

Jizzakh Solar PV Project

Livelihood Restoration Plan

Masdar

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Quality information

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Acronyms

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

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1. Introduction

1.1 Project Background

The Government of Uzbekistan aims to develop up to 5 gigawatts (GW) of solar 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 220 megawatt (MW) peak 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 Gallaorol District, Jizzakh region of Uzbekistan, referred to as "the Project". The Project site area is 562ha. The Project will also comprise a 15 km overhead transmission line from the on-site substation to the existing Saribazar substation.

Table 1-1. Key Project characteristics

Location	Gallaorol District, Jizzakh region, Republic of Uzbekistan
Installed capacity	220 MWac
Solar PV Site area	562ha
Overhead grid connection line	15 km 220 kV Steel lattice towers
National grid substation	Saribazar

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 Social Compliance Audit (SCA) 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 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 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. .

Income data was not provided by one leaseholder.

2. Project Description and Land Aspects

2.1 Project Location

The proposed Project Site is located in Gallaorol District, Jizzakh region, in the south-east of the Republic of Uzbekistan. Nearest communities (Mahallas) are Chayonly (also referred to as Chayli on some maps), Kiziltut, Karobchi (also referred to as Karakchi on some maps), and Sayfin Ota. The Project Site is approximately 10 km north of the city of Gallaorol and 25 km west of the city of Jizzakh, the regional capital. The site can be accessed via road R-42 off motorway M39.

The site area is 562 ha.

The site centre point coordinates are:

	<i>Geographic (WGS 84)</i>	<i>WGS 84 UTM 42N</i>
<i>Longitude</i>	67° 31' 47" E	374733
<i>Latitude</i>	40° 7' 38" N	4442916

The land comprises sparsely vegetated areas or bare ground and is used as for occasional seasonal livestock grazing and access to nearby grazing areas. No arable agriculture is evident on site, potentially due to the lack of water sources for irrigation.

The proposed site boundaries were optimized to use the available space and avoid areas with uneven topography and to avoid sensitive areas in the communities.

The route of the overhead transmission line is 15 km long and passes through agricultural land, connecting the Project to the existing national grid substation Saribazar.

The location of the Project Site is illustrated in Figure 2-1 below

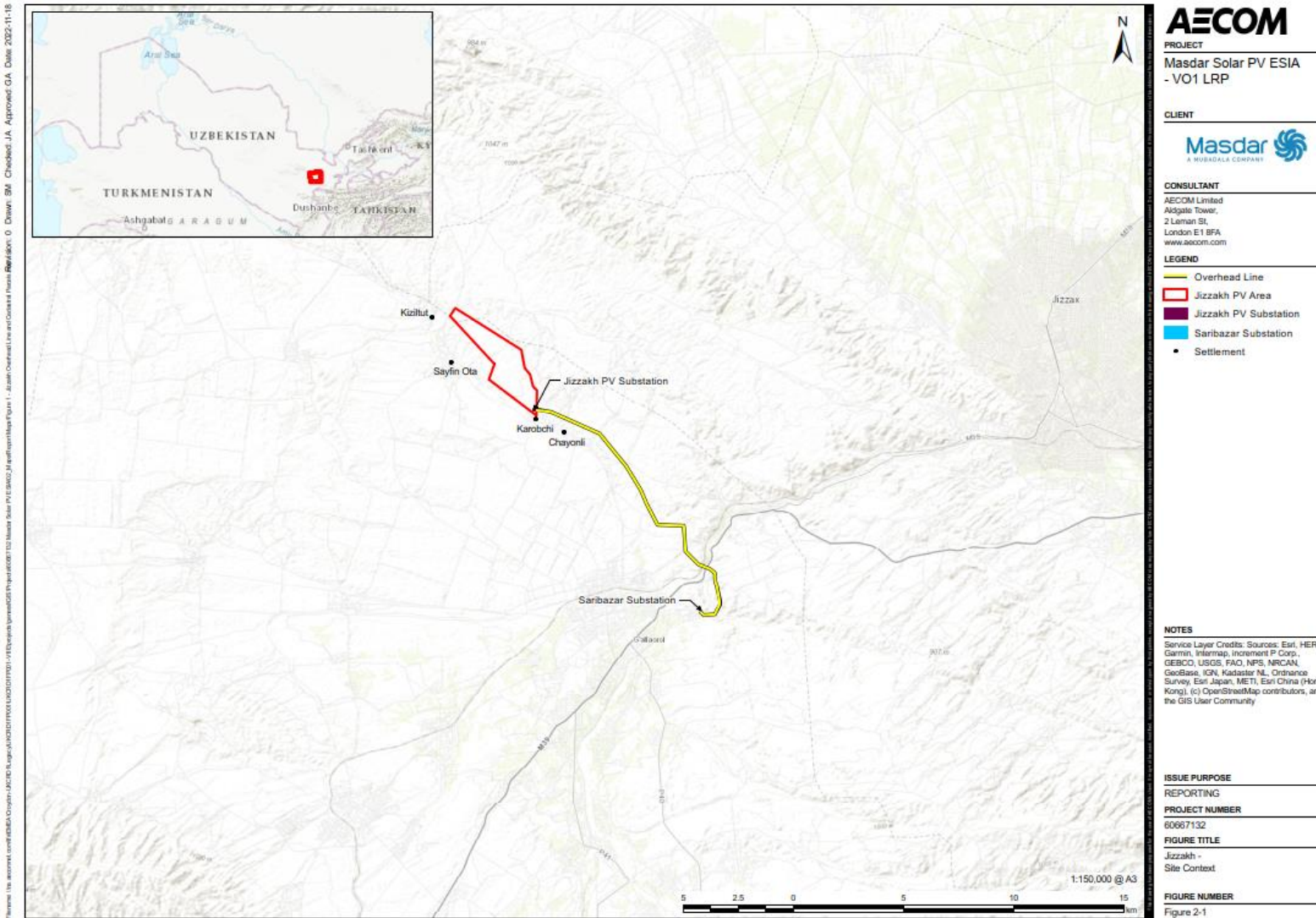


Figure 2-1. Project Location

2.2 Project Components

The key components of the Project which are relevant for this LRP are:

2.2.1 Solar PV Site

This is the area containing the Solar PV modules, inverters, transformers, grid connection interface and site office. The total area of the Solar PV Site is 562ha.

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. The route of the OTL is 15 km long and will include 62 lattice towers and passes through agricultural land.

These towers are illustrated in Figure 2-6 of the Jizzakh Solar PV ESIA.

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

- Avoid tracing the OTL 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 OTL 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.

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.

The current access route to the Solar PV Area is subject to change and will be using existing roads and will not require any further displacement or land take. Any change to site access which requires land take or displacement of any kind will automatically require an addendum to this LRP

Worker accommodation will not be located at the project site and so will not require any land take.

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. There is no blatching plant planned on site as part of this development.

2.3 Project Programme

At the time of writing, 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 Jizzakh 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 Jizzakh region. Following site screening visits by the engineering company TYP SA 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 has 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.

2.4.1.3 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.

The original transmission route passed west of Karobchi and Chauyonli villages however during a site visit in September 2021, it was identified that this route passes through economically viable agricultural lands and installation of the transmission line would hinder the development and use of this land.

An alternative route going east of Karobchi and Chauyonli villages was proposed by the local farmers. Land in this area is less valuable due to the absence of water. Therefore, construction of the OTL here would result in lower socio-economic impact.

Furthermore, adjustment of a short section of the OTL on approach to Saribazar substation was requested to avoid an orchard. The route of the OTL still passes over the orchard but the positions of the towers were optimised to minimise impacts on the orchard. The orchard is also not affected by the sterilization zone due to the trees being lower than the 6m safety threshold.

The review of these alternatives and route optimisation was conducted by the Developer's consultant Juru Energy, the National Electric Grid of Uzbekistan and local Cadastre.

3. Legal & Policy Framework

3.1 Legal Framework

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.

3.1.1 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 3.1.6).

3.1.2 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.

3.1.3 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 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.

3.1.5 Resolution of the Cabinet of Ministers “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.

3.1.6 The Law of the Republic of Uzbekistan “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):

1. Household plots, consisting of the house and a small garden.
2. 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).
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.
4. 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.
5. 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.
6. 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

Institution	Responsibilities
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Cabinet of Ministers	<ol style="list-style-type: none"> (1) Development, approval, and publication of documents regarding urban planning (2) Establish the legal procedure to privatise vacant plots of land (3) Establish fee payment amounts and methodologies (4) 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 Gosgomzemgeodescadastre or GKZGDK)	<ol style="list-style-type: none"> (1) Registration of rights to land plots (2) Management of land plot inventory (3) Definition of spatial characteristics of plots (4) Preparation of documentation for land plots
Fund for Urbanization Development	<ol style="list-style-type: none"> (1) Run e-auctions to sell the plots (2) Safekeep money generated by privatisation of land plots (3) Use funds for urbanisation processes
Local Municipalities (also referred to as Khokimiyats)	<ol style="list-style-type: none"> (1) Identify land plots to privatise (2) Identify land plots to transfer to the Fund for Urbanization Development (3) Take relevant decisions on plot privatisations
Agency for State Assets Management	<ol style="list-style-type: none"> (1) Organise e-auctions and ensure their proper execution

Source: Kosta Legal (2019)

3.1.7 Resolution 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”

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.

3.1.8 Law 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.

3.1.9 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.

3.1.10 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.

3.1.11 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.

3.1.12 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:

$F = n(F_0 + f)$ where F_0 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: $F = \eta * \pi * R^2$, where η 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 m² 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 No. ZRU-781

3.1.16 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 valuers should be licensed and independent (article 4). It envisages the events when valuation is mandatory including in case of acquisition of assets (article 11).

3.1.17 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 the 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, including those connected with ecology, 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 3.3.1 shows the main elements of Uzbekistans 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).

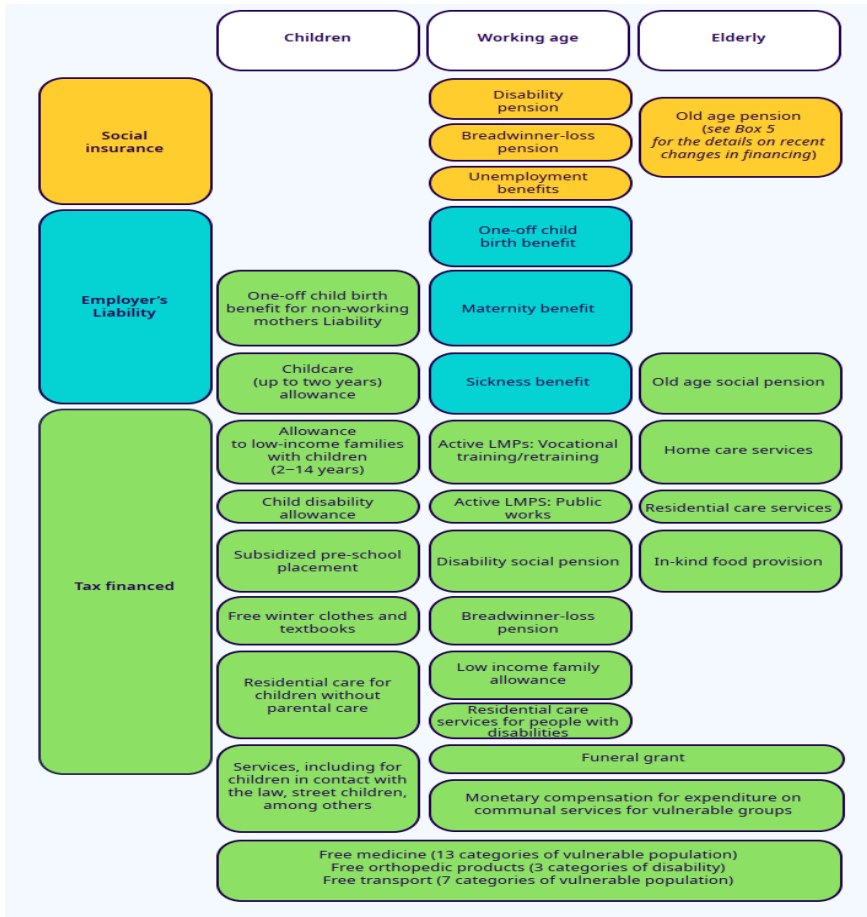


Figure 3-3-1– Uzbekistan’s social protection system

3.4 International Best Practice Guidelines

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

- IFC Performance Standards (IFC, 2012).
- (IFC, 2007a)
- (IFC, 2007b).
- Asian Development Bank (ADB) Safeguard Policy Statement (ADB, 2009).

These are all specific policies, procedures, strategies and regulations designed for promoting sustainable development. These procedures include a detailed environmental review process prior to final approval of financing for the Project, detailed environmental guidelines, detailed health and safety requirements, procedures for social impact assessment and public consultation and information disclosure and many other issues, associated with project construction, operation and decommissioning. Many of the mitigation measures described in later sections of this ESIA are based on these requirements.

Of particular relevance is Principle 1 of the Rio Declaration of Environment and Development (United Nations, 1992c) states that "Human beings are entitled to a healthy and productive life in harmony with nature". Principle 18 requires that an impact assessment be undertaken.

Further detail relating to the IFC Performance Standards and African 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 Environmental Health and Safety Guidelines.

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

IFC PS1 – Assessment and Management of Environmental and Social Risks and Impacts.

IFC PS5 – Land acquisition and involuntary resettlement.

PS5 is generally considered the global benchmark for the management of involuntary resettlement and this therefore of particular importance to this LRP. PS5 includes key principles such as: providing compensation. The majority of principles of PS5 are shared with the ADB Safeguard Policy Statement.

The key provisions of PS 5 are:

1. 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.
2. 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.
3. 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.
4. 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.
5. Where involuntary resettlement is unavoidable, the Developer will be required to prepare a RAP (in the case of physical displacement) and/or a Livelihoods Restoration Plan (in the case of economic displacement). The RAP 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.

6. 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.
7. Where affected persons are required to be relocated, the Developer will offer feasible resettlement options, including adequate replacement housing or monetary compensation where appropriate.
8. 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.
9. Economically displaced persons who face loss of assets or access to assets will be compensated for such loss at full replacement cost, and well 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.
10. 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 standard of living to vulnerable households whose livelihoods or income levels are adversely affected; and transitional support where necessary, based on a reasonable estimate of the time required to restore their income-earning capacity, production levels, and standards of living.
11. 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.
12. 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 World Bank and 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. The ESIA Study 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:

1. Avoid involuntary resettlement wherever possible.
2. Minimize involuntary resettlement by exploring project and design alternatives.
3. Enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to the pre-project levels.
4. 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 involuntary 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:

5. Displaced persons with legal rights, generally defined by those holding duly registered titles to the land.
6. 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.
7. 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.

The key objectives of PR5 are to:

- Avoid involuntary resettlement or at least minimise involuntary resettlement wherever feasible by exploring feasible alternative project designs;
- Mitigate unavoidable adverse social and economic impacts from involuntary displacement on affected persons by: (i) providing compensation for loss of assets at full replacement value; and (ii) ensuring that resettlement activities are implemented with appropriate consultation, participation, and disclosure of information, in accordance with the requirements of PR 10: Information Disclosure and Stakeholder Engagement;
- Improve, or as a minimum restore the livelihoods of affected persons compared to pre-displacement levels; and
- Improve living conditions of physically displaced persons through the provision of adequate with security of tenure.

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 valuers. 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 LARPF 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

The following gap analysis was conducted between IFC/ADB standards and the laws of Uzbekistan. EBRD standards are considered similar to that of IFC/ADB.

