

Sherabad- Solar PV Project

Livelihood Restoration Plan

Masdar

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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
LARF	Land Acquisition and Resettlement Framework
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

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1. Project Description and Land Aspects

1.1 Project Background

This report covers the development of a 456.7 MWac solar PV project in Sherabad District, Surkhandarya region of Uzbekistan, referred to as “the Project”. The Project site area is 631 ha. It will also comprise a 50.5 km overhead transmission line from the on-site substation to the existing substation.

The generation of a minimum 456.7 MWac of renewable energy, which is expected to provide clean energy to approx. 300,000 households in the Surkhandarya region.

Table 1-1. Key Project characteristics

Location	Sherabad District, Surkhandarya region, Republic of Uzbekistan
Installed capacity	456.7 MWac
Solar PV Site area	631ha
Overhead grid connection line	50.50 km 220 kV Steel lattice towers
National grid substation	Surkhan substation is located in the Jarkurgan district

Further details about the Project design, construction and operation are provided in the sections below.

1.2 Project Location

While the project site is located in the Sherabad district, the new transmission line will run across Sherabad, Kizirik and Jarkurgan districts of Surkhandarya province while the existing Surkhan substation is located in the Jarkurgan district. The site area is 631 ha, and the location of the Project Site is illustrated in Figure 1-1-1 below.

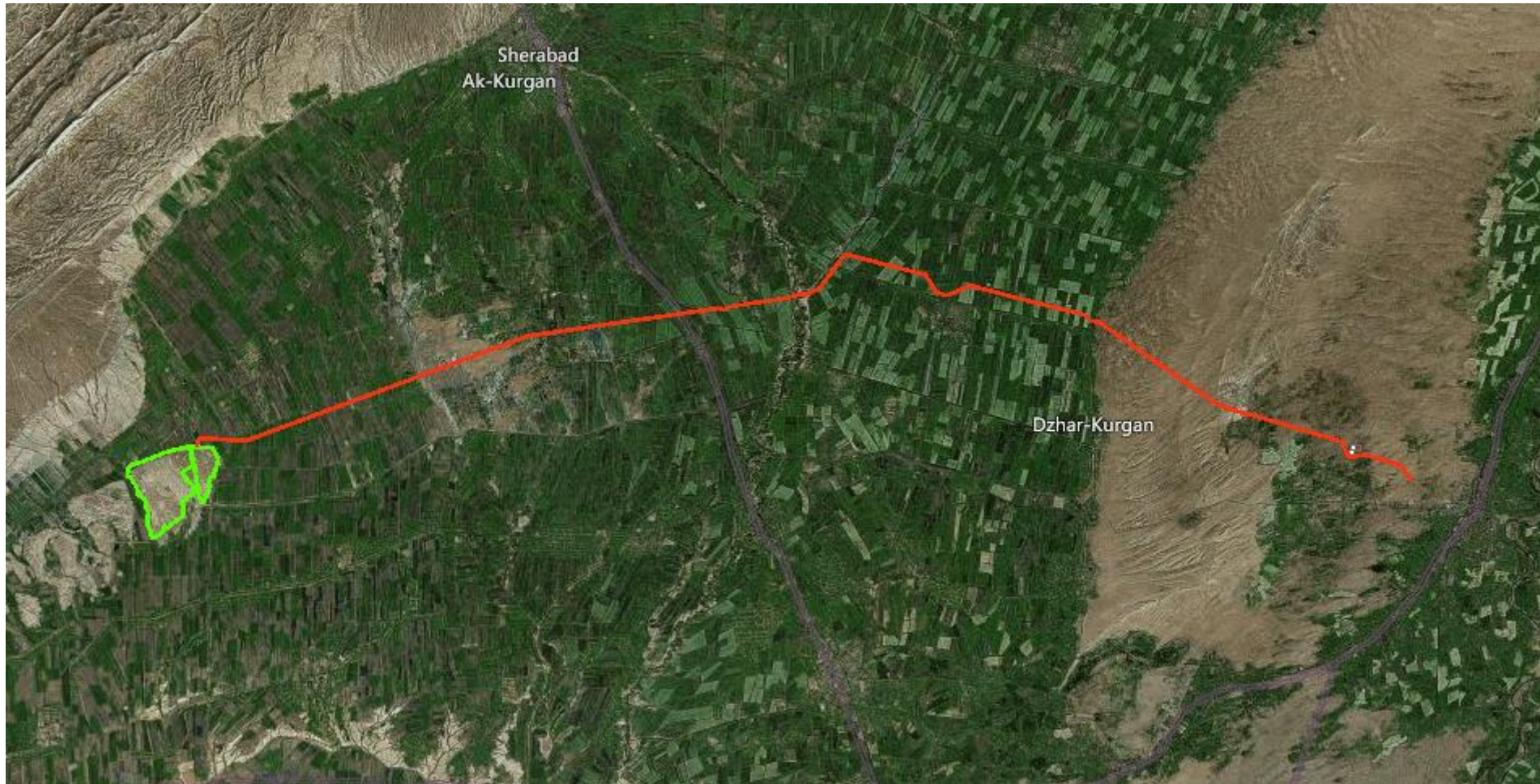


Figure 1-1. Project Location

1.3 Project Components

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

1.3.1 Solar PV Site

This is the area containing the Solar PV modules, inverters, transformers, grid connection interface and site office. A brief function of the Solar PV components is described below:

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

The fence surrounding the PV plant is approximately 10km long. 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 site design, 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.

1.3.2 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 50.5km long and passes through agricultural land.

These towers are illustrated in the Sherabad 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.

1.3.3 Land Take Requirements

The type of land impacts can be divided into three categories:

- Permanently affected areas include the Solar PV Area which is 631ha and the OTL footprints which range from 42.49 m2 to 169m2 depending on the topography and adds up to a total of 1.174ha for permanently affected areas along the OTL . 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 which range from 500m² to 630m³ and amount to a total area of 9.1254 ha 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 type of land affected is detailed below:

Solar PV Area:

- Government reserve - 617ha permanently affected
- Two leaseholds (unproductive) - 14ha permanently affected

OTL:

- Agricultural leaseholds – 0.67ha permanently affected and 67.02 ha temporarily affected
- Government Pasture – 0.57 ha permanently affected and 43.2ha temporarily affected
- Prison Colony – 0.05ha permanently affected and 4.61ha temporarily affected
- The remainder of the land along the OTL is in the government reserve

Based on the initial site design as set out in the ESIA, a total of 7.34 ha land would be cleared or just under 1.2% of the overall site area. This area currently does not include land required for internal access roads. For heavy equipment and vehicles to access the site, it is possible that some existing roads and bridges will need to be widened/reinforced to accommodate wider loads.

1.3.4 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 will utilise the existing road network using the access road from the north, 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.
- The substation will be located at Surkhan and is already located within substation land (land leased to the grid operator) and does not require any additional land take.

1.4 Project Programme

At the time of writing (December 2022), the final Project design is yet to be completed but the overall site layout, including the OTL line route is fixed. Construction will start once relevant required permits and licences have been granted, following the fulfilment of the requirements of the ADB SPS (2009) as outlined in the LARF. Further information on the ADB SPS is provided in Section 7.5.2 of this document.

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 2.4 and 2.5 of the Sherabad Solar PV ESIA.

1.5 Minimising Resettlement

1.5.1 Alternatives Considered

1.5.1.1 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.

1.5.1.2 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 Sherabad region. Following site screening visits by the engineering company TYPSA and decisions by the Government of the Republic of Uzbekistan, the Solar PV Site subject to this report was carried forward and selected for further studies.

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

1.5.1.3 Boundary adjustments

Masdar, AECOM and its local subconsultant Green Business Innovation (GBI) worked with the local cadastral office to ensure that the boundary of the Solar PV Area did not cause any displacement that could be avoided, in particular an informal farmer that was using land in the southeast corner of the site. AECOM and GBI engaged with this farmer during the site visit to understand their concerns and which are of land they were using and their preference for it to remain instead of other land which was leased by the farmer (due to superior access to water). GBI, AECOM and Masdar then worked with the local cadastral office to revise the project boundaries from the ones originally provided to Masdar by the MoE to avoid this informal farmer land and house. Only two structures will now be impacted (a storage bin and an oven) which will be replaced by the project.

1.5.1.4 Transmission Route Selection

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

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.

2. Overview of Land Acquisition and Resettlement

2.1 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.

As the Project will need future international financing for its development, the Project will require the application of Lenders Standards, including European Bank for Reconstruction and Development (EBRD) Performance Requirements and ADB's Safeguard Policy Statement (SPS). Therefore, the objectives of this LRP are to:

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

This document was developed in line with the Land Acquisition and Resettlement Framework (LARF) developed as a Partial Credit Guarantee Facility for the Uzbekistan Solar PPP Program with the Asian Development Bank. This LRP has been developed in line with the objectives and principles of the LARF, namely:

- To stipulate the principles, procedures, and compensation entitlements to be applied in the planning and implementation of the LAR safeguards.
- To guide the Special Purpose Vehicle (SPV) in preparing and implementing LRPs to ensure the resettlement safeguards are planned and implemented effectively in compliance with ADB SPS (2009).
- The projects' designs should avoid and/or minimize any LAR impact. When a total avoidance is not possible, the provisions of this LARF will be applied to ensure the resettlement safeguards and mitigation measures for AHs who will lose their lands, properties and/or incomes due to the project.
- Monitoring of potential LAR impacts will be done throughout the projects' implementation. If unanticipated impacts arise during the projects' implementation and were not considered in the LRPs, a LARP Addendum or corrective action plan (CAP) as per principles of this LARF will be prepared and implemented.

In the case of any inconsistencies on entitlements or commitments, the highest level of commitment or the most precautionary approach will apply.

2.2 Limitations

At the time of writing this draft (Version 05) of the LRP, not all engagements and the surveys for the LRP process has been completed. Still outstanding are:

- The valuation study may be subject to some minor adjustments following LRP disclosure.
- On 7th December 2022 the Kizirik District Cadastral Office informed GBI and AECOM of additional 17 households that are temporarily impacted by the OTL which were not included in the original dataset provided to AECOM in August 2022. This includes 15 small leaseholds, an informal farmer using the government reserve and a domestic garden plot. All of these new households are only temporarily impacted by the construction of the OTL with the exception of the informal farmer which will be both permanently and temporarily affected due to the positioning of a tower. These households have been engaged by the cadastral office and are included in the household numbers quoted in this LRP. This group were subject to a valuation survey on the 7-8th of December before the cut-off was called on the 9th December. This group were then subject to census/socio-economic survey on 13th – 15th December. This group are not yet represented in all socio-economic figures in the baseline chapter, however they are included in the figures for total household/affected people and also in the vulnerability analysis. . All households will be provided compensation and livelihood restoration as per the entitlement matrix in this LRP.

3. Socio-Economic Information and Profile

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. The sections includes a summary from the socio-economic baseline and assessment developed for the Project's ESIA as well as results from the socio-economic census carried out as part of the LRP process between 29th August and 2nd September 2022 ,stakeholder interviews and workshops held between 17th and 18th September 2022 and further households surveys conducted on the 13th- 15th December.

A total of 43 interviews were conducted with leaseholders and cluster farmers in August and September 2022. Five of those interviewed were subsequently excluded from the LRP as they are not impacted. A further 17 interviews were conducted in December due to the fact they were identified at a later date (60 interviews in total), however 15 of the 60 interviews were provided by a representative of the affected leaseholder with permission to complete the survey on the affected leaseholder's behalf due to an absence, sickness or other inability to attend. Representatives were typically a distant relative of the affected leaseholder, or brother/spouse in four instances.

The Project Area of influence for the LRP process covers Sherabad, Kizirik and Jarkurgan districts of Surkhandarya province where all the Project facilities will be located. 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. At the time the writing no absentee leaseholder or land user was identified.

There are three Mahallas within 2 km from the perimeter of the Solar PV area including Bog'iobod Mahalla, Yangi Yer Mahalla, Yelduzi Mahalla. These communities have been identified in Figure 3-1-1 below:



Figure 3-1. Communities near the Solar PV area

3.1.1 Administration, Population and Ethnicity

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

3.1.1.1 Formal Administration

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

At 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; and,
- **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 Makhalla Committees which act as governance institutions in towns and rural areas. Makhalla Committees are salaried state officials and as such are answerable to the local state administrators as they are fully dependent on their funding¹. Article 105 of the Constitution of the Republic of Uzbekistan recognises Makhallas 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.

The project area belongs to Bog'obod Mahalla of Sherabad District. Bo'gobod mahalla extends to the north and northeast of the project site. Towards the south and west of the project site is Musrabad District, specifically Yangi er, Tong Yulduzi, and Mehrgiyoh Mahallas (AECOM, 2021).

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.

Local intangible heritage practices including farming and crafts have strong administrative support and are considered to be resilient to the development according to an ESIA produced by AECOM in 2021.

3.1.1.2 Population

The project site and OTL are located in the Surkhandarya Region of Uzbekistan, which encompasses 14 administrative districts and has a population of over 2.5 million. Of this population, an estimated 64% lives in rural areas (UNDP, 2019). The total area of the region is 20,099km². The regional capital is Termez with a population of 122,9000. The project site sits within the Sherabad district which has an estimated population of 193,365 people and a total area of 2,620km² (State Committee of Statistics in Uzbekistan, 2020). However, the OTL crosses the Sherabad, Kizirik and Jarkurgan districts: the latter have an estimated population of 116,300 (total area 345km²) and 222,100 (total area 1,149 km²), respectively.

The Sherabad population is projected to be 98,000 males and 95,200 females, consisting of 44,439 families who live in 34,364 households. There are 630 poor families registered in the district (Suntrace, 2020).

The number of households and individuals directly affected by the Project is 40 households, including 3 households impacted by the Solar PV Area, 37 households and 1 business impacted by the OTL.

The size of the affected leaseholder's households varied from a maximum of ten individuals (affected leaseholder with land SB070 located on the Solar PV site), to a minimum of one-person households, with a four-person household mean being exhibited across

¹ Urinboyev, R. (2018). Local Government in Uzbekistan. Global Encyclopedia of Public Administration, Public Policy, and Governance .

the data set. The majority of the affected leaseholders were male (90%) and the household typically included a wife whose main occupation was home maintenance (looking after home & family).

(Source, LRP census, 2022)

3.1.1.3 Ethnic composition

Uzbekistan rich ethnic composition is representative of its history. Uzbek account for 83.8% of the population, while other ethnic groups such as the Tajiks, Kazakhs, Russians, Karakalpak, Tartars comprise the remaining 16.2%. 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.

With regards to Sherabad, the majority, 94.7% (178,700) of people in are Uzbeks, 3.7% (7,100) Tajik, 0.9% (1,600) Turkmen, 0.1% (236) Russian, 0.1% (196) Tatar and 0.5% (903) other nationalities and ethnicities (Suntrace, 2020).

Ethnic groups living in the country have equal access to all social and other services, including health, education, and water and sanitation. None of the groups are socially excluded either from a legal standpoint or in terms of their actual situation. Further, none of the ethnic groups maintain cultural or social characteristics separate from the mainstream Uzbekistan society that would classify them as ethnic minorities. Therefore, based on the information obtained during the site visit and stakeholder engagement, there it is understood that there are no indigenous people living in the region that meet EBRD criteria as defined in Performance Requirement 7 – Indigenous Peoples or ADB criteria as stated below:

- self-identification as members of a distinct indigenous cultural group and recognition of this identity by others.
- collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories.
- customary cultural, economic, social, or political institutions that are separate from those of the dominant society and culture; and
- a distinct language, often different from the official language of the country or region.

The project site is territorially related to the rural gathering of citizens "Gulbakhor", the citizens community union "Mehrigiyo" of Sherabad district. The wider project area is bordered by rural settlements / citizens community union of Baikishlak and Pakhtaabad in the south, Yangiyer, Talashkan, Beshkurgan in the east and Navbahor in the west (Suntrace, 2020). The project site is located 18 km south-west of Sherabad city (Suntrace, 2020).

To ensure that all of these minority groups (Tajik, Kazakh, Karakalpaks, and Russian) are engaged with in a culturally appropriate manner, additional measures were provided where this is necessary to do so (i.e. if they do not speak/read Uzbek). These included, 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 was provided in a suitable language (refer to Section 5.4.2 – Stakeholder engagement activities to disclose the LRP).

All affected households interviewed as part of the LRP census and all those included within the valuation spoke Uzbek. During the Environmental Due Diligence Site visit, one herder was observed transiting through the project area who confirmed they were Tajik however they communicated in Uzbek. During the LRP disclosure, provisions to engage with Tajik herders will be made, however the impacts on them are expected to be small.

3.1.2 Land Use and Land Tenure

3.1.2.1 Land use and tenure in the Project Area of Influence

The site territory is located on the desert steppe in the middle of agricultural lands, with a predominantly grey soil type. The area is used primarily for livestock grazing in springtime. In the eastern part of the site, tamarisk bushes grow in one wide strip.

Between the 21st to the 24th of October 2021 a site walkover was undertaken by AECOM to gain a better understanding of the project area and those affected by the solar development (AECOM, 2021). The walkover revealed that there are two leaseholders with leases in the area, one leased land since 2018 within the eastern part of the project area. He is yet to use the land and plans to invest in water channel before starting to cultivate the land.

There is evidence of historic land cultivation and an old water channel in the western site, it is estimated that this was last active approximately 30 years ago. On the eastern side of the site there is an abandoned water well, sheep barn, farm buildings, and water collectors. Local land users informed the ESIA Consultants that these structures have been abandoned since Soviet times.

AECOM returned to the site on the 17th and 18th of September 2022 and confirmed that the two active leaseholds remain in the Solar PV area but they are currently not being used by the leaseholders themselves (however SB064 was occupied by an informal farmer). These lease holdings are shown on Figure 3-2-2 below as cadastral parcel SB070 and SB064². Affected leaseholder SB070 has lived in the settlement for 65 years. It was reconfirmed that neither of them utilise the land itself and there was no evidence of cultivation or land investment – with the exception of those of the informal farmer who has a verbal agreement with the leaseholder. Both farmers however expressed a desire to use the land for herding in the future and thus the impact on the “opportunity” is considered in the livelihood restoration measures.

An informal farmer cultivates and herds on 3 hectares of land just outside the southeast corner of the solar PV site where he also owns a house. He has other land but he uses the area in the project site due to improved access to water. The project border was adjusted in order to avoid this farmer so that his house and farmland are outside the Solar PV Area, only two small structures of his remain in the Solar PV Area a store and an oven, these will be replaced by the project.

Some herders may visit the area surrounding the Solar PV area in seasonally when there is suitable feed, however the areas to the north of the site are used more frequently and have more abundant feed. No herders were seen by AECOM on site in any of the site visits but have been seen in the area to the north. During a site visit conducted by the Lenders consultant in October 2022, a Tajik herder was observed transiting through the Solar PV site area and was engaged by the Lenders consultant. Steps to engage any potential transitory herders (including communications in Tajik) will be made during the LRP disclosure.

No other uses of the communal land (such as gathering of plants for medicines or fuel) were observed or highlighted to AECOM by Mahallas. The socio-economic household survey also confirmed that, aside from herding, no one collected natural resources on communal land or used ecosystem services.

3.1.2.1.1 The Project Area: Solar PV Area

² Please note that the cadastral parcel SB077 is located outside of the project boundary .It should also be noted that an informal farmer using land bordering the Solar PV site near SB070 (southwest of the site) did not answer the questions during data collection.

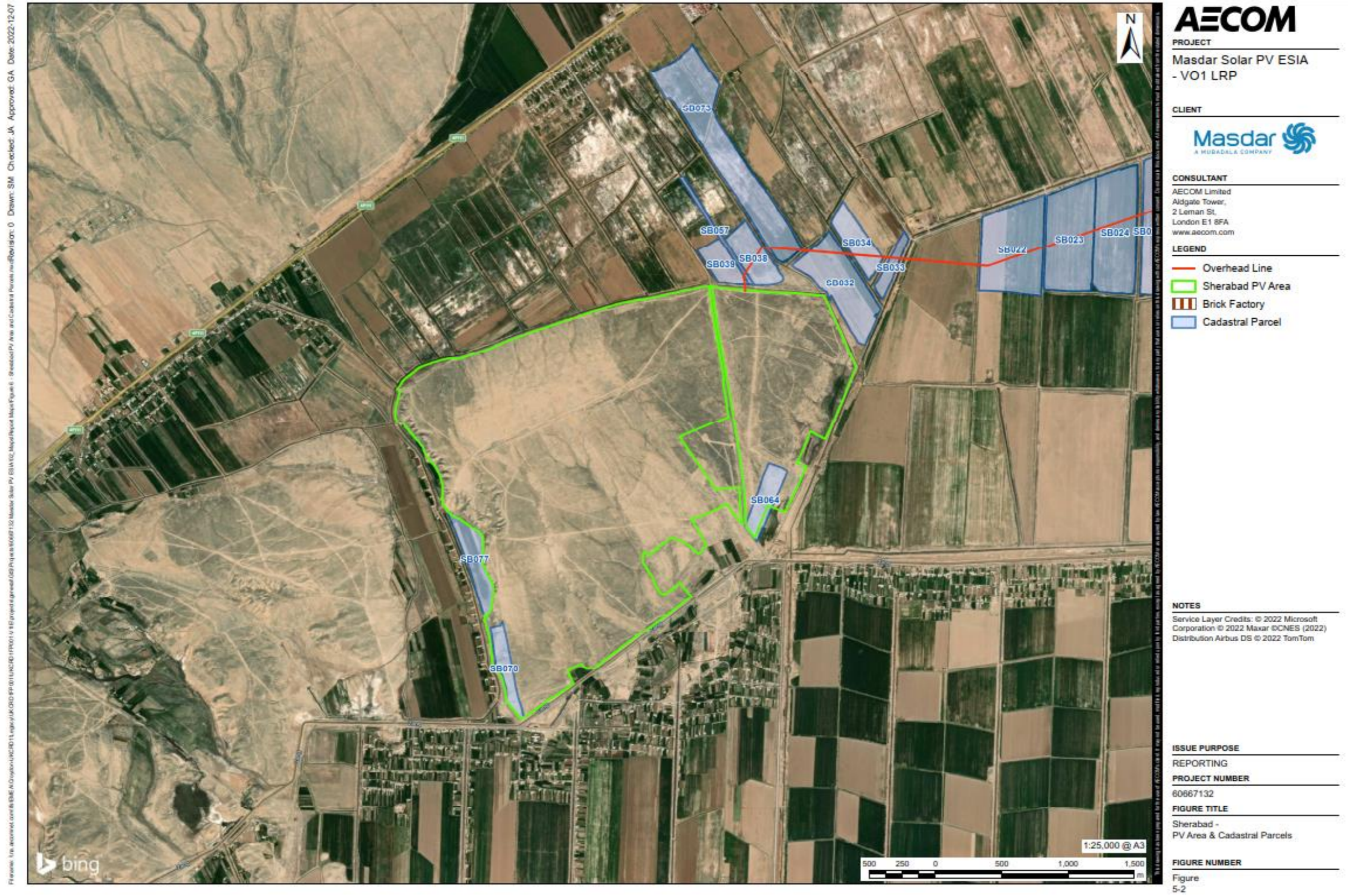


Figure 3-2. Leaseholds within the Project Area

Leasehold SB070 is seven hectares (Figure 3-3-3) and the leaseholder confirmed that it is not currently used and was only given to him as part of the land “optimization” process (a historic process whereby leaseholds allocated were at least 10ha) along with his other land, 3 hectares of irrigated land used for pomegranate farming (Figure 3-4-4). The leaseholder confirmed however it was his intention to herd livestock on this land in the future and it was previously mentioned that he wanted to install an irrigation channel. No assets or crops were present at the site of leaseholder SB070 during the site visit in September 2022.



