tr>
<td>Local communities</td>
<td>Chairman of the mahalla committee Shurak, Melikhodja of Kattakurgan district, Chairman of the mahalla committee Bagishamol mahalla of Pasdargom district</td>
<td>High</td>
</tr>
<tr>
<td>Specialist from the Women’s Committee</td>
<td>Shurak, Melikhodja, Bagishamol</td>
<td>High</td>
</tr>
<tr>
<td>Local Land Users (involved in herding activities undertaken on/through the Project site, etc.)</td>
<td>Deputy head of Kattakurgan on women and family issues, Herders from the local communities</td>
<td>High</td>
</tr>
</tbody>
</table>

4.2.1 Gender Inclusion

Efforts have been made to take a gender inclusive approach to stakeholder engagement and livelihood restoration where possible this includes:

- Most fieldwork has been led by female field staff and specialists
- Meeting with representatives of women and women’s issues at the Khokimiat to understand the challenges faced by women.
- Inviting spouses and women in the community to engagement meetings
- Requesting co-signatures of verification forms
- Requesting feedback on training targeted at women in the household
- Recognising women in the household as a potentially vulnerable or marginalised group.
- For historical farmers receiving a land enhancement grant, the money will be issued to both the farmer and the spouse (split 50/50).
- During the implementation phase at least one CLO must be female.
4.3 Previous Engagement

4.3.1 ESIA Scoping Phase – September 2020

TYPSA undertook an Environmental and Social Scoping Study for the current Project in September 2020 and as such have conducted some preliminary stakeholder engagement.

4.3.1.1 Methods

Stakeholders were consulted either via videoconference or face-to-face during the site visit. Stakeholders consulted via videoconference were predominantly institutional stakeholders who had reliable access to a computer and the internet and therefore could easily participate in this manner. All stakeholders attended one meeting held on 8th September 2020. Stakeholders who attended included representatives from the following institutions:

- Ministry of Energy – Head of Renewable Resources Department
- Ministry of Energy – Social Specialist
- Samarkand Region – Deputy Head of Cadastre Department
- Kattakurgan District - Deputy Khokim
- Kattakurgan District – Deputy Head of Cadastre Department
- Kattakurgan District - Head of Construction Department
- Kattakurgan District – Head of Forestry Department
- Kattakurgan District – Head of Water Resources Management Department
- Kattakurgan District – Head of Employment Department
- Kattakurgan District – Deputy Head of Department for Communications with Mahallas
- Chairman of Melikhudj Mahalla
- Chairman of Upka Mahalla
- Chairman of Bulakchi Mahalla
- Chairman of Damkhozda Mahalla
- Chairman of Partaabad Mahalla

Other stakeholders were engaged face-to-face during the scoping site visit which took place on 28th September 2020. Some of these stakeholders were community-level and therefore may not have had the resources required to participate in remote engagement methods (e.g. videoconferencing). Others were institutional stakeholders who participated in the site visit to facilitate a clear understanding of the project site and the environmental and social opportunities and constraints it presents. Stakeholders engaged with face-to-face during the site visit include:

- Deputy Khokim of Kattakurgan District on Investments
- Head of Environmental Department of Kattakurgan District
- Land Surveyor of Kattakurgan District
- Head of Land Cadastre Department of Kattakurgan District
- Deputy Head of Samarkand Region Cadastre Department
- Multiple residents of Damhodja Mahalla
- Head of historic leasehold farm 2
- Additional phone conversations with affected leasehold farm 2 (Kosimov Abdullo Olmazor Farm) and leasehold farm 4 (Shomurod Nur Sakhovat Farm) were also conducted during project scoping on 29th October 2020. The farmers confirmed that the Government has already taken action to acquire their land and to resettle them and provided details about their land and agricultural activities.

4.3.1.2 Outcomes

The outcomes of these engagement activities yielded an understanding and appreciation of local and regional environmental and social issues. Social issues identified and discussed during stakeholder consultations included:
Some contradictory information on current land uses within and surrounding the project site came to light during the consultations:

- According to District authorities, there is no legal use of land, although some informal use for cattle grazing occurs in springtime.
- Some participants indicated that no structures had ever been present on the project site (as grazing would mostly take place 1.5-2km away).
- Whereas representatives from the Cadastre Department of Kattakurgan District indicated that while there were structures made of light construction materials on the site these had been demolished after the official allocation of land for the project, when the local population was instructed to remove all structures from the project area, in accordance with the Decree of the Cabinet of Ministers No.416.
- However, during the scoping site visit there were still structures on the site, as described in Section 6.7.6 of the ESIA.
- The process for land acquisition and compensation was explained by the Kattakurgan District Cadastre Department:
  - The tenure of agricultural land is based on long-term contracts between Khokimiyat and individual farmers. A specific clause in the contract regulates land acquisition for state needs.
  - Based on the contract, compensation is paid unless it is proved that the land has not been used for agricultural purposes. If structures are present and legally registered, compensation is also paid. If there are crops on the land, compensation is paid for yield.
  - Compensation is agreed only after the last crop cycle has been harvested. Agronomists of the District’s agricultural departments determine the amount of compensation based on crops productivity, market price, future yield, etc.
  - Participants were shown a recent satellite image in which a well-developed farm and some structures were clearly present inside the project site. Kattakurgan District representatives stated that where there was a formal contract between the farmer and Khokimiyat, then compensation will be paid based on the contract.
  - Where there is no formal contract lender requirements entitles informal settlers to assistance and compensation of assets. However, representatives from Kattakurgan District stated that usually under national regulations, where structures are not residential and not official, compensation is not paid. There can be assistance, but through volunteers, aksakals (mahalla elderly leaders), and other unofficial assistance. This is not aligned with lender standards and thus will be addressed in this LRP.
- The consulted authorities insisted that the land is not being used in any form.
- The presence of a drainage channel crossing through the northern end of the site was also discussed:
  - Participants were shown images of the irrigation/drainage canal and authorities insisted that it was a naturally formed current and man-made irrigation infrastructure.
  - According to local farmers consulted during the site visit, the channel currently serves as a drainage canal for polluted waters from irrigation of fields upstream. Local farmers also stated that their cattle drink this water without any consequence.
  - Lastly, a burial site is visible in the north-east corner of the project site, but authorities claimed that the territory of the cemetery does not fall to the project area. The Chairman of nearby mahalla also confirmed that this is correct.

4.3.2 ESIA Phase

During the preparation of the ESIA a number of site visits were undertaken by the in-country project team which included some further stakeholder engagement activities. The site visit was conducted between 20th and 22nd September 2021. A further site visit was carried out early December 2021 by AECOM and the in-country team.

4.3.2.1 Methods

Stakeholder engagement is an important process at all ESIA stages however, it is particularly helpful to engage with relevant stakeholders during the early stages of the ESIA as their inputs can be considered in the assessment of impacts and the design of mitigation, management, and enhancement measures. A preliminary list of project stakeholders was identified prior to the site visit. Stakeholders identified include individuals, groups, and organizations that may be affected by or may influence project development, either positively or negatively. The list of project stakeholders will be continuously revised (expanded or reduced as necessary) throughout the ESIA study. The stakeholders identified and engaged with throughout the site visit are in Table 4-2.
Table 4-2 - Stakeholder Groups Engaged During Site Visit

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>Stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Government Representatives</td>
<td>Deputy Khokim of Samarkand Region on Investments</td>
</tr>
<tr>
<td></td>
<td>Head of Industry development, Samarkand region Khokimiyat</td>
</tr>
<tr>
<td></td>
<td>Deputy Khokim on Investments of Kattakurgan District</td>
</tr>
<tr>
<td></td>
<td>Cadastre of Kattakurgan</td>
</tr>
<tr>
<td></td>
<td>Head of department on Investments, Kattakurgan Khokimiyat</td>
</tr>
<tr>
<td></td>
<td>Deputy Khokim on women and families, Kattakurgan Khokimiyat</td>
</tr>
<tr>
<td></td>
<td>Ecology department of Kattakurgan District</td>
</tr>
<tr>
<td>Community Organizations</td>
<td>Women’s Shelter, Kattakurgan District</td>
</tr>
<tr>
<td>Community Representatives</td>
<td>Mahalla Chairs</td>
</tr>
<tr>
<td></td>
<td>Community leaders from Pasdargom District</td>
</tr>
<tr>
<td>Land Users</td>
<td>Farmers affected by OTL</td>
</tr>
<tr>
<td></td>
<td>Herders</td>
</tr>
<tr>
<td>Historic Land Users</td>
<td>Historic Leasehold 1 Farmer</td>
</tr>
<tr>
<td></td>
<td>Historic Leasehold 2 Farmer</td>
</tr>
<tr>
<td></td>
<td>Historic Leasehold 3 Farmer</td>
</tr>
<tr>
<td></td>
<td>Historic Leasehold 4 Farmer</td>
</tr>
<tr>
<td></td>
<td>Historic Leasehold 5 Farmer</td>
</tr>
<tr>
<td>Community Members</td>
<td>Shurak and Melikhodja mahalla community members</td>
</tr>
<tr>
<td></td>
<td>Teachers from School №57</td>
</tr>
<tr>
<td>Individual Specialists / Academics</td>
<td>Specialist on women’s issues of Pasdargom District</td>
</tr>
</tbody>
</table>

At the start of each engagement session a brief overview of the Project was provided and the rationale for engaging with the specific stakeholders was explained. The format of the engagement varied depending on the number of stakeholder’s present and the environment (i.e. on the project site or in a meeting room). The selected engagement methodologies included:

- **Key Informant Interviews (KIIs):** this methodology was used to engage one-to-one with local government representatives who are used to engaging with in this manner. This methodology was also used to engage with specific land users who would be impacted by the project in different ways.
- **Focus Group Discussions (FGDs):** this methodology was used to engage with specific groups of stakeholders who were likely to have similar concerns, priorities, and perceptions of the project and its likely impacts. This included community members, women, community leaders, and teachers.

The KIIs and FGDs both followed a semi-structured format with standard list of questions for each stakeholder. Stakeholders were then given the opportunity to ask questions of the ESIA Consultants. The project site map was used as visual aid where necessary.

4.3.2.2 Outcomes

Throughout the site visit a range of stakeholders were engaged with including farmers, community members, mahalla leaders and local government representatives. Notes were taken during each stakeholder meeting and key issues discussed. Further details of these consultations are provided in the Project SEP.

4.3.3 LRP Survey & Consultation Phase

4.3.3.1 Methods

A preliminary list of project stakeholders was identified prior to the site visit. Stakeholders identified include individuals and groups that will be impacted by the land acquisition process and organizations which would be part of the LRP process.

The stakeholders identified and engaged with throughout the LRP site visits are shown in Table 4-3.

Table 4-3— Stakeholders identified and engaged with in LRP site visits

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>Stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Government Representatives</td>
<td>Deputy Khokim of Samarkand Region on Investments</td>
</tr>
<tr>
<td></td>
<td>Head of Industry development, Samarkand region Khokimiyat</td>
</tr>
<tr>
<td></td>
<td>Deputy Khokim on Investments of Kattakurgan District</td>
</tr>
<tr>
<td></td>
<td>Cadastre of Kattakurgan</td>
</tr>
<tr>
<td></td>
<td>Head of department on Investments, Kattakurgan Khokimiyat</td>
</tr>
<tr>
<td></td>
<td>Deputy Khokim on women and families, Kattakurgan Khokimiyat</td>
</tr>
</tbody>
</table>
Engagement with Stakeholders during the LRP phase can be broken down into the following tasks:

- Disclosure of the LRP process to the community: 8-9th August.
- Socio Economic Census of households with leaseholds impacted by the project: 29th August – 2nd September.
- Valuation meetings with households with assets or crops impacted by the project: 15th September – October.
- Stakeholder interviews and workshops: 20th - 21st September.
- Census and socio-economic survey of Herders using the Solar PV Area 16th – 23rd November 2022
- Livelihood restoration consultations with historical farming households 16th – 23rd November 2022
- All engagements that have occurred as part of the LRP process are detailed in Table 4-4 below.

4.3.3.2 Outcomes

It was understood that the herders are the main group of current land users from the nearby communities who will be impacted because their access to grazing areas in the Solar PV Area will be taken away because of the project.

The impacts on herders are described further in section 6.2.

The impacts on the five historical farmers/leaseholders were also understood and in particular historical leaseholders 2 and 4 it was confirmed that they were not compensated for the improvements to the land that were made prior to the project. It was discovered that historical leaseholder 2 had left the country and so was later contacted by phone in October. The process of the historic land transfer was documented as part of the Social Compliance Audit.

It was understood that the main challenges currently facing the community are:

- Drinking water access was raised as a significant challenge by all members of the community and authorities.
- The community leaders understand that community land is a scarce resource and under threat. Mahallas expressed a desire to formalise their rights over the remaining community grazing land left behind by the project.
- One output from consultation with a farmer was concern regarding the positioning of the OTL towers near a pear orchard. Following consultation, the farmer identified an alternative suitable area which was further from the trees.
- During the site visit and initial consultations with land users who will be affected by the OTL a few key points were noted.
  - For example, the leaseholder of Kattakurgan Cluster LLC land (affected between pole 9 and 16 of the OTL route) stated that they had no objection to the Project, so long as compensation for the loss of productive land is provided. Their land is mainly used for planting cotton and grazing cattle. They requested that their land specialist be informed when technical specialists visit the area as they want to be informed/consulted on each location of the towers along the route and avoid crossing the centre of the field if possible.
  - Another farmer, whose 400-ha farm is close to the village of Suyunjon, also noted that he had no objection to the Project, so long as compensation for the loss of productive land is provided. The land is used to grow cotton and wheat and to graze 100 cows and 200 sheep. The farmer also employs 40 seasonal workers. The farmer has three wells on his land and allows the community members of Suyunjon to use these wells. It was also noted that the farmer has no objection to the reconstruction of the road that passes through the area of his farm. He felt that it will be convenient road for the Project and can be jointly used by him and the project personnel. The farmer
also requested to be consulted by the project technical specialist on the exact locations of the electrical towers along the route on his area, so that he can inform if there are any specific features that should be considered.

- In November 2022 Historical farming households (leaseholders) were consulted regarding their preference for livelihood restoration and their remaining land was visited to discuss the feasibility of options of how a Land Development Grant would be spent. The majority of households expressed interest in purchasing sheep with the grant.

- In November 2022 Herders surveyed expressed a preference to be given access to the project site to collect animal feed and also be given materials in order to build shelters at the household. Spouses expressed interest in all training offered but particularly training in Meat, Milk production and sewing/wool production. All herders confirmed that someone in the household was literate and that they all spoke Uzbek.

The engagements that have taken place to date as part of the LRP process are listed below in Table 4-4.

4.3.4 ADB Site visit

There were also engagements during the site visit of ADB representatives. These site visits entailed key informant interviews and focus group discussions with key stakeholder groups including district Khokimiyats, Mahallas and government departments. Consultations were guided through questionnaires from the ESDD consultant.

ADB obtained information regarding previous engagements, of which AECOM and GBI teams engaged with regional and district authorities, as well as other focal representatives over the course of the ESIA and LRP studies. There were also discussions with Mahallas with ADB regarding affected communities by AECOM and GBI social team. Full outcomes of these previous engagements can be found in the SEP. Part of the ADB site visit involved discussions with Khokimiyats and Mahallas regarding the impact on land tenure. This included discussions regarding land lease agreements and clarifying the absence of informal landowners present within the Project area. Discussions also included impact on livelihoods such as changing land-use from existing pasture land, as well as livestock rearing and the impact of the Project on this livelihood. Other socio-economic considerations were highlighted including employment benefits, opportunities for women, welfare programs, cultural heritage, indigenous peoples, and facilities for the construction workforce. Construction utilities would include accommodation as well as access routes, wastewater treatment facilities and potable water. ADB also consulted with the Ministry of Energy regarding permanent land acquisition, temporary land use restrictions and compensation funds. Furthermore, discussions specifically on E&S monitoring took place with District Khokimiyats.

4.3.5 Cut-off date Announcement

The cut-off date represents the completion date for when anyone that will be affected by the actions of the project has submitted relevant information regarding assets to the valuer. The cut-off date is a date which marks eligibility to receive compensation or resettlement assistance. Any assets declared prior to the cut-off date to be affected are eligible to be compensated but any newly acquired assets, such as crops, that are declared or generated after the cut-off date will not be eligible for any kind of compensation or resettlement assistance.

The cut-off date was first communicated to affected leaseholders during the valuation survey which started on the 15th September 2022 and was completed on the 18th November 2022. A form was signed by each leaseholder to confirm they understood the cut-off-date. A copy of this form is included in Figure 4-1 below however a translated version was provided to affected leaseholders.
After the completion of the surveys a project wide cut-off date was announced through the local Khokimiyat district wide telegram channel and also on the farmers telegram channel. The final cut-off date was 18th November 2022. The following wording was used to communicate the cut-off date (translated into Uzbek):

All Valuations for crops and infrastructure affected by the project are now completed as of 18th November 2022

This is the project “cut-off date” for compensation.

All crops and infrastructure which were included in the valuation study before this date will be compensated if they are impacted by the project.

Any new crops planted, or infrastructure developed in the project area after this date will not be considered for compensation.

Anyone moving into the project area to farm or develop infrastructure after this date will not be entitled for compensation or support.
4.3.6 LRP Verification

The LRP verification process occurred on the 30th of November and involved consulting all affected parties to ensure they fully understand the impacts, their entitlements and confirm their preferences for livelihood restoration options. An information pack was provided to each affected household and the following was presented/explained:

- Final site map and layout
- The types of land impacts including:
  - Permanent land take
  - Temporary land take
  - Sterilization zone (no trees above 6 meters)
  - Loss of public right of way through the site
- Land take required for each leaseholder for each of the above categories
- The purpose of Entitlement Matrix and the various categories
- How compensation is calculated
- The indicative compensation amounts will be presented where possible (to be presented on a one-to-one basis only)
- The various trainings that will be provided as part of Livelihood Restoration including:
  - A verification that the project as sought their input on the choice of training
  - Confirmation that they still have time to change their mind if they choose.
  - The importance of spouses taking part in the training.
- Affected households will receive preferential employment in the construction phase for one member.
- Explain the grievance mechanism process, including:
  - How to raise a grievance
  - The process followed
  - Other ways to make a complaint (such as via the Khokimiyat) will remain open
  - Contact details
- Describe the LRP Committee:
  - Outline its function of assisting with compensation and livelihood restoration facilitation, attending to grievances where necessary and participating in LRP monitoring
  - Gather feedback on who should be on this committee.
- Signatures of household acknowledgement from Figure 4-2 from farmers, herders and their spouses (where possible).
**Farmer acknowledgement form**

To be signed and then scanned using a mobile phone bar. Post the signed copy to the farmer.

**Location:**

**Time and date:**

**Name of surveyor:**

**Name of Farmer:**

**Farm reference Number:**

Please sign below to confirm the following:

- I have received a copy of the Relevancy Mechanism Leaflet and have had the process explained to me.
- I understand the cut-off date which is the date after my land has been surveyed. After the cut-off date any additional crops or structures that are installed on the land surveyed, will not be eligible for compensation.
- I have received a copy of the Project Information Leaflet and understand how my land will be impacted.
- I understand my entitlements as per the entitlement matrix and how compensation is calculated. (The compensation amounts will be agreed on at a later date).
- I understand what support will be available to my household and have provided my preferences at this stage. (Final choices can be made at a later date).

![Signature](image)

**Signature:**  

**Spouse Signature:**

---

**Figure 4-2 - LRP Verification Form**

The engagement record for LRP verification is included in Table 4-4.
### 4.3.7 Full Engagement Record

Table 4-4. Stakeholder engagements that took place in the LRP process

<table>
<thead>
<tr>
<th>Stakeholders present</th>
<th>Stakeholder engagement methods</th>
<th>Location/Date</th>
<th>Topics discussed</th>
<th>Consultation disclosure materials</th>
<th>Means of notification</th>
</tr>
</thead>
</table>
| Disclosure of LRP process Community leaders Khokimiyat representative | Face to face community meeting | 8th – 9th August | • Presented a map of the project area and OTL  
• Explanation of who might be affected by the land acquisition (Leaseholders, informal farmers, herders, other community members who access the site)  
• Explanation of the types of impact including permanent land take, temporary land take and the conditions associated with the sterilization zone.  
• Explanation of the Land Acquisition Process and key date of surveys and construction.  
• Explained the principles of the LRP process, including:  
  • Compensation will be issued for all land and assets lost or damaged  
  • After the survey date, new crops, buildings or land sold will not be recorded or compensated  
  • Highly impacted households will receive additional livelihood support  
  • Vulnerable households will be supported  
  • The community will be consulted and participate in decision making  
  • All complaints and grievances will be recorded and addressed  
  • Upcoming surveys and engagements  
  • Contact details for the grievance mechanism | Disclosure PowerPoint Presentation | Advertisement in Telegram Group |
| Socio-Economic Survey Interview with all impacted Leaseholders | One on one interviews | 29th August – 2nd Sept Various Locations | • Gathering demographic information  
• Gathering socio-economic information  
• Gathering livelihood information | N/A | Advance notice by phone |
| Valuation Meeting with all impacted Leaseholders | One on one interviews | 15th September – 18th November Various Locations | • Gathering information for valuation | Grievance Mechanism Leaflet Cut-off date form | Advance notice by phone |
| Socio Economic Survey interview with cluster farmers | One on one interviews | 8-9th of September 2022 Various Locations | • Gathering demographic information  
• Gathering socio-economic information  
• Gathering livelihood information | N/A | Advance notice by phone |
| Head of Department Kattakurgan district on investment, innovation, support of privatized enterprises, free | Face to Face | Khokimiyat Office 20th September 2022 | • Discussed the LRP and valuation process  
• Discussed future engagement activities  
• Current land use types in the project area  
• Historic land use including the five known households and previous land use before the announcement of the project  
• Discussed the project area to ensure land order was correct | N/A | Advance notification by Telegram and Phone |
### Stakeholder Engagement

#### Stakeholders present
- Economic and small industrial zones as well the development of tourism (Representative of Khokimiyat)
- Representative of Cadastral office
- Representative of the Agricultural Department

#### Stakeholder engagement methods
- Face to Face
- At the project site

#### Location/Date
- Khokimiyat Office
- 20th September 2022

#### Topics discussed
- Current challenges with farming and livelihoods
- Processes followed for historic resettlement (as part of SCA process)
- Known and potential impacts on stakeholders from the project
- Identification of impacted people, including informal farmers and herders.
- Identification of vulnerable people and groups
- Current governance structures and community activities (such as herding rotations)
- Potential options for livelihood restoration and support
- Farmworkers and seasonal work

#### Consultation disclosure materials
- N/A

#### Means of notification
- Advance notification by phone

#### Examples of consultations:

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Location/Date</th>
<th>Topics Discussed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Leaseholder 3 Representative of Khokimiyat (See photos below)</td>
<td>Khokimiyat Office, 20th September 2022</td>
<td>Gathered demographic information and current livelihood situation, Understand how remaining/replacement land is used, Discussed Land, crops and assets lost because of the project, Discussed the historic process of land transaction, Current challenges</td>
</tr>
<tr>
<td>Historic Leaseholder 4 Representative of Khokimiyat</td>
<td>Khokimiyat Office, 20th September 2022</td>
<td>Gathered demographic information and current livelihood situation, Understand how remaining/replacement land is used, Discussed Land, crops and assets lost because of the project, Discussed the historic process of land transaction, Current challenges</td>
</tr>
<tr>
<td>Historic Leaseholder 5 Representative of Khokimiyat (See photos below)</td>
<td>Khokimiyat Office, 20th September 2022</td>
<td>Gathered demographic information and current livelihood situation, Understand how remaining/replacement land is used, Discussed Land, crops and assets lost because of the project, Discussed the historic process of land transaction, Current challenges</td>
</tr>
<tr>
<td>Historic Leaseholder 1</td>
<td>At the project site</td>
<td>Gathered demographic information and current livelihood situation, Understand how remaining/replacement land is used</td>
</tr>
</tbody>
</table>