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

Topic	Lender (IFC/ADB) standards associated with resettlement	Requirements under national legislation	Differences identified and actions to address differences
Scope of application	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, are subject to Lender Standards.	<p>The legal and policy framework contains national laws and legislations related to land acquisition and compensation policy in Uzbekistan through the following:</p> <ul style="list-style-type: none"> (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”; (ix) 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”. 	<p>The legal and policy framework includes provisions for land acquisition and involuntary resettlement to “<i>land users, tenants and landowners</i>”. However, the Legal and Policy Framework excludes public land for compensation related payment.</p> <p>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.</p> <p>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.</p> <p>The gaps between the requirements of ADB SPS (2009) and national laws have been reconciled in previous ADB-assisted projects in Uzbekistan.</p>

Topic	Lender (IFC/ADB) standards associated with resettlement	Requirements under national legislation	Differences identified and actions to address differences
		<p>(x) 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</p> <p>(xi) The Law “On Appeals of Physical and Legal Persons</p> <p>(xii) Resolution of Cabinet of Ministers “About Approval of Rules of Protection of Power Supply Facilities</p> <p>(xiii) he National Construction Standards and Rules # KMK 2.10.08-97. “Land allocation standards for construction of 0.4 – 750 kV power networks”</p> <p>(Xiv) ZRU 781 - About procedures of seizure of land for social needs with compensation</p>	
Alternative project designs	In order to avoid or minimise effects including physical and/or economic displacement, alternative project designs should be considered by clients.	This is not a requirement under national legislation.	To avoid, where possible or minimise social impacts within and in the approximate surrounding location of the project area and enhance positive social impacts.
Compensation and benefits for displaced persons	Masdar must offer displaced communities and persons compensation for loss of assets at full replacement cost, and other assistance.	<p>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.</p> <p>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 ‘Goscomzemgeodescadastre’ 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.</p>	<p>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.</p> <p>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.</p>
Where livelihoods are land-based, the client will offer land-based compensation.		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.	<p>Both Lender Standards and government regulation is matching regarding in-kind land compensation rather than just cash payment.</p> <p>The non-land options may be necessary when replacement land of equal quality is not available or unaffordable, or when the</p>

Topic	Lender (IFC/ADB) standards associated with resettlement	Requirements under national legislation	Differences identified and actions to address differences
Timing of Compensation in relation to Resettlement	Masdar will take possession of the relevant area of land and related assets following compensation payments.	Under national legislation, it is not possible to take possession of a plot of land prior to compensation.	displaced persons make an informed decision to demand compensation in cash
	The client will provide opportunities to displaced communities and persons to derive appropriate development benefits from the Project.	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.	There is no requirement to provide development benefits under national legislation. However, it is best practice to ensure the local community benefits. 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.
Community engagement	Stakeholder engagement enables the client to engage with affected communities. This should include information on resettlement options, alternatives, and choices.	Under national legislation there is no obligation to disclose information to the public or with PAPs.	The Legal Policy and Framework does not align with National Legislation here which does not require consultation. However, Lender Standards include those which 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 leaseholders, other farmers, herders, affected community members, and government representatives. Specific details of engagements can be found in Chapter 4.
	Masdar will disclose relevant information during the planning, implementation, monitoring and evaluation of compensation payments, livelihood restoration activities, and resettlement activities.	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 compensation or undertake alternative livelihood restoration tasks.	National legislation differs from Lender Standards in that only during implementation is there a requirement to disclose legal land acquisition information to PAPs. It is however international best practice to maintain good stakeholder engagement throughout. Regular meetings should continue with stakeholders affected or potentially affected by the project. More details of this process can be found in Chapter 4 of this LRP.
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.	Both Lender Standards and National Legislation allow project affected persons to express a grievance through multiple mechanisms. Masdar has already developed a grievance

Topic	Lender (IFC/ADB) standards associated with resettlement	Requirements under national legislation	Differences identified and actions to address differences
		<p>At any time, the PAP (or any other party with a grievance) can approach the courts for a judicial ruling.</p> <p>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</p>	<p>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 will make available any relevant documents for groups or individuals looking to go through the courts to raise a grievance.</p>
Resettlement and Livelihood Restoration Planning and Implementation	<p>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.</p>	<p>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 Agreements, however their socio-economic status is not required in the information.</p>	<p>Socioeconomic surveys are not required under National legislation. Information on the identity of PAPs is held in Sub-Lease Agreements.</p> <p>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 socio-economic 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.</p> <p>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.</p>
Uneconomic parcels of Land	<p>Uneconomic parcels of land (often referred to as orphaned land) should be acquired along with the entire land parcel.</p>	<p>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.</p>	<p>In-kind compensation is available through national legislation. According to project impacts, no uneconomic parcels of land are expected to be created base on the project.</p>
Monitoring and Evaluation	<p>Masdar will establish procedures to monitor and evaluate the implementation of the LRP. PAPs will be consulted during the monitoring process.</p>	<p>National legislation does not require monitoring after the implementation of the project.</p>	<p>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 with during future monitoring and evaluation activities. More on this is detailed in section 11.4.1</p>

Topic	Lender (IFC/ADB) standards associated with resettlement	Requirements under national legislation	Differences identified and actions to address differences
Establishment of a cut-off date for eligibility	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.	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.	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. Leaseholders within the project area have been informed of the location of project infrastructure, as well as the purpose of the cut-off date. The leaseholders were asked to sign an Acknowledgement Form.
Completion Audit	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.	According to national legislation, there is no requirement for the preparation of resettlement planning documents nor for a completion audit to be carried out.	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.
Categories of displaced persons	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 land or assets but have a recognisable claim to land according to national laws.	A displaced person can be classified as someone who has the legal rights to the property they occupy or use under national legislation.	According to national legislation, anyone without formal rights to the land is not classified as a displaced person. 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.
Land Tenant and Sharecroppers	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.	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.	National legislation recognises the rights of land tenants and sharecroppers, although does not require livelihood restoration measures to be provided. All leaseholders, herders and farm workers active in the Project Area will be provided with compensation and/or livelihood restoration measures that they are eligible for (herders are classed as informal settlers so will only be entitled to livelihood restoration measures). There are no sharecroppers within the project area.

Topic	Lender (IFC/ADB) standards associated with resettlement	Requirements under national legislation	Differences identified and actions to address differences
Economic displacement	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.	According to national legislation, there is not requirement for the preparation of resettlement planning documents.	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. Leaseholders, 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.
	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 any assets which have directly resulted in land improvements will be calculated and delivered to ensure this completely replaces any asset lost.	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 based on their eligibility as discussed in Chapter 7 of this LRP.
	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.	National legislation does not require livelihood restoration measures to be carried out.	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.
	Any support given by Masdar to any PAPs will be given in a transitional manner which reasonably reflects any time required to implement livelihood	This is not a requirement under national legislation.	Not required under national legislation.

Topic	Lender (IFC/ADB) standards associated with resettlement	Requirements under national legislation	Differences identified and actions to address differences
	restoration measures to baseline levels prior to the project regarding income capacity, production levels and living standards.		Due to the very low percentage of land lost during construction there is no need to provide transitional support to leaseholders and herders.

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 Jizzakh 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: Adapted from the ESIA for Jizzakh showing stakeholder group, stakeholders and priority in stakeholder engagement.

Stakeholder Group	Stakeholders	Priority
Government/Local authority Representatives	<ul style="list-style-type: none"> • Deputy Khokim of Jizzakh Region on Investments • Deputy Khokim of Gallaorol Khokimiyat • Ministry of Energy – Development of Renewable Resources Department • Gallaorol District - Deputy Khokim on investments • Gallaorol District - Head of water resources Department • Gallaorol District - Head of cadastre Department • Gallaorol District – Environmental Protection Committee 	Medium
Community Representatives	<ul style="list-style-type: none"> • Chair of Kukbulak Mahalla • Chairman of Kiziltut Mahalla • Chairman of Sayfin Ota Mahalla • Chairman of Karakchi Mahalla • Chairman of Chayli Mahalla 	High
Land Users	<ul style="list-style-type: none"> • Herders on the site • Leaseholders using land to be impacted by the OTL: • Owner of Sangzor busines parranda LTD, Oq oltin polutry LTD, Farmer 1 • 	High
Community Members	<ul style="list-style-type: none"> • Local dweller of Karobchi village • Teachers at School №54 in Chayonli Village • Community women • Local medical point doctor • Kukbulok mahalla community members 	High

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 Khokimiyat 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.
- During the implementation phase at least one CLO must be female.

4.3 Previous Engagement Activities

4.3.1 ESIA Scoping Phase – September 2020

TYPASA 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 visits. 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 9th September 2020. Stakeholders who attended included representatives from the following institutions:

- Ministry of Energy
- Ministry of Energy – Development of Renewable Resources Department
- Gallaorol District - Deputy Khokim on investments
- Gallaorol District - Head of water resources Department
- Gallaorol District - Head of cadastre Department
- Gallaorol District – Environmental Protection Committee
- Chairman of Kiziltut Mahalla
- Chairman of Sayfin Ota Mahalla
- Chairman of Karakchi Mahalla
- Chairman of Chayli 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:

- Representative of environment protection committee of Gallaorol District
- Land surveyor of cadastral department of Gallaorol District
- Aksakals (village elders) of the Kiziltut, Sayfin Ota, Karakchi and Chayli mahallas
- Secretary of Rural citizens council Kuklik including Chayli and Karakchi mahallas
- Local shepherds

4.3.1.2 Outcomes

The outcomes of these engagement activities yielded an understanding and appreciation of local and regional social issues. Social issues identified and discussed during stakeholder consultations included:

- According to local leaders the project area is mainly used for livestock grazing or for rainfed subsistence agriculture. These activities do not receive any legal or official permission, but district authorities are aware of them and tolerate them. The land in the project area used to be owned by a poultry farm, however, because of the land's rocky nature, the farm was not productive and therefore the company transferred this land to the Government 4 - 5 years ago.
- District authorities claimed that local communities will be provided another place for grazing cattle, as the grazing land area is quite large. There are potential alternative grazing lands to the north, east and south of the project site.
- When asked about official actions taken to relocate grazing activities, participants informed that before the start of the project there was a meeting with the community and local population where they were advised to graze the cattle on alternative land. Also, the population was informed that with the project, their income would be at least doubled, according to the authorities. This is, however, not factual and the project will take steps to manage community expectations on this regard.
- When asked about a farm identified toward the north of the project site local leaders indicated that the project poses no threat to the farm's road access or water supply. This is because there is a dedicated road which serves the farm that does not go through the project site and, water is supplied by a nearby spring, no wells have been drilled for irrigation or other purposes.
- The main source of livelihood around the project area is rainfed agriculture through the cultivation of wheat and peas, as well as livestock breeding. Wheat is sold to the Government under the order, whereas peas are sold in the local market.
- Public support programs for farmers include the development of greenhouses on 100 ha located in Chayli mahalla (more 330 ha are allocated for future development) and a program called "Every family is an entrepreneur" through which some households in the area are provided with soft loans for livestock breeding. Land for the greenhouse projects is allocated officially to the project promoter. The primary objective of the project is to provide income generating opportunities and jobs for the local population.
- There is Farmer Union and a Population Protection Association in the area. They provide soft credits and help with machinery and other services. They provided 260 families with 7 billion 8 thousand UZS as financial support.

Other information which came out of the stakeholder engagement activities undertaken during the scoping stage include:

- The entire population in the project area is connected to power supply and only in case of extreme weather conditions there can be cut offs.
- The local population use wells for water drinking. For animals, they use watercourses and springs. Artesian wells used by the population are 7-15 meters deep.
- The majority of the population in the area are Uzbeks. There is a perception that no ethnic minorities, vulnerable groups, or migrants, etc. are located in the Project Area.
- The local population has had no previous experience with large projects in the last 15 years, except for the construction of the above mentioned 330 ha of greenhouses.

Among the questions and concerns raised by the participants, mahalla and district representatives asked about the possible adverse health impacts of the PV station. The E&S team explained that no health impact is expected. Solar panels do not produce any type of radiation. Solar power plant will be fenced to avoid current shocks. During construction there will be some dust because of heavy machines accessing the area. This will be mitigated by environmental measures.

Representatives of the population and District Khokimiyat also asked about job opportunities during the construction and operation of the PV station. The E&S team explained that the recommendation will be to hire local population based on their qualification during the construction period. As panels require maintenance, during the operation period there will be some jobs created as well, however, fewer than during the construction period.

4.3.2 ESIA Phase

During the preparation of the ESIA further site visits were undertaken by the in-country project team which included some further stakeholder engagement activities. The site visit was conducted between 16th and 19th September 2021 and again in November 2021.

4.3.2.1 Methods

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 stakeholders identified and engaged with throughout the site visit are in Table 4-2.

Table 4-2. Stakeholder Groups Engaged During ESIA Site Visit

Stakeholder Group	Stakeholders
Local Government Representatives	<ul style="list-style-type: none"> Deputy Khokim of Djizzak Region on Investments Deputy Khokim of Gallaorol Khokimiyat Leading specialist of Mahalla and Family Department of Gallaorol Region Khokimiyat
Community Representatives	<ul style="list-style-type: none"> Chair of Kukbulak mahalla
Land Users	<ul style="list-style-type: none"> Herders on the site Farmers using land to be impacted by the OTL: Owner of Sangzor busines parranda LTD, Oq oltin polutry LTD, Farmer 1
Community Members	<ul style="list-style-type: none"> Local dweller of Karobchi village Teachers at School №54 in Chayonli Village Community women Local medical point doctor Kukbulok mahalla community members
Individual Specialists / Academics	<ul style="list-style-type: none"> Leading specialist of Investment and Foreign Trade Department of Gallaorol Region Khokimiyat Specialist on women's issues

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 at the meeting.

4.3.2.2 Outcomes

Throughout the site visit a range of stakeholders were engaged with including herders (Figure 4-1), community members (Figure 4-2), Mahalla leaders (Figure 4-3), and local government representatives (Figure 4-4). Notes were taken during each stakeholder meeting and the key outcomes are presented in Section 6 of the Jizzakh Solar PV ESIA.



Figure 4-1. Child herders



Figure 4-2. Meeting with community members, Kukbulak mahalla



Figure 4-3. Meeting with village leaders requesting to leave the road across the site

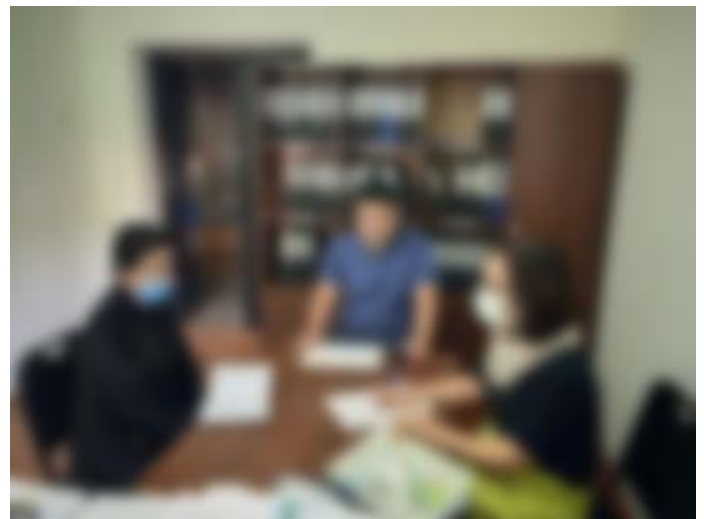


Figure 4-4. Meeting with Women focal point in Gallaorol Khokimiyat

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.