Figure 3-3. Land of Leasehold SB070



Figure 3-4. Other land belonging to holder of leaseholder SB070 (outside the Project Area)

The holder of leasehold SB064 does not use the land himself and is currently residing outside of Uzbekistan, however the land is being used by another informal farmer who has a verbal agreement to use the land. This informal farmer has a wife and seven children and he also looks after the children of his sister who is a migrant worker. This household uses the land inside leasehold SB064 to grow feed for his livestock which he grazes in this area. The informal farmer has built a house a stable, a container and other buildings in this area. While the informal farmer does have his own leasehold outside the Project Area, he chooses to farm the area within leasehold SB064 because it is closer to irrigation channels to the south from which he pumps water when irrigation channels from the north run dry. His own leasehold does not have this access to water in the summer months.

When interviewed this informal farmer confirmed that this land he uses informally is more important to him than his own leasehold because of the improved access to water. Since this engagement The project has moved the project boundary to avoid land being cultivated by this farmer and his residential property.



Figure 3-5. Farm and house of the informal farmer



Figure 3-6. Stable/store built by the informal farmer

3.1.2.1.2 The Project Area: Overhead Transmission Line

The proposed alignment for the 220 kV transmission line will follow an existing 110 kV overhead transmission line transect across, households / settlements (total of 11 villages) and pasture land. The right of way (ROW) associated with the transmission line will cross the different habitats, cross the Karasu river (the width of Karasu river at the intersection of the line is approx. 12.4 meters). There are a total of 37 households which are affected by the OTL. This includes:

- 20 Households with private Sub-lease agreements (49 years)
- 15 households with official land allocation for private use (obtained through auction and agreed with the Khokimiyat in 2022) for 10 years of temporary use 1 household with a private garden adjacent to the residence which is temporarily impacted
- 1 informal farmer with gardens/allotments within the government reserve which is permanently and temporarily impacted

There is also:

- 1 Business which is a Cluster farm (cotton and wheat farming business)
- 18 employees/contractors whose household is employed by the cluster farm who work land under the OTL
- 1 Business which is a silk factory.

NOTE: On 7th December 2022 the Kizirik District Cadastral Office informed GBI and AECOM of 17 households that are impacted by the OTL which were not included in the original dataset provided to AECOM in August 2022. This includes 15 small leaseholds, one informal farmers using the government reserve and also a domestic garden plot. All of these additional households are temporarily impacted with the exception of the one informal farmer which is both temporarily and permanently impacted by the OTL ROW. These households have been engaged by the cadastral office and were surveyed on the 13th -15th of December and are included in the household numbers quoted above and are also included in the valuation before the cut-off date however they are not yet included some of the socio-economic analysis (tables, charts and percentages quoted in this chapter which are marked with a footnote). All households will be provided compensation and livelihood restoration as per the entitlement matrix in this LRP.

The identified farming leaseholders which interact with the route of the overhead transmission line are mapped in Figure 3-7 below³.

20 of the households interviewed along the OTL held a 'long lease' for the land and 15 had an official claim made through an auction (which differs from a leasehold), one was an informal farmer (with informal permission to farm in the government reserve) and one who had rights to land adjacent to his residential property.

One business (cluster farm) was also interviewed and 18 employees who worked land in the cluster farm along the OTL were also interviewed.

The farming cluster is a cotton farming business with many small farming contractors working for the cluster. The contractors using cluster land affected by the OTL were all interviewed as part of the socio-economic census. These contractors produce cotton and are paid a salary based on a quota of output and any excess cotton they produce can be sold for a bonus (typically this excess is sold to the cluster farm whom employs them).

Affected leaseholders with cadastral ID SB052 have lived in their settlement the longest at 62 years, with 17 years being the minimum across all interviewed affected leaseholders The majority of affected leaseholders were born in the area however a number of individuals moved to the municipality or community for work opportunities or for marriage.

All besides one of the leaseholders interviewed stated that the land parcel is their main permanent place of farming or work, however affected leaseholder SB1033 uses the land as a seasonal place for farming or work. No outside individuals use or rent the affected leaseholder's land parcels according to socio-economic status data. It should also be noted that affected leaseholder of land with cadastral IDs SB081 and SB080 has a further four workers which require a salary however they are not expected to be impacted by the OTL.

³ Please note that the map also includes all other cadastral parcels in the government reserve and also parcels belonging to a large cluster farm and government prison. A full list of cadastral parcels and their assignment (leaseholder or government reserve etc) is included in Table 6-1

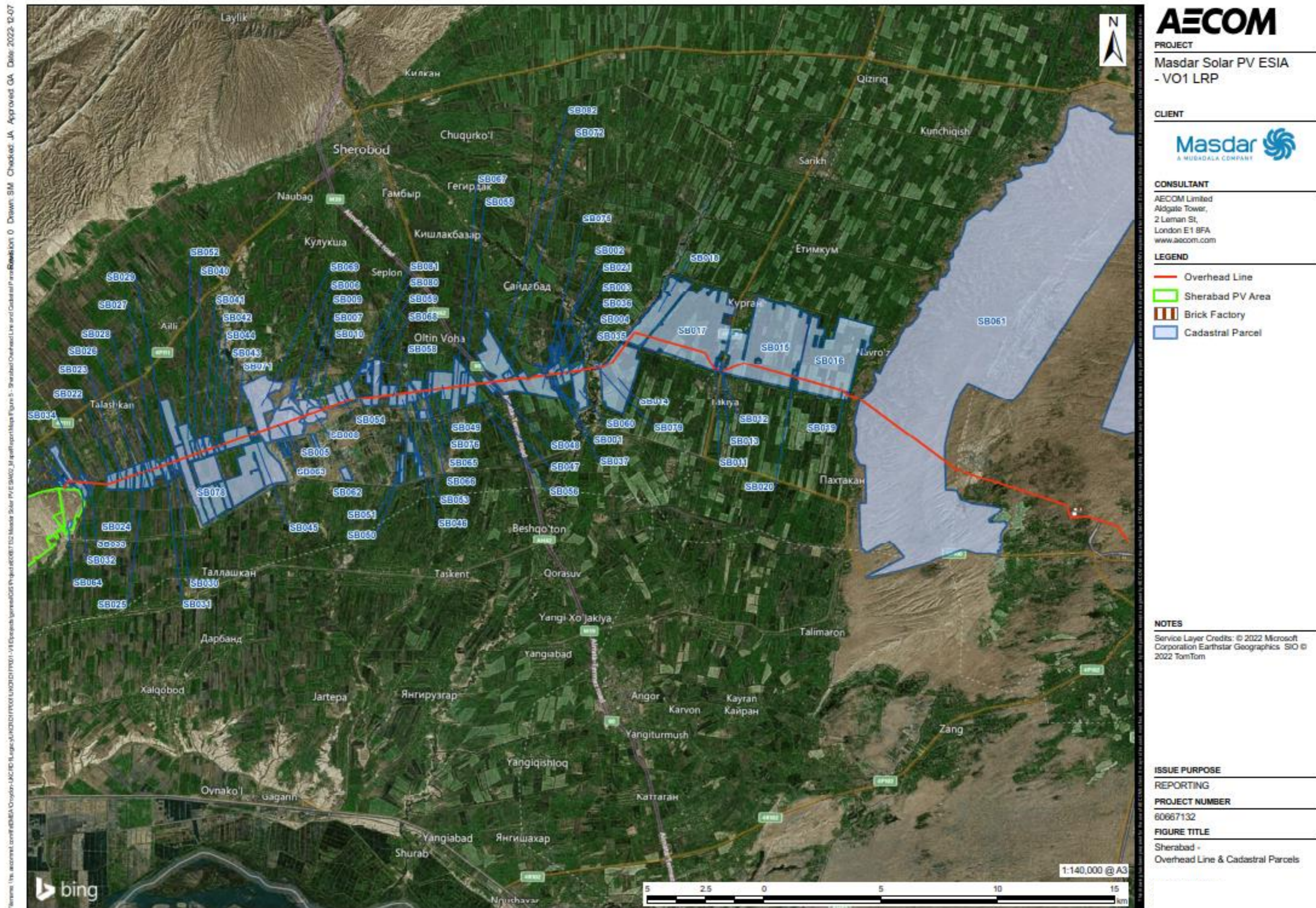


Figure 3-7. Sherabad Survey Map (cadastral parcels in proximity to the OTL)

3.1.3 Economy and Livelihoods

3.1.3.1 National and regional 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. 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 because its Gross National Income (GNI) per capita is between USD 1,026 and USD 3,995⁴. According to the International Monetary Fund (IMF), 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.

In recent years, national statistics have shown an increase in the proportion of the population who are unemployed, increasing from 4.9% to 5.2% between 2009 and 2016 and reaching 9.3% in 2018. Nationwide, the majority of the population (60.9%) are employed in the service sector, the agricultural sector also employs a significant proportion of the population (25.9%), and the industrial sector employs the smallest proportion of the population (13.2%). In Surkhandarya, 63.9% of the population is employed (State Committee of Statistics in Uzbekistan, 2020).

3.1.3.2 Local Livelihoods

The area of influence around Sherabad is dominated by cotton production, which in term provides more opportunities to women as seasonal farmworkers. The proposed alignment for the 220 kV transmission line will follow an existing 110 kV overhead transmission line transect across agro-landscapes (cotton, wheat and alfalfa fields, orchards, vegetable gardens), tree lines, roads and network of irrigation canals, and pasture land (Suntrace, 2020).

Table 3-1 below provides an estimate of the number of affected household members according to their main occupation, note that some individuals had more than one occupation. Farming, education and home maintenance constitute the main occupation of the affected households in the Project Area.

Table 3-1. Household Member Occupation Results⁵

Occupation	Count of Main Occupation
Drivers, Plant Operators	1
Farmers	33
Full time Student or School	16
Home Maintenance (looking after Home & Family)	30
Labourers or General Workers	4
Legal & Administrative	2
None	2
Qualified Professionals	5
Services, Shop or Stall Workers	2
Technicians	2
Unable to work (sick; too old, disabled)	2
Under official working age 18	70
Unemployed - not seeking work	8
Unemployed - seeking work	5
(blank)	
Grand Total	182

⁴ The Uzbekistani Som (UZS) is the currency of Uzbekistan and, as of 5 October 2021, USD 1 was equal to UZS 10,638.30.

⁵ Note: The 17 new households added in December 2022 have not yet been added to this table.

(Source, LRP census, August- September 2022)

As illustrated in Table 3-1, two members of affected leaseholders' households (namely, SB738) are unable to work (sick; too old, disabled) and are therefore potentially more vulnerable to the impacts of the Project. Moreover, one household member has expressed difficulty walking or climbing steps (this individual is part of the household of affected leaseholder SB073); another was unable to self-care including washing and dressing (this individual is part of the household of affected leaseholder SB1051); another experienced a lot of difficulty with self-care such as washing and dressing (this individual receives monthly disability pension and is part of the household of affected leaseholder SB081, SB080); and one household member was unable to remember or concentrate in daily life. These households are identified in the vulnerability analysis in section 4.

The survey results in Table 3-8 provide information detailing leaseholders' livestock on the OTL . It should be noted that two of the leaseholders interviewed also partook in fishing activities. Cattle were the most popular type of livestock owned by households with 42 households owning cattle, however the total number of sheep is higher despite only being owned by 23 households. While livestock does not account for a large amount of regular income for households compared to crops, livestock are considered an important asset for households which use livestock as an investment to be sold when more cash is needed.

Table 3-2 – Affected households Livestock Numbers across OTL

	Cattle	Goats	Sheep	Pigs	Chickens
Total No. along the OTL	228	197	308	13	269
No. of Households with livestock	42	13	23	2	23
Highest number per household	70	70	130	12	50
Median number per household	2	10	6	6.5	6

(Source, LRP census, August- September 2022 & December 2022)

Table 3-3 below shows how each plot of land within the OTL is used. Some affected leaseholders grow multiple crops on the same plot of land simultaneously, accounting for the crop count being marginally higher than the number of affected leaseholders. The average total units produced per year across all affected leaseholders was 1,434,323. However, it should be noted that this varies greatly between affected leaseholders, as does the size of area of these plots with the largest being 142.6 hectares (affected leaseholders with sub-lease agreement SB050 and SB051) and the smallest being only 3 hectares (affected leaseholders with sub-lease agreement SB079).

Table 3-3. Type of Agriculture⁶

Row Labels	Count of What is the Plot of Land used for?
Animal husbandry	2
Crops	42
Crops, Mixed use	1
other	1
Trees	5
Grand Total	51

(Source, LRP census, August- September 2022)

3.1.4 Income levels and Poverty

The Surkhandarya region remains the second poorest region in terms of per capita income, contributing only 4% to Uzbekistan's total GDP (\$1.3 billion).

⁶ Note: The 17 new households added in December 2022 have not yet been added to this table.

Based on the socio-economic census, almost all of leaseholders interviewed stated that the household has been severely negatively affected by drought/floods over the past 2 years which caused a reduction in household income, in particular a shortage of water was highlighted as a key issue. This includes an eastern border farmer having fish ponds and the informal farmer in the Solar PV Area⁷. Four leaseholders stated that the household has also been severely negatively affected by crop disease over the same time period (affected leaseholder with sub-lease agreement SB823; affected leaseholder with sub-lease agreement SB059; affected leaseholder with sub-lease agreement SB067; and affected leaseholder with sub-lease agreement SB058).

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

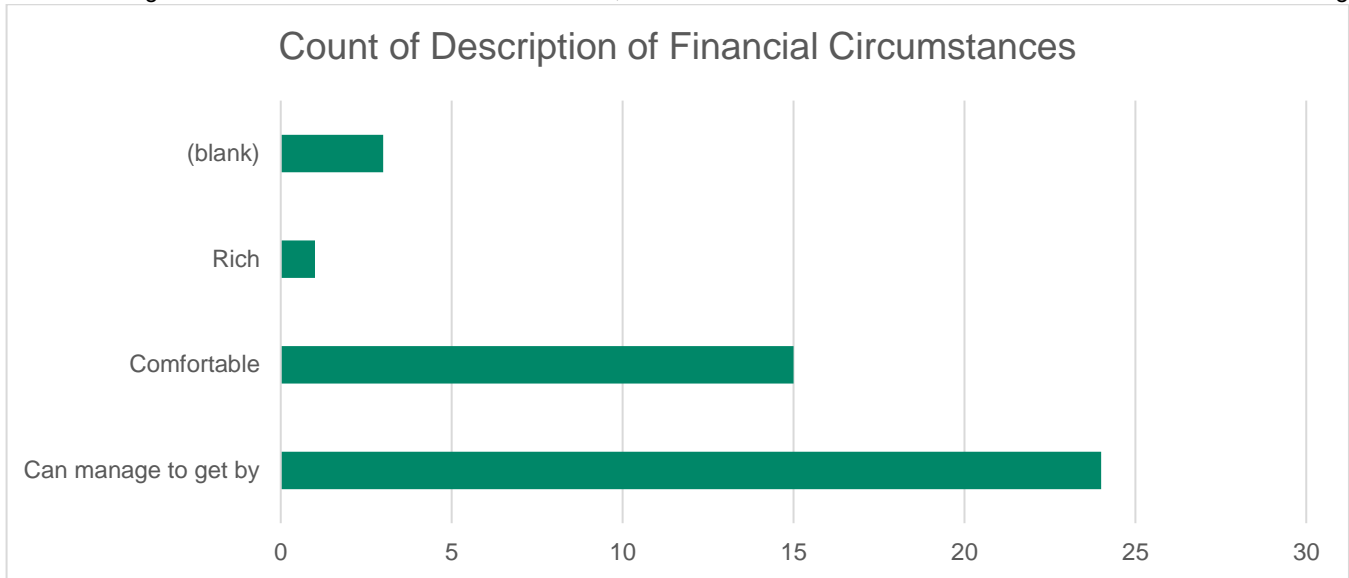


Figure 3-8. Affected Leaseholders Financial Circumstances⁸

(Source, LRP census, August- September 2022)

As illustrated in Figure 3-8, above the majority (approximately 56%) classified their financial circumstances as below comfortable. It should be noted that two of the affected leaseholders (sub-lease agreements SB072 and SB069) also own a small enterprise/trading activity whereby they employ (a total of five) residents from outside of the household.

The 18 cluster farmers did not provide income data and two of the private leaseholders also did not. Out of the remaining households interviewed during the socio-economic survey (including 18 new households added in December 2022) the average annual income (Mean) recorded was 95,452,815UZB or 8,400 USD (This is 07 USD per month or 23.27 USD per day). The median annual income was 37,500,000 UZB or 3,337 USD (278 USD per month or 9.14 USD per day) The lowest income recorded (excluding outliers) was 1602USD per year or 4.39 per day and the highest was 71,200 USD per month or 195.07 per day. No households recorded a daily income below the poverty line of 2.15 USD per day. Most of the income recorded was from growing crops, fruit and vegetables as shown below in Figure 3-9and expenditure was split across a number of items as shown in Figure 3-10with food, depts, fuel and electricity being the largest expenditures.

⁷ These locations will be avoided following project border change.

⁸ Note: The 17 new households added in December 2022 have not yet been added to this figure.

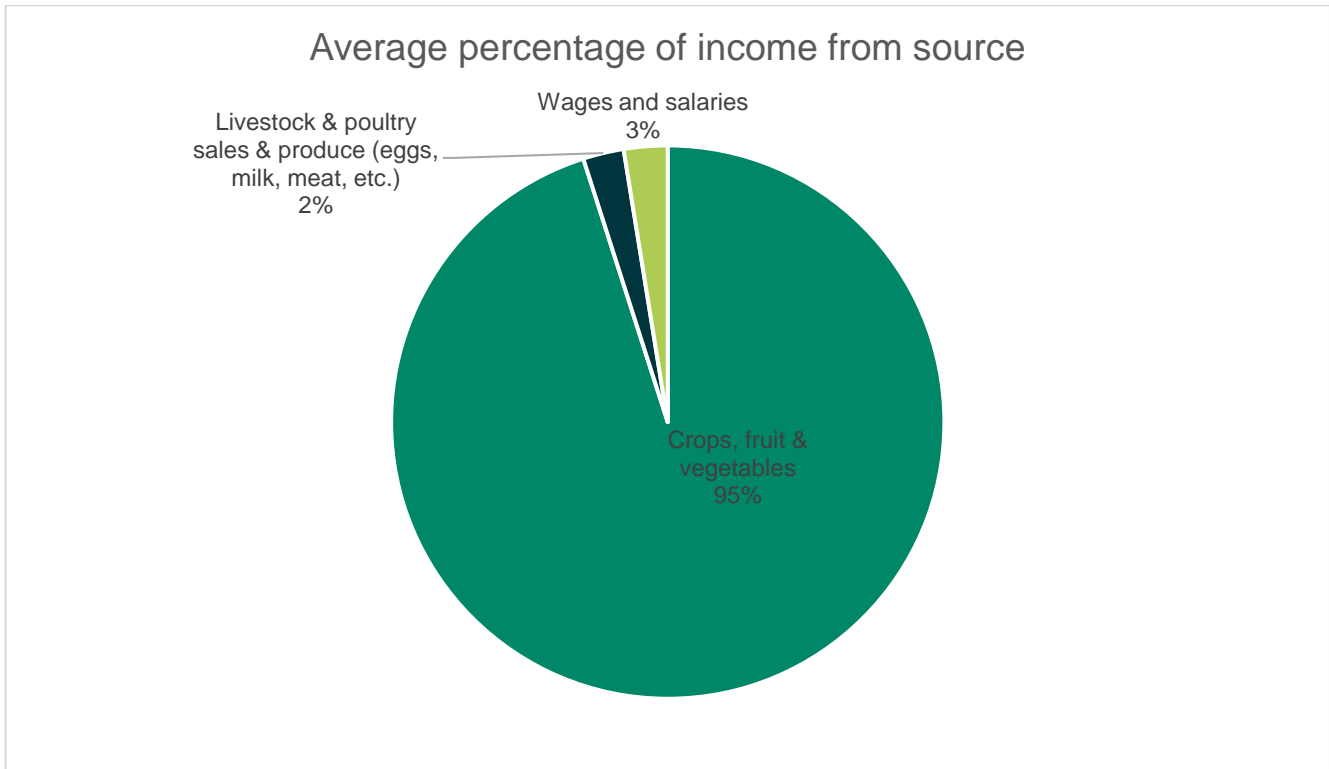


Figure 3-9. Percentage of income by source⁹

(Source, LRP census, August- September 2022)

⁹ Note: The 17 new households added in December 2022 have not yet been added to this figure.