Prepared For: Masdar
AECOM
## Stakeholder Engagement

<table>
<thead>
<tr>
<th>Stakeholders present</th>
<th>Stakeholder engagement methods</th>
<th>Location/Date</th>
<th>Topics discussed</th>
<th>Consultation disclosure materials</th>
<th>Means of notification</th>
</tr>
</thead>
</table>
| (See photos below)   |                               | 20th September 2022 | • Discussed Land, crops and assets lost because of the project  
• Discussed the historic process of land transaction  
• Current challenges | N/A | N/A |
| Community Herders from Melikhoha (See photos below) | Face to Face | At the project site 20th September 2022 | • Current governance structures and community activities (Such as herding rotations)  
• Gathered data on the number of herders from the community and how many families use the professional herders’ services  
• Gathered demographic and household data for the herders  
• Discussed access to the herding areas to the north of the site and how it will change  
• Discussed how many herders use the path through the middle of the site. Herders confirmed they mainly use access from the north and so will not be as impacted.  
• Discussed herding practices, where they herd in summer and winter  
• Discussed possible livelihood restoration options including vertical feed farming | N/A | N/A |
| Community Herders from Erkinafas (Upka) Representative of Khokimiyat (See photos below) | Face to Face | At the project site 21st September 2022 | • Current governance structures and community activities (Such as herding rotations)  
• Salaries of professional herders  
• Gathered data on the number of herders from the community and how many families use the professional herders’ services  
• Gathered demographic and household data for the herders  
• Discussed access to the herding areas to the north of the site and how it will change  
• Discussed how many herders use the path through the middle of the site. Herders confirmed they mainly use access from the north and so will not be as impacted.  
• Discussed herding practices, where they herd in summer and winter  
• Discussed possible livelihood restoration options including vertical feed farming | N/A | N/A |
| Professional Herders from Bulokcha Father of leaseholder 1 | Face to Face | At the project site 21st September 2022 | • Current governance structures and community activities (Such as herding rotations)  
• Salaries of professional herders  
• Gathered data on the number of herders from the community and how many families use the professional herders’ services  
• Gathered demographic and household data for the herders  
• Discussed access to the herding areas to the north of the site and how it will change  
• Discussed how many herders use the path through the middle of the site. Herders confirmed they mainly use access from the north and so will not be as impacted.  
• Discussed herding practices, where they herd in summer and winter  
• Discussed possible livelihood restoration options including vertical feed farming | N/A | N/A |
| Professional Herders from Bulokcha (Gorodog) | Face to Face | At the project site 21st September 2022 | • Current governance structures and community activities (Such as herding rotations)  
• Salaries of professional herders  
• Gathered data on the number of herders from the community and how many families use the professional herders’ services | N/A | N/A |
### Stakeholder Engagement

<table>
<thead>
<tr>
<th>Stakeholders present</th>
<th>Stakeholder engagement methods</th>
<th>Location/Date</th>
<th>Topics discussed</th>
<th>Consultation disclosure materials</th>
<th>Means of notification</th>
</tr>
</thead>
</table>
| Father of leaseholder 1 | Face to Face | At the project site 21st September 2022 | • Gathered demographic and household data for the herders  
• Discussed access to the herding areas to the north of the site and how it will change  
• Discussed how many herders use the path through the middle of the site. Herders confirmed they mainly use access from the north and so will not be as impacted.  
• Discussed herding practices, where they herd in summer and winter  
• Discussed possible livelihood restoration options including vertical feed farming | N/A | N/A |
| Professional Herders from Partaobod  
Father of leaseholder 1 | Face to Face | At the project site 21st September 2022 | • Current governance structures and community activities (Such as herding rotations)  
• Salaries of professional herders  
• Gathered data on the number of herders from the community and how many families use the professional herders' services  
• Gathered demographic and household data for the herders  
• Discussed access to the herding areas to the north of the site and how it will change  
• Discussed how many herders use the path through the middle of the site. Herders confirmed they mainly use access from the north and so will not be as impacted.  
• Discussed herding practices, where they herd in summer and winter  
• Discussed possible livelihood restoration options including vertical feed farming | N/A | N/A |
| Mahallas from Melikhoja and Shurak  
Community Members | Face to Face | At the project site 21st September 2022 | • The LRP process  
• Future engagement activities (Lenders visit and LRP verification)  
• Current land use types in the project area  
• Current challenges with farming and livelihoods | N/A | N/A |
| Neighbours of Historical Leaseholder 2  
Head of mahallas Katta Kurpa | Face to Face | Outside residence of leaseholder 2 21st September 2022 | • Discussed the location leaseholder 2  
• Confirmed that most of the family moved to Russia but the sister remained  
• Obtained the phone number of the sister of leaseholder 2 | N/A | N/A |
| Historical Leaseholder 2  
Sister | Phone call | 1 October 2022 | • Gathered demographic information and current livelihood situation  
• Understand how remaining/replacement land is used  
• Discussed Land, crops and assets lost because of the project | N/A | N/A |
<table>
<thead>
<tr>
<th>Stakeholders present</th>
<th>Stakeholder engagement methods</th>
<th>Location/Date</th>
<th>Topics discussed</th>
<th>Consultation disclosure materials</th>
<th>Means of notification</th>
</tr>
</thead>
</table>
| Historical Leaseholder 2 Brother | Phone call | 4th October 2022 | • Discussed the historic process of land transaction  
• Current challenges  
• Gathered demographic information and current livelihood situation  
• Understand how remaining/replacement land is used  
• Discussed Land, crops and assets lost because of the project  
• Discussed the historic process of land transaction  
• Current challenge  
• Established that the family intend to move back to Uzbekistan and obtain land. | N/A | N/A |
| Community and Professional Herders | Census & Socio-Economic and Livelihood Restoration Survey | 16th – 23rd November 2022 | • Presenting a map of the project and the grievance mechanism  
• Gathering demographic information including vulnerability.  
• Gathering information about herding practices, income and livelihoods  
• Gathering information about livelihood restoration preferences. All herders expressed an interest in all training courses and in particular in Milk Processing and sewing courses. | Survey forms, Project Map, Project Grievance Mechanism | Phone, Telegram and via Mahallas |
| Historical leaseholder 1 (See photos below) | Livelihood Restoration Preferences Survey & One on one consultation | 23rd November 2022 | • Confirming/Updating socio-economic demographic information.  
• Visiting the current land of the farmers.  
• Discussing livelihood options and how they might spend a Land Improvement Grant. All households expressed an interest in using the grant to buy sheep. | Survey forms, Project Map, Project Grievance Mechanism | Telephone call |
| Historical leaseholders 3 and spouse (See photos below) | Livelihood Restoration Preferences Survey & One on one consultation | 23rd November 2022 |  |
| Historical leaseholders 4 and spouses (See photos below) | Livelihood Restoration Preferences Survey & One on one consultation | 23rd November 2022 |  |
| Historical leaseholders 5 (See photos below) | Livelihood Restoration Preferences Survey & One on one consultation | 23rd November 2022 |  |
## Stakeholder Engagement

<table>
<thead>
<tr>
<th>Stakeholders presented</th>
<th>Stakeholder engagement methods</th>
<th>Location/Date</th>
<th>Topics discussed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LRP Verification</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Herders from Erkinafas (Upka)</td>
<td>Group meeting with herders and spouses (were possible)</td>
<td>30th November 2022</td>
<td>Presentation of/explanation of:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Final site map and layout</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• The types of land impacts</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• The purpose of Entitlement Matrix and the various categories</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Livelihood restoration packages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Early works</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• The grievance process</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• The LRP Committee</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Register of all attendees (representatives from each herd)</td>
</tr>
<tr>
<td>Professional Herders from Partaobod</td>
<td>Group meeting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Herders from Bulokcha (Gorodog)</td>
<td>Group meeting</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mahallas</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Historic Leaseholder 1 &amp; Spouses</td>
<td>One on one with farmer and spouses</td>
<td>1st December 2022</td>
<td>Presentation of/explanation of:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Final site map and layout</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• The types of land impacts</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Land take required for each leaseholder for each of the above categories</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• The purpose of Entitlement Matrix and the various categories</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• How compensation is calculated</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Livelihood restoration packages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Early works</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• The grievance process</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• The LRP Committee</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Verification survey and signature</td>
</tr>
<tr>
<td>Historic Leaseholder 2 &amp; Spouses</td>
<td>One on one with farmer and spouses</td>
<td>1st December 2022</td>
<td></td>
</tr>
<tr>
<td>Historic Leaseholder 3 &amp; Spouses</td>
<td>One on one with farmer and spouses</td>
<td>1st December 2022</td>
<td></td>
</tr>
<tr>
<td>Historic Leaseholder 4 &amp; Spouses</td>
<td>One on one with farmer and spouses</td>
<td>1st December 2022</td>
<td></td>
</tr>
<tr>
<td>Historic Leaseholder 5 &amp; Spouses</td>
<td>One on one with farmer and spouses</td>
<td>1st December 2022</td>
<td></td>
</tr>
<tr>
<td>All farmers along the OTL &amp; Spouses</td>
<td></td>
<td>1st December 2022</td>
<td></td>
</tr>
</tbody>
</table>

**Consultation disclosure materials**: Information pack, Telegram
**Means of notification**: 2 weeks in advance (date changed 1 week in advance)
Figure 4-3 Engagement with historical leaseholder 3

Figure 4-4 Engagement with professional herders

Figure 4-5 Engagement with historical leaseholder 5

Figure 4-6 Engagement with community herder

Figure 4-7 Engagement with local mahallas

Figure 4-8 Engagement with Khokimiyat and representative of cadastral office
4.4 Future planned engagements as part of Livelihood Planning

There are several future engagements which are planned as part of the Livelihood Restoration Planning phase. These engagements are described below:

4.4.1 LRP Disclosure

As per lender requirements, the LRP will be disclosed to the community and affected persons along with the ESIA document. The LRP, Social Compliance Audit and ESIA and its Non-technical summary will be translated into Uzbek and placed on the website of project lenders and placed in appropriate public spaces accessible to stakeholders including affected communities for 30 days. Public meetings will be held to present the findings of the ESIA and LRP.

Online disclosure allows for quick and free access to documents for all stakeholders that have internet. Documents disclosed online will be disclosed at a website created for this purpose by Masdar. The following documentation will be publicly disclosed:

- Preliminary ESIA.
- Draft Stakeholder Engagement Plan.
- Final ESIA/OVOS approved by the national authorities and the lenders if applicable, and conditions of approval established in the permits, if any).
- Non-technical summary of the ESIA.
- Environmental and Social Action Plan.
- Social Compliance Audit
- Draft LRP (This document)
- LRP Summary (Appendix A of this document)

Disclosure of printed documents at key locations (e.g. local government buildings). Hard copies will be provided free of charge, and there are visuals accompanying the documents to aid all levels of literacy. The following documentation, as a minimum, will be provided in English and the local language (Uzbek):
ESIA.

- Non-technical summary of the final ESIA
- Draft LRP approved by Lenders
- Social Compliance Audit
- Stakeholder Engagement Plan.
- Project Leaflets.

The disclosure will have the following purpose:

- Verifying asset survey and valuation outputs with affected landowners,
- informing affected landowners and herders about applicable valuation methods and compensation and resettlement assistance principles,
- Presenting individual and collective entitlements, in a lucid and transparent manner.

Any objections to the outcomes of asset inventory and subsequent valuation will warrant a follow-up, participatory asset survey and/or reiteration of contested valuation aspects.

The principal institutions involved in Livelihood Restoration activities include Masdar and the government's line departments of the district administration. The list below explains those responsible for LRP implementation:

- Masdar - The overall responsibility for implementation of the LRP belongs to Masdar, who will finance this aspect of the project. Masdar will employ a Community Liaison Officer who is responsible for the day-to-day engagement activities during LRP implementation, including responding to grievances, communicating activities and timelines and notifications of when land take will occur. Further information about their responsibilities is included in section 11.2.
- The local Khokimiyat will also be involved in resettlement engagement activities, as well as relevant government agencies.
- A permanent government body involved in the LRP implementation will be the Office of Land and State Cadastre which bears responsibility for updating all official government documentation and orders on existing land use
- Local mahallas for gathering community members when needed and communicating timelines and updates to community members. Local Mahallas will also have role in resolving any local disagreements or conflicts that arise during the LRP implementation.

Special resettlement assistance will be required for vulnerable people because they are less able to cope with economic displacement compared with others. A full vulnerability analysis is provided in chapter 9 which highlights any groups that will be impacted or potentially impacted by land acquisition.
4.5 Grievance Mechanism

4.5.1 Overview

AECOM, on behalf of Masdar, has developed a grievance mechanism for the Project in accordance with IFC’s Performance Standards (2012) & Guidance Notes, as well as The Equator Principles (2020) and ADB Safeguard Policy Statement (2009), which present various principles and good practice measures on grievance mechanisms. These include:

- Establish a procedure for receiving, recording or documenting and addressing complaints that is easily accessible, culturally appropriate, and understandable to affected communities.
- Inform the affected communities about the mechanism during the company/community engagement process.
- Consider when and how to seek solutions to complaints in a collaborative manner with the involvement of the affected community.
- Address concerns promptly, using an understandable and transparent process that is readily accessible to all segments of the affected communities—and at no cost and without retribution.
- Ensure full participation of both genders and vulnerable groups.
- Take into consideration customary and traditional methods of dispute resolution when designing the system.
- Assign consistent, experienced, and qualified personnel within the company with responsibility for receiving and responding to grievances.
- Establish a redress mechanism so those who feel their grievances have not been adequately addressed have recourse to an external body for reconsideration of their case.
- Document grievances received, and responses provided and report back to the community periodically.
- Provide periodic reports on issues that the grievance mechanism has identified as of concern to those communities.

The objective of Masdar grievance procedure is to ensure that all comments and complaints from people directly affected by the Project, including local communities, farmers and their families are processed and considered in an appropriate way.

Principles

The United Nations Guiding Principles (UNGP) on Business and Human Rights lists several “effectiveness criteria” for the successful implementation of a Grievance Mechanism. The UNGP states that it should always be:

- Legitimate: it must have a clear transparent and sufficiently independent governance structure to ensure that no party to a grievance process can interfere with the fair conduct of that process
- Accessible: it must be publicised to stakeholders who may wish to access it and provide adequate assistance for aggrieved parties who may face barriers to access, including language, literacy, awareness, finance, distance, or fear of reprisal
- Predictable: it must provide a clear and known procedure, with time frames for each stage; clarity on the types of process and outcome it can (and cannot) offer, and means of monitoring the implementation of any outcome
- Equitable: it must ensure that aggrieved stakeholders have reasonable access to sources of information, advice, and expertise necessary to engage in a grievance process on fair and equitable terms
- Rights-compatible: it must ensure that its outcomes and remedies accord with internationally recognised human rights standards
- Transparent: it must provide sufficient transparency of process and outcome to meet the public interest concerns at stake and should presume transparency wherever possible

4.5.2 Responsibilities

The grievance mechanism implementation team shall be comprised of the Company E&S Manager, and the appointed CLO (community liaison officer). Clear lines of responsibility and accountability will be established within the implementation team.

<table>
<thead>
<tr>
<th>Entity</th>
<th>Responsibilities for managing grievances</th>
</tr>
</thead>
</table>
| Company E&S Manager | • Ensure that the CLO has the necessary resources and personnel required to meet the commitments of the Grievance Mechanism (GM). Support the resolution of grievances by conducting investigation of serious grievances and proposing appropriate resolutions to those grievances.  
• Ensure that grievances raised are used to improve the Project's environmental and social performance in the future, so that similar grievances to not re-occur over time. |
- Monitor the effectiveness of the grievance process and make alterations to improve its effectiveness where required.

### Company Community Liaison Officer (CLO)
- Raise awareness of the GM and distribute copies of the GM leaflet and forms.
- Receive and log grievances
- Provide practical assistance to people seeking to raise a grievance, so that they are able to complete a Grievance Form.
- Send information to the Company E&S Manager, copies of completed Grievance Forms so that the Grievance Register can be updated.
- Support the investigation and resolution of grievances in close coordination with other concerned parties, including the person/group raising the concern.

### EPC Contractor Representatives
- To direct any grievances made by a person or group in contact with a member of the EPC Contractor’s workforce, to the Company CLO for formal recording, investigation and resolution.
- To provide their full support during the process of the Company investigating and resolving any grievances that occur.

### LRP Committee
- Where necessary the LRP Committee (which included representatives from local authorities listed in section 11.2) may be consulted to resolve grievances which require external input.
- All grievances which are appealed by the grievant will be reported to the LRP Committee and the Committee will oversee the resolution of the appeal process.

The grievance mechanism implementation team shall be comprised of the HSE Managers from Masdar, and the appointed CLO (community liaison officer). Clear lines of responsibility and accountability will be established within the implementation team. It is important that all members of the team are adequately trained in stakeholder engagement. It is important that the CLO be a local person, who is fluent in both English, Russian and Uzbek and familiar with the local customs. Any person or organisation may send comments and/or complaints in person or via post, email, or facsimile using the contact information provided in Table 4-6.

**Table 4-5. Responsible Persons and Contact Details**

<table>
<thead>
<tr>
<th>Pre-Construction Phase</th>
<th>Construction Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Masdar</strong></td>
<td><strong>Masdar</strong></td>
</tr>
<tr>
<td>Khurshid Karamatov, Community Liaison Officer</td>
<td>To be confirmed</td>
</tr>
<tr>
<td>e-mail: <a href="mailto:kkaramatov@masdar.ae">kkaramatov@masdar.ae</a></td>
<td></td>
</tr>
<tr>
<td><strong>Community Liaison Officer (CLO)</strong></td>
<td><strong>Community Liaison Officer (CLO)</strong></td>
</tr>
<tr>
<td>Saida Yusupova, Community Liaison Manager</td>
<td>To be confirmed</td>
</tr>
<tr>
<td>e-mail: <a href="mailto:Saidayusupova@gmail.com">Saidayusupova@gmail.com</a></td>
<td></td>
</tr>
<tr>
<td>Contact phone number: (+99893) 522-00-70</td>
<td></td>
</tr>
<tr>
<td>(+99890) 319-77-21</td>
<td></td>
</tr>
</tbody>
</table>

In addition to the above contact details, a mailbox will be provided at the site entrance to allow local people to raise grievances in a more informal way. Grievance boxes will also be place in each surrounding project community.

**Implementation of the Grievance Mechanism**

All information about grievance procedures, grievance forms, and responses will be available in Russian and in Uzbek. Access to the mechanism will be free of cost. All written and/or verbal complaint will be recorded by the Masdar CLO. Handling grievances encompasses a step-by-step process as well as assigned responsibilities for their proper completion. Masdar will follow the process’ steps illustrated in section 4-10 below:

Handling grievances encompasses a step-by-step process as well as assigned responsibilities for their proper completion.

Masdar will follow the process’ steps discussed in the sections below.

The lenders to the project also have in place their own Independent Accountability Mechanisms Network (IAMs). This provides an avenue for complainants to still voice any concerns regarding the Project if the Grievance Mechanism put in place by Masdar is not functional.
4.5.3 Publicizing Grievance Management Procedures

The grievance contact details were previously communicated to the community during the disclosure meetings and all meetings thereafter. A leaflet was handed to all farmers along the OTL which contained a summary of the grievance mechanism during the valuation meetings. This was followed up with a poster that was provided to the Khokimiyat and Mahallas. The grievance mechanism was also communicated during meetings held with community members in November.

The grievance mechanisms will be publicized in the following ways in the future:

- Posters (project site, local Council, and residential clusters within a 5 km buffer from the site) will be maintained at Mahallas offices and relevant community buildings (e.g. outside the school)
- All future consultation meetings will remind the community of the grievance mechanism and contact details.
- Letters will be provided to the local and provincial authorities, and Online (website)

4.5.4 Implementing the grievance mechanism

A flow chart below in Figure 4-13 illustrates the process for submitting, receiving and addressing grievances.

Figure 4-13 – Grievance process flow chart

4.5.5 Submitting a Complaint

- The grievance mechanism will allow for complaints to be filed in several ways:
  - By telephone
  - By email
  - By direct message (text or telegram)
  - Online: By email and/or through an online form
  - At the project gate
  - During meetings with the CLO
4.5.6 Receiving and Acknowledging Complaints and Grievances

All incoming grievances will be acknowledged as soon as possible, no later than 5 working days from receipt. A formal confirmation—with a complaint number, or other identifier, and a timeline for response—assures the complainant that the organization is responding properly, and it gives the project a record of the allegation. As a good practice, complaints received in person will be acknowledged on the spot. The CLO will be the Masdar employee who will initially receive the complaint.

If a more complex investigation is required, the complainant will receive an update within two weeks of the grievance being received, explaining the actions required to resolve the complaint, and the likely timeframe.

Masdar will explain in the first letter of acknowledgment, which claims are clearly outside the scope of the mechanism and what alternative mechanisms communities can use to address these potential issues.

To ensure that all grievances are adequately investigated and closed out, a grievance log will be kept, documenting all the actions taken to address each grievance. An extensive investigation may be required when grievances are complex and cannot be resolved quickly. Masdar will take full responsibility for investigating the details of grievances coming through its grievance mechanism, following the principle of “no cost”. The E&S Manager will be responsible for the investigation of serious grievances but will delegate to the project CLO when appropriate. All grievances will be kept confidential within the E&S team as far as possible and only shared only shared with other employees where it is necessary for the resolution of the grievance. In some cases where third where third parties must be involved, such as contractors or the LRP committee the grievant will be notified, and permission obtained before the information is shared.

There will also be a special protocol for Gender Based Violence (GBV), Sexual Exploitation Acts (SEA) and Sexual Harassment (SH). This will include a safe, confidential and accessible grievance mechanism which is utilisable by the local community. An anonymous line will also be established for reporting which is gender sensitive. Once grievances are received, a review committee, where women, vulnerable groups and all genders are represented appropriately, will investigate grievances. The committee will also work with local community organisation to coordinate grievance redress measures.

All grievances received will be captured in grievance forms which will then be forwarded to the Masdar HSE Manager. The grievance will be registered in a grievance tracker in order to track and monitor actions taken against the grievance. Each complaint will be assigned an individual number to ensure that it is appropriately tracked and closed out.

It is important that the process is easily accessible and not intimidating to stakeholders.

4.5.7 Screening and assessing the Grievance

During the assessment, the team will gather information about the case, key issues and concerns, and help determine how the complaint might be resolved. Masdar will:

- Determine who will conduct the assessment. Typically, the Masdar HSE Manager will perform this task or directs it to an appropriate staff or department for assessment (production, procurement, environment, community relations, human resources).
- Select a company member (typically the CLO) to engage directly with the complainants to gain a first-hand understanding of the nature of the complaint.
- Clarify the parties, issues, views, and options involved:
  - Identify the parties involved.
  - Clarify issues and concerns raised by the complaint.
  - Gather views of other stakeholders, including those in the company.
  - Determine initial options that parties have considered and explore various approaches for settlement.
- Classify the complaint in terms of its seriousness (minor, significant or major). Seriousness includes the potential to impact both the company and the community.