Table 4-3: Stakeholders engaged with throughout the LRP site visits

Stakeholder Group	Stakeholders
Local Government Representatives	<ul style="list-style-type: none"> Deputy Khokim of Djizzak Region on Investments Deputy Khokim of Gallaorol Khokimiyat Leading specialist of Mahalla and Family Department of Gallaorol Region Khokimiyat Cadastre Representative District Agricultural Department Representative
Community Representatives	<ul style="list-style-type: none"> Chair of Kukbulak mahalla Sayfin Community Leader
Land Users	<ul style="list-style-type: none"> Herders on the site Leaseholders under the OTL
Historic Land Users	<ul style="list-style-type: none"> Owner of Sangzor busines parranda LTD, Oq oltin poultry

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 2022.
- Socio Economic Census of households with leaseholds impacted by the project: 29th August – 2nd September 2022.
- Valuation meetings with households with assets or crops impacted by the project: 15th September – 18th November 2022.
- Stakeholder Interviews and workshops: 22nd - 23th September 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 from the nearby communities who will be impacted because their access to grazing areas to the north of the site will be obstructed increasing their commute time. The impacts on herders are described further in section 6.2.

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

- Flooding during spring and autumn is a significant issue and many of the bridges across the floodway have been destroyed by the flood water making crossing dangerous. Two fatalities have occurred because of people trying to cross floodway.
- The community leaders are encouraging Masdar to commit to rebuilding and strengthening the bridges and improving the roads through the three communities.
- Lack of phone signal was a key challenge in the community.
- Lack of vets or a drug store is a challenge in the community and herders have to travel to Samarkand to consult a vet or buy drugs for their herds
- The path across the Solar PV area is generally only used regularly by one herder based in the eastern side of Seyfin, five other herders live in western Seyfin and normally use the access part to the west of the site to reach the grazing lands in the north of the site.
- There is a general lack of employment in Jizzakh, particularly for women. There is limited seasonal farming work unlike other areas in Uzbekistan.

4.3.4 ADB Site visit

There were also engagements during the site visit of ADB. 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 rainfed agriculture and grazing including livestock rearing. Other socio-economic considerations were highlighted including support for vulnerable households through employment, communal infrastructure, indigenous peoples, GBV and construction worker facilities including accommodation, as well as contingency planning for power outages in winter. 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 completed on the 18th November. A form was signed by each leaseholder to confirm they understood the cut-off-date. A copy of this form in English is included in Figure 4-1 below, however a translated version was provided to affected leaseholders.

Jizzakh Solar Project

Farmer survey acknowledgement form

To be signed and then scanned using a mobile phone box. Pass the signed copy to the farmer.

Location: _____

Time and date: _____

Name of surveyor: _____

Name of Farmer: _____

Farm reference Number: _____

please sign inside the

I have received a copy of the **Grievance Mechanism Leaflet.**

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.

Figure 4-1 Farmer acknowledgement form

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 Verification Phase

The LRP verification process was carried out on the 15th November 2022 involved consulting all affected parties (including spouses where possible) 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 is 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.
- Seek signatures of household acknowledgement from Figure 4-2 from farmers, herders and their spouses

LRP Verification
Jizzakh Solar Project

Farmer acknowledgement form

To be signed and then scanned using a mobile phone box. Pass 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 **Grievance 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 I 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 at a later date*).
- I understand what **support will be available** to my household I and have provided my preferences at this stage (*final choices can be made at a later date*).

Farmer Signature:

Spouse Signature:

Figure 4-2 - LRP Verification Form

4.3.7 Full Engagement Record

Table 4-4– List of all engagements during the LRP phase

Stakeholders Present	Stakeholder Engagement Methods	Location/Date	Topics Discussed & outcomes	Consultation Disclosure Materials	Mean of Advance Notification	Responsibility
SCA and LRP PHASE						
<ul style="list-style-type: none"> • Disclosure of LRP process with: • Community leaders from all three districts, • Khokimiyat representative from all three districts • Impacted leaseholders 	<ul style="list-style-type: none"> • Face to face community meeting 	<ul style="list-style-type: none"> • 8th – 9th August 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Disclosure PowerPoint Presentation 	<ul style="list-style-type: none"> • Advertisement in Telegram Group 	<ul style="list-style-type: none"> • GBI
<ul style="list-style-type: none"> • Socio-Economic Survey Interview with: • All impacted Leaseholders 	<ul style="list-style-type: none"> • One on one interviews 	<ul style="list-style-type: none"> • 29th August – 2nd Sept • Various Locations • 	<ul style="list-style-type: none"> • Gathering demographic information • Gathering socio-economic information • Gathering livelihood information 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Advance notice by phone 	<ul style="list-style-type: none"> • GBI
<ul style="list-style-type: none"> • Valuation Meeting with: • All impacted Leaseholders 	<ul style="list-style-type: none"> • One on one interviews 	<ul style="list-style-type: none"> • 15th September – 18 November 2022 • Various Locations 	<ul style="list-style-type: none"> • Gathering information for valuation 	<ul style="list-style-type: none"> • Grievance Mechanism Leaflet • Cut-off date form 	<ul style="list-style-type: none"> • Advance notice by phone 	<ul style="list-style-type: none"> • GBI

Stakeholders Present	Stakeholder Engagement Methods	Location/Date	Topics Discussed & outcomes	Consultation Disclosure Materials	Mean of Advance Notification	Responsibility
<ul style="list-style-type: none"> Socio Economic Survey interview with: cluster farmers 	<ul style="list-style-type: none"> One on one interviews 	<ul style="list-style-type: none"> 8-9th of September 2022 Various Locations 	<ul style="list-style-type: none"> Gathering demographic information Gathering socio-economic information Gathering livelihood information 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Advance notice by phone 	<ul style="list-style-type: none"> GBI
<ul style="list-style-type: none"> Meeting with: Deputy Khokim of Gallaorol Khokimiyat Cadastre Representative District Agricultural Department Representative 	<ul style="list-style-type: none"> Face to face meeting 	<ul style="list-style-type: none"> Local Khokimiat Office 22nd September 2022 	<ul style="list-style-type: none"> The LRP process Future engagement activities (Lenders visit and LRP verification) Current land use types in the project area Historic land use on the Solar PV Area (As part of SCA process) Current challenges with farming and livelihoods 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 grazing rotations) Potential options for livelihood restoration and support 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Advanced notice on Telegram 	<ul style="list-style-type: none"> AECOM & GBI
<ul style="list-style-type: none"> Meeting with: Kokbulak Malkhallas Chair Sayfin Community Leader Gallaorol Khokimiyat-Specialist on investment and tourism Kokbulak Mahallas – Women and 	<ul style="list-style-type: none"> Face to face meeting 	<ul style="list-style-type: none"> Kokbulak Mahallas Office 23rd September 2022 	<ul style="list-style-type: none"> Future engagement activities (Lenders visit and LRP verification) Current land use types in the project area 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 grazing rotations) Potential options for livelihood restoration and support 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Advanced notice on Telegram 	<ul style="list-style-type: none"> AECOM & GBI

Stakeholders Present	Stakeholder Engagement Methods	Location/Date	Topics Discussed & outcomes	Consultation Disclosure Materials	Mean of Advance Notification	Responsibility
<ul style="list-style-type: none"> family issue specialist (See Figure 4-5) 						
<ul style="list-style-type: none"> Meeting with: Two Professional Herders Sayfin Community Leader Cadastre Representative (See Figure 4-6) 	<ul style="list-style-type: none"> Face to face meeting 	<ul style="list-style-type: none"> Professional Herder Residence on 22nd September 2022 	<ul style="list-style-type: none"> Current land use types in the project area Current governance structures and community activities (Such as grazing 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 grazing 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 grazing practices, where they herd in summer and winter. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Advanced notice given by phone and on Telegram 	<ul style="list-style-type: none"> AECOM & GBI
<ul style="list-style-type: none"> Meeting with: Karobchi Community Leaders Community Member Cadastre Representative (See Figure 4-7) 	<ul style="list-style-type: none"> Face to face meeting 	<ul style="list-style-type: none"> Roadside community meeting point 22nd September 2022 	<ul style="list-style-type: none"> General lack of employment for women Issue of children using the bridges which are not safe Community challenges, in particular the failure of the bridges over the floodway. They expressed that herders are not allowed to use the bridges in case it damages the bridges Number of herders who take part in community grazing They expressed that any livelihood options should benefit the community as a whole 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Advanced notice given by phone and on Telegram 	<ul style="list-style-type: none"> AECOM & GBI
<ul style="list-style-type: none"> Meeting with: Professional Herder from Karobchi Cadastre Representative 	<ul style="list-style-type: none"> Face to face meeting 	<ul style="list-style-type: none"> Grazing area to the south of the project 	<ul style="list-style-type: none"> Discussed access to the grazing areas to the north of the site and how it will change NOTE: Meeting was cut short due to herder's livestock moving on 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Advanced notice given by phone and on Telegram 	<ul style="list-style-type: none"> AECOM & GBI

Stakeholders Present	Stakeholder Engagement Methods	Location/Date	Topics Discussed & outcomes	Consultation Disclosure Materials	Mean of Advance Notification	Responsibility
<ul style="list-style-type: none"> Meeting with: One professional herder from Sayfin Cadastre Representative Sayfin community leader (See Figure 4-8) 	<ul style="list-style-type: none"> Face to face meetings 	<ul style="list-style-type: none"> Roadside community meeting point 22nd September 2022 	<ul style="list-style-type: none"> Discussed access to the grazing 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 grazing practices, where they herd in summer and winter. Gathered demographic and household data for the herders Discussed access to the grazing 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. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Advanced notice given by phone and on Telegram 	<ul style="list-style-type: none"> AECOM & GBI
<ul style="list-style-type: none"> One professional herder from east Sayfin 	<ul style="list-style-type: none"> Phone call 	18-November 2022	<ul style="list-style-type: none"> Herder confirmed he was the only one that regularly uses the path across the middle of the Solar PV Area but will now be using it less as he has some new land. He expressed interest in veterinary training and free vet consultations as a livelihood support due to the lack of vets in the local area and the lack of a drug store. He explained that currently herders must travel to Samarkand to consult with a vet or get drugs. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> GBI
All stakeholders	<ul style="list-style-type: none"> Announcement on District Khokimiyat and Local Mahallas Telegram groups 	18 th November 2022	<ul style="list-style-type: none"> The following wording was used (translated into Uzbek): <ul style="list-style-type: none"> <i>All Valuations for crops and infrastructure affected by the project are now completed as of 18/11/2022.</i> <i>This is the project "cut-off date" for compensation.</i> <i>All crops and infrastructure which were included in the valuation study before this date will be compensated if they are impacted by the project.</i> <i>Any new crops planted, or infrastructure developed in the project area after this</i> 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> GBI/AECOM

Stakeholders Present	Stakeholder Engagement Methods	Location/Date	Topics Discussed & outcomes	Consultation Disclosure Materials	Mean of Advance Notification	Responsibility
			<p><i>date will not be considered for compensation.</i></p> <ul style="list-style-type: none"> ○ <i>Anyone moving into the project area to farm or develop infrastructure after this date will not be entitled for compensation or support.</i> 			
<ul style="list-style-type: none"> • Mahallas • Farmers along the OTL • Herders in Seyfin 	Group meetings	25 th November 2022	<p>Presentation of/explanation of:</p> <ul style="list-style-type: none"> • Final site map and layout • The types of land impacts • 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 • Livelihood restoration packages • Early works • The grievance process 	Information pack printed and handed to affected people	Telegram notice 2 weeks in advance (date changed one week in advance)	• GBI/AECOM

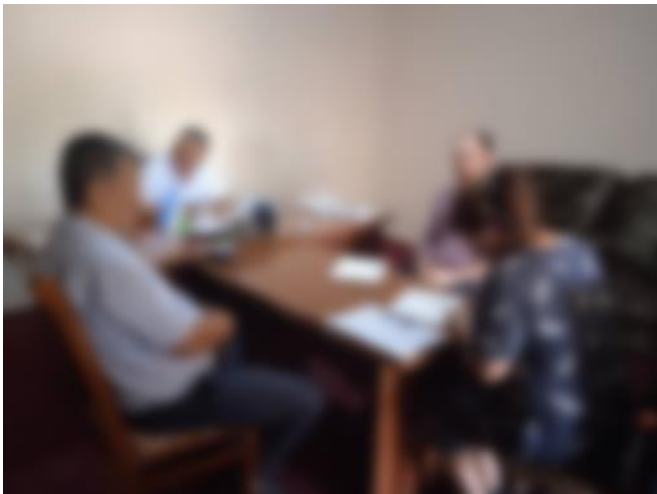


Figure 4-5. Meeting with: Kokbulak Malkhallas Chair, Sayfin Community Leader, Gallaorol Khokimiyat-Specialist on investment and tourism



Figure 4-6. Meeting with: Meeting with: One professional herder from Sayfin, Cadastre Representative, Sayfin community leader



Figure 4-7. Meeting with: Karobchi Community Leaders Community Member, Cadastre Representative



Figure 4-8. Meeting with: One professional herder from Sayfin, Cadastre Representative, Sayfin community leader

4.4 Future planned engagements

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 prior to commencement of construction (with the exception of approved early works). The LRP, and ESIA will be placed on the website of project lenders and Non-Technical Summaries will be translated in to Uzbek and Russian and placed in appropriate public spaces accessible to stakeholders including affected communities for 30 days. Public hearings 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:

- ESIA
- Stakeholder Engagement Plan.
- Final ESIA/OVOS approved by lenders.
- Non-technical summary of the ESIA.
- Environmental and Social Action Plan.
- Social Compliance AuditLRP (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 disclosure of the LRP 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.

4.4.2 LRP Implementation

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.

4.4.3 Vulnerable and Marginalised people

Special resettlement assistance will be required for vulnerable people because they are less able to cope with economic displacement compared with others. A list of vulnerable people that could, potentially, be directly affected by the through land access restrictions and land use change, is listed below:

- Young families (where the parents are under 30) or orphans who have lost both parents
- Families with disabled parents or children
- A widow
- A single parent family
- A single retired person
- An elderly person (over 65 years old)
- Women in the family
- Anyone farming or investing in the land without a legal title
- People in poor health
- People who are discriminated against
- Households under the poverty line
- Households in financial difficulty
- Households with a member who is addicted to drugs or alcohol

A full vulnerability analysis is provided which highlights any groups that could be impacted or potentially impacted in chapter 9. Analysis of the socio-economic survey was used to assess if vulnerable people are present in the households of affected community members.

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 the grievance procedure of Masdar 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.

4.5.2 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.

4.5.3 Responsibilities

The grievance mechanism implementation team shall be comprised of the Company E&S Manager, and the appointed CLO (community liaison officer) as detailed in table 4-5 below. Clear lines of responsibility and accountability will be established within the implementation team.

Table 4-5 - Grievance Mechanism responsibilities

Entity	Responsibilities for managing grievances
Company E&S Manager	<ul style="list-style-type: none"> • 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)	<ul style="list-style-type: none"> • Raise awareness of the GM and distribute copies of the GM leaflet and forms. • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Where necessary the LRP 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.

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 4-6: Responsible Persons and Contact Details

Pre-Construction Phase	Construction Phase
<p>Masdar</p> <p>Khurshid Karamatov, Community Liaison Officer e-mail: kkaramatov@masdar.ae</p>	<p>Masdar</p> <p>To be confirmed</p>
<p>Community Liaison Officer (CLO)</p> <p>Saida Yusupova, Community Liaison Manager e-mail: Saidayusupova@gmail.com Contact phone number: (+99893) 522-00-70 (+99890) 319-77-21</p>	<p>Community Liaison Officer (CLO)</p> <p>To be confirmed</p>

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 placed in each surrounding project community.

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.