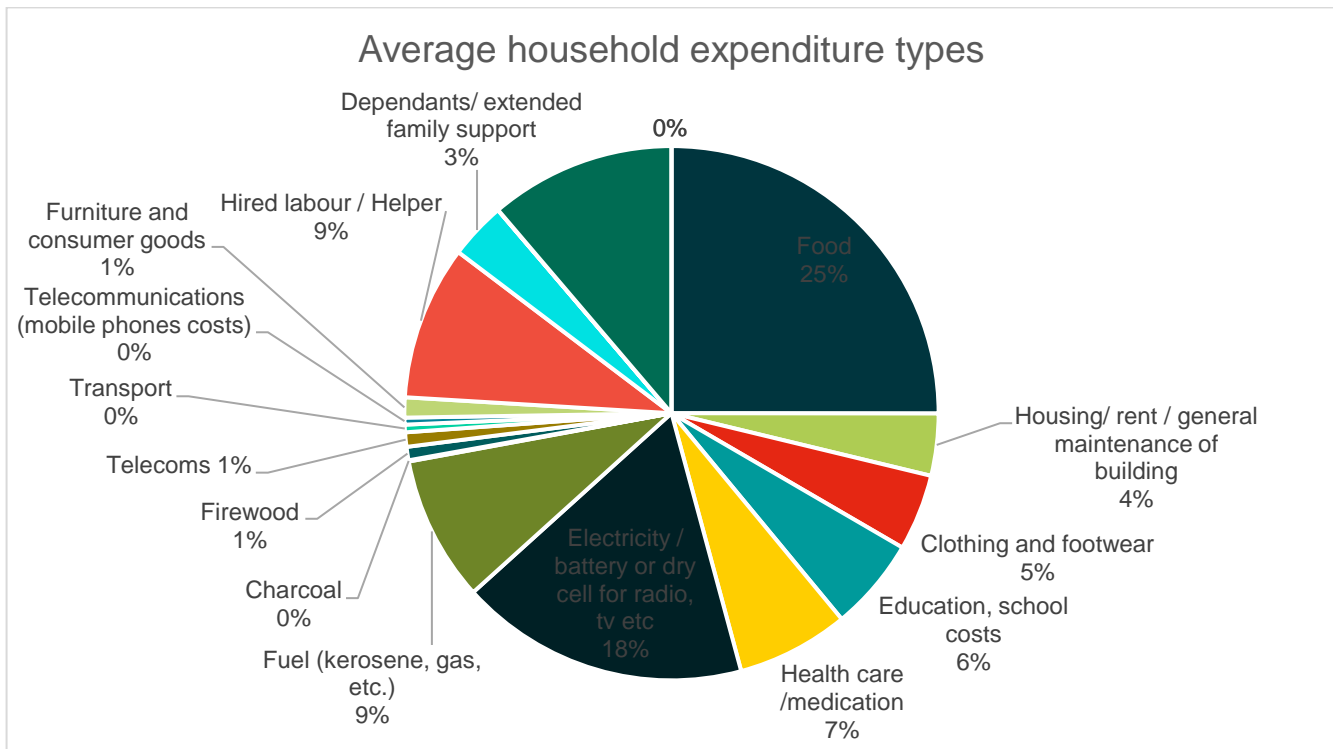


Figure 3-10. Average household expenditure types¹⁰

(Source, LRP census, August- September 2022)

3.1.5 Community Infrastructure and Resources

3.1.5.1 Housing

The United Nations Economic Commission for Europe (UNECE) found that rural households are typically larger than urban ones, averaging between 4.9 and 6 people, compared to 3.8 in the urban Capital City of Tashkent (UNECE, 2015). However, living space per person is found to be lower in rural areas of Uzbekistan (14.5 m² in rural areas and 16 m² in urban areas) (Ministry of Economy of the Republic of Uzbekistan, 2014).

The communities in the Project Aol are rural, each household plot typically consists of a detached house with an attached plot of land. Households typically accommodate several family generations living together. Many of these houses are self-built using available materials and therefore often fail to meet modern construction standards and lack important amenities (see Figure 3-11 and Figure 3-12 for examples of houses close to but outside the project area).

¹⁰ Note: The 17 new households added in December 2022 have not yet been added to this figure.



Figure 3-11. House outside the project area



Figure 3-12. A house South of the Project Site

3.1.5.2 Community Services and Facilities

AECOM gathered information on community facilities during the December 2021 site visit. The main facilities in the Project area were identified as:

Bog'iobod Mahalla

- Mahalla has one school No. 41 (900 pupils, 150 teachers and other personnel), and two kindergartens.

Yangi Yer Mahalla

- School No. 47 has 250 pupils and 35 staff.
- Mahalla administration is located in village Guldiyer, further away from the Site. That village has feldsher clinic, police station, ambulance.
- Hospital in Mehrgiye.

Yulduzi Mahalla

- Two schools (no. 42 and 52), total 670 pupils and 100-120 staff.
- Feldsher clinic, 4 doctors, 8 nurses. There are some local private health clinics.
- Mahalla does not use the Site.

During the site visit that took place between 17th and 18th of September 2022, AECOM identified that there is an active cemetery belonging to Muzrabad makhallas located in the western site (Figure 3-13) The cemetery has administrative building and prayer place (Figure 3-14) near the cemetery. **This cemetery and prayer place is excluded from the Solar PV Area and access to it will be maintained.**



Figure 3-13. Cemetery in the centre of the project site

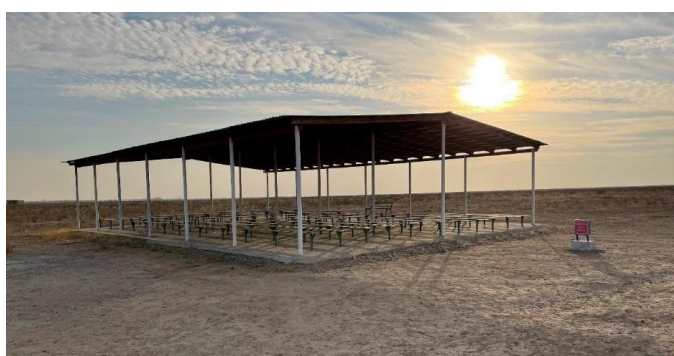


Figure 3-14. Prayer area attached the cemetery in the middle of the project site

3.1.5.3 Utilities

Access to electricity is nearly universal across Uzbekistan as most people are connected to the national grid. In the wider Sherabad district power supply is available in 99.4% of households including rural area and natural gas in 16.6% of urban district households. In-house water supply is available to 36% of the households (Suntrace, 2020).

Table 3-4. Households with access to centralised water supply and sewage facilities in the Surkhandarya region

Region	Access to a centralised water supply (percentage of households)	Access to sewage utilities (percentage of households)
Surkhandarya	23.9%	72.5%

Source: State Committee of Statistics in Uzbekistan, 2020

Table 3-5. Access to utilities in urban and rural areas in Uzbekistan (2013)

Utilities	Percentage of rural households with access (%)	Percentage of urban households with access (%)
Water Supply	50.3	82.8
Sewage	8.9	53.9
Heating	25.8	59
Hot Water	5.5	45.4
Natural Gas	72.1	87.5
Fixed Telephone Line	14	57

Source: State Committee of Statistics in Uzbekistan, 2020

Based on the interviews carried out, Bog'jobod Mahalla has water supply in the streets for drinking purposes. It has been proposed that in 2022, there should be some works carried out to install water supply in houses, as part of the governmental program. There is a lack of infrastructure for water irrigation. Propane gas bottles are generally used for cooking.

The 72% of affected households¹¹ interviewed as part of the LRP socio-economic census used water deliveries to supplement the access to the centralised water only 12%¹² had access to a tap within the household. The remainder only used centralised community taps and natural sources. Due to the low availability of sewage facilities, only 5%¹³ of affected households interviewed had a flushing toilet (however it is not clear if it is connected to a centralised sewage facility) and the remainder all used a pit latrine as a toilet.

3.1.6 Household Community Health

According to the World Bank and national statistics, life expectancy at birth has continuously been increasing in Uzbekistan, from 58 in 1960 to 71.725 in 2020. Table below shows how life expectancy varies depending on sex and location at national level. Generally, women live longer than men and those in urban areas live longer than those who live in rural areas.

Table 3-6. Life Expectancy at Birth by Sex and Location

Total		Urban		Rural	
Female	Male	Female	Male	Female	Male
74.9	71.1	77.1	71.8	74	68.5

Source: World Bank, 2021

According to a review by the Food and Agricultural Organisation (FAO) Gender Country Assessment there have been significant improvements in the rural population's access to healthcare, maternal and child healthcare, and reproductive healthcare including access to contraception (Food and Agricultural Organisation, 2019). However, there are still some key health challenges in Uzbekistan, namely the prevalence of non-communicable diseases, which is largely attributed to consumption of tobacco, alcohol, poor nutrition and lack of physical exercise. The burden of non-communicable diseases is serious in terms of socio-economic development because such diseases can "result in reduced income, early retirement, decreased productivity and employee turnover, with further implications for social protection costs" (UN and Government of the Republic of Uzbekistan, N.D).

During the socio-economic census, 7 households reported having a member who suffered a health condition or disability in the last 12 months and these include:

- One individual who suffered a respiratory illness
- One individual who had Covid 19
- One individual who suffered physical injury
- One household with a member with a mental disability
- Onne household with a family member who is deaf
- Two households with diabetes (type 2)

When asked about medial facilities, almost all affected households use the community hospital and local pharmacy in Bog'obod village which they chose due to its convenient location. 31%¹⁴ of affected households interviewed said it takes them less than 10 minutes to reach them, 36%¹⁵ said it takes between 11 and 30 minutes, 23%¹⁶ said it takes between 31 minutes and an hour and 5% claimed it took over an hour to reach their preferred medial provider. The remaining 5%¹⁷ did not provide an answer.

¹¹ Note: The 17 new households added in December 2022 have not yet been added to this figure.

¹² As above

¹³ As above

¹⁴ As above

¹⁵ As above

¹⁶ As above

¹⁷ As above

3.1.7 Education

The World Bank indicates that the net enrolment rate of primary school age children in primary education in Uzbekistan in 2018 was 96.85%. Of all the pupils that enrolled 98.31% continued to the last grade of primary (ibid.). However, when analysed through a gender lens, this number is slightly higher for male students (97.56%) than for female students (96.15%) (ibid.).

At the secondary level over 4 million pupils are enrolled nationally, 48% of which are female (World Bank, 2021b). While at the tertiary level under 10% of the national Uzbekistani population has a higher education degree.

Table 3-7 below summarises the level of education across household members interviewed as part of the socio-economic census. The majority of members had completed secondary education or higher, 14 household members have never attended school.

Table 3-7. Household Member Education Attainment Results¹⁸

Row Labels	Count of Education Attainment
Junior Secondary School – Completed	2
Junior Secondary School - Now Attending	1
Never Attended	14
Primary School - Completed	4
Primary School - Now Attending	45
Senior Secondary - completed	66
Senior Secondary – Now attending	8
Senior Secondary – partially completed	2
Under official school age - 6	2
University or College	35
(blank)	
Grand Total	179

(Source, LRP census, 2022)

¹⁸ Note: The 17 new households added in December 2022 have not yet been added to this figure.

4. 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 4-1 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 4-1. 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 widower	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 international poverty line of \$2.15 per day.	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.

During the socio-economic census and interviews carried out as part of the LRP process, the majority of affected leaseholders did not believe that their household will be significantly impacted by the Project; and 97% of households interviewed did not consider their household to be vulnerable – although 9% of interviewed individuals were uncertain. The affected leaseholder with land SB969, and SB971 considered their household to be vulnerable in some manner. It should be noted that seven households have suffered from a health condition in the last 12 months.

The vulnerable groups and individuals identified in the above categories are summarised in Table 4-2 (this includes the 17 households identified in December 2022) below with a justification for additional support and the type of support identified in Table 4.3:

Table 4-2. Vulnerability Analysis

Vulnerability Category	Identified in the project area	Identified as at risk
Young families or orphans (where the parents are under 30) who have lost both parents	•	•
Families with disabled parents or children	• 7 individuals belonging to 7 households along the OTL (31 people in the households)	•
A widower	•	•
A single parent family	•	•
A single retired person	•	•
An elderly person (over 65 years old)	• 5 individuals belonging to 3 households (3 additional	•

people in these households
not already counted)

Women in the family	•	• Group identified at risk
Anyone farming or investing in the land without a legal title	• 2 informal farming households identified including one household of 7 people and one single person household (8 individuals in total).	•
People in poor health	• 7 households along the OTL(same as above)	•
People who are discriminated against	•	•
Households in financial difficulty or under the international poverty line of \$2.15 per day	•	•
Households with a member who is addicted to drugs or alcohol	•	•

Each vulnerable households and groups, and those at risk are described in more detail below in Table 4-3 with proposed safeguards to ensure they are not disproportionately impacted and are able to take full advantage of project benefits.

Table 4-3. – Descriptions of Vulnerable Households

Vulnerability category	Description
Households with disability or poor health	<p>7 households were identified with disabilities in the family. This includes:</p> <ul style="list-style-type: none"> • One individual who suffered a respiratory illness • One individual who had Covid 19 • One individual who suffered physical injury • One household with a member with a mental disability • Onne household with a family member who is deaf • Two households with diabetes (type 2) <p>A vulnerability allowance equivalent to minimum wage will be provided for six months to the household.</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>Households will be subject to additional focused monitoring during implementation of the LRP and ffurther interventions to support these households may be implemented as a result of the focused monitoring results. Interventions may include:</p> <ul style="list-style-type: none"> • Extending the vulnerability beyond 6 months if necessary • Providing additional livelihood support if their household was unable to fully participate in the livelihood restoration options. • Providing support to them or family members to access employment opportunities with the project (such as assisting with registration) • Providing support to the household to access the compensation payments if needed (for example to support them opening a bank account).

Providing support to them to access existing government healthcare support.

An elderly person (over 65 years old)

3 households were identified.

A vulnerability allowance equivalent to minimum wage will be provided for six months to the household.

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.

Households will be subject to additional focused monitoring during implementation of the LRP and further interventions to support these households may be implemented as a result of the focused monitoring results. Interventions may include:

- Extending the vulnerability beyond 6 months if necessary
- Providing additional livelihood support if their household was unable to fully participate in the livelihood restoration options.
- Providing support to family members to access employment opportunities with the project (such as assisting with registration).
- Providing support to the household to access the compensation payments if needed (for example to support them opening a bank account).
- Providing support to them to access existing government support such as the state pension.

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.

For households that are significantly impacted, the LRP verification process will include both spouses and where signatures are required both spouses will be asked to sign.

Anyone farming or investing in the land without a legal title

Two households were identified.

Households will be subject to additional focused monitoring during implementation of the LRP.

A vulnerability allowance equivalent to minimum wage will be provided for six months to the household.

Employees and seasonal workers (if necessary)

This group is not necessarily vulnerable and should not be impacted by the project, however the project will ensure it engages with community leaders and monitors the community grievance mechanism to understand if there are any unanticipated impacts on employees and seasonal workers. If impacts are identified during implementation of the LRP the project will provide support in line with entitlement matrix and the above vulnerability safeguards where necessary.

5. Stakeholder Engagement

5.1 Approach Overview

The purpose of this section 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 Sherabad 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.

5.2 LRP Stakeholders and priority

Table 5-1.: 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 Surkhandarya Region on Investments • Khokim of Sherabad District • First Deputy Khokim of Sherabad District • Cadastre of Sherabad • Head of Ecology of Surkhandarya region • Head of department of investments, Sherabad Khokimiyat 	Medium
Community Organizations	<ul style="list-style-type: none"> • Cemetery director 	High
Community Representatives	<ul style="list-style-type: none"> • Bog'obod makhalla women • Leaders of Yangi er, Tong Yulduzi, Mehrgiyoh Makhallas • Makhalla chairs 	High
Land Users	<ul style="list-style-type: none"> • Farmers leasing and using land within the project area, surrounding the project area, and under the OHTL 	High
Community Members	<ul style="list-style-type: none"> • Bog'obod School №41 administration and teachers 	High

5.2.1 Gender Inclusion

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

- 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

5.3 Previous Engagement Activities

5.3.1 Suntrace Initial Environmental Examination

German consulting firm Suntrace undertook the Initial Environmental Examination for the current Project from November 2019 - October 2020 and as such have already conducted some preliminary stakeholder engagement. It was important to understand the depth and breadth of these consultations prior to conducting any further engagement as part of the ESIA and LRP to build up a picture of which stakeholders have been consulted, what has been discussed, and crucially which stakeholders have thus far not been consulted.

5.3.1.1 Methods

Initial consultations with local stakeholders in the project area of influence were conducted in November 2019 before the commencement of any project activity to inform them of the proposed project and obtain feedback (Suntrace, 2020). The second round of consultations were conducted in December 2019 and January 2020 when the technical and local environment consultants / specialists conducted a number of field visits for primary and secondary data collection. The Table 5-2 below outlines the details of the individuals met during this second round of consultation.

Table 5-2. List of Individuals Consulted in Stage 2 of Suntrace’s Environmental Examination

No. of Individual	Gender, age, occupation, place of residence	Date	Location
1	Man, 42 years, shepherd, Kuktash settlement.	7/3/2020	Karakyr upland- Solar plant site
2	Man, 30 years, shepherd.	7/3/2020	Karakyr upland- Chapanchi Mekhriyo settlement, Solar plant site
3	Man, 45 years, shepherd.	7/3/2020	Karakyr upland- Chapanchi Mekhriyo settlement, Solar plant site
4	Man, 60 years, shepherd.	11/3/2020	Karakyr upland-Muzrabat settlement
5	Man, 23 years, shepherd.	11/3/2020	Karakyr upland
6	Man, 60 years, Head of Buyuk Ipak Yuli settlement.	10/3/2020	Kampyrtepa, IBA Amudarya floodlands
7	Man, 63 years, shepherd.	11/3/2020	Karakyr upland- Yangier settlement
8	Man, 44 years, shepherd	11/3/2020	Karakyr upland-Yangier settlement, Solar plant site
9	Man, 44 years, shepherd.	11/3/2020	Karakyr upland-Solar plant site
10	Woman, 47 years, Head of Bogobod settlement, (this settlement locates to the North from Solar site).	11/3/2020	Karakyr upland-Solar plant site
11	Man, 57 years, famer.	12/3/2020	Karakyr upland-Solar plant site, Bogobod settlemen
12	Man, 65 years, Senior huntsman in Surkhandarya region, chief hunter at Aktepa hunting area (IBA Aktepa and three lakes).	9/3/2020	Dzharkurgan (transmission line

Source: (Suntrace, 2020)

5.3.1.1.1 Outcomes

The outcomes of these engagement activities yielded an understanding and appreciation of local and regional environmental and social issues. The main environmental issues identified during stakeholder consultations included increases in dust in the dry season and waste dumping associated with construction.

- Social issues identified and discussed during stakeholder consultations included:
- The proposed site is not used for animal grazing; the locals have other designated areas for grazing their livestock.
- However, the area in and around the proposed transmission line is used for the livestock / animal grazing.
- Overall, the proposed project was highly welcomed by the interviewed stakeholders / villagers.
- The stakeholders / villagers expressed dire necessity of the project for their overall development of the villages in the area, including improved access to electricity, particularly during the harsh winters and hot summers and improved quality of life.

- The local stakeholders / villagers hope to gain temporary employment during construction stage and a number of permanent employment positions at the solar PV plant.
- The stakeholders expressed concerns regarding the potential of damage to existing roads during construction and safety concerns due to presence of transmission towers during the operation stage.

5.3.2 AECOM ESIA

During the preparation of the ESIA an initial site visit was undertaken by the in-country project team which included some further stakeholder engagement activities. The site visit was conducted between 21st and 24th October 2021. This was followed up by additional site visits for the ESIA and LRP.

5.3.2.1 Methods

Stakeholder engagement is an important process at all ESIA stages however, it is particularly helpful to engage with relevant stakeholders during the early stages of the ESIA as their inputs can be considered in the assessment of impacts and the design of mitigation, management, and enhancement measures. A preliminary list of project stakeholders was identified prior to the site visit. Stakeholders identified include individuals, groups, and organizations that may be affected by or may influence project development, either positively or negatively. The stakeholders identified and engaged with throughout the site visit are in the Table 5-3 below.

Table 5-3. Stakeholder groups engaged during site visit

Stakeholder Group	Stakeholders
Local Government Representatives	Deputy Khokim of Surkhandarya Region on Investments Khokim of Sherabad District First Deputy Khokim of Sherabad District Cadastre of Sherabad Head of Ecology of Surkhandarya region Head of department of investments, Sherabad Khokimiyat Chair of Bog'obod makhalla Specialist on women issues of Bog'obod makhalla
Community Organizations	Cemetery director
Community Representatives	Bog'obod makhalla women Leaders of Yangi er, Tong Yulduzi, Mehrgiyoh Makhallas
Land Users	Farmers from Sherabad along the OHL route Farmer using land west of PV Site (outside the project) Informal farmer using land in the southeast of the project area (now excluded). Two leaseholders with leases inside the Solar PV Area.
Community Members	Bog'obod School №41 administration and teachers
Specialists, Academics	Local Grid Representative Head of Surkhandarya Geology department

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

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

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

5.3.2.2 Outcomes

Throughout the site visit a range of stakeholders a range of stakeholders were engaged with including local government (Figure 5-1-1), local schools (Figure 5-2-2), community leaders (Figure 5-3-3), and farmers (Figure 5-4-4). Notes were taken during each stakeholder meeting. Key issues discussed at each meeting are presented below.