4.5.8 Define Grievance Resolution Approach and Responses

The grievance investigation team will provide a proposal to resolve the complaint, which will have the backing of the Senior Management. The E&S Manager will then ask the CLO to contact the complainant to get an agreement on the proposed solution.
Solutions may include extending support or livelihood restoration to additional persons, replacing lost or damaged property, providing monetary compensation, re-valuing affected leaseholds or property, revising the community’s engagement strategy, and renegotiating existing commitments or policies.

If all parties accept the proposed solution, the agreed actions will be implemented in the established timeframe. In the case that complainant does not accept the proposed resolution, Masdar should re-assess the situation and make sure that all alternatives within the grievance mechanism are explored. If agreeing on a solution acceptable to all parties is not possible within the grievance mechanism, the complaint will be referred to external mechanisms.

When formulating a response Masdar will ensure that:

- The response should consider the complainants’ views about the process for settlement as well as provide a specific remedy. The response may suggest an approach on how to settle the issues, or it may offer a preliminary settlement.
- If necessary, the CLO presents and discuss the response to the complainant or will hold a meeting with the complaint coordinator, relevant company manager, and the complainant. If a direct meeting is not possible, consider meeting with a neutral third party serving as facilitator to agree next steps.
- If the case is complex and a resolution time frame cannot be met, provide an interim response—an oral or written communication—that informs the person of the delay, explains the reasons, and offers a revised date for next steps.

All comments and complaints will be responded either verbally or in writing, in accordance with preferred method of communication specified by the complainant in the Comments and Complaints Form. Comments will not be considered as complaints and may not, therefore, be responded to unless the commenter requests a response.

Close-up monitoring of a complaint will be undertaken, if possible, by collecting proof that the necessary actions have taken place. For example:

- If the issue was resolved with the satisfaction of the complainants, get a confirmation and file it along with the case documentation.
- Take photos or collect other documentary evidence to create a comprehensive record of the grievance and how these were resolved.

4.5.9 Request feedback

Masdar will seek sign-off from the complainant(s) that the grievance has been resolved and request any feedback they have. This will be achieved via a Grievance Resolution document.

All grievances are to be signed off at an appropriate level of seniority of staff. The staff member who signs off the complaint should have sufficient knowledge about the topic to provide assurance.

Once sign-off has occurred, this will be recorded in the grievance form.

Any grievances not signed-off as resolved will be investigated further.

4.5.10 Appeals and other recourse

If the complainant is not happy with the outcome of the grievance process, they may lodge an appeal which will automatically trigger another investigation by the E&S manager and will involve the LRP Committee, Khokimiyat and Mahalas except in cases where it would not be appropriate to involve external parties due to confidentiality. If the company GM is unable to resolve the grievance even after an appeal, the complainant may utilise other external channels such as:

- Raising an official complaint with the Khokimiyat
- Contacting the lenders directly through their independent accountability mechanisms
- Seeking legal resource

4.5.11 Monitoring and reporting of grievance mechanism

Masdar will report internally at least once a month on grievances received (both open and closed), and how they were resolved. Suggested monitoring and evaluation activities are outlined below:

- Monitor the grievance log in terms of response times to address complaints lodged as well as the recurrence of complaints over time.
Gauging level of stakeholder satisfaction as a secondary aspect to other stakeholder engagement meetings.

Monitor media coverage of Masdar.

Keep records of all engagement activities including meetings attended, community meetings, focus group discussions, etc.

Keep a library (electronic or hard copy) of all communication material.

Conduct stakeholder interviews to gauge level of satisfaction.

Develop and assess performance in terms of Key Performance Indicators (KPIs).

Revise plans and activities.

5. **Socio-Economic Baseline**

The purpose of this section is to provide a summary of the socio-economic conditions within the project area and quantify the number and status of affected people. Land use within the project area varies considerably from farmer to farmer. Some farmers only use the land during the summer months, due to the potential for harsh frost events to result in the mass fatalities of livestock.

Although the focus of the baseline study is the Project site and surrounding communities, some national and regional level baseline information may also be included to provide a wider socio-economic context.

### Table 5-1. Nearest Settlements to the Project

<table>
<thead>
<tr>
<th>Settlement</th>
<th>Distance from the Project Site (km)</th>
<th>Number of Residents</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melikhodja</td>
<td>1.6</td>
<td>1,701 (M= 858, F= 843)</td>
<td>Small village located northwest of the project site. Falls under the Melikhodja mahalla</td>
</tr>
<tr>
<td>Erkin Nafas*</td>
<td>0.87</td>
<td>719 (M=353, F= 361)</td>
<td>Erkin Nafas, Upka and Damhoda, grouped together by the district administration for the purpose of population estimates, are located to the northeast of the project site. These settlements are three relatively small rural villages. All three of these villages fall under the Shurak mahalla</td>
</tr>
<tr>
<td>Bulakchi</td>
<td>1.2</td>
<td>718 (M=349, F= 369)</td>
<td>Also located to the north east of the project site, Bulakchi is a rural village.</td>
</tr>
<tr>
<td>Suyunjon</td>
<td>1.35</td>
<td>1,177 (M= 597, F= 580)</td>
<td>Southwest of the project site Suyunjon is a small village which contains an electrical substation where the OTL from the project site will send the energy to be fed into the national grid. Falls under the Melikhodja mahalla Suyunjon community members get their water from a well on a farmer’s land that will be affected by the OTL route Suyunjon community members are also allowed to graze their livestock on this farmers land (for an agreed price) after the harvest is collected.</td>
</tr>
<tr>
<td>Partaabad</td>
<td>1.8</td>
<td>-</td>
<td>The village of Partaabad in located southeast of the project site and falls within the Pastdargom District (other settlements in the AoI are in the Kattakurgan District). Falls under the Bagishamol mahalla of Pashdargom District.</td>
</tr>
</tbody>
</table>

*Source: District Administration. Key: (*) including Upka and Damkhodza, (M) Male Population, (F) Female Population.*

5.1 **Local Socio-Economic Setting**

The Project site is located within the Samarkand Region of Uzbekistan which has an estimated population of 3.6 million people and encompasses 14 administrative districts. There are seven communities which are located within 2km of the Solar PV Area. These communities have been identified in Figure 5-1 below:
5.1.1 Administration, Population and Ethnicity

Obligations of regions regarding environmental protection are put to the Soviets of National Deputies, headed by the Leader of administration (khokims). Regional and local government are responsible for registering and evaluating the condition of nature resources, ecologically harmful facilities and are responsible for control, nature protection and usage of nature resources.

5.1.1.1 Formal Administration

The system of public administration in Uzbekistan is comprised of two tiers, central and local. Local governments are subdivided into regional, district and city administrations. In addition, community self-governments also operate locally, although they are not part of the central public administration system (Bektemirov & Rahimov, 2001).

At the sub-district level there are mahalla Committees which act as governance institutions in towns and rural areas. Mahalla Committees are salaried state officials and as such are answerable to the local state administrators as they are fully dependent on their funding¹.

5.1.1.2 Population

The mahallas identified in Section 5.1 correspond to the seven settlements located within a radius of 2 km of the project site boundary. Based on satellite images and extrapolating population figures to the seemingly populated land, it has been estimated that the overall population of all seven settlements could be within the range of 5,000-6,000 inhabitants.

5.1.1.3 Ethnic composition

The Republic of Uzbekistan is a landlocked country in Central Asia and was formerly a part of the Union of Soviet Socialist Republic until it declared independence in September 1991. The country occupies a total of 448,900 square kilometres and shares borders with five other countries: Afghanistan, Kazakhstan, Kyrgyzstan, Tajikistan, and Turkmenistan.

Uzbek is the only official and most widely spoken language in the country, spoken natively by approximately 85% of the population. Russian has widespread use as an inter-ethnic communication language and as a language of governance. Other ethnic languages


PreparedFor: Masdar
spoken in the country are Tajik, Kazakh, Tatar, Kyrgyz, and others. In terms of religious faith, 88% percent of the population are Muslim (primarily Sunni), 9% are Eastern Orthodox Christians and 3% are of other faiths (CIA, 2021).

Although detailed ethnicity information for Kattakurgan, which covers the Project Area is not available, Generally, ethnic groups living in Uzbekistan have equal access to all social and other services, including health, education, and water and sanitation. None of the groups are socially excluded either from a legal standpoint or in terms of their actual situation. Further, none of the ethnic groups maintain cultural or social characteristics separate from the mainstream Uzbekistan society that would classify them as ethnic minorities. Therefore, based on the information obtained during the site visit and stakeholder engagement, there it is understood that there are no indigenous people living in the region that meet EBRD criteria as defined in Performance Requirement 7 – Indigenous Peoples or ADB criteria defined as:

i. self-identification as members of a distinct indigenous cultural group and recognition of this identity by others.

ii. collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories.

iii. customary cultural, economic, social, or political institutions that are separate from those of the dominant society and culture; anda distinct language, often different from the official language of the country or region.

5.1.1.4 Economy
Economically, Uzbekistan is a major producer and exporter of cotton. The area of influence is dominated by cotton production, which in term provides more opportunities to women as seasonal farmworkers. Much of the land is also used for grazing of sheep, goats and cattle with the exception of areas used as orchards and occasional growing of winter wheat.

5.2 The Project Area: Solar PV Area
5.2.1 Historic Leaseholders
Currently there are no leaseholds present in the Solar PV Area due to all land being handed back to the Khokimiyat in 2019 in anticipation of the Project. There were however five leaseholds belonging to 5 households (41 affected people) that were terminated or altered to make way for the project. These households were identified during the ESIA scoping visits and investigated further as part of the LAA process which concluded that they should be included as part of this LRP. The approximate location of their leaseholds is shown below in Figure 5-2. Representatives of each historic lease holding household were interviewed in September and October 2022. Table 5-3 below summarises the socio-economic status of each historic lease holding household.
Figure 5-2. Historic leasehold areas to be affected by the Project.
Table 5-2 – Historic Landowners

<table>
<thead>
<tr>
<th>Farmer and Sub-Lease Agreement</th>
<th>Household Size</th>
<th>Location of interview</th>
<th>Summary socio-economic status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Leasehold 1</td>
<td>8 (5 Male, 3 Female)</td>
<td>AECOM/GBI visited Leaseholder 1 on his land just outside of the Project border on 20th September 2022 and interviewed him and his father.</td>
<td>Historic Leasehold 1 is an officially registered farm in a long-term lease contract with the district government, which sits adjacent to the project site’s north-western boundary. The household has two houses, one near the project site (just outside thus not relocated) and one in the village. The household head has a spouse, six children. The household also has three siblings and parents who also dwell with him. His two brothers are married, and each has two children. His sister is divorced and has two Children. The household is not considered vulnerable. The leaseholder previously leased 10 hectares (ha) of land since 2017 but has already returned 7 ha of the land for the Project. The remaining 3ha is used to grow peas and fruits as well as graze 50 sheep. The leaseholder claimed that he returned the land voluntarily as he was not using it and the 3 ha are enough for him now. The household head also works at the Masdar Lab earning 130 USD per month while his brother farms. Currently, he has 3 hectares of land and 50 sheep, whereas before he had 10 hectares of land. The project is not expected to cause transportation obstacles, as there is earth road outside the area between the farm and cotton fields nearby.</td>
</tr>
<tr>
<td>Historic Leasehold 2</td>
<td>18</td>
<td>AECOM/GBI visited the house of the family of Leaseholder 2 on the 21st of September but were unable to locate any family members. However, AECOM spoke to the household on the phone on the 1st and 4th October 2022.</td>
<td>Historic Leasehold 2 was another officially registered farm in a lease contract with the Khokimiyat of Kattakurgan. This farmland is adjacent to the project’s north-eastern boundary. The land was leased by two brothers and two sisters and their children (18 people in the household). Their elder brother had already relocated to Russia and became a citizen there before the project started. The other two brothers were farming the land and invested significantly in the land including building a well and an overnight shelter. Before the land was able to become profitable, the land was returned to the Khokimiyat to make way for the Project. The brothers were offered another plot of land but this land was not appropriately serviced (i.e. no power line for pump, no well for water) so the brothers refused the land and no compensation was provided. They, therefore, became in debt due to the investment they lost. The farmers did an independent valuation of the land and assets and the amount quoted was UZS 83 million. Unfortunately, due to COVID-19 the Khokim of the district passed away in summer of 2020. The farmer approached the new head of administration in March 2021 but had not received any information on the compensation. These two brothers and their mother have relocated to Russia in order to earn money and repay their debts. Only the sister of the leaseholders was in Uzbekistan at the time of the LRP studies in September and October 2022 and it was confirmed that the household is experiencing financial difficulties. The household is considered vulnerable.</td>
</tr>
</tbody>
</table>

PreparedFor: Masdar

AECOM

62
**Historic Leasehold 3** 5 (3 Male, 2 Female)  
**Farmer #3 at the local Khokimiyat office.**

Historic Leasehold 3 was a formally registered farm of 60 ha used to grow crops (grain, barley, wheat) and for livestock grazing. At the time of the site visit (September 2021) there were no longer any physical structures on the site, although there had previously been a container on the land for the farmer to stay in when herding livestock. The farmer left the area and in February 2020 and received alternative land (20 ha) in another area. He agreed to take these 20 hectares of land as he claims that this was sufficient for the household and previously, he used only 30 hectares out of the 60 ha he owned. The new land is rain-fed same as the one he obtained before. The farmer cultivates every culture that can be grown by refeeding, including wheat and peas. Therefore, the yield depends on the weather conditions. He mentioned that he does not need additional land. He sold his sheep last summer as he needed funds for treatment from COVID-19 complications.

The household head stated that only half of his current land (10 hectares) is productive, and the other 10 hectares of average quality. He used to have farm animals, including five sheep, however, he had to sell them in order to pay for COVID-19 treatment. The replacement land is also undersized and not suitable for grazing sheep.

The household has a tractor and a container with the gas and water supply to stay overnight. This container was located at the old site and was moved to the new land.

The household head was 70 years old at the time of the interview and thus should be considered vulnerable as would have been 68 at the time of land transfer.

The household head has a spouse, three children, two married sons (one has four children, another one has three) and a married daughter who also has three children. All children and grandchildren are healthy.

His two sons are migrant workers who provide for their families from abroad. The household's head wife is also a pensioner, and both of them receive a government pension. They receive one of the lowest pensions due to not recording their years of employment. The household head’s pension is 50 USD per month and wife’s is 45 USD per month.

---

**Historic Leasehold 4** 6 (4 Male, 2 Female)  
**Leaseholder 4 at the local Khokimiyat office on 20th September.**

Historic Leasehold 4 is an officially registered legal leasehold farm named “Shomurod Nursakhovat” which was 67 hectares, 15 of which was used for agriculture and the rest was used for herding. The household invested heavily in the land and planted crops from 2016 until 2019 when the land was taken. They cultivated wheat, vegetables and grapes.

The household had a well and installed electricity lines that they brought over 3 km. Additionally, they had construction where they stayed overnight. However, unfortunately, someone burned down the place when it was left at the end of 2020.

The household used 15 hectares of the 67 hectares they had previously and the rest of the land was used by the community herders who were not satisfied that the land was taken by the Project. At the previous location, the household had fruit teas and peach trees. After a period of conflict the household started negotiating with the herders and they worked toward an agreement. Most herders went to the old land in the project area in spring.

The household agreed to relocate to a new plot of land 4 km away from the project site under the condition that compensation be given to bring the new plot of land up to the standard of the previous land. This required installation of drilling well, power supply, and levelling of the land plot. Unfortunately, since the death of the Khokim of the district, they have also not received any compensation and are now in dept.

Currently, the household has 10.5 hectares, 8.5 are used for agricultural crops, watermelon, melon, and wheat, and another 2 hectares for herding where recently they bought 10 sheep. The previous local Khokimiyat helped them to drill a 180-meter well on the new land, but it was unsuccessful as no groundwater was reached.

Currently, the household and Khokimiyat have an agreement to use the water from the channel, using an electric pump in cooperation with other farmers however this has created a challenge to manage steady water flow as multiple farmers rely on it and...
not all are willing to pay for the electricity. This results in the electricity being cut off on regular basis. The household states that the new farm just is now (September 2022) starting to reach the productive level they had in 2019 before the project.

The household member interviewed dwells with her husband, two daughters-in-law, elder son and his two children. The elder son works for the farm, however, he graduated in aviation and used to work in the airport. The elder son is currently studying history at Navoi University and will graduate this year. The younger son serves in the military and lives in Tashkent. One of her daughters is divorced and has two children, and she is looking for a job as a German translator. Another daughter is a housewife, looking after the children.

The household head interviewed was 58 and her husband is 63, they are both pensioners. She was previously a nurse for 40 years and gets 110 USD per month as a pensioner. Her husband was a doctor.

The household does not fall into a vulnerability category. All family members are well educated; however, they have been put into debt by the Project. Therefore, the Project has made them more vulnerable.

Historic Leasehold 5

<table>
<thead>
<tr>
<th>Historic Leasehold 5</th>
<th>AECOM/GBI met with Leaseholder 5 in the parking area of the local Khokimiyat on 20th September. He came to the parking area in his car with his eldest son.</th>
</tr>
</thead>
</table>

Historic Leasehold was an officially registered farm of approximately 56.4 ha of land leased for 25 years. In February 2020, the farmer was requested to return 40.6 ha of land for the purposes of the Project, therefore 15.8 ha of the land was left. Out of the 56.4 ha 20 were used for crops and they also had 70 sheep. They grew rainfed wheat, but it was all harvested before the land was taken. They had no investments in the land and were able to harvest everything before moving.

The farmer said he had no objections to the project taking the land as the remaining land is enough to support his family.

Their current land is predominantly used for planting winter wheat and corn. The farmer drilled a well in the area and installed an electricity supply. A building in the project area was destroyed and contents were stolen.

His current farm is 15.8 ha, and 10 are used for agriculture growing rain fed wheat and 5 for pasture where they have 25 sheep.

The household head is 65 years old and cannot walk and thus should be considered vulnerable. His wife is 60 and they live with their two adult sons who are both married, and both have two children. The household head receives 180 USD of state pension, increased due to disability. His wife receives 50 USD, one of the lowest pension levels. The eldest son is the accountant and therefore manages the farm. The younger son is a chair of the district farming association and is also employed with the national railway company.
5.2.2 Herders

The Solar PV area as well as large areas to the north and east, are currently used by community herders to graze sheep, goats and cattle as shown in Figures 5-5 and 5-6 below. Small numbers of Individual livestock are owned by households in the community who either collaborate by taking turns with herding (community herders) or they pay a professional herder to do so.

Grazing duty typically rotates on a daily basis with a single member from one household taking responsibility for the herd that day. Community herders are generally not paid for the days in which they attend to the herd, as the rotation is seen as mutually beneficial.

There are however seven professional herders who own their own livestock and will also herd livestock from other community households for a monthly fee of between 3 and 6 million som.

Other professional herders from outside of the immediate project area also may occasionally use project site which is open to anyone to use.

During AECOMs visit to the project area in September 2022, a representative of each herd was interviewed to gather socio-economic information about the herders and herding practices. It was explained that there are currently five community herds which originate from the village of Melikhodja and the herders operate on an rotational basis and are not paid. There is another community herd from Erking Nafas (Upka) which also is rotational and unpaid.

There are professional herders who herd their own herd along with herds from other households and are paid for their services.

All explained that they herd regularly from March to November and occasionally in the winter. They use the Solar PV Area and surrounding community areas to the north and east to herd.

A further census and socio-economic survey of all individual herders was then conducted between the 16th and 23rd November 2022. In total, 42 Herder households participated in the census and 218 project affected people (individuals) were recorded as part of the herder households. 7 out of 42 Herders were professional herders, whereas the rest herded on behalf of the community.

The herder households came from the following villages within the Project area:

- Erkin Nafas (17 Community herders and 2 professional herders),
- Buloqchi (9 community herders and 2 professional herders),
- Melixoja (9 community herders and 2 professional herders)
- Pardabod (1 professional herder).

Amongst all households, there was a total of 167 cows, 681 sheep, and 547 chickens.

All of the herders in the census were male and married, with none of the households being a female headed household. The age amongst the herders ranged from 29-75 years of age, with the average age being 49 years old (out of 41 herders who gave their age).

Of the 42 households, the most common household size was six (over 28% of all households), with the minimum and maximum household size being 1 and 8 respectively. The main language for all households was Uzbek, and the nationality of all the herders households was Uzbek. All households declared there was an adult present that could read and write. Regarding diseases and disability, one household declared that they had two members which had been affected by poor health and noted as vulnerable. One herder suffered from a mental disability who has also been noted as vulnerable.

In total 41 herders gave education information. 4 out of 41 herders had higher education (oliy), 1 out of 41 herders had secondary school (Secondary), 1 out of 41 herders had primary school (maktab), and 35 out of 41 herders had middle school (O’rta), as their highest level of education. This is demonstrated in figure 5.3 below. Education ranges were from all levels in Erkin nafas, but in all the other villages, the highest level of education was O’rta (middle school).
All households listed food and clothing as their main expenditure, with approximately 10% of households also detailing contracts, and approximately 2% of households technology as other additional costs. 9 out of 42 herders declared that their household is in substantial debt. The majority of herders main source of household income is from profits from self-employment. All sources of household income can be found in Figure 5.4. Where applicable, the monthly payment received for herding for households was between the 3-6 million Uzbekistani sum. Regarding total household income, the minimum and maximum values amongst herder households was 780,000 and 7 million Uzbekistani sum respectively.
5.2.3 Feed collection

The Solar PV Area is also used by community members to collect feed for livestock and store it for winter. This is a natural resource that is available to the whole community. While AECOM visited the site area in September 2022, a community member was seen collecting feed and loading it onto the back of a motorbike Trailer as shown below in Figure 5-7. The feed was gathered and stored in the community as showing in Figure 5-8.
5.3 The Project Area: Overhead Transmission Line

The proposed OTL route has been designed to avoid populated areas and isolated structures however, it does pass over extensive areas of cultivation whilst several poles will need to be pegged within the boundaries of farms. A preliminary analysis of the route has identified the current land uses which could potentially be affected by the construction and operation of the OTL. This analysis is based on the following assumptions:

- A clearance corridor of 32m at each side of the OTL will be required as a wayleave
- A clearance area of 5 m$^2$ has been defined around towers
- A total number 19 towers have been pre-designed

In summary, the OTL will affect four farms with leaseholds (22 affected people within these 4 households) and will need approximately 0.678 ha$^2$ of land to be acquired. No structures were identified along the route and all the fields which will be affected grow seasonal crops. The leaseholds along the OTL are illustrated below in Figure 5.9.
Figure 5-9 – Leaseholders along the OTL
Out of the 4 farmers with leaseholds under the OTL, the largest permanent land take is 0.5% of their land for the towers. The largest temporary land take is 3% of the land for assembly areas and construction route. The commercial farmers typically employ farmworkers who help to manage the farm and seasonal farmwork during harvest is a significant source of livelihood for women in the nearby communities who help with the harvest of Wheat and Cotton. The impact on these workers is however expected to be negligible.

Four Sub-Lease Agreements SK009, SK014, SK015, and SKN016 all have Project Infrastructure located inside their boundary – although the extent of impacts is minor in all cases. All were interviewed as part of the socio-economic survey and where the following was confirmed:

- All four of the affected leaseholders are male and hold a long lease for the land which is their main permanent place of farming or work.
- All of the affected leaseholders are originally from mahalla Melikhodja district of Kattakurgan.
- All leaseholders interviewed were the household heads.
- Leaseholders were typically part of a household of at least 4-persons including a wife, whose main occupation is typically home maintenance (looking after home & family).
- All heads of household and their spouses were literate.
- The majority of the affected leaseholders travel between 5 and 45 minutes to get to the affected land, typically achieved by driving.
- The affected leaseholders have all lived in the village for over 20 years and the majority of the affected leaseholders have maintained the same house throughout their lifetime.
- All affected leaseholders have stated that without this land, they will still be able to continue their current income, however there is one affected leaseholder who considers his household vulnerable.