4.5.3.1 Publicizing Grievance Management Procedures

The grievance mechanisms will be publicized in the following ways:

- Posters (project site, local Council, and residential clusters within a 5 km buffer from the site)
- Future consultation meetings
- Letters to the local and provincial authorities, and Online (website)

4.5.3.2 Implementing the grievance mechanism

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

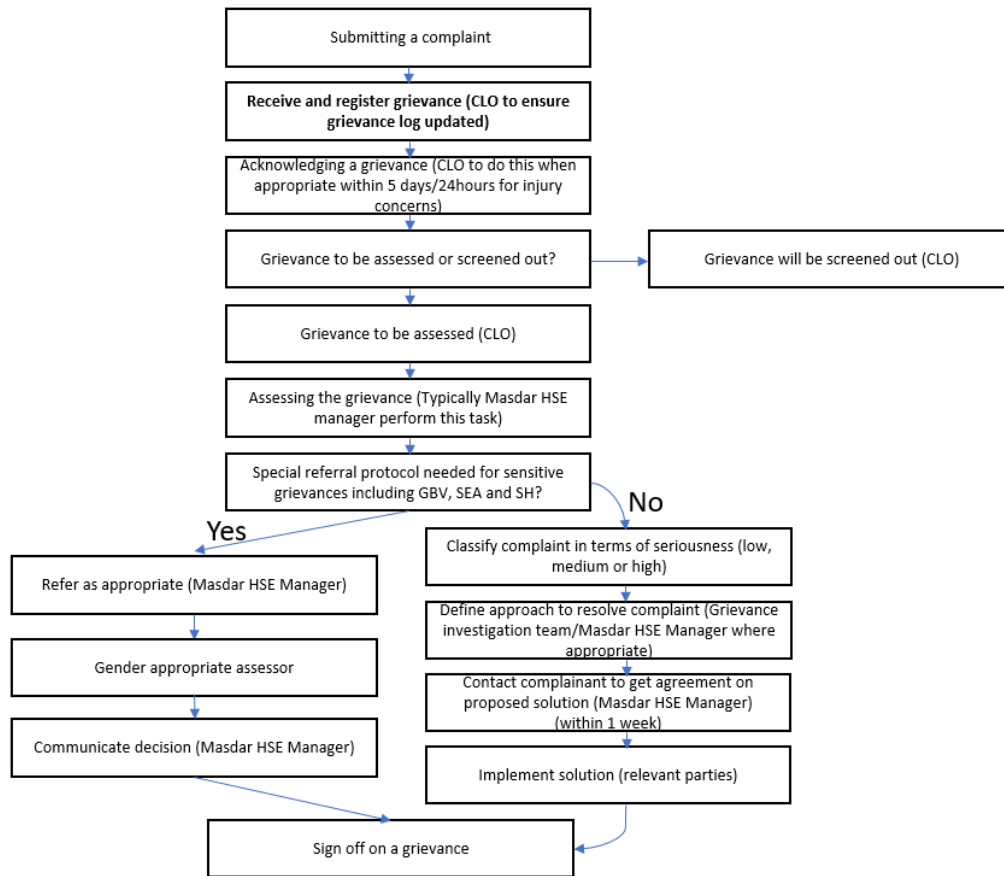


Figure 4-3 – Grievance process flow chart

4.5.3.3 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

4.5.3.3.1 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.

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.

4.5.3.3.2 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.

4.5.3.4 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.

4.5.3.5 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.

4.5.3.6 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

4.5.3.7 Monitoring and reporting of grievance mechanism

The grievance mechanism will be monitored and evaluated annually. 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.

Masdar will report internally at least once a month on grievances received (both open and closed), and how they were resolved.

5. Socio-Economic Baseline

Social impacts are defined as “the consequences to human populations of any public or private actions that alter the ways in which people live, work, play, relate to one another, organize to meet their needs, and generally cope as members of society”¹. To understand the full extent of any social impacts arising from the Project, directly or indirectly, a detailed socio-economic baseline is required to appreciate current socio-economic conditions and therefore accurately assess the significance of any anticipated impacts, positive or negative. The baseline also helps to determine what mitigation measures (which aim to reduce the significance of negative impacts and enhance the significance of positive impacts) can be feasibly implemented within the Project’s socio-economic context.

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 Person. 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 Area 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

Settlement	Distance from the Project Area	Number of Residents*	Comments
Kiziltut	500 m	666 (M= 332, F= 334)	Rural village located the north-western boundary of the project site.
Sayfin Ota	450 m	2,016 (M= 1,072, F= 944)	Village running along the western boundary of the project site.
Karobchi	200 m	371 (M= 185, F= 186)	Small rural settlement situated at the southern point of the project site.
Chayonli	800 m	1,807 (M= 998, F= 809)	Village situated at the southern point of the project site. Two of the affected leaseholders are located in this settlement (refer to Table 5.2 – Summary socio-economic status of farming leaseholders active in the project site).

Source: District Administration. Key: (M) Male Population, (F) Female Population.

5.1 Local Socio-Economic Setting

The project site is located within Jizzakh Region of Uzbekistan which has an estimated population of 127,500 people and encompasses 12 administrative districts. The project site sits within the Gallaorol District (sometimes spelt Gallyaaral), this is the largest district in the Jizzakh Region with an area of 1,959 km² and an estimated 130,000 inhabitants.

There are four communities which are located within 2km of the Solar PV Area. These communities have been identified in Figure 5-1 below:

¹ The Interorganizational Committee on Guidelines and Principles for Social Impact Assessment, 1994.



Figure 5-1. Mahallas within 2 km of the Project Site Boundary

The Solar PV Area is located near the communities listed in below:

5.1.1 Kiziltut

The residents of the settlement graze livestock in the north from the area, closer to the mountains. Residents have informal rights to graze the land.

The population of Kiziltut is 664 people and is decreasing due to emigration to neighbouring communities and COVID outbreak. The village is connected to the electricity grid, water is supplied by the wells in each household. The village residents are not connected to gas pipeline and use liquefied gas.

The ethnic composition of Kiziltut is 90% Uzbek, 10% other nationalities (e.g. Kazakh, Tajik, Russian). The main economic activities are cattle breeding and seasonal work. The number of officially registered unemployed people in the village are 25, 9 of whom are women. Further details are provided in Table 5-2.

Table 5-2. Kiziltut Community Profile

Indicator	Information
Population	664 (Female: 339, Male: 325)
Number of Families	96
Does the population change throughout the year due to migration or other reasons?	It's decreasing due to the emigration to neighbouring communities
Distance to site	500 meters
Main economic activities / livelihoods:	Cattle breeding, seasonal work, and stock raising.
Key facilities available for economic activities (markets stalls, etc.)	2 shops
Main challenges	Unemployment
Local governance structures	Kokbulak mahalla
Number of schools and their type (primary, secondary)	№ 5 (1-11 grade)
Women's skills	Women are mostly engaged in housework, raising children and seasonal work
Number of healthcare facilities and their type	N/A
Mobile phone coverage	GSM standard (Ucell, UMS) – very poor coverage,
Electricity supply	Central grid

Water supply	Water well
Local people's use of the Project Area	Grazing of livestock and occasional use for other purposes.

5.1.2 Sayfin Ota

The road crossing the area is used by village residents to reach pastures and farming lands in the north. Sayfin Ota village are the main users of the road crossing the area. Residents from this village use the project area to graze sheep; approximately 8 flocks of sheep (150-300 sheep in each one) cross the project area every day.

The population of Sayfin Ota constitutes 1,648 people and is decreasing due to emigration to neighbouring communities and COVID outbreak. The village is connected to electricity grid, water is supplied by the wells in each household plot. The village residents are not connected to gas pipeline and use liquefied gas.

Kokbulak mahalla healthcare facility (Feldsher obstetric centre, FAB) covering 9 villages located in Sayfin Ota village. Kokbulak mahalla premises and police point are also located in the village. The ethnic composition of Sayfin Ota is 90% Uzbek, 10% other nationalities (e.g. Kazakh, Tajik, Russian). The main economic activities are livestock breeding and seasonal work. The number of officially registered unemployed in the village are 55, 18 of whom are women. Further details are provided in Table 5-3.

Table 5-3. Sayfin Ota Community Profile

Indicator	Information
Population	1,648 (Female: 831, Male: 817)
Number of Families	294
Does the population change throughout the year due to migration or other reasons?	It's decreasing due to the emigration neighbouring communities. COVID outbreak last year resulted in increase of death rate among elder population.
Distance to site	450 meters
Main economic activities / livelihoods	Livestock breeding, seasonal work and public work (school, mahalla, medical klinik)
Key facilities available for economic activities (markets stalls, etc.)	5-6 shops
Main challenges	Unemployment,
Local governance structures	Mahalla Kokbulak
Number of schools and their type (primary, secondary)	School 48 (1-11 grade)
Women's skills	Women are mostly engaged in housework, raising children, and seasonal work
Number of healthcare facilities and their type	Small medical clinic (Feldsher Obstetric centre)
Mobile phone coverage	GSM standard (UMS- coverage is very poor)
Electricity supply	Central grid
Water supply	Water well
Local people's use of the Project Area	Grazing of livestock, thoroughfare to pastures and farms in the north.

5.1.3 Karobchi

Women in this village are mostly self-employed in handicraft (e.g. embroidery and carpets from sheep wool). Residents from this village confirmed that they use the land to graze livestock. The residents of this community frequently cross the area to northern pasturelands.

The population of Karobchi is 373 people and is decreasing. The village is connected to the central electricity grid and gas pipeline.

The ethnic composition of Karobchi is 90% Kazakhs, 10% other nationalities (e.g. Kazakh, Tajik, Russian). The main economic activities are cattle breeding and seasonal work. The village residents use healthcare facility located in Sayfin Ota village. Primary school (branch of school №54) for 1-4 grades was renovated last year for kids of the village. One of the challenges is the old bridge connecting communities and the school, the kids struggle to cross the bridge the water level increases. The number of officially registered unemployed in the village are 24, 8 of whom are women. Further details are provided in Table 5-4.

Table 5-4. Karobchi Community Profile

Indicator	Information
Population	373 (Female: 190, Male: 183)
Number of Families	59
Does the population change throughout the year due to migration or other reasons?	It's decreasing due to the emigration neighbouring communities. COVID outbreak last year resulted in increase of death rate among elder population.
Distance to site	200 meters
Main economic activities / livelihoods	Cattle breeding and seasonal work. Cattle farming, stock raising
Key facilities available for economic activities (markets stalls, etc.)	2 shops
Main challenges	Unemployment
Local governance structures	Mahalla Kokbulak
Number of schools and their type (primary, secondary)	School № 51 (from 1-4 grade)
Women's skills	Women are mostly engaged in housework, raising children, and seasonal work
Number of healthcare facilities and their type	N/A
Mobile phone coverage	GSM standard (Ucell, UMS both work well in hilly areas)
Electricity supply	Central grid
Water supply	Water well
Local people's use of the Project Area	Grazing of livestock, thoroughfare to pastures and farms in the north, and occasional use for other purposes.

Chayonli: The majority of the village's structures sits on the western side of the road connecting the project area to the district capital of Gallaorol. The OTL will sit on the eastern side of the road.

Women in this village are mostly self-employed in handicraft (e.g. embroidery and carpets from sheep wool). Around 15 women in Chayonli village have home-based businesses and are also providing training for girls.

The population of Chayonli constitutes 1,835 people and is increasing due to migration from neighbouring communities. Out of 9 villages in Kokbulak mahalla, only Chayonli and Karobchi are connected to the gas pipeline. There is one healthcare facility (Feldsher obstetric centre, FAB) for all 9 villages of Kokbulak mahalla, located in Sayfin Ota village.

The ethnic composition of Chayonli is 90% Uzbek, 10% other nationalities (e.g. Kazakh, Tajik, Russian). The main economic activities are cattle breeding and seasonal work. The number of officially registered unemployed people in the village is 62; 21 of whom are women. Further details are provided in Table 5-5 below.

Table 5-5. Chayonli Community Profile

Indicator	Information
Population	1,835 (Female: 928, Male: 907)
Number of Families	299
Does the population change throughout the year due to migration or other reasons?	It's growing due to the migration from small villages of the neighbouring communities
Distance to site	800 meters

Main economic activities / livelihoods	Cattle breeding, seasonal work, stock raising, and greenhouse farming
Key facilities available for economic activities (markets stalls, etc.)	2 shops
Main challenges	Unemployment and the quality of the roads
Local governance structures	Mahalla Kokbulak
Number of schools and their type (primary, secondary)	School №54 (1-11 grades), and 1 preschool facility (private)
Women's skills	Women are mostly engaged in housework, raising children, and seasonal work
Number of healthcare facilities and their type	N/A
Mobile phone coverage	GSM standard (Ucell, UMS are fine- other providers have very weak signals)
Electricity supply	Central grid
Water supply	Water well
Local people's use of the Project Area	Grazing of livestock and occasional use for other purposes.

5.1.4 Administration, Population and Ethnicity

Obligations of regions regarding environmental and social 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.

5.1.4.1 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 both the regional (or *oblast*) and district (or *raion*) levels local governance is divided into:

- **Local state administration**, which acts as an administrative body, the heads of which are appointed by the central government and are subject to formal approval by the corresponding local councils. The president appoints regional governors, who in turn appoint district and city/town governors that come under regional subordination. The district and city governors are accountable to the regional governor, who in turn is accountable to the president.
- **Elected local council**, which acts as a legislative body, the representatives of which are appointed/elected for a period of five years. These administration levels represent the executive and regulatory bodies of the state at the regional and district levels, implementing the policies of central government in the provinces.

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 funding². Article 105 of the Constitution of the Republic of Uzbekistan recognises Mahallas as self-governing bodies whose role is to govern at the local level and oversee activities which include, but are not limited to:

- Development of infrastructure.
- Administering social welfare programs (e.g. provision of social aid to low-income families).
- Ensuring security and order.

In addition to the formal Mahalla Committees, informal/social Mahallas often operate in parallel. The key difference between these institutions being that the leaders of the informal Mahallas are volunteers and are elected by local residents, hence they are regarded as community-led, self-governing institutions. However, no informal/social Mahallas have been identified in the project area.

² Urinboyev, R. (2018). Local Government in Uzbekistan. Global Encyclopedia of Public Administration, Public Policy, and Governance .

Local intangible heritage practices including farming and crafts have strong administrative support and are considered to be resilient to the development.

5.1.4.2 Population

The Mahallas identified correspond to the four settlements located within a radius of 2 km of the project site boundary. The populations of these individual settlements is shown in Table 5-6. The estimated total population of the settlements within 2 km of the site boundary is 4,860 people, 53% of which are male and 47% of which are female.

In 2020, the population of Gallaorol District was estimated to be 171,411 which is split evenly between men (50.2%) and women (49.8%). The District shows an expansive pattern, with a high birth rate in comparison to the mortality rate, as shown Table 5-6. This trend is reflected at the local level in all the settlements within 2 km of the project site boundary.

Gallaorol District also shows a negative migrant balance, with more people moving out of the district than moving in. This is also true of two of the project-affected settlements, Sayfin Ota and Karatchi; but for Chayli and Kiziltut, more people moved into these areas than those who moved out.

Generally, more women are migrating in and out of identified areas. This is reflective of a general global trend of increased female migration referred to the 'feminisation of migration'. The OECD indicate that there may be any number of reasons women are becoming increasingly mobile, but most migrate for economic reasons to participate in both formal and informal, legal and illegal work (OECD, 2000).