Figure 5-1. Meeting with the women of Bog'obod makhalla



Figure 5-2. Meeting with teachers and administration of School №41



Figure 5-3. Meeting with mahalla leaders and cemetery representatives of Muzrabad district



Figure 5-4. Meeting with farmers

5.3.3 LRP Phase

5.3.3.1 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 5-4: Stakeholders engaged with throughout the LRP site visits

Stakeholder Group	Stakeholders
Local Government Representatives	Deputy Khokim of Surkhandarya Region on Investments
	Khokim of Sherabad District
	Deputy Khokimiat on Women and Family Issues
	Deputy Khokimiat on Youth
	First Deputy Khokim of Sherabad District
	Cadastre of Sherabad
	Head of Regional Agricultural Department
	Head of department of investments, Sherabad Khokimiyat
Community Representatives	Bogobod Makhallas
	Community Members
	Community Leaders
Land Users	Cotton Farming Cluster
	Prison Managers under the OTL
	Informal farmer using land in the southeast of the project area (now excluded).Leaseholders in the Solar PV area
	Leaseholders under the OTL

Engagement with Stakeholders during the LRP phase can be broken down into the following tasks:

- Disclosure of the LRP process to the community: 15th -16th August 2022.
- Socio Economic Census of households with leaseholds impacted by the project: 29th August – 2nd September 2022.
- Stakeholder Interviews and workshops: 17th - 18th September 2022
- Valuation meetings with households with land, leaseholders, assets or crops impacted by the project: 15th September – 9th December 2022.
- Additional socio-economic census and engagement with 17 new households identified on 7th December 2022.

All engagements that have occurred as part of the LRP process are detailed in Table 5-5 below.

5.3.3.2 Outcomes

As a result of the site visit the following outcomes were understood:

- Herders do not use the project site except for occasionally and that there is an abundance of superior grazing land to the north of Solar PV Area. The herders are not professionals, and they take rotations to herd the community livestock. The Mahallas confirmed that there is an abundance of other land to the north of the site which is actually more suitable for herding and that the project area and so there is no impact on herding as a result of the project. The Mahallas estimate there are 10 herders with 200 cows and 900 sheep in the area to the north of the project.
- The informal farmer with a house on the southeast boundary wished to remain and be employed by the project. He currently leases land just outside of the project border but chooses not to farm this land because there is not a consistent supply of irrigation water. Irrigation channels runs to his leasehold from the north of the site but these typically run dry in summer. The informal farmer therefore farms further south within the previous project boundary (since moved) and pumps water from the

south in the summer. The engagement with the informal farmer ultimately resulted in the project boundary being changed to avoid this farmers farmland (except for a store building and oven which will be compensated)

- Women typically engage in seasonal farm work including the collection of cotton, wheat harvest and working in the textile industry. Workers will typically pick 100kg per day and get paid around 150,000 som (10 days of work will earn them roughly 100 USD). These women will however not be impacted by the project due to the very small land take along the OTL and the seasonal and changing nature of their employment which is typically on a day-to-day basis
- Women are very active in the Mahalla because they have more time compared to men who are employed. Most of the women in the leadership are also seasonal workers working in the farms during the harvest periods (October and November) for wheat and cotton. None have worked on the Solar PV Area. The farmers know that the women are available for seasonal work and will contact them as a group to help harvest.
- The Mahallas have a telegram group where they contact each other for work, but also to call meetings.
- The main challenge in the community is the lack of water for irrigation, there is also no gas and poor roads. The Community is however supportive of the project and is hoping the construction will bring jobs
- The cemetery is used by the community to the south.
- The leadership have requested bicycles to help get around. One of the Mahallas is keen to receive advice from Masdar on solar technology, they can afford to buy the solar panels, but they need advice and technical support from Masdar for small domestic solar.
- The cluster farm makes organic cotton, it is a large company owned by another company in the UK, and originally from Russia. The cluster farm has farming contract families who work parcels of land to produce the cotton, they have an allocated quota they must produce, and then they are paid a wage. If workers make a surplus they are allowed to sell this anywhere but they always sell this to the cluster due to lower transaction costs. The cluster also buys from other farms in the area. All crops in the ground inside the cluster farm belong to the company and not the workers.
- The preference of the cluster farm is to have an agreement with Masdar by which they ensure the wages remain the same and the compensation will be handled by the cluster.
- Leasehold SB070 is owned by a farmer who does not use the land inside the Solar PV Area and has alternative irrigated land where they have a pomegranate orchard. Since hearing about the project they stated they would like to use the land for herding in the future but currently do not.
- Leasehold SB064 is owned by a farmer who does not reside in Uzbekistan but has an agreement with the informal farmer who uses the land. Since hearing about the project they stated they would like to use the land for herding in the future but currently do not.

Table 5-5. List of all engagements during the LRP phase

Stakeholder Category	Stakeholder Engagement Methods	Location/ Timeline	Purpose	Consultation Disclosure Materials	Mean of Advance Notification	Responsibility
Disclosure of LRP process Community leaders from all three districts, Khokimiyat representative from all three districts.	Face to face community meeting	15 th – 16 th 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 	Disclosure PowerPoint Presentation	Advertisement in Telegram Group	GBI

Stakeholder Category	Stakeholder Engagement Methods	Location/ Timeline	Purpose	Consultation Disclosure Materials	Mean of Advance Notification	Responsibility
			<ul style="list-style-type: none"> Upcoming surveys and engagements Contact details for the grievance mechanism 			
Socio-Economic Survey Interview with all impacted Leaseholders and informal farmer.	One on one interviews	29 th August – 2 nd Sept Various Locations	<ul style="list-style-type: none"> Gathering demographic information Gathering socio-economic information Gathering livelihood information 	N/A	Advance notice by phone	GBI
Valuation Meeting with all impacted Leaseholders	One on one interviews	29 th August – 2 nd Sept Various Locations	<ul style="list-style-type: none"> Gathering information for valuation 	Grievance Mechanism Leaflet Cut-off date form	Advance notice by phone	GBI
Socio Economic Survey interview with cluster farmers	One on one interviews	8-9 th of September 2022 Various Locations	<ul style="list-style-type: none"> Gathering demographic information Gathering socio-economic information Gathering livelihood information 	N/A	Advance notice by phone	GBI
Deputy Khokimiyat for Sherabad	One on one interviews	17 th September Khokimiyat Office	<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 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 herding rotations) 	N/A	Advance notice by phone	AECOM & GBI

Stakeholder Category	Stakeholder Engagement Methods	Location/ Timeline	Purpose	Consultation Disclosure Materials	Mean of Advance Notification	Responsibility
			<ul style="list-style-type: none"> Potential options for livelihood restoration and support 			
Deputy Khokimiat on Women and Family Issues	One on one interviews	17 th September Khokimiyat Office	<ul style="list-style-type: none"> Employment of women Government support to vulnerable women The “Iron Notepad” Issues faced by women in farming Farmworkers and women in seasonal work 	N/A	Advance notice by phone	AECOM & GBI
Deputy Khokimiat on Youth	One on one interviews	17 th September Khokimiyat Office	<ul style="list-style-type: none"> Employment of youth Government support to vulnerable youth The “Iron Notepad” Issues faced by women in farming Farmworkers and women in seasonal work 	N/A	Advance notice by phone	AECOM & GBI
Head of Regional Agricultural Department Representative of Cadastre Department	One on one interviews	17 th September Khokimiyat Office Regional Agricultural Department Office	<ul style="list-style-type: none"> Current land use types in the project area Current challenges with farming and livelihoods Known and potential impacts on stakeholders from the project Identified discrepancies with the land order and Masdar Map 	N/A	Advance notice by phone	AECOM & GBI
Cotton Farming Cluster	One on one interviews	17 th September Khokimiyat Office	<ul style="list-style-type: none"> Gathered data regarding how the cotton farm operates Understanding how employees/farming families might be impacted by the OTL 	N/A	Advance notice by phone	AECOM & GBI

Stakeholder Category	Stakeholder Engagement Methods	Location/ Timeline	Purpose	Consultation Disclosure Materials	Mean of Advance Notification	Responsibility
			<ul style="list-style-type: none"> Confirmed that all negotiations must go through the cluster farm as the employer Agreed that a legal MoA could be established between Masdar and the cluster to protect the livelihood of the employees 			
Bogobod Mahallas Community Members Community Leaders	Group Meeting	17 th September Khokimiyat Office	<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 Current challenges with farming and livelihoods If herders currently use the land Confirmed where preferred herding areas are to the north of the site Discussing how many of Mahallas are women who are also seasonal workers in the cotton farms 	N/A	Advance notice on Telegram channel	AECOM & GBI
Informal Farmer Representative of Cadastre Department	One on one interviews	18 th September Solar PV Area	<ul style="list-style-type: none"> Discussed the project and how it might be impacted Discussed ways to avoid his farm and his house Gathered information about his socio-economic circumstances Discussed his alternative land and how he accesses water on the land he farms informally Discussed his perceptions of the project 	N/A	N/A	AECOM & GBI

Stakeholder Category	Stakeholder Engagement Methods	Location/ Timeline	Purpose	Consultation Disclosure Materials	Mean of Advance Notification	Responsibility
Neighbouring Farmer Representative of Cadastre Department	One on one interviews	18 th September Solar PV Area	<ul style="list-style-type: none"> Discussed the progress of the project Re confirmed that his land will not be impacted 	N/A	N/A	AECOM & GBI
Son of Farmer with leasehold SB070 Representative of Cadastre Department	One on one interviews	Residence of Farmer	<ul style="list-style-type: none"> Discussed how his land in the Solar PV area is currently being used and it was explained that he does not use the land 	N/A	N/A	AECOM & GBI
Leaseholder SB070	Phone call	Phone call	<ul style="list-style-type: none"> Discussed how his land in the Solar PV area is currently being used. He explained that he intends to use the area for herding. 	N/A	N/A	AECOM & GBI
Leaseholder SB064	Phone call	Phone call	<ul style="list-style-type: none"> Discussed how his land in the Solar PV area is currently being used. He explained that he intends to use the area for herding. 	N/A	N/A	GBI
All farmers along the OTL. Mahallas district representatives.	One to one meetings	14 th December 2022	<ul style="list-style-type: none"> Provided leaflet about the project Presented the land take Presented the impact in sterilisation zone Confirmed that cash compensation will be given Confirmed amount of cash compensation (where available) Communicated grievance mechanism Gathered feedback on preferences for livelihood restoration. 	<ul style="list-style-type: none"> Project leaflets Summary of entitlement matrix Livelihood restoration options 	All farmers along the OTL	All farmers along the OTL

Stakeholder Category	Stakeholder Engagement Methods	Location/ Timeline	Purpose	Consultation Disclosure Materials	Mean of Advance Notification	Responsibility
17 new households including: 15 with individual land rights obtained through the auction in 2022 for 10 years of temporary use. 1 informal farmer 1 household with land adjacent to the household house	One to one interviews and phone calls	13 th – 15 th December 2022 at the district offices.	<ul style="list-style-type: none"> • Ask them to fill in verification survey and sign • Gathered socio-economic data as part of the household survey. • Provided leaflet about the project • Presented the land take • Presented the impact in sterilisation zone • Confirmed that cash compensation will be given • Confirmed amount of cash compensation (where available) • Communicated grievance mechanism • Gathered feedback on preferences for livelihood restoration. • Ask them to fill in verification survey and sign 	<ul style="list-style-type: none"> • Project leaflets • Summary of entitlement matrix • Livelihood restoration options 	N/A	GBI



Figure 5-5. Meeting with: Bogobod Mahallas, Community Members, Community Leaders



Figure 5-6. Meeting with: Informal Farmer



Figure 5-7. Meeting with son of leasehold SB070 in front of their alternative land

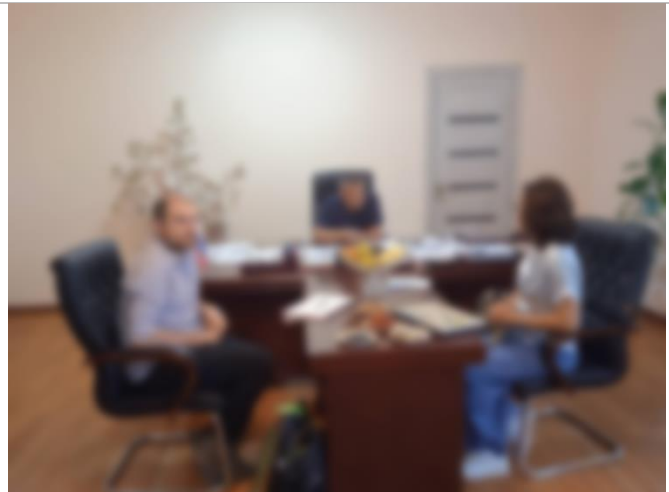


Figure 5-8. Meeting with farming cluster along the OTL

5.3.4 Lenders Site visit

There were also engagements during the lender site visit of. 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.

The lenders 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 lenders regarding affected communities by AECOM and GBI social team. Full outcomes of these previous engagements can be found in the SEP.

Part of the lender 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 women's income earning capacity, grazing on pasture land and farming. Other socio-economic considerations were highlighted including the Project access road, a nearby cemetery, formal employment opportunities for women, vulnerable households, welfare, indigenous peoples, GBV, archaeology, and construction worker facilities. The lenders 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. During the

Lenders site visit a herder was observed transiting through the site and when engaged confirmed that he was Tajik. Steps will be taken during the disclosure to ensure that transitory herders will be made aware of the project (and communications in Tajik will be conducted where necessary).

5.3.5 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 and marks eligibility to receive compensation or resettlement assistance. 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 communicated to affected leaseholders during the valuation survey (which commenced on the 15th September and was finalised on 9th December) and a form was signed by each leaseholder to confirm they understood that the cut-off-date will start from the end of their individual survey. A copy of this form is included in Figure 5-9 below. On the final cut-off date (9th December 2022) an announcement was made in Uzbek through the local Khokimiyat Telegram channel which is district wide, and on the farmers telegram channel (below is the translation in English):

“All Valuations for crops and infrastructure affected by the project are now completed as of 9th December 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.”

Masdar Sherabad 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 5-9. Farmer acknowledgement form

5.4 Future planned engagements

There are several future engagements which are planned as part of the Livelihood Restoration Planning and Compensation phase is still ongoing. These engagements are described below.

5.4.1 LRP Verification

The LRP verification process will involve consulting all affected parties to verify their acceptance of all compensation arrangements. Participants will be notified 2 weeks prior to the verification process and an information pack will be provided to them which includes the following:

- 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
- Discuss 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.

A schedule of the LRP Verification activities is included below in table 5-6.

5.4.2 LRP Disclosure

As per lender requirements, the LRP will be disclosed to all affected stakeholders along with the ESIA document. The LRP, ESIA and their Non-technical summaries will be translated into Uzbek and placed on the website of project lenders and placed in appropriate public spaces accessible to stakeholders including affected communities. 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:

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

- LRP Summary (Appendix A of this document)

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

- ESIA.
- Non-technical summary of the final ESIA and draft LRP approved by lenders.
- Project Leaflets

The disclosure will have the following purpose:

- Verifying asset survey and valuation outputs with affected landowners,
- informing affected landowners and herders about applicable valuation methods and compensation and resettlement assistance principles,
- Presenting individual and collective entitlements, in a lucid and transparent manner.
- Any objections to the outcomes of asset inventory and subsequent valuation will warrant a follow-up, participatory asset survey and/or reiteration of contested valuation aspects.

Table 5-6. LRP Verification and Disclosure Engagement Programme

Date	Stakeholder Category	Stakeholder Engagement Methods	Location/	Date of Notification	Method of notification	Purpose	Responsibility
LRP Verification (Consultation on Good Draft LRP)							
TBC	Community leaders Khokimiyat representative Representative of Cadastral office Representative of the Agricultural Department	Face to face	Khokimiyat	Two weeks prior	Phone Call & Telegram	<ul style="list-style-type: none"> • Give them leaflet about the project (prior to meeting) • Discuss the identified social impacts: <ul style="list-style-type: none"> ○ Access to grazing areas ○ Land take for OTL ○ Access route ○ Historic impacts • Present the community benefit options • Communicate grievance mechanism (in detail) 	GBI
TBC	Executing Agency (Ministry of Energy)	Face to face	Tashkent	Two weeks prior		<ul style="list-style-type: none"> • Provide good draft LRP and all summary documents • Seek endorsement from executing agency. 	GBI
TBC	Community leaders and Mahallas	Group Meeting	Mahallas	Two weeks prior	Phone Call & Telegram	<ul style="list-style-type: none"> • Give them leaflet about the project (prior to meeting) • Discuss the identified social impacts: <ul style="list-style-type: none"> ○ Access to grazing areas ○ Land take for OTL ○ Access route • Present the community benefit options • Communicate grievance mechanism (in detail) 	GBI
TBC	All farmers along the OTL and spouses	Group Meeting	Khokimiyat	Two weeks prior	Phone Call & Telegram	<ul style="list-style-type: none"> • Give them leaflet about the project (prior to meeting) • Present the land take • Present the impact in sterilisation zone • Confirm that cash compensation will be given • Confirm amount of cash compensation (if possible) • Communicate grievance mechanism (details) • Ask them to fill in verification survey and sign 	GBI
TBC	Additional small leaseholders and informal land users along the OTL which were not previously surveyed.	Group meeting & one to one surveys.	Mahallas	Two weeks prior	Phone Call & Telegram	<ul style="list-style-type: none"> • Give them leaflet about the project (prior to meeting) • Present the land take • Discuss livelihood restoration options • Present the impact in sterilisation zone • Confirm that cash compensation will be given • Confirm amount of cash compensation (if possible) • Communicate grievance mechanism (details) 	GBI

Date	Stakeholder Category	Stakeholder Engagement Methods	Location/	Date of Notification	Method of notification	Purpose	Responsibility
						<ul style="list-style-type: none"> Conduct socio-economic census 	
TBC	Discussion with women's only groups and specialist from the women's committee	Face to face meeting	Khokimiyat	Two weeks prior	Phone Call	<ul style="list-style-type: none"> Provide "good draft" LRPs Provide summary materials Gather feedback 	
TBC	Discussion with youth groups only groups and specialist from the youth committee	Face to face meeting	Khokimiyat	Two weeks prior	Phone Call	<ul style="list-style-type: none"> Provide "good draft" LRPs Provide summary materials Gather feedback 	
ESIA and LRP Disclosure							
TBC	All stakeholder groups	Disclosure online Placement of paper versions of the ESIA in public places Leaflets in public places Media announcements	TBC		Media announcements	<ul style="list-style-type: none"> Disclose and discuss the results of the ESIA study online Disclose and discuss the results of the LRP study 	GBI
TBC	Regional Government Agencies	One-to-one meetings	TBC	Two weeks prior	Phone Call & Telegram	<ul style="list-style-type: none"> Discuss/coordinate the public hearing event on the local ESIA and LRP results 	GBI
TBC	Local libraries or public spare	One-to-one meetings Phone calls Placement of paper versions of the ESIA in public places ² Placement of leaflets	TBC	Two weeks prior	Phone Call & Telegram	<ul style="list-style-type: none"> Arrange disclosure of the local ESIA and LRP package 	GBI
TBC	Discussion with women's only groups and specialist from the women's committee	Public hearing event Group Meeting	TBC	Two weeks prior	Phone Call & Telegram	<ul style="list-style-type: none"> Disclose and discuss the results of the ESIA and LRP study Alternative meeting to the public hearing 	GBI

Date	Stakeholder Category	Stakeholder Engagement Methods	Location/	Date of Notification	Method of notification	Purpose	Responsibility
TBC	Discussion with prison	Group meeting	TBC	Two weeks prior	Phone Call & Telegram	<ul style="list-style-type: none"> • Disclose and discuss the results of the ESIA and LRP study 	

5.5 Engagement for LRP Implementation

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

- The company - 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 11.1.
- The local Khokimiyat will also be involved in resettlement activities, as well as relevant government agencies.
- 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.

5.6 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
- Widowers
- A single parent family
- A single retired person
- An elderly person (over 65 years old)
- Marginalised 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

This list should however be considered a guide and 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 above. A full vulnerability analysis is provided which highlights any groups that could be impacted or potentially impacted in chapter 4. Analysis of the socio-economic survey was used to assess if vulnerable people are present in the households of affected community members.

The project will ensure that vulnerable groups are represented in engagements and their voices are heard by:

- Allowing women in the household to be consulted separately and co-sign verification and compensation documents where necessary.
- Ensuring vulnerable groups are included in any committees set up by the project.
- Producing engagement materials in a culturally appropriate manor using visuals and diagrams where possible to assist those who speak another language or are illiterate.
- Ensuring young people will be given special attention in livelihood restoration and community development programmes
- Conduct engagement with a wide range of methods to ensure accessibility to all stakeholders.

6. Grievance Mechanism

6.1 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), ADB Safeguard Policy Statement (2009) and the United Nations Guiding Principles (UNGP) on Business and Human Rights. which present various principles and good practice measures on grievance mechanisms. The Grievance Mechanism procedure and its Grievance Form are available in the Project’s Stakeholder Engagement Plan.

The objectives of the Grievance Mechanism are to:

- Establish a procedure for receiving, recording or documenting and addressing complains 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.
- Ensure that Project stakeholders have access to a system that is legitimate, accessible, predictable, equitable, rights-compatible and transparent.

6.2 Responsibilities

The grievance mechanism implementation team shall include of the Company E&S Manager, and the appointed Community Liaison Officer (CLO) as described in Table 6-1 Clear lines of responsibility and accountability will be established within the implementation team. All members of the team will be adequately trained on the grievance mechanism.

The CLO will be an Uzbek national who is fluent in English, Russian and Uzbek and familiar with the local community and local customs.

Table 6-1, Roles and responsibilities in the management of grievances

Role/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.

Any person or organisation may send comments and/or complaints in several ways:

- By telephone
- By email
- By direct message (text or telegram)
- Online: By email and/or through an online form
- Mailbox at the project gate and accessible community locations
- During meetings with the CLO

Table 6-2. Responsible Persons and Contact Details

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

6.3 Implementation of the Grievance Mechanism

All information about grievance procedures, grievance forms, and responses will be available in Russian and in Uzbek. Access to the mechanism will be free of cost. All written and/or verbal complaint will be recorded by the Masdar CLO. Masdar will follow the process’ steps illustrated in section 6.5 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 present Grievance Mechanism is not functional.

6.4 Publicizing Grievance Management Procedures

The grievance contact details have been previously communicated to the community during the disclosure meetings and all meetings thereafter. During the valuation meetings, a leaflet was handed to all farmers along the OTL which contained a summary of the grievance mechanism. A poster was provided to the Khokimiyat and Mahallas. The grievance mechanism was also communicated during meetings held with community members in November 2022.