The majority of affected leaseholders also provided household results with descriptions of their family members’ education attainment, occupation, and health status. Results across this data set pertain to a total of eight family members belonging to the four affected leaseholders.

Table 5-3. Household Count of Education Attainment

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Count of Education Attainment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never Attended</td>
<td>1</td>
</tr>
<tr>
<td>Primary School - Completed</td>
<td>2</td>
</tr>
<tr>
<td>Primary School - Now Attending</td>
<td>4</td>
</tr>
<tr>
<td>University or College</td>
<td>1</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>8</strong></td>
</tr>
</tbody>
</table>

Leaseholders were asked about income and the cost of living, but one leaseholder was unable to provide that information. The total annual cost of living for each household is also recorded and is as follows:

- SK009: 214300000 UZM
- SK014: 476300000 UZM
- SK015: 1470000000 UZM
- SKN016: Not available

The farmer with Sub-Lease Agreement SK015 also runs a small enterprise/engages in trading (buying/selling manufactured and processed goods) and considers this a formal enterprise (operating from a permanent building other than the home). The current approximate value of the stock of this business is 2500000000 UZM. The household's small enterprise/trading activity also employs individuals from outside of the household (130 employees).
Two of the households admit to owing money or goods to another person, institution or business which are 430600000 UZM and 250000000 UZM, respectively. When asked to choose between never have enough; can manage to get by; comfortable; rich; and very rich, the affected leaseholders described their financial circumstances as the following:

**Table 5-4. Affected Leaseholders Financial Circumstances**

<table>
<thead>
<tr>
<th>Affected Leaseholder with Land:</th>
<th>Description of Financial Circumstances</th>
</tr>
</thead>
<tbody>
<tr>
<td>SK009</td>
<td>Rich</td>
</tr>
<tr>
<td>SK014</td>
<td>Rich</td>
</tr>
<tr>
<td>SK015</td>
<td>Rich</td>
</tr>
<tr>
<td>SK016</td>
<td>Not available</td>
</tr>
</tbody>
</table>

A summary of the current socio-economic status of each affected leaseholder is provided in Table 5-6. This information is taken from a household questionnaire which took place on 2022-08-25 through a series of face-to-face meetings with the affected leaseholders at locations that they are normally resident in, including at various sites around Kattakurgan khokimiyat.
### Table 5-5. Summary socio-economic status of affected leaseholders along the OHTL

<table>
<thead>
<tr>
<th>Location of interview</th>
<th>Farmer and Sub-Lease Agreement</th>
<th>Household Size</th>
<th>Summary socio-economic status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kattakurgan khokimiyat</td>
<td>Farmer with Sub-Lease Agreement SK014</td>
<td>4 (3 male, 1 Female)</td>
<td>The individual providing the information is the affected leaseholder. The affected leaseholder is from Kattakurgan district of Samarkand, and now resides in the community of mahalla Melikhodja. The affected leaseholder is the Household Head and is part of a four-person household including a wife, whose main occupation qualified professional (having attained a university or college education); and two sons who are both under the official working age of 18 (currently attending primary school). The affected leaseholder is Male, holds a long lease for the land which is his main permanent place of farming or work. The affected leaseholder’s primary residence is in Paishanba town, Mirzo Ulugbek mahalla (Baland Chordara street), Kattakurgan. The affected leaseholder travels approximately 45 minutes to get to the affected land – this is typically achieved by driving. The affected leaseholder lived in their Town or Village for 41 years but has only lived in his current house for four years (having previously lived in Alisher Navoi mahalla and moved to the area through marriage). The affected leaseholder owns/uses one plot of land which are located in mahalla Melikhodja, Kattakugan and no other people currently use the land. Without this land, the affected leaseholder will still be able to continue his current income. The affected leaseholder does not believe that the household will be significantly impacted by the project; and it is not considered a vulnerable household according to the representative of the affected leaseholder.</td>
</tr>
<tr>
<td>Kattakurgan khokimiyat</td>
<td>Farmer with Sub-Lease Agreement SK016</td>
<td>7</td>
<td>The individual providing the information is the affected leaseholder. The affected leaseholder is from Kattakurgan district of Samarkand, and now resides in the community of mahalla Melikhodja. The affected leaseholder is the HHH and part of a seven-person household. The affected leaseholder is Male and holds a long lease for the land which is the farmers main permanent place of farming or work. The affected leaseholder’s primary residence is in Kattakurgan city, Kattakurgan. He travels approximately 20 minutes to get to the affected land – this is typically achieved by driving. The affected leaseholder lived in their Town or Village for 24 years and has maintained the same house throughout this time (having been born in the city). The affected leaseholder owns/uses one plot of land which are located in mahalla Melikhodja, Kattakugan and no other people currently use the land. Without this land, the affected leaseholder will still be able to continue his current income. The affected leaseholder does not believe they will be significantly impacted by the project; however he does consider the household to be vulnerable.</td>
</tr>
</tbody>
</table>
### Kattakurgan khokimiyat

| Farmer with Sub-Lease Agreement SK009 | 5 (Male) | The individual providing the information is an executive director of the land and a representative of the affected leaseholder which is a farming cluster, with permission to complete the survey on the affected leaseholder’s behalf. The affected leaseholder of SK09 is from Kattakurgan district of Samarkand, and now resides in the community of mahalla Melikhodja. The affected leaseholder is the Household Head and part of a five-person household.

The affected leaseholder is Male, holds a long lease for the land which is the farmers main permanent place of farming or work. The farmers primary residence is in Kattakurgan city, Kattakurgan. The affected leaseholder travels approximately five minutes to get to the affected land – this is typically achieved by driving. He lived in their Town or Village for 49 years and has maintained the same house throughout this time (having been born in the city). The affected leaseholder owns/uses one plot of land which are located in mahalla Melikhodja, Kattakurgan and no other people currently use the land. Without this land, the affected leaseholder will still be able to continue his current income. The affected leaseholder does not believe that the household will be significantly impacted by the project; and it is not considered a vulnerable household according to the representative of the affected leaseholder. |

---

### On Farm-site near Kattakurgan khokimiyat

| Farmer with Sub-Lease Agreement SK015 | 6 (4 Male and 2 Female) | The individual providing the information is the affected leaseholder. The affected leaseholder is from Kattakurgan district of Samarkand, and now resides in the community of mahalla Melikhodja. The affected leaseholder is the Household Head and is part of a six-person household including two sons and a daughter who are all under the official working age of 18 (currently attending primary school); a son who is under the official working age of 18 and has never attended educational services; and a wife whose main occupation is home maintenance (looking after home & family) and is literate (primary education – completed).

The affected leaseholder is Male, holds a long lease for the land which is the farmers main permanent place of farming or work. The affected leaseholder’s primary residence is in the Korravat neighborhood in Kattakurgan city, Kattakurgan. He travels approximately 20 minutes to get to the affected land – this is typically achieved by driving. The affected leaseholder lived in their Town or Village for 40 years but has only lived in his current house for 11 years (having previously moved to the area through marriage). The affected leaseholder owns/uses three plots of land which are located in mahalla Melikhodja, Kattakurgan and no other people currently use the land. Without this land, the farmer will still be able to continue his current income. The affected leaseholder does not believe that the household will be significantly impacted by the project; and it is not considered a vulnerable household according to the representative of the affected leaseholder. |
5.3.1 Livestock Rearing under the Overhead Transmission Line

Herding patterns across the farmers and herders vary although farmers and herders are present along the OTL, including winter months when many livestock can be lost due to severe frost. Leaseholder with Sub-Lease Agreement SK014 owns livestock (133 cattle).

The affected leaseholders' plots are used for a range of agriculture practices including to grow crops (SK009); for animal husbandry (SK014); and for afforestation (SK016). The area (hectares) of each plot is expressed in Table 5-7 below:

Table 5-6. Comparative Plot Size of Affected Leaseholders in OTL:

<table>
<thead>
<tr>
<th>Affected leaseholder</th>
<th>Size of Plots (hectares)</th>
<th>What is the Plot of Land used for?</th>
</tr>
</thead>
<tbody>
<tr>
<td>SK009</td>
<td>2295</td>
<td>Crops</td>
</tr>
<tr>
<td>SK014</td>
<td>403</td>
<td>Cotton &amp; wheat</td>
</tr>
<tr>
<td>SK016</td>
<td>16</td>
<td>Trees</td>
</tr>
<tr>
<td>SK015</td>
<td>80</td>
<td>Animal husbandry</td>
</tr>
</tbody>
</table>

As noted, local residents of Kattakurgan khokimiyat use the Project Site to graze livestock and gain access to other grazing lands. The land along the transmission line is used for arable farming.

5.4 Vulnerable People

A vulnerability analysis was conducted across all the affected households including the historical leaseholders, leaseholders along the OTL and herders in the Solar PV Area. The following individuals and households were identified:

- Young Family (one household identified)
- Elderly person (2 individuals identified)
- Household with member in poor health (one household with two individuals identified)
- Household with income under the poverty line (one household identified)
- Household in financial difficulty/debt (eight households identified)

The full vulnerability analysis and additional support provided is detailed in section 9 Table 9-2.
6. Assessment of Resettlement Impacts

6.1 Leaseholders

6.1.1 The Solar PV Area

The five historical leaseholders in the Solar PV Area have already experienced significant project impacts when their leaseholds were terminated or reduced to make way for the project. These impacts are explored further in the Samarkand Land Acquisition Audit which also includes an assessment of the historic resettlement process and the gaps under ADB safeguarding principles, however the mitigation of these impacts is included in this LRP.

All five leaseholders had recently been using the land for agricultural purposes at the time when they had to return their land in February 2020, this represents an impact on their livelihood and therefore entitles all of them for livelihood restoration.

Leaseholders experienced a reduction of land ranging from 66% to 100% reduction as outlined in Table 6-1 below. It is important to note however that the level of impact is not symmetrical to the quantity of land lost due to the varying qualities of land taken and investment made into that land.

Historic leaseholders 1,3 and 5 have stated that they were able to complete their harvest before returning the land and so did not lose any crops. These leaseholders also did not invest in their land and therefore will not require compensation for these entitlements. Despite this, these three leaseholders have still lost exclusive rights to land which is scarce in the area, because of the project and it is important to recognise the livelihood impact. Given that replacement land is not a feasible option due to the scarcity of available land, these leaseholders must be eligible for increased livelihood restoration in lieu of replacement land in accordance with international best practice (See the land enhancement grant available to all historical farmers outlined in section 10). Both leaseholder 3 and 5 expressed an interest in support and employment from the project and leaseholder 1 has already been employed by Masdar at the Wind testing lab earning 130 USD per month and suggested that the household did not need any further support.

Historic leaseholders 2 and 4 should be considered significantly impacted by the project as both households both heavily invested in their land and received no compensation for their investments and were put into dept by the project. Two brothers from Leaseholder 2 have left Uzbekistan to work in Russia in order to pay off their depts. Leaseholder 4 has been paying of depts by conducting seasonal work in Uzbekistan, including as a farmworker during the cotton harvests. Both historic leaseholders 2 and 4 therefore should receive compensation at full replacement value for their investments as well as increased livelihood restoration for loss of exclusive rights to the land (See the land enhancement grant available to all historical farmers outlined in section 10).

The disruption and hardships caused by the acquisition of land should also be recognised by the Project and thus leaseholders 2 and 4 should also receive a historic disruption allowance.

Table 6-1 – Summary of impacts on historic leaseholders

<table>
<thead>
<tr>
<th>Historic Leaseholder</th>
<th>Historic Land Size</th>
<th>Current Land Size</th>
<th>% Land Reduction</th>
<th>Investments made in the land</th>
<th>Estimated value of land investments lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10 ha</td>
<td>3 ha of remaining land</td>
<td>70%</td>
<td>No investments made besides crops that were harvested.</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>12 ha</td>
<td>No land</td>
<td>100%</td>
<td>Drilling a well, building an overnight shelter.</td>
<td>UZS 83 million (private valuation)</td>
</tr>
<tr>
<td>3</td>
<td>60 ha</td>
<td>20 ha of new land</td>
<td>66%</td>
<td>Portable container used for shelter was relocated to new land.</td>
<td>N/A</td>
</tr>
<tr>
<td>4</td>
<td>67 ha</td>
<td>10.5 ha of new land</td>
<td>85%</td>
<td>Electricity connection, well, shelter, water towers and labour for ploughing, seedlings (see Figure 6-1).</td>
<td>UZS 57 million estimated but excess of 86 million spent on the new land trying to increase its productivity.</td>
</tr>
</tbody>
</table>
56.4 ha
15.8 ha of remaining land
72%

No investments made besides crops that were harvested.

6.1.2  The Overhead Transmission Line

There are 4 households with leaseholds under the OTL, all of these leaseholds are used for the purposes of commercial farming. Households are described in further detail in section 5.3

Figure 6-1 – Well drilled by leaseholder 4 in the Solar PV Area

Figure 6-2 Destroyed building built by leaseholder 4 in the Solar PV Area

Figure 6-3 Land preparations by leaseholder 4 in the Solar PV Area

Figure 6-4 Irrigation channels dug by leaseholder 4 in the Solar PV Area
The impact on these leaseholds along the OTL can be broken down into the following types:

Permanent land take: The footprint for the OTL towers will be required for the lifespan of the project and thus should be considered a permanent land take. Each tower has been positioned to reduce the impact on farm infrastructure and assets in consultation with farmers where possible. The permanent land take for each leaseholder is less than 0.001% of the total land in the leasehold and therefore permanent impacts on livelihoods will be negligible. Crops and assets lost in this area will however be compensated at full replacement value with a cash payment.

Temporary land take: The project requires temporary access to land in order to construct the OTL. This includes:
- Temporary access roads 6m wide to each tower in order for heavy machinery to access each site.
- An additional assembly area will be required for each tower.
- A 10m wide right of way will be required for a tractor to suspend the OTL between the towers.

Temporary impacts on leaseholds, such as loss of crops or damage to assets will be compensated in cash at full replacement value. Temporary impacts are relatively small with the largest impact being 4.20% of land taken (SK014).

Conditional sterilization zone: The area of land within 32m each side of the OTL itself is considered a "sterilization safety zone". Farmers will be able to continue to use this land and will not be impacted by the construction however they will no longer be able to grow trees over 6 meters or build structures in this area. One leasehold (SK015) uses the land to grow a pear orchard however none of the trees exceed the 6-meter threshold.

The largest percentage of land impacted by the sterilization zone is 9.5% (SK015).

The percentage of each type of land take is summarised below for each leaseholder in Table 6-2.

### Table 6-2 – Project land take of leaseholders along the OTL

<table>
<thead>
<tr>
<th>Cadastral Parcel ID</th>
<th>% Permanent Land Take - Tower Area</th>
<th>% Temporary Land Take - Construction Route 18m and tower assembly area</th>
<th>Land with Conditions - Sterilisation Zone 64m</th>
</tr>
</thead>
<tbody>
<tr>
<td>SK014</td>
<td>0.025</td>
<td>1%</td>
<td>3.9</td>
</tr>
<tr>
<td>SK009</td>
<td>0.004%</td>
<td>0.08%</td>
<td>0.2</td>
</tr>
<tr>
<td>SK0016</td>
<td>0.5%</td>
<td>3%</td>
<td>2.2</td>
</tr>
<tr>
<td>SK0015</td>
<td>0.13%</td>
<td>1%</td>
<td>9.5</td>
</tr>
</tbody>
</table>

Due to the temporary nature of construction, it is not expected that "orphan land" (land that becomes unusable or uneconomically viable because access to it is hindered or it is cut off from the main plot of land) will cause significant impacts. This is because construction of the pylons and the suspension of the cables will occur over a short period (a few days) and will therefore not hinder access. Any claims made by farmers regarding impacts of orphan land will however be addressed through the grievance mechanism.

### 6.2 Informal Land Users

#### 6.2.1 Herders and feed gatherers

As described in section 5.2.2 and 5.2.3, the Solar PV Area is used by four communities to herd livestock and collect animal feed. There are nine known herds from the four communities which are regularly taken to the Solar PV Area by community herders or professional herders.

While the project will not eliminate community grazing areas, the majority of the area will no longer be accessible, and the remaining areas to the north and east will not be sufficient to sustain the current level of grazing.

---

3 Permanent and temporary land take calculated with data provided by the cadastral office and valuation company. Land within the sterilization zone calculated by the AECOM GIS department.
Unlike the solar sites at Sherabad and Jizzakh, community grazing land at Samarkand is not abundant and there is already conflict between herders and farmers over space which was mentioned in interviews with the historical leaseholders.

The impact on the professional herders should be considered significant as the project will directly interfere with their primary source of income. Impacts will also be experienced, albeit to a lesser extent, by all households in the community who own the herds who are taken to the project area by community herders or by the professional herders.

Because of the rotational nature of the community herders, and the potential for anyone in the community and elsewhere to access and use the lands for grazing, the impact on community herders and herd owners cannot be considered on an individual basis. Therefore, any livelihood restoration measures implemented by the project must be targeted at the herders collectively and should be equally accessible to all community members.

Professional herders whose primary source of income is through herding, should be given priority for employment by the project and also be given central roles in livelihood restoration initiative so that they may retain their income.

6.3 Affected Structures

There are no structures currently affected by the project in the PV area or along the OTL. Structures along the OTL were avoided in consultation with the leaseholders. There are however historic structures that belonged to historic leaseholders 2 and 4 which are mentioned in section 6.1 but these have already been considered in their private valuations and were destroyed by unknown persons.

6.4 Economic Trees and Crops

No economic trees or crops are affected in the Solar PV area. Trees and crops are however affected along the OTL where leaseholders have been farming. As described above in section 6.1.2 the loss of these trees and crops will have a negligible permanent impact and a minor temporary impact on the leaseholders who own them due to the small percentage of land take. All impacts to trees and crops will be compensated in cash at full replacement value.

6.5 Farmworkers

Leaseholders under the OTL typically employ seasonal and permanent farmworkers to assist them with harvest or with grazing livestock on the land. While the presence of these farmworkers is noted, the impact on them is considered negligible due to the small land take on these farms and the seasonal nature in which they are employed. There are no employed farmworkers who use the PV area.

6.6 The project access route

The final access route shall be considered during detailed design with the view to select the route that reduces the potential impacts to as low as reasonably practicable. Impact associated with the access road (including but not limited to traffic safety, land ownership, noise, dust emissions) shall be assessed prior to construction and existing roads will be used and thus physical or economic displacement is not expected. If any economic or physical resettlement is required for the access road, this LRP will be subject to an addendum to include any affected persons.
7. Eligibility & Entitlements

Eligible parties (covering individuals, persons, groups of persons, families, institutions, or any other entity) may make claim for compensation or livelihood restoration for the temporary or permanent loss of land or improvements made on the land which is directly related to the project.

Eligible parties include all persons with a formal interest on the land who are evident at the time of the socio-economic census and asset survey in the form of propriety ownership, co-proprietary, leasehold, tenants, or any persons with other limited interests. Within the Project Area at Samarkand, the only formal land rights belong to leaseholders, their household and employed workers, although the impact on the latter is considered negligible as described in section 6.5.

Eligible parties can be further expanded to affected persons – persons who gain a benefit or utilise the land or improvements made on that land irrespective of their legal standing. The term Affected Parties is more comprehensive and includes:

- 1. Formal or legal rights to land and assets consistent with national law.
- 2. Customary rights to lands and assets recognised under national law.
- 3. No recognisable legal right or claim to land or assets under national law, but occupy or use the land on a regular basis at the time of the survey are ignored / tolerated by the leaseholder.
- Herders and owners of livestock who are herded at Samarkand are included as affected persons.

This LRP establishes an Eligibility Framework that aligns the definition of affected persons based on both national law and international best practice. Where the definitions differ the higher or most inclusive definition has been adopted. The framework includes interests on both land and any improvements made on the land. Eligibility is defined in Table 7-1 below.

### Table 7-1 – Eligibility Framework

<table>
<thead>
<tr>
<th>Type of Loss</th>
<th>Eligible Persons</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exclusive rights to land</td>
<td>Leaseholder</td>
<td>The person, family, or collective entity with exclusive rights to the land</td>
</tr>
<tr>
<td></td>
<td>Tenant</td>
<td>Tenants recognised by the Leaseholder that actively farm or utilised portion of the land separately or jointly with the leaseholder, but do not have any claim to land itself.</td>
</tr>
<tr>
<td></td>
<td>De-Facto Occupant or User</td>
<td>Any person, family, or collective entity that utilises land without any form of secure tenure but are ignored / tolerated by the Leaseholder.</td>
</tr>
<tr>
<td>Structures and Other Fixed Assets</td>
<td>Asset-Owner</td>
<td>The person, family, or collective entity with uncontested ownership of any structures or other fixed assets, irrespective of their tenure status to the land on which the structures or fixed assets are built.</td>
</tr>
<tr>
<td>Crops and Trees</td>
<td>Crop-Owner</td>
<td>The person, family, or collective entity that solely tends annual and perennial crops and/or trees on land, irrespective of the type of tenure on that land.</td>
</tr>
<tr>
<td></td>
<td>Cluster farmers</td>
<td>The person, family, or collective entity that tends annual and perennial crops and/or trees on behalf of the leaseholders and has an agreed quota of production on which their salary depends.</td>
</tr>
<tr>
<td>Business</td>
<td>Business owners (cluster farm owners)</td>
<td>Those with goods, service businesses operating on land which is to be acquired by the project.</td>
</tr>
<tr>
<td></td>
<td>Employees (i.e. Farmworkers)</td>
<td>The person, family, or collective entity that farms or provides any other source of labour to a leaseholder for a daily salary (irrespective of crop output or yield).</td>
</tr>
<tr>
<td>Community Structures</td>
<td>Affected Community</td>
<td>Any community that are the owners or custodians of any structures, infrastructure or immobile fixtures that is used for the collective benefit of the community.</td>
</tr>
<tr>
<td>Communal Land</td>
<td>Affected Community</td>
<td>Any community that are the owners or custodians of any community common land that is used for their collective benefit.</td>
</tr>
</tbody>
</table>

7.1 Eligibility Exclusions

The Developer has communicated a moratorium (“cut-off-date”) on the 18th November 2022 which defines the limits for eligibility in terms of time. The meaning of the cut-off date was communicated to each leaseholder during the asset survey. Parties who
establish assets or crops after the cut-off date shall not be eligible for compensation for those crops or assets. The Developer’s grievance mechanism shall function to investigate and make decisions on contested eligibility.

7.2 Entitlement Framework

The Preliminary Entitlement Framework (Table 7-2 overleaf) defines the types of compensation or in-kind resettlement assistance to be provided to eligible persons based on the type of asset that will be lost. The framework also establishes the conditions whereby eligible persons are granted allowances or access to livelihoods restoration programs. Where possible, a range of options is provided to allow the Developer and project-affected persons to select the most suitable form of compensation.

In accordance with IFC PS5 and ADB safeguards policy, the Entitlement Framework has already been shared and agreed with stakeholders as detailed in section 4.3.6 but will still be subject to change following consultation with stakeholders during the LRP Disclosure process described in section 4.4.1 and thus the framework overleaf is subject to change.
## Table 7-2: Entitlement Framework

<table>
<thead>
<tr>
<th>Nr</th>
<th>Description of loss</th>
<th>Eligible person or group</th>
<th>Entitlement</th>
<th>Applicability</th>
<th>Number of eligible households</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Agriculture</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 1  | Loss of exclusive right of access to arable land as part of a leasehold | Owners or leaseholders of arable land | **OPTION 1**: Provide replacement plot of equal or improved productive potential within the same or improved proximity to household. Secure tenure may be obtained within leasehold tenure types if the land provided does not place the owner at risk of forced eviction. If the replacement plot is provided in-kind, upfront administrative costs involved in provision of secure tenure will be covered by the Developer (such as survey costs, statutory lease fees in the case of leasehold tenure or administrative costs).