Table 5-6. Demographic data for Gallaorol District and the affected settlements (2020)

Area	Born			Died			Immigration			Emigration		
	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
Chayli	42	20	22	6	1	5	7	0	7	5	2	3
Kiziltut	17	6	11	1	0	1	3	0	3	1	0	1
Karatchi	12	5	7	2	1	1	2	0	2	3	0	3
Sayfin Ota	62	31	31	10	6	4	2	1	1	10	5	5
Gallaorol District	4,761	2,527	2,234	743	412	331	650	125	525	930	266	664

Source: State Committee of Statistics

5.1.4.3 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. The Republic of Uzbekistan consists of the Republic of Karakalpakstan, 12 regions, 120 cities, 113 towns, 164 districts, and 11,844 rural settlements. The population is densest in the southern and eastern regions of the country near the capital, Tashkent. Whereas the population to the northern and western regions, around the Republic of Karakalpakstan is sparser (Bektemirov & Rahimov, 2001).

As of 2020, the estimated total population was 34,232,050, just under 50% of whom live in rural areas (World Bank, 2021). Uzbeks account for 83.8% of the population, while other ethnic groups such as the Tajiks, Kazakhs, Russians, Karakalpak, Tartars comprise the remaining 16.2% (CIA, 2021). 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 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).

To ensure that all of these minority groups (Tajik, Kazakh, Karakalpaks, and Russian) are engaged with in a culturally appropriate manner, additional measures shall be provided where this is necessary to do so (i.e. if they do not speak/read Uzbek). These may include, for example, ensuring that the minority groups are engaged with using a language which is understandable and appropriate to use in the cultural context, and that any written information is provided in a suitable language (refer to Section 6.4 – Stakeholder engagement activities to disclose the LRP).

5.1.5 Economy

Economically, Uzbekistan is a major producer and exporter of cotton and, with a large capacity for power-generation from the Soviet era and an abundant supply of natural gas, the country has become the largest electricity producer in Central Asia. Having a large supply of liquid assets at its disposal has resulted in high economic growth and low public debt (Pajank, 2019). However, the country's GDP per capita remains relatively low, at USD 7,378 compared to other economies in the region such as Kazakhstan (USD 26,728), Turkmenistan (USD 16,195), and Azerbaijan (USD 14,452) (World Bank, 2021).

The World Bank classifies Uzbekistan as a lower middle-income country (The World Bank, 2021) because its Gross National Income (GNI) per capita is between USD 1,026 and USD 3,995³.

5.1.5.1 Overview of Regional and Local Economy

According to the International Monetary Fund, in 2019, the Gross Domestic Product (GDP) of Uzbekistan was at USD 60.490 billion (IMF, 2021). The national GDP composition by sector of origin is split between agriculture (28.1%), industry (36.4%) and services (35.5%). Comparing the changes in the structure of the economy between 2017 and 2019 shows a 30% increase in the share of the industrial sector and a decrease of 28.1% in the share of agricultural sector.

5.1.5.2 Economy Agriculture in the Project Area of Influence

Interviews with communities and authorities revealed that the Solar PV Area was previously used for grazing and previously for the growing of winter wheat for a poultry farm. Land along the OTL is primarily used for farmland and was being ploughed during AECOM's initial visit in November 2021 and is used to grow wheat for animal feed. During AECOM's visit in September 2022 the land was primarily being used for grazing of sheep, goats and cattle with the exception of areas used as orchards. Unlike the sites of Sherabad and Samarkand which are being developed by Masdar which are dominated by cotton production, the area has very little cotton production which in turn provides less opportunities to women as seasonal farmworkers.

5.2 The Project Area: Solar PV Area

The Solar PV Area is shown below in Figure 5-2 with nearby cadastral parcels.

³ The Uzbekistani Som (UZS) is the currency of Uzbekistan and, as of 5 October 2021, USD 1 was equal to UZS 10,638.30.

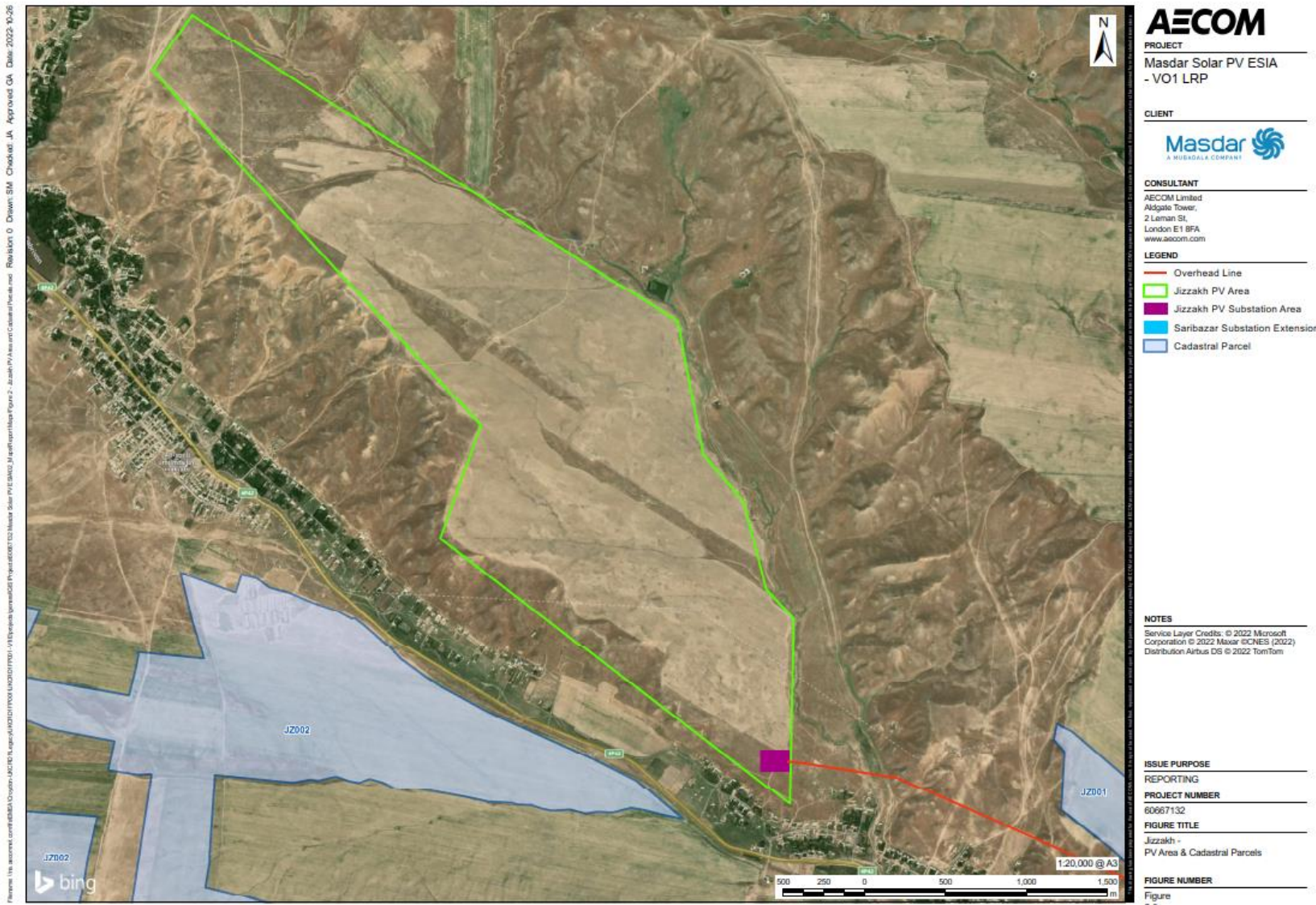


Figure 5-2. Project Site Boundary

5.2.1 Leaseholders in the Solar PV Area

Currently there no leaseholders or affected people with established farming activities (with exception of herders mentioned below) in the Solar PV area due to the fact the area was handed back to the local Khokimiyat in December 2019 under order from the Ministry of Energy in anticipation of the solar project. There was however a historic leaseholder that was identified as part of the SCA process, this is discussed further in section 6.1.1.

5.2.2 Livestock Grazing in and around the Solar PV Area

The PV area as well as large areas to the north and south, are currently used by community herders to graze sheep, goats and cattle. Small numbers of Individual livestock are typically owned by households in the community who collaborate by taking turns to take the community herds onto the grazing lands. 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 typically not paid for the days in which they attend to the herd, as it is seen as mutually beneficial. There are however some professional herders who own their own livestock and will also herd livestock from other community households for a daily fee of between 3 and 6 million som.

During the colder winter months (November to April) grazing takes place in areas to the south of the community (and the project). This is because this land to the south is easier to access and is of lower altitude. During the warmer summer months however (May – October) herders will tend to seek out the higher altitude grazing lands to the north of the site where temperatures remain cooler.



Figure 5-3. Herders to the north of the site



Figure 5-4. The site area

Interviews with the herders indicated that there are 6 community herds located in the village of Seyfin which regularly travel to the herding areas in the north of the site. 5 of those herds belong to households in the western part of Seyfin and herders typically take the western path which will be not impacted by the project, One herd belongs to households further east in Seyfin and the herder have been using the path across the Solar PV Area since the previous leaseholder vacated the area in 2019.

Professional herders do not have access to healthcare services through their employer, as the contracts are informal and verbal, although citizens can still access government-provided healthcare services. Herders are able to find alternative (grazing or other low-skilled) employment elsewhere as farmers typically need herders throughout the year, although the occupation is poorly paid and generally unattractive. Farmers try and maintain their relationships with herders, but this is difficult, as the amount of money

they can afford is relatively low, herder shelters are generally very poor in construction, and there is limited financial resources for this livelihood generally.

5.3 The Project Area: Overhead Transmission Line

There are seven affected households with 8 leaseholds which interact with the route of the OTL and are defined in Figure 5-5 below. There are a total of 39 individual affected people belonging to the seven households which are described in Table 5-9. All other land along the OTL is government land and is unoccupied with the exception of community grazing which will not be impacted by the OTL, government land will be handed over to the Ministry of Energy from the relevant Ministries and committees on a servitude basis:

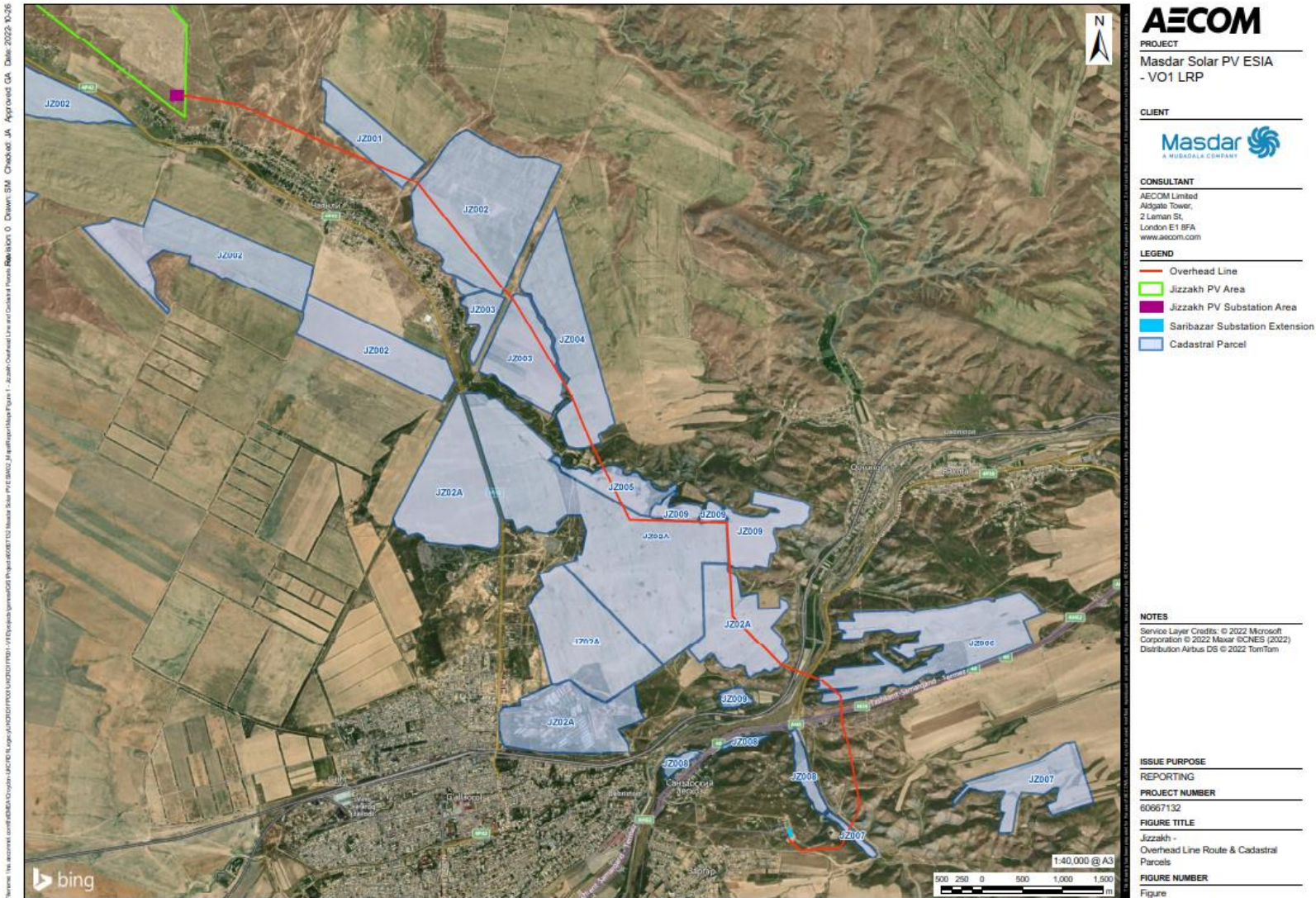


Figure 5-5. Jizzakh Survey Map (Farms in proximity to the OTL)

According to the results of engaging with affected leaseholders, there is a single leaseholder who has access to Sub-Lease Agreement JZ002 and JZ02a. On this basis, there are a total of seven leaseholders leasing eight areas of land in the proximity of the OTL. Sub-Lease Agreements: JZ001, JZ002, JZ002A, JZ003, JZ004, JZ005, JZ006 and JZ007 will all be affected by project infrastructure – although the extent of impacts along the transmission line is minor in most cases (including JZ007, JZ006) with some infrastructure being more prominent and extending the length of other plots such as JZ002 and JZ002a. Note that JZ008 and JZ009 noted on the map are not impacted by the project as confirmed by valuation company and the local cadastral office.

The area (hectares) of each plot is expressed in Table 5-7 below:

Table 5-7. Comparative Plot Size of Affected Leaseholders in OTL:

Affected leaseholder	Size of Plots (hectares)
JZ002, JZ02a	3089
JZ001	190.6
JZ004	140.6
JZ006	181.4
JZ005	40
JZ007	82.1
JZ003	113.5

5.3.1.1 Leaseholders along OTL

The majority of the affected leaseholders are originally from Gallaorol district of Jizzakh. All of the affected leaseholders are the Household Head (HHH) and typically part of an at least 4-6 person household including a wife, whose main occupation is typically home maintenance (looking after home & family) and is literate. All seven of the affected leaseholders are Male and hold a long lease for the land which is their main permanent place of farming or work. Six out of the seven of the affected leaseholders travels between 5 and 15 minutes to get to the affected land, typically achieved by driving or walking. 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.

Two of the affected leaseholders are located in the settlement of Chayonli village (refer to section Table 5-1. Chayonli Community Profile) with one affected leaseholder residing in Ghafur Ghulam neighbourhood, one in Kashkabulok neighbourhood, and another in Kukgumbaz neighbourhood

When thinking about their current financial circumstances, the affected leaseholders describe their households as the following:

Table 5-8. Affected Leaseholders Financial Circumstances

Affected Leaseholder with Land:	Description of Financial Circumstances
JZ002, JZ02a	Very Rich
JZ001	Comfortable
JZ004	Never have enough
JZ006	Rich
JZ005	Comfortable
JZ007	Can manage to get by
JZ003	N/A

Although affected leaseholders with land JZ003 did not provide an answer to this question it was noted that he is a director of a company with middle level of income.