The grievance mechanisms will be publicized in the future through posters (located at the project site, council residential clusters in a 5km buffer of the site), future consultation meetings with the community, letters (and online letters) to local and provincial authorities.

6.5 Implementing the grievance mechanism

A flow chart below in Figure 6-1-1 illustrates the process for submitting, receiving and addressing grievances.

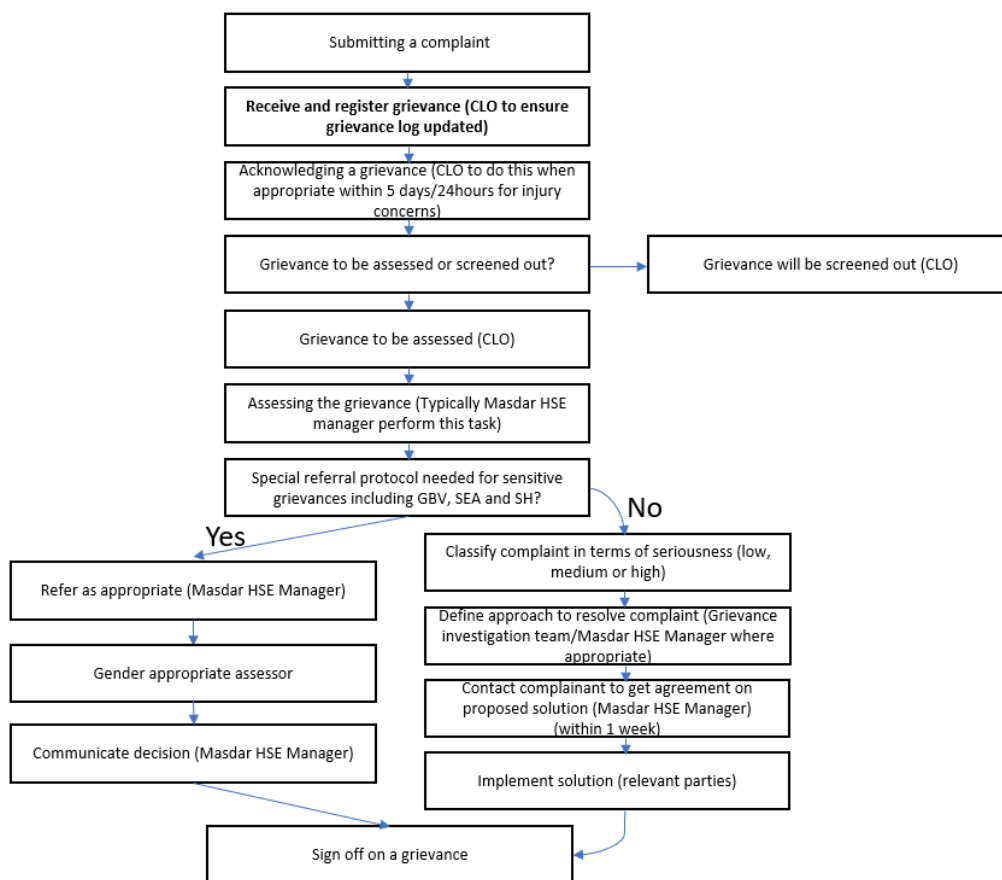


Figure 6-1. Grievance process flow chart

Once received, the grievances will be acknowledged as soon as possible, (within 5 or less working days from receipt). A formal confirmation—with a complaint number, or other identifier, and an initial timeline for response will be provided by the Project’s CLO. Most grievances should be resolved within one month of receiving the grievance, for more complex investigations, the complainant will be updated within two weeks of the grievance being received and an updated timeline of how it will be resolved will be provided. Masdar will issue a first letter of acknowledgement, stating what is outside the scope of the mechanism and what alternatives communities can use to address issues.

A grievance log will be kept, documenting all the actions taken to address each grievance. Masdar will take full responsibility for investigating the details of grievances coming through its grievance mechanism, following the principle of “no cost”. The E&S Manager will be responsible for the investigation of serious grievances but will delegate to the project CLO when appropriate.

All grievances will be kept confidential within the E&S team as far as possible and only shared only shared with other employees where it is necessary for the resolution of the grievance. In some cases where third where third parties must be involved, such as contractors or the LRP committee the grievant will be notified, and permission obtained before the information is shared.

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

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

During the complaint assessment, 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.

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.

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 considers 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, The Project will 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 a confirmation letter from the complainant and/or photos or other appropriate evidence that the grievance has been closed)

6.6 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.

6.7 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

6.8 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.

7. Legal & Policy Framework

7.1 National Legal Framework

7.1.1 The Constitution of the Republic of Uzbekistan

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

7.1.2 Land Code

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

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

Generally, all land in Uzbekistan is state property. However, in March 2020 the *Law on Privatization of Non-Agricultural land Plots* came into effect (see 7.1.7.)

7.1.3 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.

7.1.4 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. If however unanticipated job losses do occur, the project will compensate affected employees (formal and informal) for lost jobs, whether they are temporary or permanent.

7.1.5 Resolution no.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.

7.1.6 Resolution of the Cabinet of Ministers no.146 "About the Measures of Improvement the Order of Provision of Land Plots for Implementation of Urban Development Activity and for Other Non-Agricultural Needs"

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

7.1.7 The Law of the Republic of Uzbekistan #ZRU-552 "About Privatization of Non-Agricultural Land Plots"

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

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

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

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

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 the table below.

Table 7-1. Institutional framework of land privatisation in Uzbekistan

Institution	Responsibilities
Cabinet of Ministers	<ul 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)	<ul 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	<ul 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)	<ul 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	<ul style="list-style-type: none"> (1) Organise e-auctions and ensure their proper execution

Source: Kosta Legal (2019)

7.1.8 Resolution of the Government of Uzbekistan no.3857 “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.

7.1.9 Law of Uzbekistan #LRU-336 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.

7.1.10 Resolution of the President of Uzbekistan no.5495 “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.

7.1.11 Resolution no.1047 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.

7.1.12 The Law “On Appeals of Physical and Legal Persons” No. ZRU-378

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.

7.1.13 Resolution of Cabinet of Ministers no.1050 “About Approval of Rules of Protection of Power Supply Facilities” of 26th December 2018

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.

7.1.14 Resolution of the Cabinet of Ministers no.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).

7.1.15 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.

7.1.16 The Law “about procedures of seizure of land for social needs with compensation” of 29 June 2022 No. ZRU-781

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.

7.1.17 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).

7.1.18 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. The new law sets out the different types of pasture found in the country. The law also outlines that there is a role to be played by the State in pasture protection. It furthermore describes the responsibilities of different stakeholders in pasture management, as well as pasture conservation. This includes pasture restoration and protection, such as through monitoring activities such as pasture assessments.

7.2 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”. 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.

7.3 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 7-1 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).

It is important that the LRP builds on and utilises the existing social protection systems. Vulnerable individuals identified as part of this project will be encouraged to seek support from the existing social protection systems as well as receiving additional support from the project.

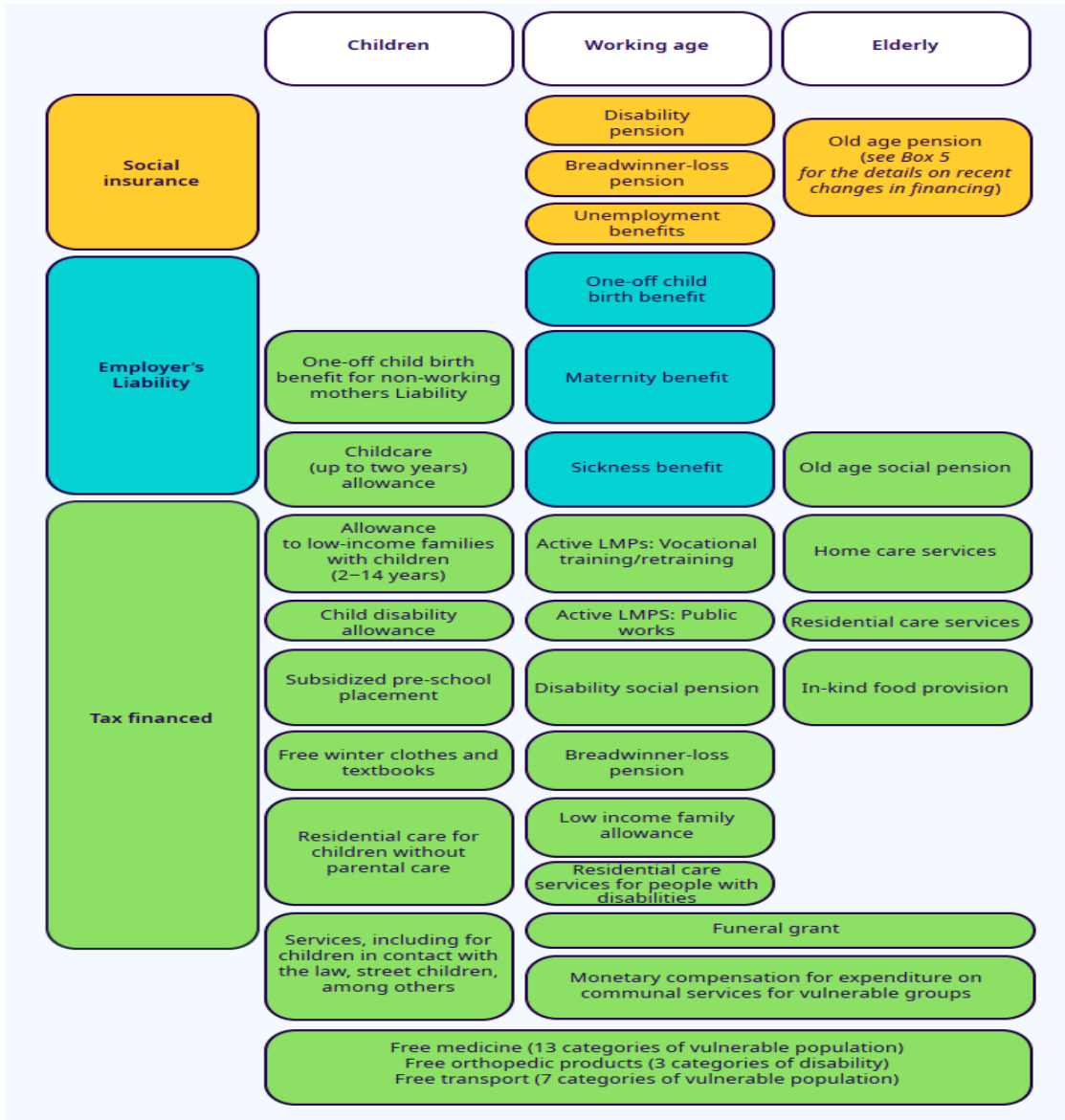


Figure 7-1. Uzbekistan social protection system

7.4 Land Governance in the National Context

Lifelong inheritable land tenure is available to Uzbek citizens but only in the following cases:

- Dehkan farms (individual or family farms)
- Individual homestead construction and household operation
- Collective orchards and vineyards

Land plots can be provided to legal and physical entities for a continuous, long-term, or temporary tenure and use. This is usually for agricultural or forest land, as per Head 4, Article 20 of the Land Code (1998). Land plots are usually leased to citizens and legal entities by mayors (or *hokims*) of districts, towns, and cities. However, if any foreign element is involved, the central Government of Uzbekistan must be the leasing entity, as per Head 4, Article 24 of the Land Code (1998).

Users pay for the use of the land in the form of land tax. Under Head 4, Article 24 (1998) of the Land Code it is not permitted to sublease the leased land plot as a whole or even part of it. This provision further stipulates that leased land plots cannot be sold and purchased, cannot serve as collateral, and cannot be donated or exchanged. A specific form of subleasing, “intrafarm leasing”, is permitted only to worker families within a *shirkat* (former collective farms).

For private farms land is usually leased for approximately 30 years but can range between a minimum of 10 years and a maximum of 50 years. Farms are subject to some state interventions (e.g. quotas for the production of cotton and wheat) but for the most part they are governed by local authorities (or *hokimiyat*). Hokimiyat may cancel leases for various transgressions, usually if the leaseholder fails to comply with the contract terms (e.g. the cropping plan).

Most land around the project site is organized under the Dehkan modality. Dehkan farms are rural household producers operating on small household plots received on lifetime inheritable tenure rights. Dehkan farms are numerous and are considered to be very important as they satisfy basic needs of the large rural population including food, employment, income. Dehkan farms tend to specialize in vegetables, fruit, meat, milk, eggs and other animal related products. Dehkans often work for private farmers – for cash or on the basis of a sharecropping agreement (dehkans receive a percentage of the yield) (Melnikovová, L., & Havrland, B., 2016)

7.5 Lenders Standards

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 have been followed and applied to the Project development and implementation since they are relevant to involuntary resettlement:

- IFC Performance Standards (IFC, 2012).
- IFC Environmental, Health and Safety (EHS) General Guidelines, including wastewater and ambient water quality, waste management and hazardous materials management, noise management, occupational health and safety, and construction and decommissioning guidelines (IFC, 2007a).
- IFC EHS Guidelines for Electric Power Transmission and Distribution (IFC, 2007b).
- European Bank for Reconstruction and Development (EBRD) Environmental and Social Policy, including Performance Requirements (EBRD, 2019)
- Asian Development Bank (ADB) Safeguard Policy Statement (ADB, 2009).

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

7.5.1 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.
- IIFC 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. This 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.

7.5.2 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 most important aspects of Safeguard Requirement 2 include vulnerability and livelihood restoration measures. 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. Specific requirements relating to the LRP from the ADB SPS 2009 include:

- Disclose a draft and final LARP, including documentation of the consultation process on time, before project appraisal, in an accessible place and a form and language(s) understandable to affected persons and other stakeholders. Disclose the final LARP and its updates to affected persons and other stakeholders.
- Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement LARP under close supervision throughout project implementation.

The commencement of physical civil works is conditioned to full implementation of LARPs endorsed by ADB, and after ADB approves LARPs implementation Compliance Reports for the respective project components/sections with land acquisition and resettlement impact. For resettlement impacts that will be identified based on the detail design of projects, the SPV will prepare and implement final LARPs after approval of ADB. ADB and the SPV will disclose the approved final LARPs on their websites and the SPV will disclose them to the AHs and communities. After the final LARP approval, the SPV will pay compensations and allowances to AHs based on the final LARP. After AHs receive full compensations and allowances, the SPV shall submit LARPs implementation Compliance Reports with confirmation of payment of all compensations, and if applicable, assistance allowances to eligible AHs, to ADB for clearance. After ADB confirms, the civil works can start at the land acquisition and resettlement affected project sites. Resettlement safeguard monitoring shall be continued throughout the project implementation period until the restoration of

temporarily used land and semi-annual monitoring reports will be submitted to ADB for review and disclosure. If unanticipated impacts will be identified during the civil works that were not covered in the LARPs, the SPV will prepare and implement LARP Addendum or corrective action plan (CAP), and submit LARP compliance reports for ADB approval.

7.5.3 The Land Acquisition and Resettlement Framework (LARF)

ADB were also part of the development process for the Land Acquisition and Resettlement Framework (LARF) for this project as part of a Partial Credit Guarantee Facility for the Uzbekistan Solar PPP Program. The key specific requirements of this framework which apply to this project (beyond the standard ADB and lender requirements) include:

- A rehabilitation allowance equivalent to 5 months of minimum wage will be available to all vulnerable households
- The valuation procedures in Uzbekistan are outlined in section 64 - 83 of the LARF and are applied to this LRP as included in section 10.

As stated in the LARF, if a LAR impact is likely to occur, the SPV will prepare and implement LRP(s), and prepare a LRP Compliance Reports (for project components or subprojects with LRP) confirming the LRPs implementation completion including payment of compensation to all AHs and assistance allowances to eligible Affected Households. Preparing the LRPs Compliance Report will include the following activities:

- Review LRPs and internal monitoring reports, principles of valuation of losses, compensation, and payments processes and timeframe;
- Conduct interviews with at least 25% of Affected Households to verify they received compensations and evaluate the level of their satisfaction with type and amount of compensations;
- Assess satisfaction of AHs on valuation of their losses and acquired assets, time taken to process and deliver compensations to AHs, full amount received by Affected Households as envisaged in LARPs;
- For any identified incompliances, gaps, or undelivered compensation cases (if relevant), propose corrective actions to solve the issue and ensure compliance with LARF and ADB SPS (2009);
- Recommend lessons learned and development of recommendations for future projects to ensure compliance.

Commencement of civil works for such components will be conditional to ADB's review and approval of the LRP implementation.

This LRP has been developed in line with the principles of the LARF however in the case of any inconsistencies on entitlements or commitments the highest level of commitment or the most precautionary approach will apply.

7.5.4 European Bank for Reconstruction and Development Requirements

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

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

- An environmental and social assessment should be undertaken early on to identify if there will be economic or physical displacement due to the Project. The Project should also consider whether additional land will be required at a later stage.
- If displacement is to occur due to the Project, there should be socio-economic baseline established in order to determine the extent and significance of impacts, as well as taking into account the views of project affected persons and stakeholders, through meaningful consultations.
- If risks and impacts are likely from physical or economic displacement due to the Project, the client will engage resettlement experts in the process to develop resettlement planning documentation. This should be designed to provide measures to address impacts on anyone displaced by the Project. EBRD will determine the nature of the document through the environmental and social assessment process. Alternatives should also be considered in resettlement documentation, and the detail of the plan will be proportionate to the size and impacts of the Project.
- Avoidance of displacement where applicable (unless adverse health impacts are likely), or minimization of displacement if this is not possible.
- Negotiated settlements to acquire land should take place, even if it has legal means to gain access without the consent of the seller. This can be achieved through providing fair and appropriate compensation to those affected by the Project.

- Special considerations should be made for vulnerable groups, especially, at the time of socio-economic baseline surveys, for a vulnerability analysis, during stakeholder consultations, when planning assistance measures, during impact assessment as well as mitigation and monitoring. Measures should be put in place for meaningful participation of women, and the Project should seek to understand differential impacts of land acquisition, land use restrictions and involuntary resettlement on men and women. Delivery and establishment of compensation shall take into account gender issues. Provisions will be made where national law does not recognise the rights of women, to ensure women can have security of tenure, where possible. During consultations, women's views shall be represented fairly and factored into planning and implementation. Women's and men's preferences for compensation and asset replacement should be documented. Furthermore, any opportunities arising from the Project should be made equal to both men and women affected by the Project.
- A census of the Project area should be carried out by the client, to determine who will be affected by the Project, and who will be entitled to compensation and assistance. An inventory of affected assets should be completed, for further valuation of such assets. A cut-off date for eligibility should also be established as part of the Project, based on legislation or the end date of the census. The cut-off date will be well documented and shared throughout the Project area regularly.
- Valuation of affected assets should be at full replacement cost and performed by qualified 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.

7.5.5 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 includes preparation of an LRP. The LRP 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. The LRP 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 involing 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.

7.5.6 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.

7.6 Gap Analysis between National and International Requirements

Table 7-2. Comparison between national legislation in Uzbekistan and Lenders Standards (ADB, EBRD and IFC) of the project

Topic	Lender standards associated with resettlement	Requirements under national legislation	Differences identified and actions to address differences
Scope of application	<p>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> <p>Such restrictions may cause physical displacement (relocation, loss of land or shelter), and/ or economic displacement (loss of land, assets or restrictions on land use, assets and natural resources leading to loss of income sources or other means of livelihood), that can be partial, permanent or temporary and must be mitigated in line with Lenders Standards.</p>	<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”. (x) Resolution of the Government of Uzbekistan “About Approval of the Procedure of Accumulating and Use of Funds of 	<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. The gaps between the requirements of ADB SPS (2009) and national laws have been reconciled in previous ADB-assisted projects in Uzbekistan.</p>

Centralized Stocks for Compensation of Damages to Individual Persons and Legal Entities Due to Acquisition of Lands for Public Needs
 (xi) The Law “On Appeals of Physical and Legal Persons
 (xii) Resolution of Cabinet of Ministers “About Approval of Rules of Protection of Power Supply Facilities
 (xiii) he National Construction Standards and Rules # KMK 2.10.08-97. “Land allocation standards for construction of 0.4 – 750 kV power networks”
 (Xiv) ZRU 781 - About procedures of seizure of land for social needs with compensation

Alternative project designs	In order to avoid or minimise effects including physical and/or economic displacement (especially on those socially or economically vulnerable), alternative project designs should be considered by clients. The client shall not resort to forced eviction, unless it complies with the requirements of national law and the provisions set out in the Lenders Standards and is conducted in a manner consistent with basic principles of due process.	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	The client 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>	There is a potential difference in recognition of compensation between national and legislation since national legislation refers to market value, which may not be perceived to reflect full replacement cost. Masdar will provide compensation for the loss of any crops or infrastructure based on full replacement value which includes market value in addition to elements such as transaction costs, interest accrued, transitional and restoration costs and other applicable payments
	Where livelihoods are land-based, the client will offer land-based compensation.	Article 41 (Clause 4) of the Land Code (30 of	Both Lender Standards and government regulation is matching regarding in-kind land compensation rather than just cash payment.