*NB: Option only available to leaseholds where over 10% of the land is due to be permanently acquired by the project or if 10% of the land becomes uneconomically viable as a result of the project. This threshold should be reduced to 5% where the leaseholder is critically vulnerable.*

- **OPTION 2**: Cash compensation based on the average monthly income from the land over the last three years multiplied by the number of months that the interruption occurs, or if permanent, multiplied by four years.

*NB: Option to be avoided for critically vulnerable leaseholders in favour of option 1 (if the amount of land lost is greater than 5% of total landholding).*

- **Active**: There are 4 households with leaseholds under the OTL. There are 5 households with a historic leaseholds in the PV area.

| 2  | Loss of land preparation or enhancements | Farmers (with formal or informal right of access) | **OPTION 1**: Monetary compensation at replacement value, or government rate, or whichever is higher, for land preparation (including irrigation, electricity provision, clearing or ploughing) that existed at time of the survey, to be paid after delivery of entitlement for replacement land (if applicable), so that the compensation can be used for the intended purpose of land preparation.

*NB: Option to be avoided for critically vulnerable households in favour of option 2 (if the amount of land lost is greater than 5% of total landholding).*

- **OPTION 2**: The Developer arranges for preparation of replacement land of equivalent productive potential, on replacement plot.

  **AND**

  1. A Disruption Allowance equivalent to 10% of replacement value for land preparation.

- **Active**: There are 4 households with leaseholds under the OTL which will be entitled to compensation for land preparation that is impacted by the OTL. There are 2 households with historic leaseholders in the PV area which lost land enhancement as a result of the project.

| 3  | Loss of Crops | Owner of crops | **OPTION 1**: Compensation at (1) government-established crop rate, or (2) replacement value, for crops, whichever is higher for crops that existed at time of moratorium, that were unable to be harvested, to be paid any time before the planned removal of the said crops. To be multiplied by number of seasons of lost production. This option is only permissible for situations where harvest is not possible due to the project schedule and/or life cycle of the specific crop in question.

*NB: For critical vulnerable households who are below the poverty line or in financial difficulty compensation may be paid in instalments to maintain food security.*

- **Active**: There are 4 households with leaseholds under the OTL which will be entitled to compensation for lost crops impacted by the OTL.
OPTION 2: Allow harvest of current crop, for crops that existed at the time of the moratorium but provide compensation for future seasons lost at (1) government-established crop rate, or (2) replacement value, for crops, whichever is higher for crops that existed at time of the survey.

AND

1. A Disruption Allowance equivalent to 10% of replacement value of the said crops.

<table>
<thead>
<tr>
<th>4 Temporary loss of ability to farm crops within temporary access areas</th>
<th>Farmers (with formal or informal right of access)</th>
<th>OPTION 1: Compensation at (1) government-established rate, or (2) replacement value, whichever is higher, and predicted total annual profit from harvest, multiplied by number of seasons required to re-establish crop to productive potential to be paid in annual instalments at harvest time. This option is only permissible where harvest is not possible due to the project schedule and/or crop life cycle.</th>
<th>Active</th>
<th>There are 4 households with leaseholds under the OHTL which will be entitled to compensation for temporary loss of ability to farm crops.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Permanent loss of primary agricultural livelihood</td>
<td>Farmers (with formal or informal right of access)</td>
<td>Livelihood restoration targeted at improving and enhancing the livelihoods of the affected farmers and herders. Various livelihood restoration options may be included and will be proportionate to the level of impact. Livelihood restoration measures are detailed in section 10.</td>
<td>Active</td>
<td>5 Historical leaseholders have experienced impacts on livelihood and so will be entitled to livelihood restoration.</td>
</tr>
<tr>
<td></td>
<td>Business owners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employees or informal workers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Loss of productive fruit trees</td>
<td>Owner of trees</td>
<td>OPTION 1: Provision of monetary compensation as determined by (1) government-established compensation rates, or (2) the cost of replanting plus cumulative lost income from productive trees (i.e., replacement rate) until tree can be re-established, whichever is the higher, for trees that existed at time of moratorium.</td>
<td>Active</td>
<td>One lease holding household along the line will lose productive trees as part of temporary impacts and...</td>
</tr>
</tbody>
</table>
## OPTION 2: Provide replacement trees and pay for lost harvest until replacement trees reach productive age. For critically vulnerable households consider providing transitional food support packages equivalent to lost harvest of affected households for time period required for replacement trees to become productive, for trees that existed at time of moratorium. If monetary option for lost harvest is chosen, this should be paid in instalments, to enable use for intended purpose of providing for lost interim harvest.

### Permanent Loss of Communal Natural Resources

**9 Loss of Natural Resources, grazing land / Communal Land**

**Herding community as whole**

**OPTION 1:** Identify alternative communal grazing land at an appropriate proximity to the land users and where necessary increase the carrying capacity of said land or improve access to alternative land.

**OPTION 2:** Community Livelihood restoration initiative with sustainable agriculture project on replacement or remaining land.

**Vulnerable Households**

**10 Vulnerable or disproportionately affected households**

A range of other specific assistance measures will be provided to support vulnerable and disproportionately affected people to reflect the specific vulnerability identified. For example, elderly persons and individuals with health issues will be provided with more frequent visits and communication to ensure that they are kept calm and closely informed during implementation of the LRP.
<table>
<thead>
<tr>
<th>Table Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>11</strong> Critically Vulnerable Households with no member able to partake in subsistence or economic activities.</td>
<td><strong>OPTION 1:</strong> Engage local government to place them on welfare scheme. <strong>OPTION 2:</strong> A vulnerability allowance equivalent to minimum wage will be provided for six months to the household. The payments will be paid on a monthly basis.</td>
</tr>
</tbody>
</table>

**Gender**

| **12** Gender inequality | Marginalised women in the household or community | For households significantly impacted (above 20% of land displaced by the project) All spouses to be registered as co-owners of assets prior to compensation. All compensation is to be paid to all spouses, and in cases of dispute, divided equally between spouses. All spouses to be co-signatories of all compensation agreements. |

**No-Shows/Absentees**

| **13** No-Shows/Absentees | Owners of crops or assets which are absent at the time of survey or compensation process | Assets or crops for which the owner/s cannot be located shall be surveyed, and the value of the total compensation package (monetary and in-kind) calculated and placed within a third-party escrow account where funds are held in trust for a period of 5 years. After a 5 years period has elapsed without an asset owner making a claim, the funds will be disbursed to community development activities targeting the respective village, based on needs as determined in consultation with the Community Resettlement Committee at the time of disbursement. Should the asset owner make a claim before the 5-year period, and be able to furnish proof of asset ownership, the funds shall be disbursed to enable the asset owner to replace the affected assets. |

**Historic Impacts**

| **14** Significant hardship caused by loss of investment in the land which was not compensated | Households that have been put into financial difficulty and experienced hardship as a result of loss of investment in the land without compensation should receive an additional disruption allowance to recognise the stress and upheaval caused by the project. The allowance should be a cash package equal to 30% of total compensation owed. |

**Prepared For:** Masdar **AECOM** 84
8. Valuation & Compensation

8.1 The valuation regulations in Uzbekistan.

The following national laws have governed the valuation process:

- The Law About Valuation Activities (Amended 2009) which envisions that valuation is a licensed activity and the valuators should be licensed and independent (article 4). It envisages the events when valuation is mandatory including in case of acquisition of assets (article 11).
- Resolution of the Cabinet of Ministers (25 May 2011), №146 “About measures to improve the procedure for allocating land plots for urban development activities and other non-agricultural purposes” (Annex 2 – Regulations on the identification of possessors, users, tenants and landowners, and loss of agricultural and forestry production); This resolution provides the methodology and formular for calculating compensation values.
- Resolution of the Board of the Central Bank of Uzbekistan About Approval of the Procedure of valuation of the land lease rights (08th April 20014) by the Ministry of Justice.

8.2 Valuation principles for this LRP

In accordance with International Best Practice, and all project sponsor standards, all compensation for crops, trees, assets and income will be based on full replacement value, which includes the market value of losses and any other transaction costs, interest accrued, transitional cost without any deductions for taxes, depreciation or materials which can be salvaged.

All affected people who have crops, assets or structures that are impacted by the project will be entitled to compensation, irrespective of their legal tenure in the project area.

Compensation will be issued prior to any adjustment of leases or land take by the project for construction.

Affected persons will have the opportunity to appeal the valuation amounts and this will trigger a re-valuation by another independent valuation company.

The principles followed for each type of compensation is broken down further below:

- Compensation for standing crops will be at replacement value based on one year of production costs and an allowance equivalent to one-year average net income based on the average income over the previous three years.
- Compensation for fruit producing trees will be based on the average income from the past three years multiplied by the years required for the tree to reach productive maturity and the cost of planting new saplings. Trees that are immature will be compensated based on the cost for planting and growing replacement trees to the same age.
- Compensation for structures is not expected to be required due to the OTL tower locations being optimised in consultation with the farmers however any unexpected damage to structures caused during construction will be based on full replacement value in accordance with the Entitlement Matrix.
- Compensation for loss of income/livelihood will be compensated based on the average monthly income for the last three years multiplied by the number of months that the interruption occurs.
- Cash compensation for permanent loss of land leased based on the average monthly income from the land over the last three years multiplied by four years.

8.3 The valuation process

The valuation process was carried out by a local government approved valuation company in Uzbekistan with experience conducting valuations of this kind including for previous projects sponsored by ADB. The name and credentials of the valuation company are below:

- **Company Name & Address:** BAHOLASH INTEGRAL* LLC, Tashkent, Yunusabad district, Bodomzor str, 3, room 7,8,9
- **Credentials:** Membership certificate of the Public Association "Society of Appraisers, Experts and Consultants of Uzbekistan" No. 087 dated 06/15/2022
- **Insurance:** The insurance for professional activity of JSC "Kafolat" Registration number No. 15.01.2022/70-01 dated June 15, 2022. Valid from 06/16/2022-06/15/2023.
To conduct valuation activities the company is required to be a member of the Public Professional Organization.

The valuation process took place during the period from 15th September to 18th November 2022 and involved the following steps:

- Each household with a Sub-lease Agreement affected by project infrastructure (this includes the OTL but not the Solar PV Area which was historically vacated) was contacted to have a one-to-one meeting with the valuers and the district Khokimiyat at the district Khokimiyat office. Leaseholders were given an opportunity to submit any outstanding tax statements for their leases which will be used to calculate the average income from the land.

- Once the project infrastructure co-ordinates were fixed, the co-ordinates were sent to the Ministry of Energy to make an official land order for both permanent and temporary land.

- A committee was then set up which involved the following agencies:
  - Regional Khokimiyat
  - District Khokimiyat
  - District Cadastre
  - District Agricultural Department
  - District grid representative
  - Representative of valuation company

- Each cadastral parcel as part of a leasehold was examined to calculate the following land takes and impacts:
  - Permanent land take (required alterations to Sub-Lease Agreements)
  - Temporary land take (damages to crops, trees and infrastructure)
  - Damages to trees imposed by the sterilization zone high limit of 6m

  The value of lost income for permanent and temporary impacts was calculated using the above calculated land take and also the average income of the land recorded over the past three years.

The valuation provided almost final but may be subject to small changes after the disclosure process is completed to allow affected persons to submit any further documented evidence which may change the final valuation.

The valuation provided below will expire one year after the date when the valuation process began (15th September 2023) after this date, if compensation has not been paid to the affected households, a revaluation must take place and the compensation amounts must be updated.
8.4 The compensation process

Following the valuation and the verification of the LRP, the final compensation and livelihood restoration packages should be discussed with each affected household head and spouse. The compensation methodology, payment terms, amounts and additional support will be disclosed to each household in the presence of the District Khokimiyat. The household will have an opportunity to challenge the valuation either by raising the issue directly with the District Khokimiyat or via the project grievance mechanism. This will trigger a re-valuation and if there is sufficient evidence that something was previously omitted the valuation will be amended.

Legal agreements will be drafted by the District Khokimiat and the District Agricultural Department and signed by the company and affected household. These agreements will clearly state the total amount of compensation and support and the timing of payments.

Payment will typically be made using bank transfer or if preferred a cheque. The project will ensure that the type of payment is agreed before issuing payment and will ensure that the mode of payment is accessible to the affected household.

A receipt of payment will be issued to both the affected household and to the company.

All agreements and payment receipts will be kept in a safe and organised manner by the company.

A summary database of payment will be maintained by the company and will inform monthly monitoring of the LRP.
8.5 Summary of valuation results

Table 8-1 – Summary of valuation results

<table>
<thead>
<tr>
<th>Cadastal ID</th>
<th>total leased area, ha</th>
<th>temporary land use, ha</th>
<th>% of temporary Land Take - Construction Route 18m &amp; Tower Assembly Area</th>
<th>permanent land use by the Electric Grid, ha</th>
<th>% of permanent Land Take (Tower Area)</th>
<th>agricultural crops &amp; cultivated trees, type and number in the taken area</th>
<th>the cost of lost profits from the temporary area, soum. for 1 year of construction income approach</th>
<th>the cost of lost profits from the permanent land use, soum. income approach</th>
<th>The cost of perennial plantings from the temporary area (trees). Cost approach</th>
<th>The cost of perennial plantings for permanent land taken (trees). Cost approach</th>
<th>TOTAL (UZB)</th>
<th>Total (USD)</th>
<th>10% Disruption Allowance</th>
</tr>
</thead>
<tbody>
<tr>
<td>SK014</td>
<td>403.50</td>
<td>4.20</td>
<td>1%</td>
<td>0.10</td>
<td>0.025%</td>
<td>Cotton per 100 ha and wheat per 100 ha</td>
<td>2,544,631.00</td>
<td>242,345.80</td>
<td></td>
<td></td>
<td>2,786,976.80</td>
<td>248.04</td>
<td>272.85</td>
</tr>
<tr>
<td>SK009</td>
<td>2,223.60</td>
<td>1.90</td>
<td>0%</td>
<td>0.10</td>
<td>0.004%</td>
<td>Cotton</td>
<td>7,291,608.40</td>
<td>694,438.93</td>
<td></td>
<td></td>
<td>7,986,047.33</td>
<td>710.76</td>
<td>781.83</td>
</tr>
<tr>
<td>SK016</td>
<td>20.00</td>
<td>0.50</td>
<td>3%</td>
<td>0.10</td>
<td>0.500%</td>
<td>Apple trees in a quantity of 300 pcs. 5 apple trees are grown on one hundred square meters</td>
<td>878,090.00</td>
<td>702,472.00</td>
<td>24,244,526.70</td>
<td>4,848,905.35</td>
<td>30,673,994.06</td>
<td>2,729.99</td>
<td>3,002.98</td>
</tr>
<tr>
<td>SK015</td>
<td>79.50</td>
<td>0.50</td>
<td>1%</td>
<td>0.10</td>
<td>0.126%</td>
<td>The land plot is allocated for animal husbandry.</td>
<td>No damage occurs</td>
<td>No damage occurs</td>
<td>No damage occurs</td>
<td>No damage occurs</td>
<td>No damage occurs</td>
<td>No damage occurs</td>
<td></td>
</tr>
</tbody>
</table>

Total Compensation & Disturbance Allowances: 4,057.66 (USD)

The above results quoted above have been calculated based on balance sheets provided by the affected households to the valuation company thus far. There is still additional data which is being reviewed to clarify the types of land use (crops and trees) which will be used to further refine the final valuation results. Households will have the opportunity to provide additional evidence.

USD amount calculated using an exchange rate of 0.000089 on the 21/11/2022
9. Safeguarding Vulnerable People

The Project has the potential to impact vulnerable groups and individuals. Vulnerable people are defined as those who might be disproportionately negatively impacted by the project or who might not be able to take full advantage of project benefits. Table 9-1 below includes the typical categories for vulnerable people considered in the LRP, however it is noted that the identification of vulnerable people should not be a formulaic process and some vulnerable people may not fit into a particular category below.

<table>
<thead>
<tr>
<th>Vulnerability</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young families or orphans (where the parents are under 30) who have lost both parents</td>
<td>Affected people who are orphans and living with other relatives in a household are likely to be particularly susceptible to any changes in their socio-economic status in the absence of parents who would otherwise be economically active. They may also be looked after by elderly relatives.</td>
</tr>
<tr>
<td>Families with disabled parents or children</td>
<td>Families with a disabled adult or child are likely to be particularly susceptible to any changes in their socio-economic status, due to the need to provide care for the affected person.</td>
</tr>
<tr>
<td>A widower</td>
<td>A widower is likely to be particularly susceptible to any changes in their socio-economic status, due to the need to provide care for children without a partner who is economically active.</td>
</tr>
<tr>
<td>A single parent family</td>
<td>Single parent families are likely to be particularly susceptible to any changes in their socio-economic status, due to the need to provide care for children without a partner who is economically active.</td>
</tr>
<tr>
<td>A single retired person</td>
<td>Retired people are likely to be particularly susceptible to any changes in their socio-economic status due to limited sources of household income.</td>
</tr>
<tr>
<td>An elderly person (over 65 years old)</td>
<td>Older people may not be as economically active compared to younger people and may be more vulnerable to any change in their livelihood or living conditions. Older people may also experience greater mental stress when dealing with significant change.</td>
</tr>
<tr>
<td>Women in the family</td>
<td>Women are often marginalised individuals within the family household and may not be included in decision making around money or land. Women’s views on how to spend compensation or which livelihood support to choose from may not be recognised.</td>
</tr>
<tr>
<td>Anyone farming or investing in the land without a legal title</td>
<td>Farmers who have invested in land which they hold no formal legal title are vulnerable because they are at risk of losing significant investment in the land if removed (by the project, government or title holder) without compensation or support. Even when the project intends to compensate informal land users, there is a risk that formal title holders may opt to evict informal farmers in anticipation of the project.</td>
</tr>
<tr>
<td>People in poor health</td>
<td>People living with physical and/or mental disabilities, or poor health status, may be vulnerable as they may experience difficulties in accessing Project-related (and non-Project-related) employment opportunities and/or undertaking livelihood activities, thereby constraining their ability to provide for themselves, leading to a reliance on relatives, community members, NGOs, and the government for support. People living with physical and/or mental disabilities, or poor health status, may be subject to discrimination and marginalisation in the workplace and/or the local community. Differential treatment and/or exclusion in these settings may lead to social isolation and reinforce the vulnerability of this group. People living with physical and/or mental disabilities, or poor health status, may need specific types of assistance to be keep adequately informed about the Project, resettlement choices, and may not understand written documents used during a resettlement implementation process. They also be discriminated against which could lead to reduced access to health care, thereby exacerbating the health problems experienced by this category of vulnerable group.</td>
</tr>
</tbody>
</table>
People who are discriminated against

People who experience discrimination are typically unable to be influential within the community, assist in decision making processes, and ‘be heard’.

People who experience discrimination can find it difficult to access employment opportunities which reduces their potential to generate income.

<table>
<thead>
<tr>
<th>Households in financial difficulty or under the international poverty line of $2.15 per day (World Bank, 2022)</th>
<th>Households in substantial debt may use any cash provided to clear (some or all) of their debts instead of using the money to restore their livelihood and standard of living. Additional support may be needed to these households. Households who have a very low-income are also considered to be vulnerable as any minor change in their livelihood could have significant effects.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households with a member who is addicted to drugs or alcohol</td>
<td>Households with members who suffer from addiction to drugs or alcohol may be vulnerable as the household member may be inclined not to spend compensation in a way that will benefit the household as a whole. Members who suffer from addiction may also not attend any livelihood restoration initiatives.</td>
</tr>
</tbody>
</table>

Households or individuals who fit into one of the above criteria were identified using several information sources:

- **Socio Economic Census**: The socio-economic census of leaseholders and informal land users included a number of questions to identify vulnerable individuals, including household demographics, health of family members, sources of and income level.

- **Women and Youth Notepad**: The local Khokimiyat keep a record of vulnerable women and youth which have requested support. These are known as the Women and Youth *note pad*. The Khokimiyat provided a list of known vulnerable Women and Youth that are known within the affected households.

- **Key informant interviews**: Interviews with Khokimiyat, local Mahalas and affected people were also used to identify any vulnerable households or individuals.

- **Background research**: Some groups cannot be easily identified individually in a survey due to affected person to reveal personal information but are known to exist through background research. Marginalised women in the household are one example of this.

The vulnerable groups and individuals identified in the above categories are summarised in Table 9-2 below with a justification for additional support and the type of support identified:
### Table 9-2 – Vulnerability Analysis

<table>
<thead>
<tr>
<th>Vulnerability Category</th>
<th>Identified in the project area</th>
<th>Additional support required? (justification)</th>
<th>Additional support measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young families (where the parents are under 30) or children who have lost both parents</td>
<td>1 young family identified (parents aged 29 and 30)</td>
<td>No - No evidence they will be disproportionately impacted more than other families.</td>
<td>N/A</td>
</tr>
<tr>
<td>Families with disabled parents or children</td>
<td>2 individuals Identified</td>
<td>Yes – One herder household includes a member who suffers from a mental disability who will not be able to participate in engagement activities or livelihood restoration. Yes - One historical household includes a member with a physical disability who may not easily be able to participate in engagement activities or livelihood restoration.</td>
<td>All engagement historical household should be at a location accessible to the disabled family member or with a member of the family. Herder with mental disability will not be able to attend engagement activities and will require a household member to attend so that they can explain to the member where the project will be located and how this will impact herding practices. An alternative family member will need to participate in engagement activities and livelihood restoration. For the herder household with 2 members in poor health, another household member will need to participate in engagement activities and livelihood restoration. Households will be subject to additional focused monitoring during implementation of the LRP. If the household wishes to spend Livelihood Restoration packages on supporting the disabled family member rather than on investment in land, this will be permitted. The household will be encouraged to contact the Khokimiyat for further benefits and support if it has not already. The project will support the household to access existing government disability benefits by liaising with the local Khokimiyat. The project will offer critically vulnerable households’ preference in employment opportunities.</td>
</tr>
<tr>
<td>A widow</td>
<td>None identified</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>A single parent family</td>
<td>None identified</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>A single retired person</td>
<td>None identified</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>An elderly person (over 65 years old)</td>
<td>4 households (identified (one also listed above with disability)</td>
<td>Yes – The household relies on a low government pension for income and will therefore be disproportionately impacted by any change in income.</td>
<td>Households will be subject to additional focused monitoring during implementation of the LRP. Household members will be offered preferential employment. The household will be encouraged to contact the Khokimiyat for further benefits and support if it has not already. The project will support the household to access existing government disability benefits by liaising with the local Khokimiyat. Marginalised women in the family</td>
</tr>
<tr>
<td>Marginalised women in the family</td>
<td>Group identified as at risk</td>
<td>Yes – There is potential for disproportionate impacts and therefore precautionary measures must be put in place.</td>
<td>The LRP process will include a requirement for co-signatures where necessary. Specific livelihood restoration measures will be targeted at women and land enhancement grants (for historical farmers) will be split between farmer and spouse.</td>
</tr>
<tr>
<td>Anyone farming or investing in the land without a legal title</td>
<td>None identified – Herders use the land but have not invested.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Household with member in poor health</td>
<td>2 Individuals identified in one household.</td>
<td>Yes - One herder household includes two members with poor health who may not be able</td>
<td>Another household member will be invited to participate in engagement activities and livelihood restoration.</td>
</tr>
</tbody>
</table>
People who are discriminated against | None identified, all are Uzbek and confirmed they are not discriminated against. | N/A | N/A

Households under the poverty line of earning $2.15 per day | 1 herder households identified which is on the poverty line 3 more just above. | Yes - Any impact on income will have a disproportionate impact because it will affect their ability to meet basic needs such as buying food. | Household will be subject to additional focused monitoring during implementation of the LRP comparing income levels to baseline levels. The household will be encouraged to contact the Khokimiyat for further benefits and support if it has not already. The project will offer vulnerable households’ preference in employment opportunities. Transitional support (available to herders until livelihood restoration is underway) may be extended for vulnerable households in financial difficulty.