Moreover, the affected leaseholder of JZ007 (in particular) has also been severely negatively affected by a chronic severe illness of a HH member (wife) over the past 2 years and the affected leaseholders of JZ003 has been severely negatively affected by water shortage. All of these factors have caused a reduction in household income and/or assets according to the affected leaseholders. Two of the seven farmers owe money or goods to another person, institution or business: Farmer with Sub-Lease Agreements: JZ006, and JZ005.

As noted above one of the seven affected leaseholder are also part of a household who have suffered from a health condition in the last 12 months and should be considered vulnerable: affected leaseholder who has access to Sub-Lease Agreement JZ007 (Cancer);

All seven affected leaseholder's main source of lighting at home is derived from grid electricity and their main source of cooking fuel is gas. The main water source for drinking / cooking - rainy season for five of the seven affected leaseholders is ground water, with tap water (inside source) being the primary source for two of the affected leaseholders and public tap water for the remaining affected leaseholder. For dry season, the main water source for drinking / cooking for five of the seven affected leaseholders is from boreholes with public tap water or 'other' being used by the remaining three affected leaseholders. However, the reliability of the water source is good throughout, and they exhibit clean water all year round.

All seven affected leaseholder's expressed concerns in relation to water resources, droughts and floods with each household being severely negatively affected by this over the past 2 years. The main toilet facilities for six of the seven affected leaseholders are a pit latrine, with two of the affected leaseholders utilising a pour flush toilet.

A summary of the current socio-economic status of affected leaseholders is provided in Table 5-9. This information is taken from a household questionnaire which took place on 2022-08-26 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 Khokimiyat of Gallaorol.

Table 5-9. Summary socio-economic status of farmers active in the OHTL

Location of interview	Farmer and Sub-Lease Agreement	Household Size	Summary socio-economic status
Khokimiyat	Farmer with Sub-Lease Agreement JZ001	6 (2 Female & 4 Male)	<p>The individual providing the information is the affected leaseholder. The affected leaseholder is from Gallaorol district of Jizzakh, and now resides in the community of Kukbulak mahalla. The affected leaseholder is the HHH and is part of a six-person household including a wife, whose main occupation is home maintenance (looking after home & family) and is literate (senior secondary – completed); a daughter at university; a son who is at university; a son who is unemployed (not currently seeking work); and another son who is in secondary education. No one has a disability in the family.</p> <p>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 Chayanli village, Gallaorol. The affected leaseholder travels approximately 10 minutes to get to the affected land – this is typically achieved by walking. The affected leaseholder lived in their Town or Village for 48 years (being born in Gallaorol) and has maintained the same house throughout his lifetime. The affected leaseholder owns/uses 4 plots of land which are located in Gallaorol, mahalla Kukbulak and no other people currently use the land. The affected leaseholder has stated that without this land, he will still be able to continue his current income. The affected leaseholder does not believe the household will be significantly impacted by the project; and it is not considered a vulnerable household according to the affected leaseholder. The affected leaseholder admitted that the household has been severely negatively affected by drought/floods over the past 2 years.</p>
Khokimiyat	Farmer with Sub-Lease Agreement JZ002 and JZ02a	1 (Male)	<p>The interview was conducted by chief agronomist as a representative of the affected leaseholder (and HHH) with permission to complete the survey on the affected leaseholder's behalf. The representative is male, and not related to the affected leaseholder. The affected leaseholder is from Gallaorol district of Jizzakh, and now resides in the community of Kukbulak mahalla. The affected leaseholder has a single member household, and his primary residence is in Gallaorol. No one has a disability in the family.</p> <p>The land is the affected leaseholder's main permanent place of farming or work. The affected leaseholder holds a long lease and travels approximately 10 minutes to get to the affected land – this is typically achieved by driving. The affected leaseholder lived in their Town or Village for 30 years (being born in Gallaorol) and has maintained the same house throughout his lifetime. The affected leaseholder owns/uses 2 plots of land which are located in Gallaorol, mahalla Kukbulak and no other people currently use the land. When asked, the representative of the affected leaseholder stated that without this land, the HHH will still be able to continue his current income. The representative of the affected leaseholder does not believe that the household will be significantly impacted by the project; and it is not considered a vulnerable household. The affected leaseholder admitted that the household has been severely negatively affected by drought/floods over the past 2 years.</p>
By phone	Farmer with Sub-Lease Agreement JZ003	4 (2 Female, 2 Male)	<p>This interview was conducted by a farmer and representative of the affected leaseholder (and HHH) with permission to complete the survey on the affected leaseholder's behalf. The representative is male and related to the HHH. The affected leaseholder is from Gallaorol district of Jizzakh, and now resides in the community of Kukbulak mahalla. The affected leaseholder is part of a four-member household including a wife who is professionally qualified from a university or college; a son, who is a full-time student; and a daughter who is under the official working age of 18 – currently attending primary school. No one has a disability in the family.</p> <p>The affected leaseholder holds a long lease for the land which is his main permanent place of farming or work. Kukbulak, Gallaorol is the affected leaseholder's main place of residence and he travels approximately 1 hour to get to the affected land – this is typically achieved by driving. The affected leaseholder lived in their Town or Village for 45 years and has maintained the same house throughout this time (but was originally from Samarkand). The affected leaseholder owns/uses 2 plots of land which are located in Gallaorol, mahalla Kukbulak 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 the household will be significantly impacted by the project; and it is not considered a vulnerable household. The affected leaseholder admitted that the household has been severely negatively affected by drought/floods severe water shortage over the past 2 years.</p>

Khokimiyat Farmer with Sub-Lease Agreement JZ004	6 (3 Female, 3 Male)	<p>The individual providing the information is the affected leaseholder. The affected leaseholder is from Gallaorol district of Jizzakh, and now resides in the community of Kukbulak mahalla. The affected leaseholder is the HHH and part of a six-member household including wife, whose main occupation is home maintenance (looking after home & family) and is literate (senior secondary – completed); two daughters and a son who are all under official working age of 18 and are in primary education; and a son all under official working age of 18 who has not yet attended education. No one has a disability in the family.</p> <p>The affected leaseholder is male holds a long lease for the land which is his main permanent place of farming or work. Kukbulak, Gallaorol is the affected leaseholder's main place if residence and he travels approximately 15 minutes to get to the affected land – his primary mode of transport is a tractor. The affected leaseholder lived in their Town or Village for 39 years and has maintained the same house throughout this time (but was originally from Chayonli village, Gallaorol). The HHH owns/uses 3 plots of land which are located in Gallaorol, mahalla Kukbulak – other people use hectares of the land for renting. Without this land, the farmer will still be able to continue his current income. The affected leaseholder does not believe the household will be significantly impacted by the project; and it is not considered a vulnerable household according to the affected leaseholder (although he was uncertain overall). The affected leaseholder admitted that the household has been severely negatively affected by drought/floods over the past 2 years.</p>
Khokimiyat (On Farm- site) Farmer with Sub-Lease Agreement JZ005	6 (3 Female, 3 Male)	<p>The individual providing the information is the affected leaseholder. The affected leaseholder is from Gallaorol district of Jizzakh, and now resides in the community of Madaniyat mahalla. The affected leaseholder is the HHH and part of a six-member household including wife, whose main occupation is home maintenance (looking after home & family) and is literate (senior secondary – completed); two daughters who are both under official working age of 18 and are in primary education; and two sons under official working age of 18, who have not yet attended education. No one has a disability in the family.</p> <p>The affected leaseholder is male holds a long lease for the land which is his main permanent place of farming or work. Madaniyat ҚФЙ, Gallaorol is the affected leaseholder's main place if residence and he travels approximately 5 minutes to get to the affected land – his primary mode of transport is a car. The affected leaseholder lived in their Town or Village for 42 years and has lived in his current house for 40 years (having also lived in Karizkuduk). The affected leaseholder owns/uses 4 plots of land which are located in Gallaorol, mahalla Madaniyat. No other people use or rent the farmers' plots of land. Without this land, the farmer will still be able to continue his current income. When asked, the affected leaseholder did not believe the household will be significantly impacted by the project; and it is not considered a vulnerable household according to the affected leaseholder. The affected leaseholder admitted that the household has been severely negatively affected by drought/floods over the past 2 years.</p>
Khokimiyat Farmer with Sub-Lease Agreement JZ006	6 (3 Female, 3 Male)	<p>The individual providing the information is the affected leaseholder. The affected leaseholder is from Gallaorol district of Jizzakh, and now resides in the community of Kukgumbaz mahalla. The affected leaseholder is the HHH and part of a six-member household including a wife, whose main occupation is home maintenance (looking after home & family) and is literate (senior secondary – completed); a daughter whose main occupation is home maintenance (looking after home & family) and is literate (university education – completed); a son who is under official working age of 18 and is in primary education; a son who is a full-time student; and a daughter who is in university. No one has a disability in the family.</p> <p>The affected leaseholder is male holds a long lease for the land which is his main permanent place of farming or work. Kukgumbaz neighbourhood, Gallaorol is the affected leaseholder's main place if residence and he travels approximately 10 minutes to get to the affected land – his primary mode of transport is a car. The affected leaseholder lived in their Town or Village for 46 years and has lived in his current house over that time period. The affected leaseholder owns/uses 5 plots of land which are located in Gallaorol, mahalla Kukgumbaz. No other people use or rent the affected leaseholder's plots of land. Without this land, the affected leaseholder will still be able to continue his current income. When asked, the affected leaseholder did not believe the household will be significantly impacted by the project; and it is not considered a vulnerable household according to the affected leaseholder. The affected leaseholder admitted that the household has been severely negatively affected by drought/floods over the past 2 years.</p>

Farmers' property
Farmer with Sub-Lease Agreement JZ007
10
(7 Female & 3 Male)

The individual providing the information is the affected leaseholder. The affected leaseholder is from Gallaorol district of Jizzakh, and now resides in the community of Kashkabulak mahalla. The affected leaseholder is the HHH and part of a ten-member household including wife, who is unable to work (sick; too old, disabled); a son who works in services, (shop or stall); six daughters all of whose main occupation is home maintenance (looking after home & family) and is literate (university education – completed); and a son who is who is a full-time student.

The affected leaseholder is male holds a long lease for the land which is his main permanent place of farming or work. Kashkabulok neighborhood, Gallaorol is the affected leaseholder's main place of residence and he travels approximately 15 minutes to get to the affected land – his primary mode of transport is a car. The affected leaseholder lived in their Town or Village for 68 years and has lived in his current house over that time period. The affected leaseholder owns/uses 2 plots of land which are located in Gallaorol, mahalla Kukgumbaz. No other people use or rent the affected leaseholder's plots of land. Without this land, the affected leaseholder will still be able to continue his current income. When asked, the affected leaseholder did not believe the household will be significantly impacted by the project; and did not consider his household a vulnerable household however this household should be considered vulnerable due to sickness in the family. The affected leaseholder admitted that the household has been severely negatively affected by drought/floods over the past 2 years in addition to a chronic severe illness of a HH member (wife).

5.3.1.2 Livestock Rearing around Overhead Transmission Line

As noted below, local residents of Karakchi use the Solar PV Area occasionally to graze livestock and gain access to other grazing lands. In addition to this, the land along the transmission line is also used for grazing with five of the leaseholders along the OTL owning livestock.

Table 5-10 shows the number of animals each farmer owns.

Table 5-10. Livestock Numbers along Transmission Line

Lease Number	Poultry	Sheep	Goats	Cattle	Horses
JZ001	500,000	1,500		610	0
JZ002 & JZ002a	0	60	10	0	0
JZ003	0	0	0	0	0
JZ004	0	850	50	20	0
JZ005	300	75	0	10	0
JZ006	20	30	20	0	0
JZ007	0	0	6	0	0

The leaseholders will pay herders to herd livestock on their land. In general, Herders receive monthly income from the farmer, irrespective of the actual amount of days he spends with the animals. Herders can also receive an annual bonus either in livestock (such as 10-15 sheep) or in cash (the cost of a single sheep is about 80 to 100 USD). Farmers generally struggle with the high turnover of herders as they frequently depart and enter the Project Area for various reasons.

According to the Livelihood Survey results, none of the seven affected leaseholders (or members of their household) currently engage in fishing or foraging. Moreover, when asked, none of the seven affected leaseholders (or members of their household) currently run a small enterprise/engage in trading (buy/sell manufactured/ processed goods) and therefore don't possess this alternative method of income. However, affected leaseholders with plots JZ003 do earn an income from a formal job with a company/organisation/ government at the time of the interview. According to the survey results, all of the seven affected leaseholders (or members of their household) felt they had enough food to eat in the last year with the majority of affected leaseholders selecting the 'We produce some of our food but have to purchase most of what we need' answer when questioned.

The affected leaseholders also provided information relating to their annual income for each source, as shown in Table 5-11 below, the owner of leaseholds JZ002 and JZ002a did not provide income data, however it is known that this household has very high earnings through owning and managing a poultry farm.

Table 5-11. Affected Leaseholders Annual Income⁴

Affected Leaseholder	Crops, fruit & vegetables annual income (UZM)	Livestock & poultry produce (eggs, milk, meat, etc.) annual income (UZM)
JZ001	100000000	15000000
JZ002, JZ002a	Not available	Not available
JZ004	20000000	N/A
JZ006	150000000	150000000
JZ005	100000000	50000000
JZ007	160000000	25000000
JZ003	45000000	N/A

It should be noted that affected leaseholders JZ004 and JZ005 collected 100% of their food from their own produce from livestock & poultry & produce (eggs, milk, meat, etc.) as well as selling their produce. The affected leaseholder with land JZ007 also collects 18000000 UZM annually from pensions/government allowances.

Household expenditure is primarily split between food, housing, water, fuel and services, this is represented in Figure 5-6 below which shows the expenditure as an average percentage of income. The split of expenditure was relatively consistent between households except for healthcare which varied between 2% and 47% with the latter being a known vulnerable household.

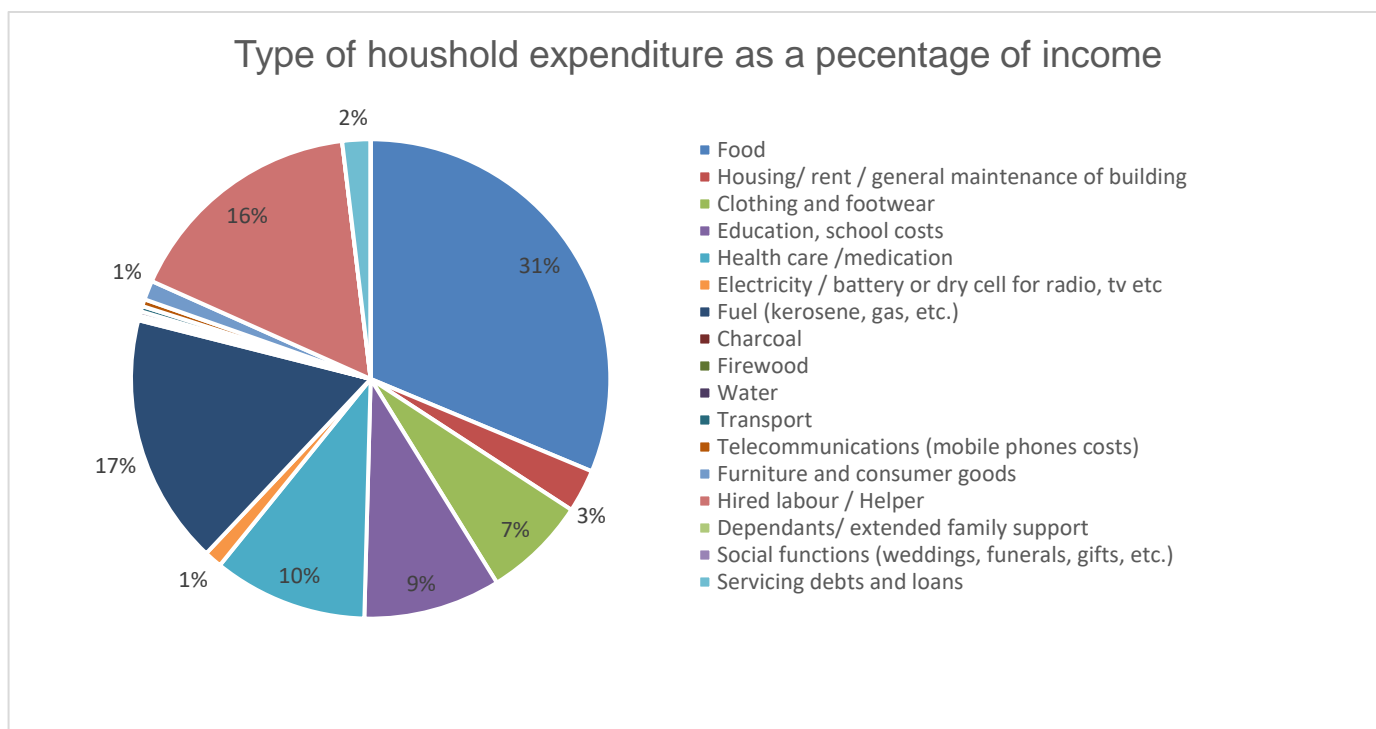


Figure 5-6 – Average Household Expenditure as a percentage of income

⁴ Income figures are approximate and were quoted directly from farmers during the socio-economic survey and therefore may differ from the figures used by the valuation company in section 8 which is calculated using annual tax records verified by the Regional Agricultural Office.