		April 1998) requires offering tenants an equivalent land plot (in-kind land compensation) and compensation for lost profits and other losses.	The non-land options may be necessary when replacement land of equal quality is not available or unaffordable, or when the displaced persons make an informed decision to demand compensation in cash
	The client 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.	Legislation is matching regarding the chronology of land resettlement payments. Masdar will ensure that land compensation payments are made prior to any land acquisition.
	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.
Timing of Compensation in relation to Resettlement			
Vulnerable groups	Special considerations will 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. Delivery and establishment of compensation shall take into account gender issues.	No corresponding requirement in the country's legislation, but there are a number of legislative documents related to social support and livelihood improvement measures considered by the GoU to consider social allowances and needy families through two Cabinet of Ministers resolutions and to consider disabled people through the Law on social protection of disabled people. Thus, support of vulnerable segments of the population is provided on the regular basis by the GoU on central and local levels and does not require additional payments in connection with the project implementation.	The Legal Policy and Framework requires that vulnerable and severely AHS will be (i) provided with additional cash allowance, (ii) enrolled in government assistance program, and (iii) prioritized in project-related employment. Resolution of the Cabinet of Ministers #3857. No AHS will experience severe impact. In line with Lenders Standards, the Project will take into consideration women's and men's preferences for compensation and asset replacement should be documented. Any opportunities arising from the Project should be made equal to both men and women affected by the Project.
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

	Measures should be put in place for meaningful participation of women, and the client shall seek to understand differential impacts of land acquisition, land use restrictions and involuntary resettlement on men and women.		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. During consultations, women's views shall be represented fairly and factored into planning and implementation. Specific details of engagements can be found in Chapter 4.
	The client 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	The client will establish and implement a grievance mechanism.	Grievances can be communicated at any time during the process. Any grievances can be delivered via Khokimiyats or any other state representatives for investigation and follow-up. At any time, the PAP (or any other party with a grievance) can approach the courts for a judicial ruling. The grievance process is regulated by law December 3, 2014 No. ZRU-378 about appeals of physical persons and legal entities (as amended on 10-03-2020). A complaint shall be considered within fifteen days from the date of receipt by the state authority, which is obliged to resolve the issue on the merits. When additional study and (or) verification is required, the request for additional documents is up to one month	Both Lender Standards and National Legislation allow project affected persons to express a grievance through multiple mechanisms. Masdar has already developed a grievance mechanism which is easily accessible and readily available for community members and any other PAPs. Full details of the process can be found in section 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.
Resettlement and Livelihood Restoration Planning and Implementation	The client will conduct a census to collect appropriate socio-economic baseline data, using a combination of quantitative and qualitative methods to identify those classified as displaced, and to determine if the displaced person is eligible for compensation and/or livelihood restoration assistance. Through data collected, the project will establish a social and economic profile of the affected communities and people with a disaggregation of data; identify sources of livelihoods that are affected and their significance to the overall livelihoods of affected people; identify land tenure regimes in the affected	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.	Socioeconomic surveys are not required under National legislation. Information on the identity of PAPs is held in Sub-Lease Agreements. The LARF and Lenders Standards requires the development of a socio-economic census of all affected households. 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.

	area; identify any gender issues that may affect the land acquisition and resettlement process; and identify relevant factors of vulnerability.		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.
Uneconomic parcels of Land	Uneconomic parcels of land (often referred to as orphaned land) should be acquired along with the entire land parcel.	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.	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.
Monitoring and Evaluation	The client will establish procedures to monitor and evaluate the implementation of the LRP. PAPs will be consulted during the monitoring process.	National legislation does not require monitoring after the implementation of the project.	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 12.5.1
Establishment of a cut-off date for eligibility	The client will establish a cut-off date for eligibility either: (i) as foreseen in applicable legislation; or (ii) using the end date of the census or of the inventory (whichever is the latest). The client shall inform affected persons of the cut-off date. After the established cut-off date, 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.
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 restoration measures to baseline levels prior to the project regarding income capacity, production levels and living standards.

This is not a requirement under national legislation.

Not required under national legislation.

Due to the very low percentage of land lost during construction there is no need to provide transitional support to leaseholders and herders.

8. Eligibility, Entitlements, Assistance and Benefits

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 Sherabad, the only formal land rights belong to leaseholders and their household although the impact on the latter is considered negligible as described in section 9.

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 8-1 below.

Table 8-1. 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).i.e	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.
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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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8.1 Eligibility Exclusions

The Madar has communicated a moratorium (“cut-off-date”) on the 9th December 2022 which will define 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.

8.2 Entitlement Framework

The Preliminary Entitlement Framework (Table 8-28-2) 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 lender requirements, **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.

The entitlement framework was developed in line with the principles of the LARF however in the case of any inconsistencies on entitlements, the highest level of commitment or the most precautionary approach will apply.

Table 8-2. Entitlement Framework

Nr	Loss of asset/ Description of impact	Eligible person or group	Entitlement	Applicability	Number of eligible households	Number of affected people (within the 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 or those with formal title	<p>OPTION 1: Cash compensation based on the average monthly income from the land over the last three years multiplied by the number of months that the interruption occurs, or if permanent, multiplied by four years.</p> <p><i>NB: Option to be avoided for critically vulnerable leaseholders in favour of option 1 (if the amount of land lost 5% or more of total landholding)</i></p> <hr/> <p>OPTION 2: Provide replacement plot of equal or improved productive potential within the same or improved proximity to household. Secure tenure may be obtained within leasehold tenure types if the land provided does not place the owner at risk of forced eviction. If the replacement plot is provided in-kind, upfront administrative costs involved in provision of secure tenure will be covered by the Developer (such as survey costs, statutory lease fees in the case of leasehold tenure or administrative costs).</p> <p><i>NB: Option only available to leaseholds where 10% or more of the land is due to be permanently acquired by the project or if 10% or more of the land becomes uneconomically viable as a result of the project. This threshold will be reduced to 5% or more where the leaseholder is critically vulnerable.</i></p>	Active	<p>There is 36 households and 2 businesses with formal title under the OTL and 2 households in the Solar PV area.</p> <p>The 2 households with leaseholders with land inside the Solar PV area which are losing greater than 10% of their land permanently</p> <p>There are no vulnerable formal title holders which are losing more than 5% of land permanently.</p>	156 affected people along the OTL and 11 affected people in the Solar PV area (with formal title).
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 5% or more of total landholding).</i></p>	Active	<p>There are 37 households and 2 businesses under the OTL which will be entitled to compensation for land preparation that is impacted by the OTL</p> <p>N/A in the Solar PV area</p>	157 affected people along the OTL. N/A in the Solar PV area

		<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 10% of replacement value for land preparation.</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 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>	Active	<p>There are 37 households and 2 business under the OTL which will be entitled to compensation for lost crops impacted by the OTL.</p> <p>N/A in the Solar PV area because the informal farmers crops will be avoided by the project.</p>	<p>157 affected people along the OTL.</p> <p>N/A in the Solar PV area</p>
4	Temporary loss of ability to plant or harvest crops within temporary access areas due to the project schedule.	Farmers (with formal or informal right of access)	<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 planting or 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 planting or 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 20% or more of the land is temporarily lost.</i></p> <p>AND</p> <p>A Disruption Allowance equivalent to 10% of replacement value of the said crops.</p>	Active	<p>There are 37 households under the OTL which will be entitled to compensation for temporary loss of ability to farm.</p>	<p>157 affected people along the OTL.</p> <p>N/A in the Solar PV area</p>
5	Permanent or temporary loss of	Farmers (with formal or informal right of access)	<p>Livelihood restoration targeted at improving and enhancing the livelihoods of the affected farmers and herders. Various livelihood restoration options may be included and will be proportionate to the level of impact. Livelihood measures include:</p>	Active	<p>There are 39 households under the OTL and two business that will have</p>	<p>157 affected people</p>

primary agricultural livelihood	Business owners Employees or informal workers	<ul style="list-style-type: none"> Land enhancement grant for the two households with leaseholds in the PV area to recognise the loss of opportunity: Training on Veterinary Health Training on Meat, Milk or Wool Production Technical training on how to improve agricultural crop yields Business and financial training Preferential employment for vulnerable households 		<p>permanent or temporary loss of agricultural livelihood.</p> <p>No household loses more than 10% of its income assets permanently.</p> <p>The informal farmers agricultural land will be avoided by the project and so his household will require livelihood restoration.</p>
<p>Livelihood restoration measures are further detailed in section 11.</p> <p>A significant impact allowance will be provided to any household which loses more than 10% of its income earning assets temporarily or permanently. The allowance will be equivalent to six months of monthly minimum wage.</p>				
6 Loss of productive fruit trees	Owner of trees	<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> <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 will be paid in instalments, to enable use for intended purpose of providing for lost interim harvest.</p>	Active	<p>7 households have productive trees that are affect by the project however no household will lose 10% or more of their trees.</p>
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 (excluding depreciation), 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>	Active	<p>The informal farming 7 affected people within household in the Solar PV the single household. Area has some assets that will be displaced by the project including a stove oven, storage facility and farm shelter.</p> <p>Lease holding households along the line which will lose structures will be</p>

					entitled to compensation if accidental damage occurs.
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>	Active	<p>One informal farmer uses 8 affected people. land near the PV Area but his farm land will be avoided by the project.</p> <p>One informal land user is impacted by the OTL.</p>
<i>Permanent Loss of Communal Natural Resources</i>					
9	Permanent 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>	Not Active	The land is occasionally used by herders however there is abundant grazing land to the north still available. No other users of the community land were identified.
<i>Temporary Loss of Communal Natural Resources</i>					
10	Temporary Loss of Natural Resources, grazing land / Communal Land	Grazing community as whole	Community transitional support in the form of temporary access to alternative land or provision of feed during the period of disturbance	Not Active	The project has written conformation from the government pasture committee that no one uses this land currently
<i>Employment</i>					
11	Loss of employment or loss of salaried income.		<p>The project will seek to protect any employees from job losses or reduction in income by seeking a legal agreement with their employer to ensure their income is not affected.</p> <p>If however unanticipated job losses or reduction of salary do occur, the project will compensate affected employees (formal and informal) based on the average monthly salary calculated over the last three years for a period of six months and they will also be entitled</p>	Active	18 households are employed by the cluster farming business and cultivate cluster land affected by the OTL. The project will seek a legal 95 affected people

to specific livelihood assistance (to be developed if this impact occurs, it is currently not expected to occur).

agreement with the cluster to ensure the income of these households is not affected.

Vulnerable Households

12	Vulnerable or disproportionately affected households	Vulnerable households	<p>A vulnerability allowance equivalent to minimum wage will be provided for six months to the household.</p> <p>Priority for employment in project-related jobs, training opportunities, self-employment and wage employment assistance.</p> <p>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.</p> <p>Engage local government to place them on welfare scheme.</p>	Active	12 Vulnerable households identified	42 affected people
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Gender

13	Gender inequality	Women in significantly impacted households	For households significantly impacted (above 10% of land displaced by the project): All spouses to be registered as co-owners of assets prior to compensation. All compensation is to be paid to all spouses, and in cases of dispute, divided equally between spouses. All spouses to be co-signatories of all compensation agreements.	Not Active	No households are significantly impacted with greater than 10% of active agricultural land permanently displaced.	
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No-Shows/Absentees

14	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.	When Necessary	No absentees identified currently	
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9. Assessment of Resettlement Impacts

A summary of impacts is included in the summary table below.

Table 9-1 – Summary of impacts

Item	PV site	OTL	Total
No. of Affected people	<ul style="list-style-type: none"> 18 household members 	Total 252: <ul style="list-style-type: none"> 157 household members 95 household members belonging to employees of the cluster farm 	270 Affected people
No. of Affected households	Total: 3 <ul style="list-style-type: none"> 2 leaseholds 1 informal farmer 	Total: 37 <ul style="list-style-type: none"> 20 Households with private Sub-lease agreements 15 households with official land allocation for private use (auction) 1 household with a private garden adjacent to the residence which is temporarily impacted 1 informal farmer with gardens/allotments within the government reserve which is permanently and temporarily impacted Note: this does not include 2 businesses (cluster farm & Silk Factory) and 18 employed households.	40 Affected households
Permanent Land take (ha)	<ul style="list-style-type: none"> Site only – 631 ha 	<ul style="list-style-type: none"> Towers only – 1.174ha 	632.17 ha
Temporary Land take (ha)	<ul style="list-style-type: none"> Not applicable – no temporary access road will be used 	<ul style="list-style-type: none"> Assembly areas for each tower, total area – 9.125ha 6m wide Access roads to the towers 18m right of way to suspend cables 	
Other land take - permanent: <ul style="list-style-type: none"> Sterilization zone (ha) Access roads (# and total ha) Substation (# and total ha) 	<ul style="list-style-type: none"> Access Road: The project will only improve existing roads, therefore no additional land take is envisaged No sterilization zone in the PV area. The Substations are located within the PV site area 	<ul style="list-style-type: none"> Not applicable – only tower footprint as shown above 	
Other land take -temporary: <ul style="list-style-type: none"> Temp access roads (# and total ha) Tower assembly areas (# and total ha) Worker camp Else? (# and total ha) 	<ul style="list-style-type: none"> Not applicable – only the PV site area i.e. 631 Ha 	<ul style="list-style-type: none"> Not applicable – only tower assembly area and temporary access roads as stated above 	
Affected businesses (# formal/informal, separately)	<ul style="list-style-type: none"> Not applicable 	2 Businesses: <ul style="list-style-type: none"> Cluster farm (cotton and wheat farming business) with a Sub-lease agreement 18 households employed by the cluster farm who work land affected by the OTL. Land belonging to a Silk Factory. Note: one other household also employs 4 workers, but they are not impacted by the OTL.	
No. of Significantly affected households loosing 10% or more of productive assets	<ul style="list-style-type: none"> Not Applicable (Two leaseholds are permanently affected (more than 10%) but they are not productive and there is no evidence of investment or cultivation. These households will however receive livelihood restoration to recognize the loss of opportunity. 	<ul style="list-style-type: none"> Not applicable 	

No. of households physically displaced	<ul style="list-style-type: none"> Not applicable - One informal farmer will have his outdoor oven and storage facility relocated/replaced but his residence or his farmland will not be affected. 	<ul style="list-style-type: none"> Not applicable 	
No. of households losing 10% or over perennial crops to sterilization	<ul style="list-style-type: none"> Not applicable 	<ul style="list-style-type: none"> Not applicable 	
No. of affected households temporary loosing 10% or more of productive assets or access to them over 1 season or more (should have tailored LR support)	<ul style="list-style-type: none"> Not Applicable 	<ul style="list-style-type: none"> 17 households will have more than 10% of their land temporarily affected while the OTL is constructed, however most of the impacts will be very short term i.e crops will be damaged as vehicles move through the area to suspend the cables. All will be entitled to LR. 	17 households
No. of affected people (household member) temporary loosing 10% or more of productive assets or access to them over 1 season or more (should have tailored LR support)	<ul style="list-style-type: none"> Not Applicable 	<ul style="list-style-type: none"> 65 people in the 17 households 	65 people
No. of vulnerable households	<ul style="list-style-type: none"> 1 (informal farming household) 	<ul style="list-style-type: none"> 11 households. 	12 households
No. of vulnerable people	<ul style="list-style-type: none"> 7 members of the household 	<ul style="list-style-type: none"> 35 Individuals within the household 11 households 	42 Individuals
Pasture land affected (# and total ha)	<ul style="list-style-type: none"> No official pastureland affected however the 617ha in government reserve is very occasionally used or crossed by herders. Access across the site will be maintained via the road. 	<ul style="list-style-type: none"> Permanent: Government Pasture – 0.57 ha Temporary: Government Pasture – 43.2ha <p><i>Data supplied from the cadastral office</i></p>	
No. of water points affected	<ul style="list-style-type: none"> Not applicable 	<ul style="list-style-type: none"> Not applicable 	
No. of cemeteries, schools and medical centers or other social infrastructure affected	<ul style="list-style-type: none"> Land previously allocated to a cemetery (for future expansion) has been allocated to the project, but the cemetery itself is not affected and access to it will be maintained. 	<ul style="list-style-type: none"> Not applicable 	
Types of land affected:	<p>Permanent:</p> <ul style="list-style-type: none"> Government reserve - 617ha Two leaseholds (unproductive) - 14ha <p>Temporary:</p> <ul style="list-style-type: none"> Not Applicable 	<p>Permanent:</p> <ul style="list-style-type: none"> Agricultural leaseholds – 0.67ha Government Pasture – 0.57 ha Prison Colony – 0.05ha <p>Temporary:</p> <ul style="list-style-type: none"> Agricultural leaseholds– 67.02 ha Government Pasture – 43.2ha Prison Colony – 4.61ha <p><i>Data supplied from the cadastral office</i></p>	
Mode of land acquisition (as applicable)	In-voluntary resettlement/expropriation through the closing of two leaseholds (the land is not owned by PAH but leased).	In-voluntary resettlement/expropriation in the form of alteration of leaseholds or informal land rights (the land is not owned by PAH but leased).	

9.1 The Solar PV Area

A total of three households comprising of 18 people were identified in the Solar PV area:

- 10 member household owing a leasehold to the west of the site
- 1 member household owning a leasehold to the east of the site (This member was living outside of Uzbekistan and did not provide details of any other household members)
- A household of 7 people which is informally farming an area to the east of the site

9.1.1 Leaseholders

Currently there two leaseholders with leaseholds in the Solar PV area (SB070 and SB064). Neither of the leaseholders were being used by the household who held the lease, however SB064 was being used by another farmer (informal farmer mentioned below).

Both Leaseholder SB070 and SB064 originally stated they did not use the land but later confirmed by phone that they had intended to use their leaseholds for herding livestock and one planned to install an irrigation channel. The two leaseholders had not yet commenced any agriculture or livelihood on the land. The overall livelihood impact on these two leaseholds is considered minor due to the lack of any demonstrated cultivation or land use from the households with the lease holding, they will however be enrolled in livelihood restoration programs to recognise the lost opportunity and will both receive a land enhancement grant to be used on their remaining land as detailed in section 11.

9.1.2 Informal Farmer

Following engagement with the informal farmer on the PV area, the land being used was avoided through the amendment of the project boundary. The displacement related impacts on this farmer are considered minor with only two assets needing to be replaced (a storage facility and oven described in section 9.1.4.). The area of cultivation will be unaffected, and his herding practices can continue this land.

9.1.3 Herders

As explained in section 3.1.3.2, herders occasionally use the project area during the spring months. During the site validation visit, one Tajik herder was encountered who passes through the site in November and December for grazing near the Solar PV Site. However, all interviews with Mahallas and herders around the site suggested that the project area is of inferior quality to the surrounding grazing land of which there is an abundant amount. The impact on the herders is therefore expected to be minor however further provisions to engage with transitory herders will be made to make them aware of the project impacts and to confirm if there is any impact to them.

9.1.4 Affected Structures

There are two affected structures that remain in the PV area following measures to avoid the informal farmers house and the cemetery. This includes an oven and a storage container which belong to the informal farmer discussed in 9.1.2. These two items are shown below in Figure 9-1-1 and Figure 9-2-2. The informal farmer will be compensated for these items in cash or materials will be provided so they can be replaced.



Figure 9-1. Storage facility belonging to informal farmer



Figure 9-2. Oven belonging to informal farmer

9.1.5 Economic Trees and Crops

Following the adjustment of the project boundary to avoid the informal farmer, no economic trees or crops are affected in the Solar PV area.

9.2 The project access route

The access route to the Solar PV Area will be along an existing public road from the north and will not involve cause any displacement or land take for any new roads. Access to the site will be subject to a Traffic Management Plan to manage other impacts as outlined in the ESIA The OTL

9.3 The Overhead Transmission Line

There are a total 37 households comprising of 252 people which are affected by the OTL. This includes:

- 20 Households (96 affected people) with private Sub-lease agreements
- 15 households (57 affected people) with individual land rights assigned as part of an auction
- 1 household (3 affected people) with a private garden adjacent to the residence which is temporarily impacted
- 1 informal farmer (1 affected person) with gardens/allotments within the government reserve which is permanently and temporarily impacted

In addition to these 37 households there is:

- 1 Cluster farming business (cotton and wheat farming business) with a Sub-lease agreement
- 18 employee/contractor households (95 affected people) employed by the cluster farm who work land under the OTL
- 1 silk manufacturing company with a Sub-lease agreement affected by the OTL (no employees impacted).

9.3.1 Leaseholders/formal title holders

There are 36 households and two businesses (cluster farm and silk manufacturing company) with leaseholds or formal land rights under the OTL, including 20 leaseholds (49 year lease) and 15 with formal land rights (10 years) allocated as part of an auction and one household with land adjacent to their property. All of these leaseholds/titles are used for the purposes of farming.



Figure 9-3. view 1 of typical farmland under the OTL



Figure 9-4. view 2 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 highest permanent land take is 0.20% (SB075) of the total land in the leasehold and therefore permanent impacts on livelihoods will be negligible. Crops and assets lost in this area will however be compensated at full replacement value with a cash payment.

Temporary land take: The project requires temporary access to land in order to construct the OTL. This includes:

- Temporary access roads 6m wide to each tower in order for heavy machinery to access each site.

- An additional assembly area will be required for each tower.
- A 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. The highest temporary impact on leaseholds is approximately 21.58% (SB075) of land take and the temporary land take of the domestic garden is 100%. These households will be entitled to transitional support and livelihood restoration. The transition period is assumed to be no longer than 6 months for a particular household and will likely be shorter for most households. If transition period extends beyond 6 months additional transitional support will be provided.

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

The percentage of each type of land take is summarised below for each household in

Table 9-2. It should be noted that many cadastral parcels included Figure 3-7 were under government reserve and therefore are not leased by any private individual and therefore impacts are negligible and are not included in the below table. One informal land user is cultivating land in the government reserve and will be temporarily impacted by the OTL and compensated for loss in income and enrolled in livelihood restoration.