Households in financial difficulty/in dept | 8 identified | Yes - Two historical households have been put into dept by the project because they did not receive compensation. They are already disproportionately impacted. Yes - 6 herder households reported to be in dept due to education costs, credit for business or to pay for assets such as livestock or technology. Any impact on income will have a disproportionate impact because it will affect their ability to pay off debts. | Household will be subject to additional focused monitoring during implementation of the LRP comparing income levels to baseline levels. (Historical households) If the household wishes to spend Livelihood Restoration packages on paying off dept this will be permitted, however it would be encouraged to invest any compensation into land improvements which will enable to the household to sustainably generate additional income which will pay off depts and improve livelihoods into the future. The household will be encouraged to contact the Khokimiyat for further benefits and support if it has not already. The project will offer vulnerable households’ preference in employment opportunities. Transitional support (available to herders until livelihood restoration is underway) may be extended for vulnerable households in financial difficulty.

Youth who are unable to take advantage of project benefits | None identified | N/A | N/A

Households with a member who is addicted to drugs or alcohol | None identified | N/A | N/A
10 Livelihood Restoration

The entitlement matrix details which affected people and groups are entitled to livelihood restoration in accordance with the impacts on them as described in section 6.

During discussions with the design team and interviews with herders, Mahalas, Khokimiyat and other community members possible livelihood restoration measures were discussed. The following options were discussed and ruled out for reasons explained below:

- Maintaining access to for herders to graze inside the Solar PV Area, between the panels was discussed with the design and engineering team however the health, safety and liability risks were too high for this option to be considered feasible. It was however concluded that allowing selected community members inside to collect feed manually, without bringing in any livestock could be possible.

- Creating vertical wheat feed banks was discussed as a potential option with herders as this is something that has been practiced in the community. This option was however considered less favourable than collecting feed from within the project area and so is not included in the below options. Vertical wheat feed banks could however be considered as a backup option if access to the Solar PV becomes unviable in the future.

The following Livelihood Restoration options were also discussed in September 2022 with the herders, Mahalas and Khokimiyat which are the most viable and this includes:

- Provision of training to be provided to all herders and other community members who wish to attend. The training will focus on animal veterinary health including how to identify common diseases, how to treat common diseases and injuries. This option was put forward by AECOM and discussed with herders, Mahallas and Khokimiyat.

- Assistance provided to the Mahallas to formally secure the remaining grazing with a leaseholder Agreement in order to protect it from future claims by other farmers or projects. The Mahallas would form a co-operative which would be legally able to take out a leasehold on behalf of the community.

- Preferential employment of herders by Masdar during both construction and operation where possible. Provision of employment is a very common request by all people interviewed as part of the ESIA and LRP.

During engagements in November 2022, further feedback was obtained from farmers along the OTL, herders and historical farmers about their preferences for livelihood restoration. A number of options were given to each for feedback. The following outcomes were obtained:

- All historic farmers expressed an interest in both the land enhancement grant (with technical advice) and also employment by the project. Historic farmers all expressed an interest in using their grant to buy sheep.

- Farmers along the OTL line and their spouses expressed an interest in training on business and finance, increasing agricultural yields, veterinary training and also meat, milk and wool processing (Land enhancement grants were not an option presented to farmers along the OTL due to the very small impact).

- Herders expressed an interest in access to the Feed Bank at the Solar PV Site and also the provision of materials for storage of feed.

The types of livelihood restoration measures proposed for farmers herders is detailed below in Table 10-1.
### Table 10-1 – Livelihood restoration measures, key risks and next steps for practical implementation

<table>
<thead>
<tr>
<th>Name and eligibility/target recipients</th>
<th>Description</th>
<th>Risks</th>
<th>Steps to overcome risks</th>
<th>Next steps for implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land enhancement grant</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Target recipients:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Historical Leaseholds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| | Land enhancement grant (or provision of materials, land or livestock) and technical advice given to historic leaseholders that have permanently lost a significant portion (>10%) of their land to the project in order to improve the capacity of remaining land. This land enhancement grant will be issued in lieu of replacement land of which availability is scarce in the area.  
The value of the cash allowance will be subject to discussion with Masdar.  
Cash payment should be conditional on it being spent to improve the capacity of the remaining land OR for improving wellbeing of the household.  
Free consultation and technical advice should be given to recipients of cash compensation in order to understand how they wish to invest the money and caution against possible poor investment (e.g a water well in an area where there is little chance of success).  
Consultation with historical farmers revealed that most farmers wish to spend the grant on livestock. | Grant could be poorly invested by the household, for example on a well that does not produce enough water.  
Increase in local price of materials due to project construction.  
Unmet expectations regarding the quantity of cash provided. | When delivering cash payments to households, ensure both spouses are sign a written agreement on how they wish to spend the money.  
Monitor price fluctuations of materials and if necessary, provide and adjustment in the cash provided. | 1. E&S team to appoint an agricultural specialist with experience in improving the capacity of land in the local area, including drilling wells and developing irrigation systems.  
2. E&S team to hold further one-to-one consultations with households to confirm their preferences on which livelihood option they would prefer (cash, livestock or materials) and if cash, or materials how they intend to use these. Agricultural specialist and other government representatives should be invited to this meeting including a representative of the Khokimiat, Cadastre Office and Regional Agricultural Office.  
3. Most historical farmers have already indicated their preference in spending the grant on sheep. An agricultural specialist will investigate which would be the best breed of sheep to purchase for the land use at each farmer’s land. The pros and cons of each breed should be communicated to farmers before a final choice is made.  
4. If required agricultural specialist to visit the remaining land of the affected leaseholders to provide a free consultation and understand the feasibility of suggested improvements. Checks might include:  
  a. Locating where irrigation or access to water might be improved.  
  b. Identifying improved uses of the land (e.g alternative crop types that might suit the land).  
  c. Identifying if crop processing or storage could be improved.  
5. After the household has received sufficient advice, E&S team to seek written confirmation of how they intend to use the cash or materials. Confirmation should include co-signature from spouses.  
6. E&S team to arrange the provision of cash, materials or livestock to the household. |
<table>
<thead>
<tr>
<th>Training on Veterinary Health &amp; free consultation</th>
<th>Description</th>
<th>Risks</th>
<th>Steps to overcome risks</th>
<th>Next steps for implementation</th>
</tr>
</thead>
</table>
| **Target recipients:**  
  • Herders  
  • Farmers along the OTL | Open training provided to all herders and farmers along the OTL and their household members. The training will focus on animal veterinary health including how to identify common diseases, how to treat common diseases and injuries.  
  A free consultation will be provided to all professional herders and one representative of each community herd  
  Maximum 30 people per training | The training is not attended by Farmers or Herders because they do not see the value of it, or they are busy grazing.  
  Herders may forget their training after some time. | Ensure the benefits of the training are advertised.  
  Offer some food refreshments during the training to acknowledge the time taken to attend.  
  Each Training will be held a second time if case they cannot attend the one held in their community (if they are on grazing rotation for example).  
  A training session will be advertised at least two weeks in advance and will be held a second time if insufficient numbers attend (less than 60% of affected households represented).  
  Training venue should be able to accommodate an attendance of 30 people maximum.  
  The training should include the provision of educational materials which can be taken away by attendees.  
  The training and materials must be delivered Uzbek the language. | 1. The E&S team will develop a scope of work for each training course.  
  2. The E&S team consultant will identify at least two specialists for each type of training preferably with experience in delivering such training. Female trainers for training targeted at women will be preferred. If no such specialist is available, a practicing professional could be used with assistance provided by a training specialist to develop an engaging training package. For veterinary training, a practicing vet will be identified who can travel to the site to offer consultations.  
  3. Specialists to Consult with the local mahallas to understand further what each training could focus on, e.g what are the common diseases, injuries and other challenges are experienced by herders, what are the challenges with farming and meat/milk/wool production.  
  4. The specialists will develop all training materials informed by the above consultations and ensure they are translated.  
  5. Consult with the local mahallas to arrange suitable dates and venues and to ensure the course is appropriate advertised among grazing communities (e.g via Telegram and noticeboards).  
  6. Deliver the training at a venue accessible by all affected households distributing educational materials and taking a register of attendance. |

<table>
<thead>
<tr>
<th>Training on Meat, Milk &amp; Wool Production</th>
<th>Description</th>
<th>Risks</th>
<th>Steps to overcome risks</th>
<th>Next steps for implementation</th>
</tr>
</thead>
</table>
| **Target recipients:**  
  • Women in affected households (Herders and Farmers) | Open training provided to spouses of all herders and farmers along the OTL and their household members. The training will focus on how to increase the value of meat, milk and wool products on the market.  
  Maximum 30 people per training | | |  |

<table>
<thead>
<tr>
<th>Technical training on how to improve agricultural crop yields.</th>
<th>Description</th>
<th>Risks</th>
<th>Steps to overcome risks</th>
<th>Next steps for implementation</th>
</tr>
</thead>
</table>
| **Target recipients:**  
  • Farmers along the OTL | Open training provided to farmers along the OTL.  
  The training will focus on techniques to improve crop yield such as providing advice on seed varieties, irrigation techniques, harvesting techniques. | | |  |

<table>
<thead>
<tr>
<th>Business and financial training</th>
<th>Description</th>
<th>Risks</th>
<th>Steps to overcome risks</th>
<th>Next steps for implementation</th>
</tr>
</thead>
</table>
| **Target recipients:**  
  • Farmers along the OTL | Open training provided to farmers along the OTL  
  The training will provide a basic training on farming and business finances including the budgeting and forecasting | | |  |
### Feed Bank in the Solar PV Area

**Target recipients:**
- Professional herders
- Community herders

**Description**
Development of a “feed bank” which involves the collection, storage and distribution of feed for livestock herds who are displaced by the project. The feed will be collected from within the Solar PV Area between the solar panels and under them (where possible). Professional herders who are displaced will be able to collect the feed free of charge and then sell to the community members who previously paid them to herd or feed to community herds as part of a paid service. Community herders who are displaced by the community will be given free access to collect feed on a rotational basis similar to their current herding rotation.

**Area for collection of feed on a seasonal basis.**

**Training**
Training will be provided to community members who are given access, on how to collect the feed safety without risk to themselves or the project. The project will provide tools and vehicles for the collection of the feed (to be confirmed). The project will build storage facilities in each village for the feed.

**Health and safety risks to those accessing the project (e.g. interaction electrical cables).**
Health and safety training will be provided to all selected individuals who can access the site to collect feed.

**Steps to overcome risks**

1. Access to the site should be kept open for herders for as long as possible while other areas of the project are being constructed (e.g. include a gap in fences erected until the construction of the Solar PV Area commences).
2. CLOs to notify communities of when the land will be closed off for access well in advance.
3. A soon as access to the Solar PV Area is removed, the project must provide transitional support to the community who own livestock until the “feed bank” initiative is operational. Transitional support will include the provision of feed for communities.
4. E&S team to arrange for a land capacity assessment of the land inside the Solar PV Area.
5. E&S team to work with the engineering and design team to establish where within will be accessible for selected community members to collect feed (i.e. between the panels, under the panels etc.).
6. E&S team to work with the engineering and design team to conduct a thorough health and safety risk assessment regarding access to the area. This should be done once the layout of the site is known and must include the identification of any hazards (e.g. overground cables etc) and ways to secure these safely so that feed collection will not interfere with these.
7. E&S team to understand what kind of liability insurance will be needed for selected community members.
8. E&S team to appoint a specialist in sustainable grazing in order to input into the detailed design of the initiative. Where possible partners from the NGO and government may be included. Specialists and partners should provide technical input including:
   a. Identification of any suitable alternative species of feed that might increase yield.
   b. Identifying effective ways to collect and store the feed.
   c. Confirming how frequently feed should be collected.

**Next steps for implementation**

1. E&S team and project CLOs to conduct a “co-design” process with the community, including mahallas, professional and community herders. This process will include a participatory and iterative design process which will also include the grazing specialist and the project design team. The objective of the co-design will be to develop a number of operational protocols and governance structures for the **Prepared For: Masdar**
<table>
<thead>
<tr>
<th>Name and eligibility/target recipients</th>
<th>Description</th>
<th>Risks</th>
<th>Steps to overcome risks</th>
<th>Next steps for implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>If excess feed is collected, communities will have the choice to be able to sell the feed to other nearby communities if there is a demand.</td>
<td>Conflict between communities and community herders over the remaining land which becomes overgrazed. Despite a leasehold, the community is unable to stop other herders from other areas from using the land.</td>
<td>Engagement with the mahallas to develop an agreed governance system to ensure equal usage of the land. Input from a grazing specialist to ensure future grazing is sustainable and avoiding overgrazing. The project will ensure the Khokimiyat will intervene if other community herders from elsewhere encroach on the leasehold.</td>
<td>initiative to ensure that it is successful and that it operates in a way that the community agrees with. 2. Construct feed storage areas within each community at a location agreed with the community. 3. Agree who from each community will be given access to the Solar PV area and will have responsibility of collecting feed. 4. Source appropriate transportation tools and vehicles, e.g. quad bikes and trailers which can be used to transport feed. These tools and vehicles should remain property of the initiative and should be shared by members. 5. Provide HSE training and any other training required to selected individuals. 6. The first &quot;pilot&quot; season of feed collection should be conducted while the affected community are still receiving transitional support (albeit reduced to avoid overstocking of feed). 7. Any necessary changes to methods, personnel or governance should be made following the first season and following seasons where necessary.</td>
<td></td>
</tr>
<tr>
<td>Securing remaining grazing land</td>
<td>Securing legal tender for remaining community grazing land and improving its potential yield. Leasehold status will be sought for the remaining grazing land around the project with co-ownership from the community. The objective will be to protect these areas from being assigned to other individual farmers seeking land from the Khokimiyat.</td>
<td>1. E&amp;S team to liaise with the cadastral office in order to obtain maps outlining the boundaries of all remaining grazing land around the project. 2. E&amp;S team to confirm with the Khokimiyat that this land is available and a community leasehold for this land could be issued. 3. E&amp;S team to appoint a grazing specialist with knowledge of sustainable grazing practices in Uzbekistan. 4. E&amp;S team to appoint a legal clerk who will be responsible for managing the administrative process of applying for a leasehold on behalf the community. 5. The legal clerk would identify the most appropriate legal entity to be formed which could hold the leasehold of the land for or on behalf of the community. 6. E&amp;S team and CLO’s to engage with all four communities to “co-design” the necessary governance structures for management of such land. This will include agreeing the following: a. In who’s name will the leasehold be held in or what entity should be created. b. If the leasehold is in the name of a group (i.e the community) who in the community will be the legal custodian of the leasehold (i.e who will be the contact point for future issues arising on that land) c. Agree what committees or other structures might need to be set up to govern these areas of land for the benefit of the community as a whole. d. Rotations for who may use the land and when to avoid overuse. e. Other to avoid overgrazing (to be informed by training and specialist advice) 7. The legal clerk with make all necessary arrangements with the Khokimiyat in order to secure leaseholds in the various land parcels on behalf of the community.</td>
<td>1. E&amp;S team to liaise with the cadastral office in order to obtain maps outlining the boundaries of all remaining grazing land around the project. 2. E&amp;S team to confirm with the Khokimiyat that this land is available and a community leasehold for this land could be issued. 3. E&amp;S team to appoint a grazing specialist with knowledge of sustainable grazing practices in Uzbekistan. 4. E&amp;S team to appoint a legal clerk who will be responsible for managing the administrative process of applying for a leasehold on behalf the community. 5. The legal clerk would identify the most appropriate legal entity to be formed which could hold the leasehold of the land for or on behalf of the community. 6. E&amp;S team and CLO’s to engage with all four communities to “co-design” the necessary governance structures for management of such land. This will include agreeing the following: a. In who’s name will the leasehold be held in or what entity should be created. b. If the leasehold is in the name of a group (i.e the community) who in the community will be the legal custodian of the leasehold (i.e who will be the contact point for future issues arising on that land) c. Agree what committees or other structures might need to be set up to govern these areas of land for the benefit of the community as a whole. d. Rotations for who may use the land and when to avoid overuse. e. Other to avoid overgrazing (to be informed by training and specialist advice) 7. The legal clerk with make all necessary arrangements with the Khokimiyat in order to secure leaseholds in the various land parcels on behalf of the community.</td>
<td></td>
</tr>
<tr>
<td>Name and eligibility/target recipients</td>
<td>Description</td>
<td>Risks</td>
<td>Steps to overcome risks</td>
<td>Next steps for implementation</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-------------</td>
<td>-------</td>
<td>-------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td><strong>Preferential employment</strong></td>
<td>Preferential employment for some herders and vulnerable people during the construction phase of the project. Employment will be subject to the effected person having the required skills needed by Masdar, however where possible training will be provided. Employment will also be limited by the needs of the project and cannot be guaranteed. Employment will not exclude anyone from other livelihood restoration measures to which they are entitled.</td>
<td>Vulnerable people or herders may not possess the necessary skills to be employed. Expectations of employment is high in the surrounding communities, and it is likely that these expectations will not be met.</td>
<td>Masdar should aim to provide basic training to employees in order to allow them to fulfil their employment duties. Where vulnerable people are unable to work (e.g due to age, disability or illness) a member of their household could be considered. Engagement regarding local employment should be frequent and informative to all nearby communities. Where a significant drop in local employment is foreseen, for example when moving from construction to operations, an engagement plan should be put in place to manage expectation.</td>
<td>1. E&amp;S team to consult with Masdar HR team to identify possible local employment opportunities. 2. E&amp;S team to consult with the local Mahallas to identify possible herders or vulnerable who might be suitable for employment. Care must be taken to avoid nepotism by the Mahallas. 3. A set of employment criteria should be developed by the E&amp;S team should be developed and shared with the community for transparency on hiring practices. 4. A local employment plan should be developed in order to boost local employment opportunities generally. 5. Training should be provided to affected persons in order for them to fulfil their duties successfully. 6. Herders who are employed should be given leave to attend training provided as part of the livelihood restoration initiative so that they may benefit from this training after the employment contract is terminated (e.g at the end of construction). 7. Upskilling will be provided to vulnerable households and particularly women so that they can take advantage of employment opportunities.</td>
</tr>
<tr>
<td><strong>Transitional support</strong></td>
<td>Provision of feed for vulnerable herders and herders at risk of losing significant income temporarily after the Solar PV site is blocked off for construction and while the feed bank is still being set up.</td>
<td>There is a risk that herders become dependent on the transitional support. There is a risk that transitional support ends too early</td>
<td>Ensure the decision to terminate transitional support is based on sound monitoring data against the baseline. Gradual decline in transitional support may be appropriate rather than a single termination date.</td>
<td>1. Contact vulnerable herders and professional herders to enquire about their ability to store feed if provided and how much feed would be required to sustain their herd during the construction period. 2. Locate a source of animal feed that can be transported to the communities during the construction period. 3. Arrange for the feed to be trucked into the communities on a monthly basis. 4. Monitor the usage of feed and income levels and ensure that the feed bank at the Solar PV Site is operational before terminating the transitional support.</td>
</tr>
</tbody>
</table>
11. Implementation

11.1 Roles and Responsibilities

The implementation of the LRP will be undertaken by the following entities. The roles and responsibilities are described in Table 11-1 below.

Table 11-1 – LRP Roles responsibilities

<table>
<thead>
<tr>
<th>Entity</th>
<th>Responsibilities as part of LRP implementation</th>
</tr>
</thead>
</table>
| LRP Implementation Manager & and Community Liaison Manager | • Overall responsibility for the day-to-day implementation of the LRP initiatives.  
• Oversite of the Community Liaison Officer  
• Gather monitoring and evaluation data on the implementation of the LRP to be shared with the Developers E&S Manager |
| Samarkand LRP Committee | • Oversee implementation of Community Development Plan and LRP and assist in the provision of livelihood restoration.  
• Reviewing of LRP monitoring reports and evaluation the ongoing progress of the LRP using the internal and external monitoring and evaluation indicators. The objectives of the review should be continual improvement of performance and prevent reoccurrence of issues and challenges.  
• Indicate when the LRP Completion Audit should be conducted  
• Verify that all expenditure is fully accounted for which will inform future financial auditing.  
• Assist in the resolution of grievances where required.  
• Review and resolution of all appealed grievances.  
• Monitoring the effectiveness of the grievance mechanism. |
| Masdar Community Liaison Officers (At least one CLO must be female) | • To manage the project grievance mechanism, responding to the grievant in the first instance an maintain contact with grievant throughout the process, investigating and close out of grievances within input from the JCDC.  
• Managing the compensation process, including the issuing of compensation documents and payments and storage and of all confidential information.  
• Receiving and in filing grievance forms and reporting to the E&S team.  
• Maintaining stakeholder engagement plan and database including minutes of meetings.  
• Communicating with the community about upcoming activities, meetings and trainings.  
• Prepare posters, press releases, media release and other external engagement for the LRP where appropriate. |
| Technical Specialists | • To provide specialist services in relation to the implementation of the LRP for example the development and delivery of training materials. |
| Developer’s E&S Team | • To prepare and implement the companies Environmental and Social Management Systems including this LRP.  
• To prepare and maintain all confidential records of affected persons, their livelihood restoration choices and proof of compensation payments.  
• Maintain an up-to-date Stakeholder Engagement Database and manage the CLOs in the documenting of engagement activities.  
• Maintain an up-to-date Grievance Database and managing the CLOs in the documenting of grievances.  
• Providing capacity building activities to the CLOs and teams implementing the LRP.  
• Maintain a project Environmental and Social Risk Register including risks associated with land acquisition and the LRP.  
• Co-ordinate the activities of the Community Liaison Officers.  
• Prepare LRP monitoring reports to reflect the current status of implementation. |
| Ministry of Energy | • Responsible for official land order and approval of valuation  
• General oversite of the LRP project |
| Local Khokimiyat | • Assistance enrolling vulnerable people onto existing government support programs where appropriate.  
• Assistance with identifying vulnerable people in the community.  
• Assistance with resolution of any further compensation claims. |
| Regional Agricultural Office | • Assistance with the implementation of livelihood restoration training by assisting to locate and recruit specialists. |
• Assistance with the provision of future agricultural data as part of ongoing livelihood monitoring.

Local Mahallas

• Assistance to organise community meetings and gather herders for training.
• Assistance to communicate key project information to the community.
• Assistance to resolve specific grievances where necessary.
• Assistance providing monitoring information where necessary.

Land administration authorities (Regional khokimiyat)

• Responsible for issuing leaseholds
• Manage the land acquisition process
• Partake in all official engagements regarding land

11.2 Composition of the LRP Committee

The project will assemble a LRP Committee in order assist the implementation and monitoring of the LRP. The composition of the LRP Committee is expected to include:

• The Ministry of Energy
• Regional Agricultural Office
• Cadastral Office
• Masdar Community Liaison Office
• Representatives from the local Khokimiyat including:
  • Representative for Women
  • Representative for Youth
• Male and female representatives from local mahallas
• A male and female representative of Lease holding households under the OTL
• A male and female representative of herding households

Additional committee members may be added while specific livelihood restoration initiatives are implemented, this may include representatives from NGOs or Civil Society.