5.4 Vulnerable People

A vulnerability analysis was conducted across all the affected households including the leaseholders along the OTL

The following individuals and households were identified:

- Family with a member with a disability (one household identified)
- A widow (1 individuals identified)
- Households with member in poor health (one household identified which is the same household with a widow)
- Households with a member with alcohol addiction (one household)

The full vulnerability analysis and additional support provided is detailed in section 9.

6. Assessment of Resettlement Impacts

6.1 Leaseholders

6.1.1 The Solar PV Area

Currently there no leaseholders in the Solar PV area due to the fact the area was handed back to the local Khokimiyat in December 2019 under order from the Ministry of Energy in anticipation of the solar project. At the time of the land order, the majority of the Solar PV Area was subject to a leasehold belonging to a poultry farming company owned by leaseholder JZ002 with the remainder under government reserve. The land had been used to grow feed (wheat) for the local poultry farming company owned by leaseholder JZ002.

The land was considered not financially viable by the company and was not being used at the time of the land order. Leaseholder JZ002 who was interviewed as part of the SCA process confirmed that his company returned the land willingly and would have returned the voluntarily anyway. This land is only one of many leaseholds belonging to the leaseholder (some of which are impacted by the transmission line). No crops or investment in the land were lost when transferring the land back to the Khokimiyat. There is no impact identified on leaseholder JZ0012 and therefore no livelihood restoration necessary.

6.1.2 The OTL

There are 7 households with 8 leaseholds under the OTL, all of these leaseholds are used for the purposes of commercial farming. These households are described in further detail in table 5.3.1.1.



Figure 6-1– view of typical farmland under the OTL

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 0.1% 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 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 18m 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 4.88% of land taken (JZ005).

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 that exceed 6m in height or build structures in this area.

The largest percentage of land impacted by the sterilization zone is 8.3% (JZ005). All leaseholders, with the exception of one, use the land to grow crops and therefore the land use is not prohibited by the sterilization zone. One leaseholder (JZ00Z) uses the land to grow cherry trees however no trees currently exceed the height limit of 6m as confirmed by the topography survey and valuation survey. This leaseholder will however be required to ensure their trees to not exceed 6 m in the future.

The percentage of each type of land take is summarised below for each leaseholder in Table 6-1.

Table 6-1– Project land take of leaseholders along the OTL⁵

Cadastral Parcel ID:	Number of towers within leasehold	% of permanent Land Take (Tower Area)	% of temporary Land Take - Construction Route 18m & Tower Assembly Area	% of land affected by Sterilisation Zone 64m
JZ001	0	-	0.87%	1.6%
JZ002	0	-	0.25%	0.5%
JZ02a	3	0.0028%	0.90%	1.3%
JZ003	1	0.0009%	3.33%	6.8%
JZ004	1	0.0007%	1.30%	3.4%
JZ005	0	-	4.88%	8.3%
JZ006	1	0.0055%	0.67%	1.4%
JZ007	0	-	0.31%	0.6%

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 Herders and Access

Herders currently have the option to pass through the middle of the Solar PV area to access these higher grazing lands in the north and in spring they may also graze in the project area itself when there is adequate feed growing there but it is considered low value land.

Interviews with Mahallas and herders indicated that out of the 6 herds which are based in Seyfin, one herd is currently using the path which goes through the Solar PV Area with the other 5 using paths to the west of the site.

⁵ Permanent and temporary land take calculated using areas provided by the Cadastral Office. Land Affected by Sterilisation Zone calculated by AECOM GIS Department.



Figure 6-2– Access route through the site

This access route was not always available to herders before 2019 due to the presence of the poultry feed farm which was owned by leaseholder JZ002. During this time herders living in east Seyfin Ota community would need to travel an approximately 2 additional km (depending on the route taken) around the western boundary of the land to access grazing lands to the north. During interviews with leaseholder JZ002, it was confirmed that occasionally herders did attempt to cross this farm and some conflict arose from this, however this was stopped once he communicated the issue with community leaders. Since the project was announced and the leasehold with JZ002 was terminated at the end of 2019, herders have been able to pass through the middle of the project area with no obstruction.

Once the Solar Project begins construction, the PV project area will no longer be accessible for herders who wish to graze inside the area or pass through it. While there is still an abundance of grazing land in the area which herders may continue to use, the limitation of access should be noted. Interviews with herders and mahallas confirmed there is one herder living in east Seyfin who has been using this path since 2019 and five other herders in Seyfin who use the western path which will not be impacted. The herder based in east Seyfin will need to travel a longer distance to access pastureland to the north. This represents approximately an additional 4 – 5 km distance (depending on the route taken) to be travelled in order to access pastureland on the other side of the Solar PV area. This additional distance is further than the pre 2019 situation and so should be considered a new impact, but this impact is not considered significant and will be mitigated through community benefits during construction and operation. The herder has also confirmed in interviews that he has acquired new land (leasehold) and so will not be using this path as regularly in the future.

6.3 Other informal land use in the PV area

With the exception of passage for grazing, no other informal land use has been observed in the Solar PV area or identified during consultations with the communities.

6.4 Affected Structures

There are no structures affected by the project in the PV area or along the OTL. Structures along the OTL were avoided in consultation with the leaseholders.

6.5 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.

6.6 Farmworkers

Leaseholders under the OTL typically employ seasonal and permanent farmworkers to assist them with harvest or with grazing livestock on the land. The area around Jizzakh has been found to employ less seasonal women workers due to the lack of cotton farms which are present at the Samerakand and Sherabad sites. 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.

6.7 The project access route to the Solar PV Area

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 Jizzakh, 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 6.6.

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.

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 10 below.

Table 7-1. Eligibility Framework

Type of Loss	Eligible Persons	Description
Exclusive rights to land	Leaseholder	The person, family, or collective entity with exclusive rights to the land
	Tenant	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.
	De-Facto Occupant or User	Any person, family, or collective entity that utilises land without any form of secure tenure but are ignored / tolerated by the Leaseholder.
Structures and Other Fixed Assets	Asset-Owner	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.
Crops and Trees	Crop-Owner	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.
	Cluster farmers	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.
Business	Business owners (cluster farm owners)	Those with goods, service businesses operating on land which is to be acquired by the project.
	Employees (i. e. Farmworkers)	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).
Community Structures	Affected Community	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.

Communal Land	Affected Community	Any community that are the owners or custodians of any community common land that is used for their collective benefit.
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7.1 Eligibility Exclusions

The Developer has communicated a moratorium (“cut-off-date”) on the 18th of 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) 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 will be subject to change following consultation with stakeholders during the LRP Validation workshop** and thus the framework overleaf should be considered preliminary and subject to change.

Table 7-2: Entitlement Framework

Nr	Loss of asset/ Description of impact	Eligible person or group	Entitlement	Applicability	Number of eligible households
<i>Agriculture</i>					
1	Loss of exclusive rights of access to arable land as part of a leasehold	Owners or leaseholders of arable land	<p>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).</p> <p><i>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.</i></p> <hr/> <p>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.</p> <p><i>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)</i></p>	Active	<p>There are 7 households with leaseholds under the OHTL however the permanent impact is below 5% and so cash compensation will be provided for loss of income.</p> <p>There is 1 household with a historic leasehold in the PV area (entitlement already settled no compensation required)</p>
2	Loss of land preparation or enhancements	Farmers (with formal or informal right of access)	<p>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.</p> <p><i>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).</i></p> <hr/> <p>OPTION 2: The Developer arranges for preparation of replacement land of equivalent productive potential, on replacement plot.</p> <p>AND</p> <p>1. A Disruption Allowance equivalent to 20% of replacement value for land preparation.</p>	Active	<p>There are 7 households with leaseholds under the OHTL which will be entitled to compensation for land preparation that is impacted by the OTL.</p>
3	Loss of Crops	Owner of crops	<p>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</p>	Active	<p>There are 7 households with leaseholds under the OHTL which will be entitled to</p>

		<p>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.</p> <p><i>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.</i></p> <p>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.</p> <p>AND</p> <p>1. A Disruption Allowance equivalent to 10% of replacement value of the said crops.</p>		compensation for lost crops impacted by the OTL.
4	<p>Temporary loss of ability to farm crops within temporary access areas</p> <p>Farmers (with formal or informal right of access)</p>	<p>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.</p> <p>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 harvest is not possible due to the project schedule and/or crop life cycle.</p> <p><i>NB: Option only available to leaseholds where access to over 20% of the land is temporarily lost</i></p> <p>AND</p> <p>1. A Disruption Allowance equivalent to 10% of replacement value of the said crops.</p>	Active	There are 7 households with leaseholds under the OHTL which will be entitled to compensation for temporary loss of ability to farm.
5	<p>Permanent loss of primary agricultural livelihood</p> <p>Farmers (with formal or informal right of access)</p> <p>Business owners</p> <p>Employees or informal workers</p>	<p>Livelihood restoration targeted at improving and enhancing the livelihoods of the affected farmers. Various livelihood restoration options may be included and will be proportionate to the level of impact.</p>	Active	There are 7 households with leaseholds under the OHTL which will be entitled to livelihood restoration.
6	<p>Loss of productive fruit trees</p> <p>Owner of trees</p>	<p>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.</p> <p>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.</p>	Active	Lease holding households along the line which will lose productive trees will be entitled to compensation. One household will lose some cheery trees as part of a temporary impact. (No

			<p>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.</p>		trees are however impacted by the sterilization zone).
7	Loss of farm shelter, structure or built assets	Owner of shelter Informal users of shelter	<p>OPTION 1: Provision of monetary compensation as determined by (1) government-established compensation rates, or (2) replacement value, whichever is higher, for farm shelters that existed at time of moratorium.</p> <p>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.</p> <p>AND</p> <p>1. A Disruption Allowance equivalent to 10% of replacement value of the said farm shelter.</p> <p>2. Permit the salvage of non-fixed materials</p>	Not Active	Lease holding households along the line which will lose structures will be entitled to compensation, however there are no structures impacted.
8	Loss of Informal access to land	Informal users of land	<p>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.</p> <p>AND</p> <p>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</p> <p>AND</p> <p>Other practical support necessary for informal land users to re-establish their livelihoods elsewhere, including the provision of livelihood restoration measures</p>	Not Active	No informal farmers with assets or crops have been identified.
<i>Permanent Loss of Communal Natural Resources</i>					
9	Loss of Natural Resources, grazing land / Communal Land	Grazing community as whole	<p>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.</p> <p>OPTION 2: Community Livelihood restoration initiative with sustainable agriculture project on replacement or remaining land,</p>	Active	The land is occasionally used by herders however there is abundant grazing land to the north still available. Local Herders from Seyfin will however be given an opportunity to participate in training programs listed in chapter 10 and will be given priority

				for employment opportunities.	
<i>Vulnerable Households</i>					
10	Vulnerable or disproportionately affected households	Vulnerable 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.	Active	3 Vulnerable individuals identified
11	Critically Vulnerable Households with no member able to partake in subsistence or economic activities.	Critically vulnerable households	<p>OPTION 1: Engage local government to place them on welfare scheme.</p> <p>OPTION 2: A vulnerability allowance equivalent to minimum wage will be provided for six months to the household..</p>		
<i>Gender</i>					
12	Gender inequality	Women in significantly impacted households	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.	Not Active	No households are significantly impacted with greater than 20% of land displaced.
<i>No-Shows/Absentees</i>					
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.	Not Active	No absentees identified

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 valuers 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 asset 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 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 height 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.

8.4 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 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 Khokimiyat 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 results⁶

Name	total leased area, ha	temporary land use, ha	% of temporary Land Take - Construction Route 18m & Tower Assembly Area	permanent land use by the Electric Grid, ha	% of permanent Land Take (Tower Area)	agricultural crops	cultivated trees, type and number in the taken area	the cost of lost profits from the temporary area, (UZS). for 1 year of construction. income approach	the cost of lost profits from the permanent land use, (UZS). income approach	The cost of perennial plantings from the temporary area (trees). Cost approach	The cost of perennial plantings for permanently taken land (trees). Cost approach	Total (UZS)	Total (USD) ⁷	10% added Disturbance Allowance -\$100 minimum) (USD)
JZ001	190.6	1.665	0.87%	-	0.0000%	no data	Awaiting data	42,343.40	-	-	-	42,343.40	3.77	103.77
JZ002	2000	5.058	0.25%	-	0.0000%	no data	Awaiting data	Balance sheet not provided	Balance sheet not provided	Balance sheet not provided	Balance sheet not provided	Balance sheet not provided	-	-
JZ002a	1089	9.801	0.90%	0.03	0.0028%	no data	Awaiting data	14,793,097.00	181,121.48	-	-	14,974,218.48	1,332.71	1,465.98
JZ003	113.5	3.779	3.33%	0.001	0.0009%	no data	Awaiting data	600,704.64	635.00	-	-	601,339.64	53.52	153.52
JZ004	140.6	1.826	1.30%	0.001	0.0007%	no data	Awaiting data	83,779.42	183.12	-	-	83,962.54	7.47	107.47
JZ005	40	1.95	4.88%	-	0.0000%	no data	fruit trees, 83 pcs	unprofitable balances	-	18,079,945.33	-	18,079,945.33	1,609.12	1,770.03
JZ006	181.4	1.21	0.67%	0.01	0.0055%	no data	Awaiting data	195,839.57	64,740.35	-	-	260,579.92	23.19	123.19
JZ007	82.1	0.252	0.31%	-	0.0000%	no data	cherry trees, 125 pcs	112,176.61	-	18,976,669.24	-	19,088,845.85	1,698.91	1,868.80

Total Compensation & Disturbance Allowances: **5,592.75 (USD)**

⁶ The above results quoted above are estimates and should be considered a provisional draft which has 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.

⁷ 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 9-1 – Vulnerability categories

Vulnerability	Explanation
Young families or orphans (where the parents are under 30) who have lost both parents	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.
Families with disabled parents or children	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.
A widow	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.
A single parent family	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.
A single retired person	Retired people are likely to be particularly susceptible to any changes in their socio-economic status due to limited sources of household income.
An elderly person (over 65 years old)	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.
Women in the family	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.
Anyone farming or investing in the land without a legal title	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.
People in poor health	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 kept 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.