Table 9-2. Project land take of land along the OTL

No.	Cadastral Parcel/Map Reference	Tenure Type	Household total land size	temporary land use (ha)	% temporary land take	Permanent use by the Electric Grid, (ha)	% Permanent land take	% of land within the sterilization zone	Trees over 6m impacted by the sterilization zone
Sherabad District									
1	SB073	Leasehold	134.9	0.77	0.57%	0.01	0.01%	1.06	n/a
2	SB078, SB081	Leasehold	843.45	1.20	0.14%	0.02	0.00%	6.42	n/a
3	SB052	Leasehold	60.06	1.38	2.29%	0.01	0.02%	2.86	n/a
4	SB071	Leasehold	88.17	4.24	4.81%	0.04	0.05%	8.17	n/a
5	SB069	Leasehold	230.5	1.35	0.59%	0.01	0.00%	1.25	n/a
6	SB054	Leasehold	21.9	1.29	5.89%	0.02	0.09%	4.69	n/a
7	SB080	Leasehold	35.7	1.09	3.06%	0.01	0.03%	1.25	n/a
8	SB062	Leasehold	17.3	1.35	7.83%	0.01	0.06%	5.85	n/a
9	SB068	Leasehold	67	1.00	1.50%	0.01	0.01%	3.13	n/a
10	SB059	Leasehold	43.6	1.12	2.56%	0.01	0.02%	4.43	n/a
11	SBNew1	Leasehold	30	0.97	3.22%	0.01	0.03%	tbc	n/a
12	SB058	Leasehold	35.2	1.21	3.45%	0.01	0.03%	3.8	n/a
13	SB053	Leasehold	26.1	0.46	1.75%	0.01	0.04%	5.56	n/a
14	SB050, SB051	Leasehold	16.8	1.26	7.50%	0.01	0.06%	0.66	n/a
15	SB063	Leasehold	19.9	0.60	3.01%	0.01	0.05%	3.52	n/a
16	SB049	Leasehold	94.9	1.09	1.15%	0.01	0.01%	6.09	n/a
17	SB067	Leasehold	79.9	1.38	1.73%	0.01	0.01%	2.72	n/a
18	SB056	Leasehold	48.4	3.17	6.55%	0.02	0.04%	3.73	n/a
19	SB082	Leasehold	225	3.08	1.37%	0.04	0.02%	2.78	n/a
20	SB075	Leasehold	14.9	3.22	21.58%	0.03	0.20%	6.33	n/a
NA	SB037,SB036,SB001,SB003, SB035,SB002, SB021, SB004, SB055	Prison Land	499	4.61	0.92%	0.05	0.01%	tbc	n/a
Kizirik District									
21	SB015,SB014,SB017,SB016, SB018	Cluster Farm	23,494.00	34.76	0.15%	0.36	0.00%	3%	n/a
22	SBNew2	Leasehold	0.25	0.04	17.52%		0.00%	tbc	n/a
23	SBNew3	Leasehold	0.25	0.04	17.52%		0.00%	tbc	n/a
24	SBNew4	Leasehold	0.25	0.04	17.52%		0.00%	tbc	n/a
25	SBNew5	Leasehold	0.25	0.04	17.52%		0.00%	tbc	n/a
26	SBNew6	Leasehold	0.25	0.04	17.52%		0.00%	tbc	n/a
27	SBNew7	Leasehold	0.25	0.04	17.52%		0.00%	tbc	n/a
28	SBNew8	Leasehold	0.25	0.04	17.52%		0.00%	tbc	n/a
29	SBNew9	Leasehold	0.25	0.04	17.52%		0.00%	tbc	n/a
30	SBNew10	Leasehold	0.25	0.04	17.52%		0.00%	tbc	n/a
31	SBNew11	Leasehold	0.25	0.04	17.52%		0.00%	tbc	n/a
32	SBNew12	Leasehold	0.25	0.04	17.52%		0.00%	tbc	n/a
33	SBNew13	Leasehold	0.25	0.04	17.52%		0.00%	tbc	n/a
34	SBNew14	Leasehold	0.25	0.04	17.52%		0.00%	tbc	n/a
35	SBNew15	Leasehold	0.25	0.04	17.52%		0.00%	tbc	n/a
36	SBNew16	Leasehold	0.25	0.04	17.52%		0.00%	tbc	n/a
37	Informal Farmer 2	Informal Farmer (Allotment)	8.4	0.38	4.52%	0.01	0.12%	tbc	n/a
38	Household Garden 1	Household Garden	0.11	0.11	100%		0.00%	100%	n/a
39	SB020	Silk Business	150.5	0.554	0.37%	0.01	0.007%	tbc	n/a
Jarkurgan District:									
NA	SB061	Government Pasture Committee		43.20		0.57	n/a	n/a	n/a

(Source: Temporary and permanent land requirements provided by Sherabad, Kizirik and Jarkurgan District Cadastral office, Sterilization zone calculated by AECOM GIS analysis, presence of trees confirmed by valuation company)

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.

9.3.2 Informal farmers

One informal farmer with gardens/allotments in the government reserve were identified by the Kizirik District Cadastral office on the 7th December 2022 and was included in a socio-economic census on the 14th December 2022. This farmer is a 22 year old with no other household members. While this farmer has permission from the Khokimiat to farm in the government reserve, this is only an informal agreement and therefore this farmer is considered vulnerable and has been added to the list of vulnerable households. The permanent land take this farmer is small (0.12%). The informal farmer will be entitled to compensation and livelihood restoration in accordance with the entitlement framework.

9.3.3 Domestic garden

One household with a domestic garden adjacent to their residence is impacted identified by the Kizirik District Cadastral office on the 7th December 2022 and was included in a socio-economic census on the 14th December 2022. This garden is used to grow winter wheat. The temporary land take on this garden will be 100% however it is confirmed that they are not affected by towers and so all impacts on them will be temporary and it is confirmed that the residence itself is not affected (including by the sterilization zone). This household will be entitled to compensation, transitional support and livelihood restoration in accordance with the entitlement framework.

9.3.4 Cluster Farm

A large cluster farm is located along the line and holds a leasehold for cadastral parcels SB015 – SB018. This cluster is an organic cotton farming business with many households employed within the cluster to produce cotton according to quotas. The impact of the OTL on the cluster farming business itself is considered negligible because of the low percentage of permanent land take and no impact on current land use within the sterilization zone. All households who were farming land within the cluster as employees were also surveyed as part of the socio-economic census. The impact on these households is however dependant on the actions of cluster farming business itself who owns all the land and crops and employs the farmers. The cluster farm indicated that no farmers within the cluster would experience any loss of income as a result of the OTL, however it is important that the project puts in place a formal legal agreement with the cluster farm to ensure that no employees income will be impacted as a result of the project.

9.3.5 Silk Manufacturing company (silkworm factory)

A small piece of land and a mulberry tree that is on a leasehold owned by a silk manufacturing company is impacted by the OTL. It is confirmed that there will be no impacts on employees.

9.3.6 Prison (colony land)

The OTL also passes through land belonging to a government prison. The management of the prison were engaged during the socio-economic survey process but were not included in the survey itself. The impacts on the prison colony land are considered negligible because of the small land take. The prisoners themselves have a limited livelihood by virtue of their status as prisoners and they are under the duty of care of the prison. It is important however that the project seeks a formal written confirmation from the prison to ensure that no prisoners will be impacted by the OTL. The project will consult with the prison again before the finalisation of the LRP to ensure there will be no livelihood impacts on prisoners.

9.3.7 Government committee for pasture lands

The OTL passes through an area of open pastureland which is governed by a committee of pasture land. The impact on this area of land is negligible due to the small land take. The committee have also confirmed in writing that there are no farmers using the area under the OTL.

9.3.8 Farmworkers

Leaseholders under the OTL typically employ seasonal and permanent farmworkers to assist them with harvest or with grazing livestock on the land. These seasonal workers are typically women who are not otherwise employed. 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. The final LRP will confirm whether

any affected farmers engage regular seasonal labour and if construction may result in any additional temporary impacts. If unanticipated impacts occur on the farmworkers, provisions will be made to support them in line with the Entitlement Matrix.

9.3.9 Affected Structures

There are no structures affected along the OTL. Structures along the OTL were avoided in consultation with the farmers.

9.3.10 Economic trees and crops

Trees and crops are affected along the OTL where leaseholders have been farming. As described above in section 9.3.1 the loss of these trees and crops will have a minor permanent impact and 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.

The impacts of the sterilization zone on current land uses (e.g trees) will not impact any households as it is confirmed that no household has trees over 6m.

10. Valuation & Compensation

10.1 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.

10.2 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.

The valuation provided in this LRP includes all affected households however, small amendments to the compensation amounts may be made following disclosure should any of the households provide additional evidence reflecting their historic income..

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 10th December 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.

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

Table 10-1 Valuation Table

	Cadastral Parcel/Map Reference	Tenure Type	Impact Type	cost (UZB)	total cost (UZB)	total cost USD*
Sherabad District						
1	SB073	Leasehold	Temporary	6,601,652.17	6,870,130.43	611.44
			Permanent	268,478.26		
2	SB078, SB081	Leasehold	Temporary	24,000,000.00	24,400,000.00	2,171.60
			Permanent	400,000.00		
3	SB052	Leasehold	Temporary	12,770,920.17	13,060,876.70	1,162.42
			Permanent	289,956.52		
4	SB071	Leasehold	Temporary	39,291,714.78	40,451,540.87	3,600.19
			Permanent	1,159,826.09		
5	SB069	Leasehold	Temporary	21,058,809.31	21,602,774.53	1,922.65
			Permanent	543,965.22		
6	SB054	Leasehold	Temporary	16,447,184.42	17,339,845.29	1,543.25
			Permanent	892,660.87		
7	SB080	Leasehold	Temporary	13,936,486.26	14,382,816.70	1,280.07
			Permanent	446,330.43		
8	SB062	Leasehold	Temporary	16,198,366.43	16,616,801.22	1,478.90
			Permanent	418,434.78		
9	SB068	Leasehold	Temporary	16,006,354.61	16,564,267.65	1,474.22
			Permanent	557,913.04		
10	SB059	Leasehold	Temporary	9,965,472.17	10,244,689.57	911.78
			Permanent	279,217.39		
11	SBNNew1	Leasehold	Temporary	27,304,742.48	27,587,122.57	2,455.25
			Permanent	282,380.09		
12	SB058	Leasehold	Temporary	14,526,236.87	14,944,671.65	1,330.08
			Permanent	418,434.78		
13	SB053	Leasehold	Temporary	1,093,944.00	1,333,944.00	118.72
			Permanent	240,000.00		
14	SB050, SB051	Leasehold	Temporary	15,573,052.17	16,005,434.78	1,424.48
			Permanent	432,382.61		
15	SB063	Leasehold	Temporary	5,354,956.61	5,634,174.00	501.44
			Permanent	279,217.39		
16	SB049	Leasehold	Temporary	6,542,350.65	6,730,285.43	599.00
			Permanent	187,934.78		
17	SB067	Leasehold	Temporary	12,784,552.83	13,074,509.35	1,163.63
			Permanent	289,956.52		

18	SB056	Leasehold	Temporary	37,941,672.39	38,778,541.96	3,451.29
			Permanent	836,869.57		
19	SB082	Leasehold	Temporary	15,573,052.17	16,005,434.78	1,424.48
			Permanent	432,382.61		
20	SB075	Leasehold	Temporary	35,891,364.05	37,062,981.44	3,298.61
			Permanent	1,171,617.39		
NA	SB037,SB036,SB001,SB003, SB035,SB002, SB021, SB004, SB055	Prison Land			N/A	
Kizirik District						
21	SB015,SB014,SB017,SB016, SB018	Cluster Farm	Temporary	132,183,547.83	235919543.5	20996.83
			Permanent	103,735,995.65		
22	SBNew2	Leasehold	Temporary	591,300.00	591,300.00	52.63
23	SBNew3	Leasehold	Temporary	338,497.83	338,497.83	30.13
24	SBNew4	Leasehold	Temporary	338,497.83	338,497.83	30.13
25	SBNew5	Leasehold	Temporary	338,497.83	338,497.83	30.13
26	SBNew6	Leasehold	Temporary	338,497.83	338,497.83	30.13
27	SBNew7	Leasehold	Temporary	338,497.83	338,497.83	30.13
28	SBNew8	Leasehold	Temporary	591300.00	591,300.00	52.63
29	SBNew9	Leasehold	Temporary	338,497.83	338,497.83	30.13
30	SBNew10	Leasehold	Temporary	338,497.83	338,497.83	30.13
31	SBNew11	Leasehold	Temporary	338,497.83	338,497.83	30.13
32	SBNew12	Leasehold	Temporary	338,497.83	338,497.83	30.13
33	SBNew13	Leasehold	Temporary	338,497.83	338,497.83	30.13
34	SBNew14	Leasehold	Temporary	338,497.83	338,497.83	30.13
35	SBNew15	Leasehold	Temporary	338,497.83	338,497.83	30.13
36	SBNew16	Leasehold	Temporary	338,497.83	338,497.83	30.13
37	Informal Farmer 2	Informal Farmer (Allotment)	Temporary	5,400,000.00	8,400,000.00	747.60
			Permanent	3,000,000.00		
38	Household Garden 1	Household Garden	Temporary	865,565.22	865,565.22	77.04
39	SB020	Silk Factory Land	Temporary	3,996,098.35	417,9625.31	371.98
			Permanent	183,526.35		
Jarkurgan District:						
NA	SB061	Government Pasture Committee			N/A	

Total valuation amount **54,613.84 USD**

10.3 The compensation process

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

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

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

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

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

11. 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 9.

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

- Community leaders expressed interest in seeking technical advice from Masdar on solar technology and explained they had funds within the community to purchase solar panels but needed technical advice before doing so.
- Training to herders was put forward by AECOM as an option.
- Women from the Bog'obod Mahallas leaders requested the provision of bicycles to assist them with their daily duties within the community.
- 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.
- Affected households (household head, and spouses where possible) were also surveyed to understand their preferences for livelihood restoration measures in December 2022. The following outcomes were observed:
 - The two households with unproductive leaseholds in the Solar PV area both stated that they would spend their land enhancement grant on seedlings and livestock. They will however be allowed to make a final decision in the implementation phase.
 - Training on veterinary health was the most popular training package
 - Farmers also expressed an interest in exporting their produce abroad and welcomed training and advice in business, sales and marketing.
 - Women who are undertaking wool and milk processing also expressed interest in marketing skills.

The types of livelihood restoration initiatives considered at this stage are detailed below in Table 11-1. These livelihood restoration measures will be further enhanced for the final LRP, which will include:

- Identification of partners in the NGO/CSO sector that may be able participate in the Livelihood Restoration Initiatives.
- Identification of potential specialists or service providers to implement the Livelihood Restoration Initiatives.
- Identification of suitable materials, seed varieties or livestock breeds to be provided as part of land enhancement grant.
- Clearly defining resource requirements and allocating resources for each initiative.

In addition to the LRP, the project will develop a Community Development Plan to be implemented in the construction and operational phase of the project and will focus on providing project benefits to the wider community and may include initiatives such as:

- Improved shared infrastructure (e.g access road to and through the site).
- Providing bicycles to the Mahalas (as requested during LRP engagements).
- Providing training and assistance with solar technology (as requested during the LRP engagements).
- Machines which will be at the site during construction may be used to assist community projects
- Providing materials and resources to benefit surround communities (e.g materials for building community structures)
- Training and capacity building.

Table 11-1. Community benefit measures, key risks and next steps for practical implementation

Name/Target Recipients	Description	Risks	Steps to overcome risks	Next steps for implementation
<p>Land enhancement grant (likely to be spent on livestock and seedlings)</p> <p>Target recipients:</p> <ul style="list-style-type: none"> Leaseholders with land inside the PV area (i.e more than 20% of land permanently impacted) will be entitled to the land enhancement grant and both have stated their preference for the grant to be spent on livestock and seedlings. 	<p>Land enhancement grant (or provision of materials, seedlings land or livestock) and technical advice given to leaseholders that have permanently lost a significant portion (>10%) of their land to the project in order to improve the capacity of remaining land.</p> <p>The value of the cash allowance will be 1000 USD split between the household head and their spouse.</p> <p>The project will source the materials/seedlings/livestock for the households. If the household requires a cash payment, this should be conditional on it being spent to improve the capacity of the remaining land OR for improving wellbeing of the household.</p> <p>Free consultation and technical advice should be given to recipients of the grant in order to understand how they wish to invest the money and caution against possible poor investment (e.g a water well in an area where there is little chance of success).</p>	<p>Grant could be poorly invested by the household, for example on a well that does not produce enough water.</p> <p>Increase in local price of materials due to project construction.</p> <p>Unmet expectations regarding the quantity of cash provided.</p>	<p>When delivering cash payments to households, ensure both spouses are sign a written agreement on how they wish to spend the money.</p> <p>Monitor price fluctuations of materials and if necessary, provide and adjustment in the cash provided.</p>	<ol style="list-style-type: none"> Agricultural specialist to visit the remaining land of the affected leaseholders to provide a free consultation and understand the feasibility of planned improvements by the household and also providing general specialist advice. Checks might include: <ol style="list-style-type: none"> Locating where irrigation or access to water might be improved. Identifying improved uses of the land (e.g alternative crop seedling types that might suit the land). Identifying if crop processing or storage could be improved. Identifying if herding livestock is feasible and identifying the most appropriate breed. After the household has received sufficient advice, E&S team to seek written confirmation of how they intend to use land enhancement grant. Confirmation should include co-signature from spouses. E&S team to arrange the provision of cash, materials, seedlings or livestock to the household.

<p>Training on Veterinary Health</p> <p>Open training provided to 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.</p> <p>Maximum 30 people per training</p>	<p>The training is not attended by Farmers because they do not see the value of it, or they are busy grazing.</p> <p>Herders may forget their training after some time.</p>	<p>Ensure the benefits of the training are advertised.</p> <p>Offer some food refreshments during the training to acknowledge the time taken to attend.</p> <p>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).</p> <p>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).</p> <p>Training venue should be able to accommodate an attendance of 30 people maximum.</p>	<p>8. The E&S team will develop a scope of work for each training course.</p> <p>9. The E&S team will identify partners in the NGO/CSO sector which could take part in the delivery of the training courses as well as identify existing agricultural extension services that could be highlighted to farmers during the training.</p> <p>10. 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.</p>	<p>11. 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.</p> <p>12. The specialists will develop all training materials informed by the above consultations and ensure they are translated.</p> <p>13. 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).</p> <p>14. Deliver the training at a venue accessible by all affected households distributing educational materials and taking a register of attendance.</p>
<p>Training on Meat, Milk & Wool Production, Marketing and Sales</p> <p>Open training provided to spouses of all farmers along the OTL and their household members.</p> <p>The training will focus on how to increase the value of meat, milk and wool products on the market.</p> <p>Maximum 30 people per training</p>	<p>Target recipients:</p> <ul style="list-style-type: none"> Women in affected households (Herders and Farmers) 	<p>The training should include the provision of educational materials which can be taken away by attendees.</p> <p>The training and materials must be delivered Uzbek the language.</p>		
<p>Technical training on how to improve agricultural crop yields</p> <p>Open training provided to farmers along the OTL.</p> <p>The training will focus on techniques to improve crop yield such as providing advice on seed varieties, irrigation techniques, harvesting techniques.</p>	<p>and advice on how to access existing agricultural extension services Target recipients:</p> <ul style="list-style-type: none"> Farmers along the OTL 			
<p>Training and advice on how to market agricultural produce and how to export internationally.</p>	<p>Open training provided to farmers along the OTL.</p> <p>The training will provide an introduction into marketing techniques and typical ways in which produce can be exported, including typical</p>			

challenges and how to overcome them.

Business and financial training

Open training provided to farmers along the OTL

Target recipients:

- 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

Preferential Employment

Target recipients:

- Farmers along the OTL
- Leaseholders in the PV area
- Informal farmers

Preferential employment community members and particularly vulnerable people during the construction phase of the project. Employment will be subject to the effected person having the required skills needed by Masdar, however where possible training will be provided.

Employment will also be limited by the needs of the project and cannot be guaranteed. Employment will not exclude anyone from 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.
6. Upskilling will be provided to vulnerable households and particularly women so that they can take advantage of employment opportunities.

12. Implementation & Monitoring

12.1 Roles and Responsibilities

The implementation of the compensation process will be undertaken by the following entities. The roles and responsibilities are described in Table 12-1 below.

Table 12-1. LRP Roles responsibilities

Entity	Responsibilities as part of LRP implementation
LRP Implementation Manager & and Community Liaison Manager	<ul style="list-style-type: none"> • Overall responsibility for the day-to-day implementation of the compensation process. • Oversight 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.
LRP Committee	<ul style="list-style-type: none"> • Oversee implementation of Community Development Plan and LRP and assist in the provision of livelihood restoration. • Reviewing of LRP monitoring reports and evaluation the ongoing progress of the LRP using the internal and external monitoring and evaluation indicators. The objectives of the review should be continual improvement of performance and prevent reoccurrence of issues and challenges. • Indicate when the LRP Completion Audit should be conducted • Verify that all expenditure is fully accounted for which will inform future financial auditing. • Assist in the resolution of grievances where required. • Review and resolution of all appealed grievances. Monitoring the effectiveness of the grievance mechanism.
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. • Managing the compensation process, including the issuing of compensation documents and payments and storage and of all confidential information. • Receiving and in filing grievance forms and reporting to the E&S team. • Maintaining stakeholder engagement plan and database including minutes of meetings. • Communicating with the community about upcoming activities, meetings and trainings. • Prepare posters, press releases, media release and other external engagement for the LRP where appropriate.
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)	<ul style="list-style-type: none">• Responsible for issuing leaseholds• Manage the land acquisition process• Partake in all official engagements regarding land
National Resettlement Specialist	<ul style="list-style-type: none">• Work on daily implementation of the LRP providing advice and specialist fieldwork services to the implementation manager where possible.• Review of complex grievances.• Provision of training to internal project team members.• Liaison with government agencies where necessary.• Ad-hoc support to the project team.• Input into internal monitoring and development of internal monitoring reports.
International Resettlement Specialist	<ul style="list-style-type: none">• Provision of advice to the LRP implementation team• Ensure international standards (lender standards) and all commitments in the LRP are upheld.• Review of internal monitoring reports and development of correction actions.

12.2 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:

- Regional Agricultural Office
- Cadastral Office
- Masdar Community Liaison Office
- Representatives from the local Khokimiyat (preferably also a district representative for women):
- Male and female representatives from local mahallas
- A male and female representative of Lease holding households under the OTL

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

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

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

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

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

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

- Identifying and addressing conflicts of 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.

12.3 Implementation budget

The costs for LRP implementation are included in the tables below. These costs are I estimates and the costs of livelihood restoration may change depending on the daily rates of specialists and once final options are chosen by affected people. The budget is indicative and will be updated in the final LRP. It should be noted that Table 12-412-4 includes costs for LRP management which could be reduced depending on the company's internal resource arrangements.

Table 12-2. Draft Compensation Costs

Compensation	Assumptions/Notes	Amount (USD)
Estimated Compensation amount	Based on current draft valuation for Sherabad district and Kizirik District.	54,613.84
10% Disruption allowances	Based on 10% of total valuation cost.	5,461.38
Total		60,075.22.