Where necessary the LRP committee may be broken down into sub-committees with specific responsibilities, for example implementation of specific livelihood initiatives.

The LRP Committee will meet every three months during construction of the project and implementation of the livelihood restoration initiatives. Once all initiatives have been implemented and all compensation has been paid the LRP Committee will meet every six months until the LRP Completion Audit is undertaken.

Before the LRP Committee is set up, the representatives of leaseholders and herders should be selected using cultural appropriate but also fair and transparent selection process.

All members of the committee will be provided training which should include:

• The objectives, scope, roles and responsibilities of the LRP and the LRP committee
• Understanding eligibility and entitlement
• The livelihood restoration initiatives
• The gaps between national legislation and lender standards
• The grievance mechanism
• The monitoring and evaluation process and the LRP’s responsibilities with regards to monitoring.
• Identifying and addressing conflicts of interest.

In the case where a conflict of interest is identified, the member in question should be prohibited for taking part in key decisions that interact with the conflict, or an alternative member will be chosen.

Masdar E&S department will develop a Terms of Reference (ToR) for the LRP Committee which will be agreed with the committee itself.
11.3 Implementation Schedule

<table>
<thead>
<tr>
<th>LRP Implementation Activity</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclosure of final LRP</td>
<td>Before site mobilisation for construction</td>
</tr>
<tr>
<td>Establishment of LRP Committee including any necessary training/briefing.</td>
<td>Before start of construction</td>
</tr>
<tr>
<td>Issuing of compensation and adjustment of Sub-Lease Agreements</td>
<td>Before start of construction of the OTL</td>
</tr>
<tr>
<td>Payment of compensation for historical farmers 2 and 4</td>
<td>Agreement within 3 months of land take (site fully fenced) and payment within 4 months</td>
</tr>
<tr>
<td>Transitional support</td>
<td>Commencing as soon as the site is fully fenced and access to herders is denied for construction</td>
</tr>
<tr>
<td>Feed bank at the Solar PV Site</td>
<td>Within 3 months after completion of construction</td>
</tr>
<tr>
<td>The provision of livelihood restoration related training to the affected farmers and herders</td>
<td>Within 6 months from the start of construction</td>
</tr>
<tr>
<td>Monitoring of the Livelihood Restoration process</td>
<td>Ongoing until the completion audit</td>
</tr>
</tbody>
</table>

11.4 Implementation budget

The estimated costs for LRP implementation are included in tables 11-2, 11-3 & 11-4. These costs are provisional estimates and the costs of livelihood restoration may be reduced depending on the daily rates of specialists and once final options are chosen by affected people. It should be noted that table 11-4 includes costs for LRP management which could be reduced depending on the company’s internal resource arrangements.

Table 11-2 – Draft Compensation Costs

<table>
<thead>
<tr>
<th>Compensation</th>
<th>Assumptions/Notes</th>
<th>Amount (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation amount for leaseholds along the OTL</td>
<td>Based on the valuation provided by the valuer</td>
<td>4,057.66</td>
</tr>
<tr>
<td>Estimated compensation for historical leaseholds/households 2</td>
<td>83 million (UZB) - (based on their own official valuations by the Khokimiyat, reported verbally to AECOM) converted to USD using an exchange rate of 0.000089 from 21/11/2022</td>
<td>7,387.00</td>
</tr>
<tr>
<td>Estimated compensation for historical leaseholds/households 4</td>
<td>86 million (UZB) - (based on their own official valuations by the Khokimiyat, reported verbally to AECOM) using an exchange rate of 0.000089 from 21/11/2022</td>
<td>7,654.00</td>
</tr>
<tr>
<td>Disruption/Transport allowances for historic farmers</td>
<td>Disruption allowance of 100 USD for all historical farmers and an additional 100 USD for farmer 3 (As required in the SCA)</td>
<td>600.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19,698.66</td>
</tr>
</tbody>
</table>

Table 11-3 – Livelihood Restoration Costs
## Livelihood Restoration Measures

<table>
<thead>
<tr>
<th>Measures</th>
<th>Assumptions/Notes</th>
<th>Amount (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land enhancement grant (significant hardship allowance) to historical farmers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,500 USD given to historical farmer and 1,500 USD given to spouse of historical farmers 1, 2 and 3. 3,000 given to historical farmer and 3,000 given to spouses of historical farmers 2 and 4 to account for the “significant hardship caused by loss of investment”)</td>
<td>21,000.00</td>
<td></td>
</tr>
<tr>
<td>Agricultural technical advice to historical farmers</td>
<td>10 days of specialist time (400 USD per day)</td>
<td>4,000.00</td>
</tr>
<tr>
<td>Vet Training</td>
<td>20 days of specialist time (400 USD per day)</td>
<td>8,000.00</td>
</tr>
<tr>
<td>Meat &amp; Milk Processing Training</td>
<td>20 days of specialist time (400 USD per day)</td>
<td>8,000.00</td>
</tr>
<tr>
<td>Technical training on how to improve agricultural crop yields</td>
<td>20 days of specialist time (400 USD per day)</td>
<td>8,000.00</td>
</tr>
<tr>
<td>Business and financial training</td>
<td>20 days of specialist time (400 USD per day)</td>
<td>8,000.00</td>
</tr>
<tr>
<td>Feed bank at the Solar PV Site</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 days of specialist time (400 USD per day) for training, risk assessment and co-design. 5,000 needed for common infrastructure. 10 days of specialist engineer (1000 USD per day). Insurance costs and design costs to be sourced from project construction and operation budgets.</td>
<td>39,000.00</td>
<td></td>
</tr>
<tr>
<td>Materials for storage facilities at herders home</td>
<td>500 USD each for 42 herders</td>
<td>21,000.00</td>
</tr>
<tr>
<td>Provision of legal clerk to secure remaining land</td>
<td>30 days of specialist time (400 USD per day)</td>
<td>12,000.00</td>
</tr>
<tr>
<td>Vulnerability Allowance/Transitional support</td>
<td>6 months of minimum wage (80 USD per month) for 15 households to be paid on a monthly basis.</td>
<td>7,200.00</td>
</tr>
<tr>
<td>Materials &amp; Equipment for LR measures (printing and food for meetings etc)</td>
<td></td>
<td>6,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>142,200.00</td>
</tr>
</tbody>
</table>

## Table 11-4 – LRP Management Costs

<table>
<thead>
<tr>
<th>LRP implementation management tasks</th>
<th>Assumptions/Notes</th>
<th>Amount (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management of compensation process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 days per household of a local consultant time (400 USD per day)</td>
<td></td>
<td>6,400.00</td>
</tr>
<tr>
<td>Set up of one committee</td>
<td>3 days of local consultant time (400 USD per day)</td>
<td>1,200.00</td>
</tr>
<tr>
<td>Organisation of Committee meetings (one per quarter)</td>
<td>Local consultant will attend 6 committee meetings (400 USD per day)</td>
<td>2,400.00</td>
</tr>
<tr>
<td>Stakeholder Engagement Activities &amp; Co-ordination of trainings</td>
<td>40 days of local consultant time (400 USD per day)</td>
<td>16,000.00</td>
</tr>
<tr>
<td>Grievance Officer</td>
<td>2 days per month for 6 months, followed by 1 day per month for 18 months (400 USD per day)</td>
<td>12,000.00</td>
</tr>
</tbody>
</table>
## Monitoring & Evaluation
3 days per month for 2 years of local consultant (400 USD per day) & 1 day per quarter of an international specialist (1000 USD per day)  
36,800.00

## Completion Audit
5 days of an independent international specialist (1500 USD per day)  
7,500.00

## Materials & Equipment engagement (printing and food for meetings etc)
N/A  
2,000.00

## CLO
CLO annual salary for two years  
4,800.00

## Technical Oversight
2 days per month of international specialist time (1000 USD per day) for 6 months  
12,000.00

## Completion Audit
3 days of an independent international specialist (1500 USD per day)  
4,500.00

Total LRP Cost (USD): **267,498**

Total LRP Cost with 20% Contingency (USD): **320,925**
12. Monitoring & Reporting

Monitoring is a critical part of a resettlement and livelihood restoration. Monitoring is required in order to assess whether the goals of the livelihood restoration and compensation plan are being met. Monitoring primarily involves the systematic use of information to determine the extent to which plans are being implemented effectively. The purpose of LRP monitoring will be to verify that:

- Actions and commitments described in the LRP are implemented
- Eligible people and communities receive their full compensation prior to the start of the construction.
- Vulnerable households received adequate support and are not worse off as a result of the project
- Livelihood restoration programmes are achieving their aims and being effectively implemented
- Complaints and grievances lodged by affected people are followed up and, where necessary, appropriate corrective actions are taken
- If necessary, changes in in the LRP and associated procedures are made to improve delivery of entitlements to affected people.

The data collected as part of the LRP socio-economic baseline is to provide a baseline against which indicators for livelihood restoration can be monitored.

The design of the monitoring plan should comprise two levels of monitoring: internal and external.

12.1.1 Internal Monitoring

Internal monitoring is an internal management function allowing the LRP management (or agency elected to implement the LRP) to measure physical progress against milestones set out in the LRP.

Internal monitoring should:

- Ensure that due process has been followed in the notification of stakeholders, with adequate public meetings being held.
- Verify delivery and usage of compensation and entitlements.
- Verify that the Livelihood Restoration has been implemented in accordance with the provisions of the LRP.
- Maintain records of any grievances that require resolution.
- Oversee that all LRP measures are implemented as approved by the project management and relevant local authorities.
- Verify that funds for implementing livelihood restoration activities are provided in a timely manner, are sufficient for their purposes, and are spent in accordance with the provisions of the LRP.
- Document timely completion of LRP obligations (i.e. payment of the agreed-upon sums, provision of training materials etc)
- Ensure that monitoring and evaluation reports are submitted

12.1.2 External Independent Monitoring

External Independent Monitoring takes the form of effects and impact monitoring, should be conducted every six months until the close out audit decrees that the LRP objectives have been met.

Both internal and external monitoring reports should be used to assess whether any changes should be made to the LRP during implementation. This provides an opportunity for frequent monitoring and evaluation, and results of this can be incorporated into a continuous improvement feedback loop. The LRP management should meet after each monitoring exercise to consult over findings of the monitoring evaluation and decide whether steps should be taken to address issues highlighted by monitoring reports.

12.1.3 Indicators

A number of objectively verifiable indicators shall be used to monitor the impacts of compensation and livelihood restoration activities. These indicators will be targeted at quantitatively measuring the socio-economic status of the affected people, to determine and guide improvement in their social well-being.

These indicators are listed below.
### Table 12-1. Input indicators to monitor the impacts of the compensation and livelihood restoration activities

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Information Source</th>
<th>Frequency</th>
<th>Data gathering responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Indicators</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall spend of the LRP</td>
<td>Financial Records</td>
<td>Monthly</td>
<td>LRP Implementation Manager</td>
</tr>
<tr>
<td>Distribution of spending by:</td>
<td>Financial Records</td>
<td>Monthly</td>
<td>LRP Implementation Manager</td>
</tr>
<tr>
<td>- Compensation payments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Livelihood Restoration Initiative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Community Development Plan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Additional assistance provided to vulnerable people</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Resolution of grievances</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of cash compensation payments made</td>
<td>Financial Records &amp; Compensation Database</td>
<td>Monthly</td>
<td>LRP Implementation Manager</td>
</tr>
<tr>
<td>Number of resources assigned to implement the LRP.</td>
<td>Human Resources</td>
<td>Monthly</td>
<td>LRP Implementation Manager</td>
</tr>
<tr>
<td>The frequency of meetings of the Samarkand Community Development Committee</td>
<td>Engagement Database</td>
<td>Monthly</td>
<td>LRP Implementation Manager</td>
</tr>
<tr>
<td>Number of engagements with:</td>
<td>Engagement Database</td>
<td>Monthly</td>
<td>LRP Implementation Manager &amp; Community Liaison Officer</td>
</tr>
<tr>
<td>- Historical leaseholders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Herders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Lease holding households along the OTL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Women in households along the OTL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Vulnerable households</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of vulnerability allowances paid</td>
<td>Financial Records</td>
<td>Monthly</td>
<td>LRP Implementation Manager &amp; Community Liaison Officer</td>
</tr>
<tr>
<td>Number of vulnerable people referred to government support programs</td>
<td>Engagement Database</td>
<td>Monthly</td>
<td>LRP Implementation Manager &amp; Community Liaison Officer</td>
</tr>
</tbody>
</table>

### Output Indicators
<table>
<thead>
<tr>
<th>Event</th>
<th>Data Collection</th>
<th>Frequency</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herders’ perception of the training provided</td>
<td>Feedback Survey following the training</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Women’s perception of training provided</td>
<td>Feedback Survey following the training</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Herders and surrounding communities’ perception of the feed bank initiative</td>
<td>Survey 1 month after mast installed and every 6 months thereafter</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Number of trainings been provided to selected community members to access the Solar PV Area</td>
<td>Livelihood Restoration Records</td>
<td>Monthly</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Training attendance</td>
<td>Livelihood Restoration Records</td>
<td>Monthly</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Quantity of feed fathered from the PV Solar Site and given to each community</td>
<td>Livelihood Restoration Records</td>
<td>Monthly</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Number of households being provided feed by the feed bank</td>
<td>Livelihood Restoration Records</td>
<td>Monthly</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Revenue generated from the feed bank</td>
<td>Livelihood Restoration Records</td>
<td>Monthly</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Farmer’s (along the OTL) perception of the project</td>
<td>Perception survey 1 month after compensation issued and every 6 months thereafter</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Herder’s perception of the project</td>
<td>Perception survey following the training and every 3 months thereafter</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Community perception of the project</td>
<td>Perception survey</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Effectiveness of training to actually restore/enhance ability to maintain or increase income</td>
<td>Multiple sources including perceptions, training records and impact monitoring</td>
<td>Every 6 months</td>
<td>LRP Implementation Manager &amp; Community Liaison Officer</td>
</tr>
<tr>
<td>Effectiveness of feed bank to actually restore/enhance ability to maintain or increase income</td>
<td>Multiple sources including perceptions, usage records and impact monitoring</td>
<td>Every 6 months</td>
<td>LRP Implementation Manager &amp; Community Liaison Officer</td>
</tr>
<tr>
<td>Effectiveness of the legal clerk to secure remaining land</td>
<td>Progress reports from the legal clerk and perceptions of the Mahallas</td>
<td>Every 6 months</td>
<td>LRP Implementation Manager &amp; Community Liaison Officer</td>
</tr>
<tr>
<td>Issuing of the land enhancement grant to the historical farmers</td>
<td>Payment record</td>
<td>Every 3 months</td>
<td>LRP Implementation Manager &amp; Community Liaison Officer</td>
</tr>
<tr>
<td>Type of usage of the land enhancement grant by the historical farmers</td>
<td>Engagement records</td>
<td>Every 3 months</td>
<td>LRP Implementation Manager &amp; Community Liaison Officer</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Historical farmers perception of the livelihood restoration programme</td>
<td>Engagement records</td>
<td>Every 3 months</td>
<td>LRP Implementation Manager &amp; Community Liaison Officer</td>
</tr>
<tr>
<td>Number of cash compensation payments received</td>
<td>Samarkand LRP Committee</td>
<td>Monthly</td>
<td>LRP Implementation Manager</td>
</tr>
<tr>
<td>Number of grievances received</td>
<td>Grievance Mechanism</td>
<td>Monthly</td>
<td>LRP Implementation Manager</td>
</tr>
<tr>
<td>Number of grievances open and closed</td>
<td>Grievance Mechanism</td>
<td>Monthly</td>
<td>LRP Implementation Manager</td>
</tr>
<tr>
<td>Average time taken to resolve grievances</td>
<td>Grievance Mechanism</td>
<td>Monthly</td>
<td>LRP Implementation Manager</td>
</tr>
</tbody>
</table>

**Impact indicators**

<table>
<thead>
<tr>
<th>Changes in where herders now choose to herd</th>
<th>Socio-Economic Survey</th>
<th>Every 6 months</th>
<th>Community Liaison Officer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes to the income received by professional herders</td>
<td>Socio-Economic Survey</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Changes to the income received by vulnerable community and herders</td>
<td>Socio-Economic Survey</td>
<td>Every 3 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Time taken to reach grazing land making sure it aligns with predicted impact</td>
<td>Socio-Economic Survey</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Number of herds in the three communities</td>
<td>Socio-Economic Survey</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Number of diseases reported among livestock</td>
<td>Socio-Economic Survey</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Number of diseases/injuries to livestock that were home treated because of training provided by the project</td>
<td>Socio-Economic Survey</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Number of livestock per herd the three communities</td>
<td>Socio-Economic Survey</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Changes to the roles and income of women</td>
<td>Socio-Economic Survey</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Changes to the income of historical farmers households</td>
<td>Socio-Economic Survey</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>-----------------------</td>
<td>----------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Women’s perception of how their quality of life has changed</td>
<td>Socio-Economic Survey</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Number of households considered vulnerable</td>
<td>Socio-Economic Survey</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Vulnerable people income compared to baseline levels</td>
<td>Socio-Economic Survey</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Vulnerable people spending compared baseline levels</td>
<td>Socio-Economic Survey</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Number of individuals with health issues compared to the baseline</td>
<td>Socio-Economic Survey</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Number of vulnerable households reporting financial difficulty</td>
<td>Socio-Economic Survey</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Number of vulnerable households reporting difficulty providing food for the family</td>
<td>Socio-Economic Survey</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Number of vulnerable households reporting changes to their living conditions/livelihood compared to baseline levels</td>
<td>Socio-Economic Survey</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Number of vulnerable households enrolled in government support services</td>
<td>Socio-Economic Survey</td>
<td>Every 6 months</td>
<td>Community Liaison Officer</td>
</tr>
</tbody>
</table>

### 12.1.4 LRP Completion Audit

The developer will commission a LRP completion audit with an independent consultant to verify that the LRP has been fully implemented and has been effective in restoring and where possible enhancing the livelihoods of affected persons. Where the completion audit recognises that the Livelihood Restoration activities have not been successful in fulfilling the goals of the LRP it will recommend corrective actions where necessary.

- The objectives of the LRP completion audit include:
  - Assess the effectiveness of the LRP implementation in minimising the impacts associated with economic displacement
  - Ensure that all entitlements and commitments in the LRP have been delivered
  - Assess if livelihoods have been successfully restored
  - Ensure that the grievance mechanism is effectively implemented and is accessible to the community.
  - Identify the need for any corrective actions that might improve the overall performance of the livelihood restoration initiatives and compensation process.
Appendix A - LRP Summary
Project Background

The Government of Uzbekistan plans to develop up to 5 gigawatts of solar power by 2030 through the development of three Solar PV projects (220 MWac each) in Samarkand, Jizzakh and Sherabad regions.

The purpose of this Project Information Leaflet is to provide details on Samarkand Solar PV Project.

This document is a summary of the prepared Livelihood Restoration Plan (LRP) which will be implemented during the construction and operational phase of the project.

The proposed site is in the Kattakurgan District, Samarkand region, in the Republic of Uzbekistan. The nearest communities are Bulakchi and Damkhodzha as shown below.

Project Description

The Project Site is approximately 20km from the city of Kattakurgan and approximately 50km from Samarkand. The site can be accessed via a road at the south end of the facility. The Project will also comprise a 4.5km overhead transmission line (OTL) from the on-site substation to the existing Ishtihan substation.

Construction Programme

As of January 2023, final Project design has yet to be completed some early works have already commenced including the construction of a small office and some fencing. Construction will start once all the required permits and licences have been received and will take approximately 12 months to complete, starting to supply the grid in the first quarter of 2024.

The construction of a small office at the site and some fencing is due to start in December 2022.

<table>
<thead>
<tr>
<th>Work Stream</th>
<th>Early Works</th>
<th>Construction Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
<td>2022</td>
<td>2023</td>
</tr>
<tr>
<td></td>
<td>Apr May Jun</td>
<td>Aug Sep Oct Nov Dec</td>
</tr>
<tr>
<td></td>
<td>Jan Feb Mar</td>
<td>Jan Feb Mar</td>
</tr>
<tr>
<td>Plant Design Approval</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase and Order of Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation &amp; Installation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commissioning</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Samarkand Solar PV Project

Livelihood Restoration Plan – Summary

Project Location
Minimising Displacement

The project first took steps to minimise displacement including:

- **Boundary adjustments:** Masdar, AECOM and its local subconsultant Green Business Innovation (GBI) worked with the local cadastral office to ensure that the boundary of the Solar PV Area did not overlap with any existing leaseholds (not including historical leaseholds that had already been terminated). The local cadastral office provided a map of leaseholds to AECOM and Masdar that were held in the area. GBI, AECOM, Masdar and the local cadastral office then worked together to revise the project boundaries from the ones originally provided to Masdar by the Ministry of Energy to ensure no further displacement of leaseholds occurred within the solar PV area.

- **Transmission Route Selection:** The primary route for the OTL was designed in consultation with affected leaseholders along the route of the line in order to avoid structures, high value crops or other social receptors where possible.

Displacement Impacts

The project will however still cause displacement on households outlined below. A total of 51 households and 281 people are impacted by the solar PV site and the OTL. Out of this group 5 households have already been significantly impacted (over 10% of their land temporarily or permanently impacted) by historical resettlement related to the project.

### Displacement and impacts on land

The project will cause three types of land impacts:

- **Permanent land take:** The solar PV site will require 426 ha. The footprint for the OTL towers also require 0.2310ha and will be required for the lifespan of the project and thus should be considered a permanent land take. The permanent land take for each leaseholder is less than 0.001% of the total land in the leasehold (excluding historical leaseholds).

- **Temporary land take:** The project requires temporary access to land in order to construct the OTL. This includes:
  - Temporary access roads 6m wide to each tower in order for heavy machinery to access each site.
  - An additional assembly area will be required for each tower (total area of 1.33ha)
  - An 18m wide right of way will be required for a tractor to suspend the OTL between the towers.

Temporary impacts are relatively small with the largest impact being 4.20% of land taken.

- **Conditional sterilization zone:** The area of land within 32m each side of the OTL itself is considered a “sterilization safety zone”. Farmers will be able to continue to use this land and will not be impacted by the construction however they will no longer be able to grow trees over 6 meters or build structures in this area.

### Type of affected households

<table>
<thead>
<tr>
<th>No. of Households</th>
<th>No. of individuals</th>
<th>No. of significantly impacted Households &gt;10%</th>
<th>No. of significantly impacted Individuals &gt;10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical Farming Households with Sub-Lease Agreements in the Solar PV Area were already displaced in 2019 and are included in the LRP.</td>
<td>5 Households</td>
<td>41 People</td>
<td>5 Households</td>
</tr>
<tr>
<td>Farmers with Sub-Lease Agreements along the Overhead Transmission Line will be impacted by a small amount of land take for towers, and temporary impacts during construction.</td>
<td>4 Households</td>
<td>22 People</td>
<td>0</td>
</tr>
<tr>
<td>Informal land users (Professional and Community Herder) using the Solar PV Area will lose access to this area for grazing herds.</td>
<td>42 Households</td>
<td>218 People</td>
<td>The land is a community resource and therefore the % of land take per household cannot be calculated.</td>
</tr>
</tbody>
</table>

### Permanent affected areas:

- PV Area
- OHTL Tower Footprints

### Temporarily Affected Areas:

- Construction routes under OHTL
- Tower Assembly Areas

### Sterilization Zone:

- Within 32m of the OHTL will be subject to conditional use: no trees can be grown over a height of 6 meters and no structures can be built.
Objectives & Policy Framework

Objectives of the LRP

The LRP was developed to manage the land acquisition process and mitigate the remaining displacement related impacts on affected people. The LRP has the following objectives:

- Define national and international requirements for economic displacement.
- Outline procedures for the land acquisition and compensation to be carried out by State parties.
- Identify affected people and understand the socio-economic characteristics of affected households.
- Evaluate and assess the socio-economic activities that are located within the Project Site.
- Define appropriate levels and means of compensation for losses resulting from the Project in line with National Law and lender standards.
- Identify other assistance and measures to enable affected households to restore and improve their livelihood.
- Define roles and responsibilities of key parties in the Project.
- Propose an appropriate grievance resolution mechanism.
- Evaluate and address disclosure and consultation requirements required by the Project lenders.