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.

Households in financial difficulty or under the poverty line

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.

Households with a member who is addicted to drugs or alcohol

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.

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.

Table 9-2 – Vulnerability Analysis

Vulnerability Category	Identified in the project area (baseline)	Identified as at risk
Young families (where the parents are under 30) who have lost both parents		
Families with disabled parents or children	1 household Identified	
A widow	1 household Identified	
A single parent family		
A single retired person		
An elderly person (over 65 years old)		
Marginalised women in the family		Group Identified
Anyone farming or investing in the land without a legal title		
Household with member in poor health	1 household Identified (same as widowed household)	
People who are discriminated against		
Households under the poverty line		
Households in financial difficulty		
Youth who are unable to take advantage of project benefits		
Households with a member who is addicted to drugs or alcohol	1 household Identified	

Each vulnerable households and groups, and those at risk are described in more detail below in Table 9-3 with proposed safeguards to ensure they are not disproportionately impacted and are able to take full advantage of project benefits.

Table 9-3 – Descriptions of Vulnerable Households

Vulnerability Description	Additional support measures
One household with a disability was identified along the OTL	<p>All engagement historical household should be at a location accessible to the disabled family member or with a member of the family.</p> <p>Household will be subject to additional focused monitoring during implementation of the LRP.</p> <p>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.</p> <p>The household will be encouraged to contact the Khokimiyat for further benefits and support if it has not already. The Developer will support the household to access existing disability benefits by liaising with the local Khokimiyat.</p> <p>A vulnerability allowance equivalent to minimum wage will be provided for six months to the household</p>
Marginalised women in the household. Assumes that women are generally not included in decision making regarding money or land. This is confirmed in ADB's gender assessment for Uzbekistan which acknowledges that most legal title to property is registered in the name of the household head which is typically men.	<p>The LRP verification process will include both spouses and where signatures are required both spouses will be asked to sign.</p>
A recently bereaved widow was identified along the OTL	<p>Household will be subject to additional focused monitoring during implementation of the LRP.</p> <p>If the household wishes to spend Livelihood Restoration packages on supporting the elderly family member rather than on investment in land, this will be permitted.</p> <p>The household will be encouraged to contact the Khokimiyat for further benefits and support if it has not already.</p> <p>A vulnerability allowance equivalent to minimum wage will be provided for six months to the household.</p>
A household with member with alcohol addiction was identified along the OTL	<p>Household will be subject to additional focused monitoring during implementation of the LRP.</p> <p>The project may encourage other members of the household to attend livelihood restoration initiatives in addition to those who suffer from addiction.</p> <p>The project may highlight any existing government or charity-based support programs which may be appropriate for the household.</p> <p>A vulnerability allowance equivalent to minimum wage will be provided for six months to the household</p>

10. Livelihood Restoration & Community Benefits

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

During interviews with herders, Mahalas, Khokimiyat and other community members possible community support measures were discussed including:

- It was suggested by AECOM that some shelters could be provided to the north of the project site to allow herders and their herds to shelter overnight or just for rest periods in the day. Discussions with the Khokimiyat and Mahalas indicated that the shelters would likely just be occupied by other richer herders from other areas and that communities themselves would rather the herd be returned to the home overnight for security reasons. This option could however be discussed again for future benefits once the project is operational and access has been impacted.
- The Mahalas expressed significant interest in Masdar improving the road between the three villages and in particular improving the bridges over the floodway which had given way in previous flood seasons (spring and autumn) and led to fatalities in the past. It would also be a relatively large construction project with significant costs. It is therefore suggested that these requests should be considered as part of a wider community development programme once the project is in operation.
- 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 initiative was put forward by AECOM and discussed with herders, Mahalas and Khokimiyat.
- Herders consulted expressed interest in training on veterinary health and free consultations with a vet due to the fact there is no vet in the area and no drugstore. Currently they have to travel to Samarkand to consult the vet and get veterinary drugs.
- Another issue raised by the Mahalas and Khokimiyat was the lack of mobile phone signal at Jizzakh. Given that is likely that Masdar will need mobile phone signal to enable communications while constructing the project, it would be beneficial to both the project and the community to erect a new mobile phone mast in the area in order to boost signal. This has been a standard practice at previous Masdar projects and it would be very feasible to leave this mast in place for ongoing use by the community after construction.
- Preferential employment local community members 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.

The types of livelihood restoration initiatives are detailed below in Table 10-1.

Table 10-1 – Livelihood Restoration, key risks and next steps for practical implementation

The following Livelihood Restoration initiatives are options which may be narrowed down following the LRP verification process

Name & Target recipients	Description	Risks	Steps to overcome risks	Next steps for implementation
Livelihood Restoration				
Training on Veterinary Health & free consultation Target recipients: <ul style="list-style-type: none"> • Herders • Farmers along the OTL 	Open training provided to all herders in Seyfin 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 veterinary consultation will be made available for up to six herders in Seyfin Village. 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. For veterinary training, a free consultation will be provided to up to six herders in Seyfin village in return for attending the training.	<ol style="list-style-type: none"> 1. The E&S team will develop a scope of work for each training course. 2. The E&S team will 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.
Training on Meat, Milk & Wool Production Target recipients: <ul style="list-style-type: none"> • 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		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).	<ol style="list-style-type: none"> 3. Specialists to Consult with the local mahallas to understand further what each training could focus on, e.g what 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.
Technical training on how to improve agricultural crop yields. Target recipients: <ul style="list-style-type: none"> • 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.		Training venue should be able to accommodate an attendance of 30 people maximum.	<ol style="list-style-type: none"> 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).

Name & Target recipients	Description	Risks	Steps to overcome risks	Next steps for implementation
Business and financial training Target recipients: <ul style="list-style-type: none"> • 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 of income, revenue and costs and taxes etc Maximum 30 people per training		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.	6. Deliver the training at a venue accessible by all affected households distributing educational materials and taking a register of attendance.
Preferential employment Target recipients: <ul style="list-style-type: none"> • Herders • Farmers along the OTL • Women in affected households 	Preferential employment of community members and particularly people from vulnerable households 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 compensation to which they are entitled to.	Vulnerable people may not possess the necessary skills to be employed. Expectations of employment is high in the surrounding communities, and it is possible these expectations will not be met.	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.	1. E&S team to consult with Masdar HR team to identify possible local employment opportunities. 2. E&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&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.
Wider Community Benefits				
Telephone mast Target recipients:	Erect a telephone mast at the project site to improve phone signal.	none identified	N/A	1. Consult with mahallas to understand which phone network is commonly used in the area by community members. 2. Erect the mast to boost phone signal.

Name & Target recipients	Description	Risks	Steps to overcome risks	Next steps for implementation
<ul style="list-style-type: none"> The community as a whole 	<p>The network provider should be a common provider in Uzbekistan that is accessible to everyone.</p>			<ol style="list-style-type: none"> Communicate to the community which is the best network provider to use.

11. Implementation & Monitoring

11.1 Roles and Responsibilities

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

Table 11-1 LRP Roles responsibilities

Entity	Responsibilities as part of LRP implementation
LRP Implementation Manager	<ul style="list-style-type: none"> Overall responsibility for the day-to-day implementation of the compensation process. 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.
Jizzakh LRP Committee	<ul style="list-style-type: none"> Oversee implementation of LRP and assist in the provision of compensation and 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. The LRP Committee will also be responsible for community development activities which will be developed as part of a community development plan to be developed in the construction phase.
Company Community Liaison Officers	<ul style="list-style-type: none"> To manage the project grievance mechanism, responding to the grievant in the first instance and 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 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.
Developer's E&S Team	<ul style="list-style-type: none"> To prepare and implement the companies Environmental and Social Management Systems including this LRP. To prepare and maintain all confidential records of affected persons 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 monitoring reports to reflect the current status of implementation.
Ministry of Energy	<ul style="list-style-type: none"> Responsible for official land order and approval of valuation. General oversight of the compensation process.
Local Khokimiyat	<ul style="list-style-type: none"> 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.
Local Mahallas	<ul style="list-style-type: none"> Assistance to organise community meetings 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

The LRP Committee will meet every quarter 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 (assumed to be after 2 years since the beginning of implementation). After this time the LRP Committee will be dissolved or its function orientated towards community development and its funds taken from the projects operational budget.

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 interested

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

LRP Implementation Activity	Schedule
Disclosure of final LRP	Before site mobilisation for construction
Establishment of LRP Committee including any necessary training/briefing.	Before start of construction
Issuing of compensation and adjustment of Sub-Lease Agreements	Before start of construction of the OTL
The provision of livelihood restoration related training to the affected farmers and herders	Within 6 months from the start of construction
Monitoring of the Livelihood Restoration process	Ongoing until the completion audit

11.3.1 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 –Compensation Costs

Compensation	Assumptions/Notes	Amount (USD)
Compensation & Disruption Allowance amount (USD)	Based on valuation figures detailed in table 8.5	5,592.75

Table 11-3 – Livelihood Restoration Costs

Livelihood Restoration Measures	Assumptions/Notes	Amount (USD)
Veterinary Training & Consultations	20 days of specialist time (400 USD per day)	8,000.00
Meat & Milk Processing or Wool Processing Training	20 days of specialist time (400 USD per day)	8,000.00
Technical training on how to improve agricultural crop yields or	20 days of specialist time (400 USD per day)	8,000.00
Business and financial training	20 days of specialist time (400 USD per day)	8,000.00
Materials & Equipment for LR measures (printing and food for meetings etc)	n/a	2,000.00
Total (USD)		34,000.00

Table 11-4 – LRP Management Costs

LRP implementation management tasks	Assumptions/Notes	Amount (USD)
Management of compensation process	2 days per household of a local consultant time (400 USD per day)	6,400.00
Set up of one committee	3 days of local consultant time (400 USD per day)	1,200.00
Organisation of Committee meetings (one per quarter)	Local consultant will attend 6 committee meetings (400 USD per day)	2,400.00
Stakeholder Engagement Activities & Co-ordination of trainings	40 days of local consultant time (400 USD per day)	16,000.00
Grievance Management	2 days per month for 6 months, followed by 1 day per month for 18 months (400 USD per day). Grievance management beyond this point will be included in the operational budget.	12,000.00
Monitoring & Evaluation	2 days per month for 2 years of local consultant (400 USD per day) & 1 days per quarter of an international specialist (1000 USD per day)	27,200.00
Materials & Equipment engagement (printing and food for meetings etc)	N/A	2,000.00
CLO	CLO annual salary for two years. After this time the salary of the CLO will come out of the projects operational budget.	4,800.00
Technical Oversight	1 day per month of international specialist time (1000 USD per day) for 6 months	6,000.00
Completion Audit	3 days of an independent international specialist (1500 USD per day)	4,500.00
Total (USD)		82,500.00

Total implementation budget: **122,092.75 (USD)**

11.4 Implementation monitoring

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.
- 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 compensation process and associated procedures are made to improve delivery of entitlements to affected people.

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

11.4.1 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 compensation process has been implemented in accordance with the provisions of the LRP.
- Maintain records of any grievances that require resolution.
- Oversee that all compensation measures are implemented as approved by the project management and relevant local authorities.
- Verify that funds for issuing compensation are provided in a timely manner, are sufficient for their purposes.
- Document timely completion of LRP obligations (i.e. payment of the agreed-upon sums).
- Ensure that monitoring and evaluation reports are submitted.

11.4.2 External Independent Monitoring

External Independent Monitoring takes the form of effects and impact monitoring. This provides an opportunity for frequent monitoring and evaluation, and results of this can be incorporated into a continuous improvement feedback loop. The project 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.

11.4.3 Indicators

A number of objectively verifiable indicators shall be used to monitor the compensation process. These indicators are listed below.

Table 11-5. Input indicators of compensation and livelihood restoration activities

Indicator	Information Source	Frequency	Data gathering responsibility
Input Indicators			
Overall spend of the compensation process	Financial Records	Monthly	LRP Implementation Manager
Distribution of spending by:	Financial Records	Monthly	LRP Implementation Manager
<ul style="list-style-type: none"> • Compensation payments 			

- **Community Development Plan**
- **Additional assistance provided to vulnerable people**
- **Resolution of grievances**

Number of cash compensation payments made	Financial Records & Compensation Database	Monthly	LRP Implementation Manager
Number of resources assigned to the LRP	Human Resources	Monthly	LRP Implementation Manager
The frequency of meetings of the Jizzakh LRP Committee			LRP Implementation Manager
Number of engagements with:	Engagement Database	Monthly	LRP Implementation Manager & Community Liaison Officer
<ul style="list-style-type: none"> • Herders • Lease holding households along the OTL • Women in the households along the OTL • Vulnerable households 			
Number of vulnerability allowances paid	Financial Records	Monthly	LRP Implementation Manager & Community Liaison Officer
Number of vulnerable people referred to government support programs	Engagement Database	Monthly	LRP Implementation Manager & Community Liaison Officer
Output Indicators			
Farmers perception of the project	Perception survey	Every 6 months	Community Liaison Officer
Farmers spouses perception of the project	Perception survey	Every 6 months	Community Liaison Officer
Herders' perception of the training provided	Feedback Survey following the training	Herders' perception of the training provided	Community Liaison Officer
Herder's perception of the project	Perception survey	following the training and every 6 months thereafter for 2 years	Community Liaison Officer
Number of cash payments received	Proof of receipts	Monthly	LRP Implementation Manager
Number of grievances received	Grievance Mechanism	Monthly	LRP Implementation Manager
Number of grievances open and closed	Grievance Mechanism	Monthly	LRP Implementation Manager
Average time taken to resolve grievances	Grievance Mechanism	Monthly	LRP Implementation Manager

Impact indicators

Changes in where herders now choose to herd	Socio-Economic Survey	Every 6 months	Community Liaison Officer
Changes to the income received by professional herders and farmers	Socio-Economic Survey	Every 6 months	Community Liaison Officer
Changes to quality of life as reported by spouses of herders and farmers	Socio-Economic Survey	Every 6 months	Community Liaison Officer
Time taken to reach grazing land making sure it aligns with predicted impact	Socio-Economic Survey	Every 6 months	Community Liaison Officer
Number of herds in the three communities	Socio-Economic Survey	Every 6 months	Community Liaison Officer
Number of livestock per herd the three communities	Socio-Economic Survey	Every 6 months	Community Liaison Officer
Number of diseases reported among livestock	Socio-Economic Survey	Every 6 months	Community Liaison Officer
Number of diseases/injuries to livestock that were home treated because of training provided by the project	Socio-Economic Survey	Every 6 months	Community Liaison Officer
Number of households considered vulnerable	Socio-Economic Survey	Every 6 months	Community Liaison Officer
Vulnerable people income compared to baseline levels	Socio-Economic Survey	Every 6 months	Community Liaison Officer
Vulnerable people spending compared baseline levels	Socio-Economic Survey	Every 6 months	Community Liaison Officer
Number of individuals with health issues compared to the baseline	Socio-Economic Survey	Every 6 months	Community Liaison Officer
Number of vulnerable households reporting financial difficulty	Socio-Economic Survey	Every 6 months	Community Liaison Officer
Number of vulnerable households reporting difficulty providing food for the family.	Socio-Economic Survey	Every 6 months	Community Liaison Officer
Number of vulnerable households reporting changes to their living conditions/livelihood compared to baseline levels.	Socio-Economic Survey	Every 6 months	Community Liaison Officer
Number of vulnerable households enrolled in government support services	Socio-Economic Survey	Every 6 months	Community Liaison Officer

11.4.4 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 minimise 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.