Table 12-3. Livelihood Restoration Costs

Livelihood Restoration Measures	Assumptions/Notes	Amount (USD)
Land enhancement grant to historical farmers	500 USD given to farmers with leaseholders inside the PV area (i.e permanent impacts above 10%) and 500 USD given to spouse	2000.00
Vet Training	20 days of specialist time (400 USD per day)	8,000.00
Meat & Milk Processing Training	20 days of specialist time (400 USD per day)	8,000.00
Technical training on how to improve agricultural crop yields	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
Replacement/relocation of oven and store belonging to the informal farmer.		1000.00
Materials & Equipment for LR measures (printing and food for meetings etc)		2,000.00
Vulnerability Allowance/Transitional support	6 months of minimum wage (80 USD per month) for 12 vulnerable households and 2 households with over 20% of land temporarily impacted.	6720.00
Total		43,720.00

Table 12-4 – LRP Management and Administration 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 Officer	2 days per month for 6 months, followed by 1 day per month for 18 months (400 USD per day)	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
Mid term audit	5 days of an independent international specialist (1500 USD per day)	7,500.00
Completion Audit	5 days of an independent international specialist (1500 USD per day)	7,500.00
Materials & Equipment engagement (printing and food for meetings etc)	N/A	2,000.00
CLO	CLO annual salary for two years	4,800.00
Technical Oversight from national Resettlement expert	5 days per month of international specialist time (400 USD per day) for 6 months	12,000
Technical Oversight from international Resettlement expert	2 day per month of international specialist time (1000 USD per day) for 6 months	12,000
Monitoring & Evaluation	2 days per month for 2 years (400 USD per day) & 2 days per quarter of an international specialist (1000 USD per day)	35,200.00
Completion Audit	3 days of an independent international specialist (1500 USD per day)	4,500.00
Total		150,700.00

Estimated Total LRP Cost (USD): **254,495.22**

Estimated Total LRP Cost + 15% contingency (USD): **292,669.51**

12.4 Implementation schedule

A preliminary LRP implementation schedule is provided below. The Project will be required to obtain signed agreements and pay agreed compensation prior to commencement of construction works (including site clearing).

Table 12-5. LRP Implementation Schedule (preliminary)

LRP Implementation Activity	Milestone	Month:	1	2	3	4	5	6	7	8	9	10
Consultation on the LRP draft (“good draft”)	Prior to finalisation of LRP	Month 1										
Further detail to be added to the LRP where necessary, including detail on livelihood restoration measures to ensure they are “implementation ready”. This will include: Sourcing training teams/partners for farmers along the OTL and identifying seedling varieties and livestock varieties for the leaseholders within the Solar PV area.	Prior to disclosure of final LRP	Month 1 & 2										
Disclosure/consultation of final LRP	Before site mobilisation for construction	Month 2										
Recruitment/appointment of internal personnel required for LRP implementation (implementation manager and CLO etc)	Before site mobilisation for construction	Month 2-3										
Project announcement that construction will begin	Before site mobilisation for construction	Month 2-3										
Selection of affected people to be employed in the construction phase	Before site mobilisation for construction	Month 2-3										
Establishment of LRP Committee including any necessary training/briefing.	Before start of construction	Month 2-3										
Reach signed legal agreement with the cluster farm to confirm that no employees (cluster	Before start of construction of OTL.	Month 2-3										

LRP Implementation Activity	Milestone	Month:	1	2	3	4	5	6	7	8	9	10
farmers) will lose income as a result of the construction of the OTL.												
Issuing of compensation and adjustment of Sub-Lease Agreements	Before start of construction of the OTL and PV area (at a minimum before each affected household loses access to the land). If households are absent at the time of compensation payment, the compensation will be placed in a 3 rd party escrow account before land take.	Month 3-4										
Vulnerability allowance	Vulnerability allowance payments to commence as soon as land take (temporary or permanent) occurs and continue for six months or longer if necessary.	Month 3-ongoing										
Transitional support	Commencing as soon as the site is fully fenced and access to land is denied for construction	Month 3-ongoing										
Selection of affected household members to take part in livelihood restoration	Within 2 months from the start of construction	Month 4-5										
Provision of seedlings and sheep (as part of the land enhancement grant) for the two leaseholds within the Solar PV area.	Within 2 months from the start of construction	Month 4-5										
The provision of livelihood restoration related training to the affected farmers.	Within 6 months from the start of construction	Month 4 -10										
Monitoring of the Livelihood Restoration process	Ongoing until the completion audit	For 24 months										Ongoing for 24 months

LRP Implementation Activity	Milestone	Month:	1	2	3	4	5	6	7	8	9	10
Mid-term audit	1 year after finalisation of LRP	1 year after finalisation of LRP										
Completion Audit	Once all LRP activities are complete	Once at the end of LRP implementation										

12.5 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 the LRP compensation process and associated procedures are made to improve delivery of entitlements to affected people.
- Ensure social safeguard compliance during project implementation.

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

12.5.1 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, such as semi-annual social safeguards monitoring reports during project implementation and construction:
 - This should reflect monitoring activities conducted to address any social or resettlement issues
 - This will allow corrective action to be taken in compliance with the LARF, ADB 2009 requirements and the laws of Uzbekistan.
- As per the LARF, a special purpose vehicle (SPV) will be required to complete internal monitoring, and inform ADB following 2009 requirements, including if unanticipated impacts are found during project implementation. This may include formulating corrective action plans.
 - The SPV will submit semi annual monitoring for the duration of the Project and report on any issues and complaints during implementation.
 - Information from the field will be collected from affected households by the SPV.

12.5.2 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.

12.5.3 Indicators

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

Table 12-6. 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
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
The frequency of meetings of the LRP Committee			LRP Implementation Manager
Number of engagements with:	Engagement Database	Monthly	LRP Implementation Manager & Community Liaison Officer
<ul style="list-style-type: none"> • Lease holding households along the OTL • Women in the households along the OTL • Leaseholders in the Solar PV Area • Informal farmers • Cluster farm • Government Prison • Vulnerable Households 			
Output Indicators			
Farmers perception of the project	Perception survey	Every 6 months	Community Liaison Officer
Spouses perception of the project	Perception survey	Every 6 months	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 to the income received by farmers	Socio-Economic Survey	Every 6 months	Community Liaison Officer
Change in salaries provided to cluster farmers	Socio-Economic Survey	Every 6 months	Community Liaison Officer
Change in bonuses provided to cluster farmers	Socio-Economic Survey	Every 6 months	Community Liaison Officer
Changes to quality of life as reported by spouses of farmers	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

12.5.4 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.

Appendix A - LRP Summary

Sherabad Solar PV Project

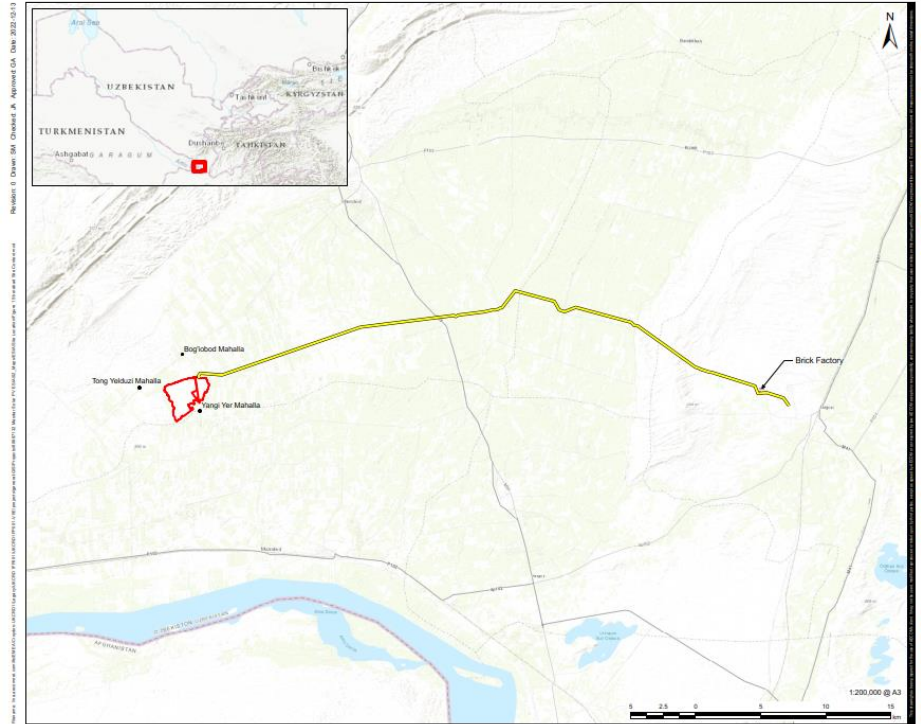
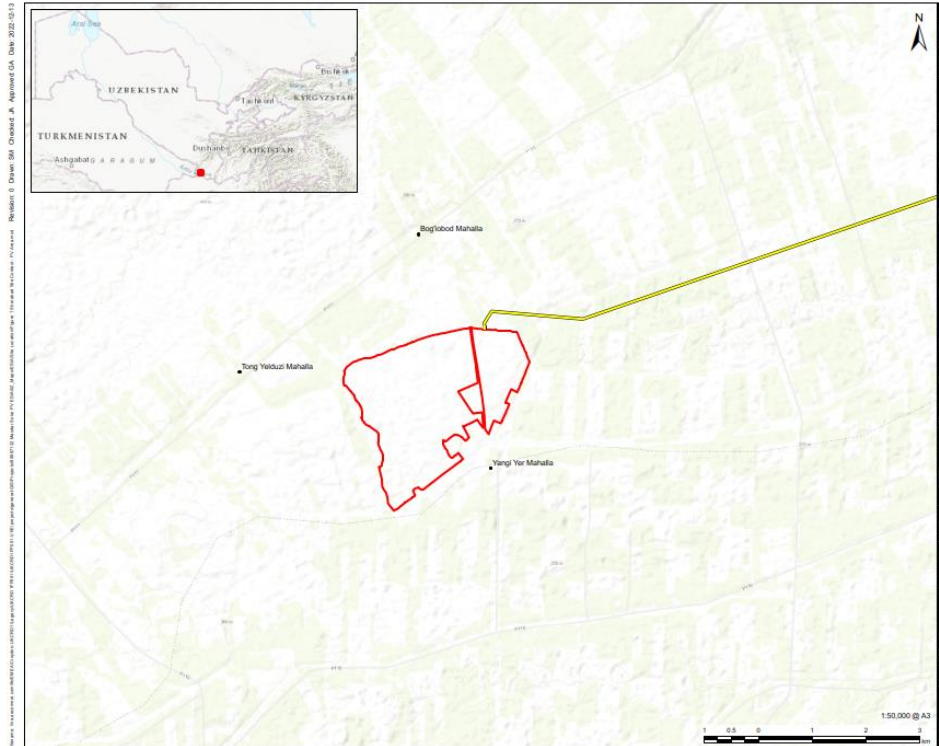
Livelihood Restoration Plan – Summary

Project Background

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

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

The solar PV site area is 631 ha. It will also be linked by a 50.5 km overhead transmission line (OTL) from the on-site substation to the existing substation. The generation of a minimum 456.7 MWac of renewable energy, which is expected to provide clean energy to approx. 300,000 households in the Surkhandarya region. The project site is located in the Sherabad district and the new transmission line will run across Sherabad, Kizirik and Jarkurgan districts of Surkhandarya region while the existing Surkhan substation is located in the Jarkurgan district. There are three Mahallas within 2 km from the perimeter of the Solar PV area including Bog'iobod Mahalla, Yangi Yer Mahalla, Yelduzi Mahalla. The Project site and the transmission line have been identified below:



Construction Programme

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

Work Stream	Early Works					Construction Period													
	2022	2023				2023					2024								
Month	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Plant Design Approval																			
Purchase and Order of Equipment																			
Transportation & Installation																			
Commissioning																			

Impacts and Land Requirements

Minimising Displacement

The project first took steps to minimise displacement including:

- **Boundary adjustments:** Masdar, AECOM and its local subconsultant Green Business Innovation (GBI) worked with the local cadastral office to ensure that the boundary of the Solar PV Area did not cause any displacement that could be avoided, in particular an informal farmer that was using land in the southeast corner of the site. AECOM and GBI engaged with this farmer during the site visit to understand their concerns. GBI, AECOM and Masdar then worked with the local cadastral office to revise the project boundaries to avoid this informal farmers land and house.
- **Transmission Route Selection:** The primary route for the OTL was designed in consultation with affected leaseholders along the route of the line in order to avoid structures, high value crops or other social receptors where possible.

Displacement Impacts

The project will however still cause displacement on households outlined below. A total of 40 households and 270 people will be impacted by the solar PV site and the OTL . Out of this group 18 households will be significantly impacted (over 10% of their land temporarily or permanently impacted).

Type of affected households/businesses	No. of Households	No. of individuals	No. of significantly impacted Households >10%	No. of significantly impacted Individuals >10%
Farmers with Sub-Lease Agreements (not productive) in the Solar PV Area.	2 Households	11 People	2 Households	11 People
Farmers formal rights to land along the Overhead Transmission Line	35 Households	153 People	16	62
Household with a private garden adjacent to the residence which is temporarily impacted	1 Household	3 People	1 Household	3 People
Informal land users	2 Households	8 People	0	0
Businesses (1 Cluster Farm & 1 Silkworm Factory)	2 Businesses			
Employee/contractor households of the cluster farming business	18 households	95 people	n/a	n/a

In addition, the OTL will require 0.57 ha of governmental pasture permanently and 43.2ha of governmental pastures during construction only. It is established that these lands are not used by local herders. Some land which is currently allocated for a prison colony will also be temporarily affected.

Displacement and impacts on land

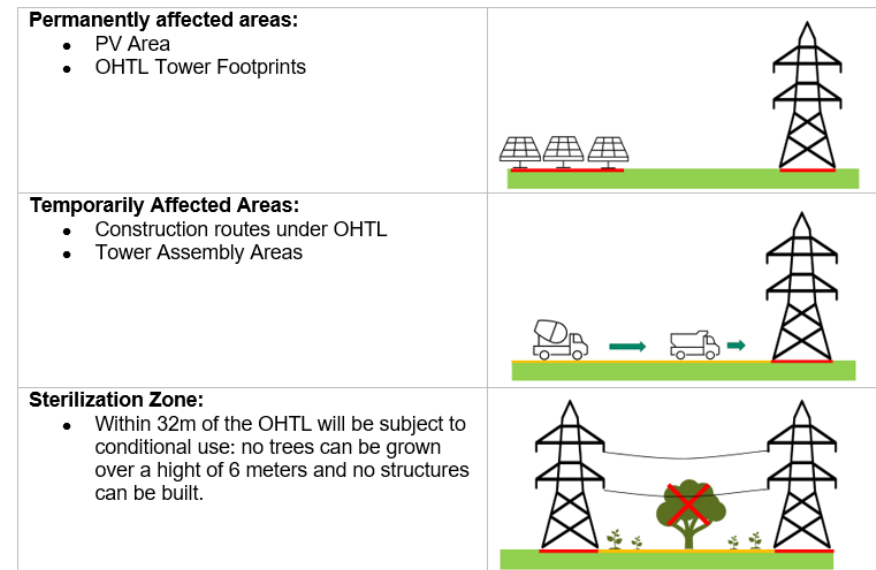
Permanent land take: The solar PV site will require 631 ha. The footprint for the OTL towers will be 1.174ha and will be required for the lifespan of the project and thus should be considered a permanent land take. The permanent land take for each leaseholder is less than 1% of the total land in the leasehold/

Temporary land take: The project requires temporary access to land in order to construct the OTL. This includes:

- Temporary access roads 6m wide to each tower in order for heavy machinery to access each site.
- An additional assembly area will be required for each tower (total area of 9.125ha).
- An 18m wide right of way will be required for a tractor to suspend the OTL between the towers.

The temporary impact will range from 0.14% to 21.58% with the exception of one household's domestic garden being temporarily affected at 100%.

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



Objectives & Policy Framework

Objectives of the LRP

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

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

Entitlements

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

The main entitlements include:

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

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

Project Requirements:

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

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

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

The above standards all have similar requirements which include:

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

Entitlement Matrix

Loss of asset/ Description of impact	Eligible person or group	Entitlement	Applicability
Loss of exclusive rights of access to arable land as part of a leasehold	Owners or leaseholders of arable land or those with formal title	<p>OPTION 1: Cash compensation based on the average monthly income from the land over the last three years multiplied by the number of months that the interruption occurs, or if permanent, multiplied by four years.</p> <p>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)</p> <p>OPTION 2: Provide replacement plot of equal or improved productive potential within the same or improved proximity to household. Secure tenure may be obtained within leasehold tenure types if the land provided does not place the owner at risk of forced eviction. If the replacement plot is provided in-kind, upfront administrative costs involved in provision of secure tenure will be covered by the Developer (such as survey costs, statutory lease fees in the case of leasehold tenure or administrative costs).</p> <p>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.</p>	Active
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>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).</p> <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 10% of replacement value for land preparation.</p>	Active
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 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>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.</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>	Active
Temporary loss of ability to plant or harvest crops within temporary access areas due to the project schedule.	Farmers (with formal or informal right of access)	<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 planting or 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 planting or harvest is not possible due to the project schedule and/or crop life cycle.</p> <p>NB: Option only available to leaseholds where access to over 20% of the land is temporarily lost.</p> <p>AND</p> <p>1. A Disruption Allowance equivalent to 10% of replacement value of the said crops.</p>	Active
Permanent loss of primary agricultural livelihood	Farmers (with formal or informal right of access) Business owners Employees or informal workers	<p>Livelihood restoration targeted at improving and enhancing the livelihoods of the affected farmers and herders. Various livelihood restoration options may be included and will be proportionate to the level of impact.</p> <p>A significant impact allowance will be provided to any household which loses more than 10% of its income earning assets permanently. The allowance will be equivalent to six months of monthly minimum wage.</p>	Active
Loss of productive fruit trees	Owner of trees	<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> <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>	Active

Entitlement Matrix

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

Valuation and Compensation

Provision of compensation

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

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

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

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

Valuation principles:

The following valuation principles were followed to determine compensation amounts:

- Compensation for standing crops will be at replacement value based on one year of production costs and an allowance equivalent to one-year average net income based on the average income over the previous three years.
- Compensation for fruit producing trees will be based on the average income from the past three years multiplied by the years required for the tree to reach productive maturity and the cost of planting new saplings. Trees that are immature will be compensated based on the cost for planting and growing replacement trees to the same age.
- Any unexpected damage to structures caused during construction will be based on full replacement value in accordance with the Entitlement Matrix.
- Compensation for loss of income/livelihood will be compensated based on the average monthly income for the last three years multiplied by the number of months that the interruption occurs.
- Cash compensation for permanent loss of land leased based on the average monthly income from the land over the last three years multiplied by multiplied by four years.

The valuation process

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

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

The valuation process took place during the period from 15th September to 9th December 2022 and involved the following steps:

1. Each household was contacted to have a one-to-one meeting with the valuers and the district Khokimiyat at the district Khokimiyat office and given an opportunity to submit evidence to calculate the average income from the land.
2. A committee was then set up which involved the District Khokimiyat, District Cadastre, District Agricultural Department, District grid representative, Representative of valuation company
3. Each cadastral parcel as part of a leasehold was examined to calculate the following land takes and impacts
4. The value of lost income for permanent and temporary impacts was calculated using the above calculated land take and also the average income of the land recorded over the past three years.

Cut off date

After the completion of the valuation surveys a project wide cut-off date was then announced through the local Khokimiyat district wide telegram channel and also on the farmers telegram channel. The final cut-off date was **9th December 2022**. Any new crops planted, or infrastructure developed in the project area after this date will not be considered for compensation.

Livelihood Restoration and other Support

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

Livelihood Restoration Initiative	Target recipients	Description
Land enhancement grant	Farmers losing >10% of their land to the project permanently .	Land enhancement grant (or provision of materials, seedlings land or livestock) and technical advice given to leaseholders that have permanently lost a significant portion (>10%) of their land to the project in order to improve the capacity of remaining land. Initial engagement with the two households eligible for this grant indicate they would spend it on seedlings and livestock.
Training on Veterinary Health & free consultation	Farmers along the OTL	Open training provided to all herders and farmers along the OTL and their household members. The training will focus on animal veterinary health including how to identify common diseases, how to treat common diseases and injuries.
Training on Meat, Milk & Wool Production	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.
Technical training on how to improve agricultural crop yields.	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 and advice on how to access existing agricultural extension services.
Business and financial training	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
Export and Marketing training	Farmers along the OTL	Open training and advice on how to market agricultural produce and how to export internationally.
Preferential employment	Farmers along the OTL Leaseholders in the PV area Informal farmers	Preferential employment for affected people (particularly vulnerable people) during the construction phase of the project. Employment will be subject to the affected person having the required skills needed by Masdar, however where possible training will be provided. Employment will also be limited by the needs of the project and cannot be guaranteed. Employment will not exclude anyone from other livelihood restoration measures to which they are entitled to.
Significant impact allowance (transitional support)	Farmers losing >10% of their land to the project permanently or temporarily .	An allowance equivalent to minimum wage will be provided for six months to the household.
Vulnerability Allowance	Vulnerable Households only	A vulnerability allowance equivalent to minimum wage will be provided for six months to the household.

Implementation Arrangements

Project Resources

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

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

The LRP Committee

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

- Regional Agricultural Office
- Cadastral Office
- Masdar Community Liaison Office
- Representatives from the local Khokimiyat
- Male and female representatives from local mahallas
- Male and female representatives of affected households

LRP Implementation Schedule

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

Work Stream	Early Works				Construction Period												Operation									
	2022	2023											2024													
Month	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Apr	May	Jun	Jul	Aug	Sep	
Livelihood Restoration Planning																										
Appointment of LRP resources																										
Provision of Compensation																										
Transitional Support																										
Livelihood Restoration & Monitoring																										

Project Grievance Mechanism

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

Khurshid Karamatov, Masdar Solar Community Liaison Officer (CLO) **Kkaramatov@masdar.ae** **(+99893) 522-00-70**

Saida Yusupova, Community Liaison Manager **Saidayusupova@gmail.com** **(+99890) 319-77-21**

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

The following information should be submitted with a complaint:

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

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

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