Entitlements

All displaced people will be entitled to support by the project and the type of support.

The main entitlements include:

- Compensation for all assets, crops and trees
- Compensation for lost income
- Livelihood restoration for all displaced households
- Additional safeguards and support for vulnerable households and individuals

These entitlements are outlined in greater detail in the Entitlement Matrix on the next two pages.

Project Requirements:

National laws applicable to land acquisition for the project are described in detail in the LRP.

Beyond Uzbek legal requirements, the project lenders who are financing the project also have standards which must be followed by the project, these include:

- **Asian Development Bank (ADB)** - Safeguard Policy Statement (SPS)
- **The European Bank for Reconstruction and Development (EBRD)** - Environmental and Social Policy (ESP) and Performance Requirement (PR) 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement addresses impacts on land acquisition.
- **The Asian Infrastructure and Investment Bank (AIIB)** - Environmental and Social Framework and Environmental and Social Standard 2: Land Acquisition and involuntary Resettlement.
- **The European Investment Bank (EIB)** - Environmental and Social Standards. This includes, Standard 6 – Involuntary Resettlement.

The above standards all have similar requirements which include:

- Avoid involuntary resettlement wherever possible.
- Enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to the pre-project levels.
- Improve the standards of living of vulnerable groups.
- Engage directly with affected persons through meaningful consultation.
- Compensation rates applied must be at “full replacement value”.

Entitlements:

- Compensation for all assets, crops and trees
- Compensation for lost income
- Livelihood restoration for all displaced households
- Additional safeguards and support for vulnerable households and individuals

These entitlements are outlined in greater detail in the Entitlement Matrix on the next two pages.
**Objectives of the LRP**

The LRP was developed to manage the land acquisition process and mitigate the remaining displacement related impacts on affected people. The LRP has the following objectives:

- Define national and international requirements for economic displacement.
- Outline procedures for the land acquisition and compensation to be carried out by State parties.
- Identify affected people and understand the socio-economic characteristics of affected households.
- Evaluate and assess the socio-economic activities that are located within the Project Site.
- Define appropriate levels and means of compensation for losses resulting from the Project in line with National Law and lender standards.
- Identify other assistance and measures to enable affected households to restore and improve their livelihood.
- Define roles and responsibilities of key parties in the Project.
- Propose an appropriate grievance resolution mechanism.
- Evaluate and address disclosure and consultation requirements required by the Project lenders.

**Entitlements**

All displaced people will be entitled to support by the project and the type of support.

The main entitlements include:

- Compensation for all assets, crops and trees
- Compensation for lost income
- Livelihood restoration for all displaced households
- Additional safeguards and support for vulnerable households and individuals

These entitlements are outlined in greater detail in the Entitlement Matrix on the next two pages.

---

**Project Requirements:**

National laws applicable to land acquisition for the project are described in detail in the LRP.

Beyond Uzbek legal requirements, the project lenders who are financing the project also have standards which must be followed by the project, these include:

- **Asian Development Bank (ADB)** - Safeguard Policy Statement (SPS)
- **The European Bank for Reconstruction and Development (EBRD)** - Environmental and Social Policy (ESP) and Performance Requirement (PR) 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement addresses impacts on land acquisition.
- **The Asian Infrastructure and Investment Bank (AIIB)** - Environmental and Social Framework and Environmental and Social Standard 2: Land Acquisition and involuntary Resettlement.
- **The European Investment Bank (EIB)** - Environmental and Social Standards. This includes, Standard 6 – Involuntary Resettlement.

The above standards all have similar requirements which include:

- Avoid involuntary resettlement wherever possible.
- Enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to the pre-project levels.
- Improve the standards of living of vulnerable groups.
- Engage directly with affected persons through meaningful consultation.
- Compensation rates applied must be at “full replacement value”.

---

[aeecom.com]
Valuation and Compensation

Provision of compensation

In accordance with national and international requirements, temporary and permanent impacts on leaseholds, such as loss of crops or damage to assets will be compensated in cash at full replacement value which includes the market value of losses and any other transaction costs, interest accrued, transitional cost without any deductions for taxes, depreciation or materials which can be salvaged.

All affected people who have crops, assets or structures that are impacted by the project will be entitled to compensation, irrespective of their legal tenure in the project area.

Compensation will be issued prior to any adjustment of leases or land take by the project for construction.

Affected persons will have the opportunity to appeal the valuation amounts and this will trigger a re-valuation by another independent valuation company.

Valuation principles:

The following valuation principles were followed to determine compensation amounts:

• Compensation for standing crops will be at replacement value based on one year of production costs and an allowance equivalent to one-year average net income based on the average income over the previous three years.

• Compensation for fruit producing trees will be based on the average income from the past three years multiplied by the years required for the tree to reach productive maturity and the cost of planting new saplings. Trees that are immature will be compensated based on the cost for planting and growing replacement trees to the same age.

• Any unexpected damage to structures caused during construction will be based on full replacement value in accordance with the Entitlement Matrix.

• Compensation for loss of income/livelihood will be compensated based on the average monthly income for the last three years multiplied by the number of months that the interruption occurs.

• Cash compensation for permanent loss of land leased based on the average monthly income from the land over the last three years multiplied by four years.

The valuation process

The valuation process was carried out by a local government approved valuation company in Uzbekistan with experience conducting valuations of this kind including for previous projects sponsored by ADB. The name of the valuation company is below:

- Company Name & Address: BAHOLASH INTEGRAL" LLC, Tashkent, Yunusabad district, Bodomzor str, 3, room 7,8,9

The valuation process took place during the period from 15th September to 18th November 2022 and involved the following steps:

1. Each household was contacted to have a one-to-one meeting with the valuers and the district Khokimiyat at the district Khokimiyat office and given an opportunity to submit evidence to calculate the average income from the land.

2. A committee was then set up which involved the District Khokimiyat, District Cadastre, District Agricultural Department, District grid representative, Representative of valuation company

3. Each cadastral parcel as part of a leasehold was examined to calculate the following land takes and impacts

4. The value of lost income for permanent and temporary impacts was calculated using the above calculated land take and also the average income of the land recorded over the past three years.

Cut off date

After the completion of the valuation surveys a project wide cut-off date was then announced through the local Khokimiyat district wide telegram channel and also on the farmers telegram channel. The final cut-off date was 18th November 2022. Any new crops planted, or infrastructure developed in the project area after this date will not be considered for compensation.
## Entitlement Matrix

<table>
<thead>
<tr>
<th>Loss of asset/Description of impact</th>
<th>Eligible person or group</th>
<th>Entitlement</th>
<th>Applicability</th>
</tr>
</thead>
</table>
| Loss of exclusive rights of access to arable land as part of a leasehold | Owners or leaseholders of arable land or those with formal title | OPTION 1: Cash compensation based on the average monthly income from the land over the last three years multiplied by the number of months that the interruption occurs, or if permanent, multiplied by four years.  
   NB: Option to be avoided for critically vulnerable leaseholders in favour of option 1 (if the amount of land lost is greater than 5% of total landholding).  
   OPTION 2: Provide replacement plot of equal or improved productive potential within the same or improved proximity to household. Secure tenure may be obtained within leasehold tenure types if the land provided does not place the owner at risk of forced eviction. If the replacement plot is provided in-kind, upfront administrative costs involved in provision of secure tenure will be covered by the Developer (such as survey costs, statutory lease fees in the case of leasehold tenure or administrative costs).  
   NB: Option only available to leaseholds where over 10% of the land is due to be permanently acquired by the project or if 10% of the land becomes uneconomically viable as a result of the project. This threshold should be reduced to 5% where the leaseholder is critically vulnerable. | **Active**  
   NB: Option only available to critically vulnerable households. | **Active** |
| Loss of land preparation or enhancements | Farmers (with formal or informal right of access) | OPTION 1: Monetary compensation at replacement value, or government rate, or whichever is higher, for land preparation (including irrigation, electricity provision, clearing or ploughing) that existed at the time of the survey, to be paid after delivery of entitlement for replacement land (if applicable), so that the compensation can be used for the intended purpose of land preparation.  
   AND  
   1. A Disruption Allowance equivalent to 10% of replacement value for land preparation. | **Active**  
   NB: Option to be avoided for critically vulnerable households in favour of option 2 (if the amount of land lost is greater than 5% of total landholding).  
   OPTION 2: The Developer arranges for preparation of replacement land of equivalent productive potential, on replacement plot. | **Active** |
| Loss of Crops | Owner of crops | OPTION 1: Compensation at (1) government-established crop rate, or (2) replacement value, for crops, whichever is higher for crops that existed at time of moratorium, that were unable to be harvested.  
   This compensation is to be paid any time before the planned removal of the said crops. To be multiplied by number of seasons of lost production. This option only permissible for situations where harvest is not possible due to the project schedule and/or life cycle of the specific crop in question.  
   NB: For critical vulnerable households who are below the poverty line or in financial difficulty compensation may be paid in instalments to maintain food security.  
   OPTION 2: Allow harvest of current crop, for crops that existed at the time of the moratorium but provide compensation for future seasons lost at (1) government-established crop rate, or (2) replacement value, for crops, whichever is higher for crops that existed at time of the survey.  
   AND  
   1. A Disruption Allowance equivalent to 10% of replacement value of the said crops. | **Active**  
   NB: Option only available to leaseholds where over 10% of the land is due to be permanently acquired by the project or if 10% of the land becomes uneconomically viable as a result of the project. This threshold should be reduced to 5% where the leaseholder is critically vulnerable. | **Active** |
| Temporary loss of ability to plant or harvest crops within temporary access areas due to the project schedule. | Farmers (with formal or informal right of access) | BUSINESS OWNERS  
   OPTION 1: Compensation at (1) government-established rate, or (2) replacement value, whichever is higher, and predicted total annual profit from harvest, multiplied by number of seasons required to re-establish crop to productive potential to be paid in annual instalments at harvest time. This option is only permissible where planting or harvest is not possible due to the project schedule and/or crop life cycle.  
   OPTION 2: Provide transitional food support packages equivalent to lost harvest of farming households, during resettlement transition period. This option is only permissible for situations where planting or harvest is not possible due to the project schedule and/or crop life cycle.  
   NB: Option only available to leaseholds where access to over 20% of the land is temporarily lost.  
   AND  
   1. A Disruption Allowance equivalent to 10% of replacement value of the said crops. | **Active**  
   NB: Option only available to critically vulnerable households. | **Active** |
| Permanent loss of primary agricultural livelihood | Farmers (with formal or informal right of access)  
   EMPLOYEES OR INFORMAL WORKERS | Livelihood restoration targeted at improving and enhancing the livelihoods of the affected farmers and herders. Various livelihood restoration options may be included and will be proportionate to the level of impact.  
   A significant impact allowance will be provided to any household which loses more than 10% of its income earning assets permanently. The allowance will be equivalent to six months of monthly minimum wage. | **Active**  
   NB: Option only available to critically vulnerable households. | **Active** |
| Loss of productive fruit trees | Owner of trees | OPTION 1: Provision of monetary compensation as determined by (1) government-established compensation rates, or (2) the cost of replanting plus cumulative lost income from productive trees (i.e., replacement rate) until tree can be re-established, whichever is the higher, for trees that existed at time of moratorium.  
   For vulnerable households the compensation of lost income must be paid in periodic instalments covering the period between the loss of trees and for new trees to become productive.  
   OPTION 2: Provide replacement trees and pay for lost harvest until replacement trees reach productive age. For critically vulnerable households consider providing transitional food support packages equivalent to lost harvest of affected households for time period required for replacement trees to become productive, for trees that existed at time of moratorium. If monetary option for lost harvest is chosen, this should be paid in instalments, to enable use for intended purpose of providing for lost interim harvest. | **Active**  
   NB: Option only available to critically vulnerable households. | **Active** |
### Entitlement Matrix

<table>
<thead>
<tr>
<th>Loss of asset/ Description of impact</th>
<th>Eligible person or group</th>
<th>Entitlement</th>
<th>Applicability</th>
</tr>
</thead>
</table>
| Loss of farm shelter, structure or built assets | Owner of shelter | OPTION 1: Provision of monetary compensation as determined by (1) government-established compensation rates, or (2) replacement value (excluding depreciation), whichever is higher, for farm shelters that existed at time of moratorium.  
OPTION 2: Provision of partial monetary replacement value compensation for labour, transport and transaction costs, and a package of replacement materials to enable construction of improved replacement farm shelter.  
1. A Disruption Allowance equivalent to 10% of replacement value of the said farm shelter.  
2. Permit the salvage of non-fixed materials | When Necessary |
| Loss of informal access to land | Informal users of land | Facilitate through the provision of support and technical advice, a formal (security of tenure) Lease/Sub-Lease Agreement including the payment of any administrative costs such as taxes, transaction, registration fees, etc.  
AND  
Cash compensation to reflect the income lost through land-access restrictions where this can be demonstrated to have occurred as a direct consequence of the changes in land use arising from the Project  
AND  
Other practical support necessary for informal land users to re-establish their livelihoods elsewhere, including the provision of livelihood restoration measures | When Necessary |
| Permanent Loss of Natural Resources, grazing land / Communal Land | Grazing community as whole | OPTION 1: Identify alternative communal grazing land at an appropriate proximity to the land users and where necessary increase the carrying capacity of said land or improve access to alternative land.  
OPTION 2: Community Livelihood restoration initiative with sustainable agriculture project on replacement or remaining land. | Active |
| Temporary Loss of Natural Resources, grazing land / Communal Land | Grazing community as whole | Community transitional support in the form of temporary access to alternative land or provision of feed during the period of disturbance | Not Active |
| Loss of employment or loss of salaried income. | The project will seek to protect any employees from job losses or reduction in income by seeking a legal agreement with their employer to ensure their income is not affected.  
If however unanticipated job losses or reduction of salary do occur, the project will compensate affected employees (formal and informal) based on the average monthly salary calculated over the last three years for a period of six months and they will also be entitled to specific livelihood assistance (to be developed if this impact occurs, it is currently not expected to occur). | Not Active |
| Vulnerable or disproportionately affected households | Vulnerable households | A vulnerability allowance equivalent to minimum wage will be provided for six months to the household.  
Priority for employment in project-related jobs, training opportunities, self-employment and wage employment assistance.  
A range of other specific assistance measures will be provided to support vulnerable and disproportionately affected people to reflect the specific vulnerability identified. For example, elderly persons and individuals with health issues will be provided with more frequent visits and communication to ensure that they are kept calm and closely informed during implementation of the LRP.  
Engage local government to place them on welfare scheme. | Active |
| Gender inequality | Women in significantly impacted households | For households significantly impacted (above 10% of land displaced by the project): All spouses to be registered as co-owners of assets prior to compensation. All compensation is to be paid to all spouses, and in cases of dispute, divided equally between spouses. All spouses to be co-signatories of all compensation agreements.  
A range of other specific assistance measures will be provided to support vulnerable and disproportionately affected people to reflect the specific vulnerability identified. For example, elderly persons and individuals with health issues will be provided with more frequent visits and communication to ensure that they are kept calm and closely informed during implementation of the LRP.  
Engage local government to place them on welfare scheme. | When Necessary |
| No-Shows/Absentees | Owners of crops or assets which are absent at the time of survey or compensation process | Assets or crops for which the owner/s cannot be located shall be surveyed, and the value of the total compensation package (monetary and in-kind) calculated and placed within a third-party escrow account where funds are held in trust for a period of 5 years. After a 5 years period has elapsed without an asset owner making a claim, the funds will be disbursed to community development activities targeting the respective village, based on needs as determined in consultation with the Community Resettlement Committee at the time of disbursement. Should the asset owner make a claim before the 5-year period, and be able to furnish proof of asset ownership, the funds shall be disbursed to enable the asset owner to replace the affected assets.  
A range of other specific assistance measures will be provided to support vulnerable and disproportionately affected people to reflect the specific vulnerability identified. For example, elderly persons and individuals with health issues will be provided with more frequent visits and communication to ensure that they are kept calm and closely informed during implementation of the LRP.  
Engage local government to place them on welfare scheme. | When Necessary |
| Significant hardship caused by loss of investment in the land which was not compensated | Historical Households 2 and 4 | A Disruption Allowance equivalent to 10% of replacement value of the said farm shelter.  
A range of other specific assistance measures will be provided to support vulnerable and disproportionately affected people to reflect the specific vulnerability identified. For example, elderly persons and individuals with health issues will be provided with more frequent visits and communication to ensure that they are kept calm and closely informed during implementation of the LRP.  
Engage local government to place them on welfare scheme. | Active |
Livelihood Restoration and other Support

In addition to receiving compensation, all affected persons will have access livelihood restoration initiatives and vulnerable households will also receive additional support. The livelihood restoration and vulnerability support initiatives are outlined below.

<table>
<thead>
<tr>
<th>Livelihood Restoration Initiative</th>
<th>Target recipients</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land enhancement grant</strong></td>
<td>Historical Leaseholds only</td>
<td>Land enhancement grant (or provision of materials, land or livestock) and technical advice given to historic leaseholders that have permanently lost a significant portion (&gt;10%) of their land to the project in order to improve the capacity of remaining land. This land enhancement grant will be issued in lieu of replacement land of which availability is scarce in the area. Consultation with historical farmers revealed that most farmers wish to spent the grant on livestock.</td>
</tr>
<tr>
<td><strong>Training on Veterinary Health &amp; free consultation</strong></td>
<td>Herders, Farmers along the OTL</td>
<td>Open training provided to all herders and farmers along the OTL and their household members. The training will focus on animal veterinary health including how to identify common diseases, how to treat common diseases and injuries. A free consultation will be provided to all professional herders and one representative of each community herd</td>
</tr>
<tr>
<td><strong>Training on Meat, Milk &amp; Wool Production</strong></td>
<td>Women in affected households (Herders and Farmers)</td>
<td>Open training provided to spouses of all herders and farmers along the OTL and their household members. The training will focus on animal veterinary health including how to identify common diseases, how to treat common diseases and injuries.</td>
</tr>
<tr>
<td><strong>Technical training on how to improve agricultural crop yields.</strong></td>
<td>Farmers along the OTL</td>
<td>Open training provided to farmers along the OTL. The training will focus on techniques to improve crop yield such as providing advice on seed varieties, irrigation techniques, harvesting techniques.</td>
</tr>
<tr>
<td><strong>Business and financial training</strong></td>
<td>Farmers along the OTL</td>
<td>Open training provided to farmers along the OTL. The training will provide a basic training on farming and business finances including the budgeting and forecasting of income, revenue costs and taxes etc.</td>
</tr>
<tr>
<td><strong>Feed Bank in the Solar PV Area</strong></td>
<td>Professional herders, Community herders</td>
<td>Development of a “feed bank” which involves the collection, storage and distribution of feed for livestock herds who are displaced by the project. The feed will be collected from within the Solar PV Area between the solar panels and under them (if possible). Professional herders who are displaced will be able to collect the feed free of charge and then sell to the community members who previously paid them to herd or feed to community herds as part of a paid service. Community herders who are displaced by the community will be given free access to collect feed on a rotational basis similar to their current herding rotation.</td>
</tr>
<tr>
<td><strong>Securing remaining grazing land</strong></td>
<td>The communities as a whole</td>
<td>Securing legal tender for remaining community grazing land and improving its potential yield. Leasehold status will be sought for the remaining grazing land around the project with co-ownership from the community. The objective will be to protect these areas from being assigned to other individual farmers seeking land from the Khokimiyat.</td>
</tr>
<tr>
<td><strong>Guaranteed employment of a household member</strong></td>
<td>Historical leaseholder household, Vulnerable herder household, Professional herders household</td>
<td>Guaranteed employment (if accepted by the household) for one member of the household for Historic leaseholder households, vulnerable herders and professional herders.</td>
</tr>
<tr>
<td><strong>Preferential employment</strong></td>
<td>All Herders, Farmers along the OTL</td>
<td>Preferential employment for some herders and vulnerable people during the construction phase of the project. Employment will be subject to the affected person having the required skills needed by Masdar, however where possible training will be provided. Employment will also be limited by the needs of the project and cannot be guaranteed. Employment will not exclude anyone from other livelihood restoration measures to which they are entitled to.</td>
</tr>
<tr>
<td><strong>Transitional support</strong></td>
<td>Professional herders, Vulnerable community herders</td>
<td>Provision of feed for vulnerable herders and herders at risk of losing significant income temporarily after the Solar PV site is blocked off for construction and while the feed bank is still being set up.</td>
</tr>
<tr>
<td><strong>Vulnerability Allowance</strong></td>
<td>Vulnerable Households only</td>
<td>A vulnerability allowance equivalent to minimum wage will be provided for six months to the household.</td>
</tr>
</tbody>
</table>
Implementation Arrangements

Project Resources

In order to effectively implement the LRP, the project will appoint the following resources (See LRP for full list):

- A LRP implementation manager with overall responsibility of day to day implementation of the LRP.
- A designated Community Liaison Officer (CLO) to manage the project grievance mechanism, manage the compensation process and keep the community informed of project progress.
- Technical specialists responsible for monitoring the progress of LRP implementation in accordance with international best practice.

The LRP Committee

The project will also assemble a LRP Committee in order assist the implementation and monitoring of the LRP. The composition of the LRP Committee is expected to include:
- Regional Agricultural Office
- Cadastral Office
- Masdar Community Liaison Office
- Representatives from the local Khokimiyat
- Male and female representatives from local mahallas
- Male and female representatives of affected households

LRP Implementation Schedule

The LRP implementation schedule is below (subject to change):

<table>
<thead>
<tr>
<th>Work Stream</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
<td>Nov</td>
<td>Dec</td>
<td>Jan</td>
<td>Feb</td>
</tr>
<tr>
<td>Livelihood Restoration Planning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appointment of LRP resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision of Compensation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transitional Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Livelihood Restoration &amp; Monitoring</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Project Grievance Mechanism

At all times, Masdar will accept comments, complaints and grievances concerning the Project in both verbal and written formats. Persons responsible for addressing grievances are outlined below:

**Khurshid Karamatov, Masdar Solar Community Liaison Officer (CLO)**

Karamatov @masdar.ae (+99893) 522-00-70

**Saida Yusupova, Community Liaison Manager**

Saidayusupova@gmail.com (+99890) 319-77-21

All written and/or verbal complaint will be recorded by the Masdar CLO.

The following information should be submitted with a complaint:

- Name (anonymous complaints are accepted), address, (community name) and full contact details.
- Date, time and place where complaint was received.
- Description of complaint (including third parties such as construction contractors) and location of the issue.
- Preferred means of communication for future contact.

Any grievance will be acknowledged by the Masdar CLO within 5 working days.

Most grievances should be resolved within one month of receiving the grievance, for more complex investigations, the complainant will be updated within two weeks of the grievance being received and an updated timeline of how it will be resolved will be provided.