

# Land Acquisition and Resettlement Plan

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## Republic of Uzbekistan: Samarkand Solar Power Project

Prepared by the Uzbekenergo for the Asian Development Bank.

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## **ABBREVIATIONS**

ADB	– Asian Development Bank
AH	– Affected Household
AP	– Affected Person
CC	– Civil Code
DMS	– Detailed Measurement Survey
EA	– Executing Agency
GHG	– Green House Gas
GFP	– Grievance Focal Point
GOU	– Government of Uzbekistan
GRM	– Grievance Redress Mechanism
Ha	– Hectare
IA	– Implementing Agency
IOL	– Inventory of Loss
IR	– Involuntary Resettlement
LARC	– Land acquisition and resettlement commission
LARP	– land acquisition and resettlement plan
LC	– Land Code
MOF	– Ministry of Finance
O&M	– Operation and Maintenance
PMU	– Project Management Unit
PPTA	– Project Preparatory Technical Assistance
ROW	– Right-of-way

## **CURRENCY EQUIVALENTS**

(as of June 2013)

Currency Unit – sum (UZS)

UZS 1.00 = \$0.00048

\$1.00 = UZS 2084.95

## **NOTE**

in this report,

- i. “\$” refers to United State dollars (USD)
- ii. UZS refers to Uzbekistan sum

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## GLOSSARY

Affected Household	- In the context of involuntary resettlement, Affected Households are those who are physically displaced (relocation, loss of residential land, or loss of shelter) and/or economically displaced (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas.
Affected Person	- Refers any person as a family member in affected household or worker in affected business entity/firm, public or private institutions.
Cut-off Date	- This refers to the date prior to which the occupation or use of the project area makes residents/users of the same eligible to be categorized as AH. In this Project, the cut-off date will coincide with the period of the census of affected persons and the inventory of losses (IOL) that will be conducted based on feasibility design documents. Persons not covered in the census are not eligible for compensation and other entitlements, unless they can show proof that (i) they have been inadvertently missed out during the census and the IOL; or (ii) they have lawfully acquired the affected assets following completion of the census and the IOL and prior to the conduct of the detailed measurement survey (DMS).
Detailed Measurement Survey	- With the aid of the approved detailed engineering design, this activity involves the finalization and/or validation of the results of the inventory of losses (IOL), severity of impacts, and list of AHs earlier done during RP preparation. The final cost of resettlement can be determined following completion of the DMS.
Economic Displacement	- Loss of land, assets, access to assets, income sources, or means of livelihoods as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas.
Entitlement	- Refers to a range of measures comprising compensation, income restoration support, transfer assistance, income substitution, relocation support, etc. which are due to the AHs, depending on the type and severity of their losses, to restore their economic and social base.
Household	- Household means all persons living and eating together as a single social unit and eating from the same kitchen whether or not related to each other. The census used this definition and the data generated by the census forms the basis for identifying the household unit.
Illegal	- HHs that are not registered their business, agriculture, residential and orchard and those who have no recognizable rights or claims to the land that they are occupying and includes people using private or state land without permission, permit or grant i.e. those people without legal lease to land and/or structures occupied or used by them. ADB's policy explicitly states that such people are entitled to compensation for their non-land assets.
Income Restoration	- This is the re-establishment of sources of income and livelihood of the affected households.
Meaningful Consultation	- A process that (i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people; (iii) is undertaken in an atmosphere free of intimidation or coercion; (iv) is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) enables the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues
Inventory of Losses	- Is the process where all fixed assets (i.e., lands used for residence, commerce, agriculture, including ponds; dwelling units; stalls and shops; secondary structures, such as fences, tombs, wells; trees with commercial value; etc.) and sources of income and livelihood inside the Project right-of-way (ROW) are identified, measured, their owners identified, their exact location pinpointed, and their replacement costs

	calculated. Additionally, the severity of impact to the affected assets and the severity of impact to the livelihood and productive capacity of AHs will be determined.
Khokimiyat	- Local government authority that interfaces between local communities and the government at the regional and national level. It has ultimate administrative and legal authority over local populations residing within its jurisdiction.
Land Acquisition	- Refers to the process whereby an individual, household, firm or private institution is compelled by a public agency to alienate all or part of the land it owns or possesses to the ownership and possession of that agency for public purposes in return for compensation at replacement costs.
Leaseholder	- Legal entity (registered farm) running agricultural production with the use of land parcels granted to him on a long-term lease. Lease term is limited up to fifty years but not less than for ten years. Leaseholder cannot sell - buy, mortgage, sublease, present, exchange the land.
Mahalla	- Is a local level community-based organization recognized official by the GoU that serves as the interface between state and community and is responsible for facilitating a range of social support facilities and ensuring the internal social and cultural cohesiveness of its members. Mahalla leaders are elected by their local communities.
Physical Displacement	- Relocation, loss of residential land, or loss of shelter as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas.
Relocation	- This is the physical relocation of an AH from her/his pre-project place of residence and/or business.
Rehabilitation	- This refers to additional support provided to AHs losing productive assets, incomes, employment or sources of living, to supplement payment of compensation for acquired assets, in order to achieve, at a minimum, full restoration of pre-project living standards and quality of life.
Replacement Cost	- The term used to determine the value enough to replace affected assets and/or cover transaction costs necessary to replace the affected assets without depreciation for such assets as well as material advantage, taxes and/or travel expenses.
Resettlement	- Means all social and economic impacts that are permanent or temporary and are (i) caused by acquisition of land and other fixed assets, (ii) by change in the use of land, or (iii) restrictions imposed on land, as a result of a project.
Resettlement Plan	- This is a time-bound action plan with budget setting out compensation and resettlement, entitlement, actions, responsibilities, monitoring and evaluation.
Severely Affected Households	- This refers to affected households who will (i) lose 10% or more of their total productive land and/or assets, (ii) have to relocate; and/or (iii) lose 10% or more of their total income sources due to the Project.
Significant impact	- 200 people or more will experience major impacts, which are defined as; (i) being physically displaced from housing, or (ii) losing 10% or more of their productive assets (income generating).
Vulnerable Group	- These are distinct groups of people who might suffer disproportionately or face the risk of being further marginalized by the effects of resettlement and specifically include: (i) female headed households without support, (ii) disabled household heads, (iii) households falling under the generally accepted indicator for poverty, (iv) children and the elderly households who are landless and with no other means of support.
Minimum Wage Rate	- The official minimum wage rate declared is UZS 79 590 per person a month (as of December 2012), will be used for providing assistance allowance for 3 months for affected persons belonging to the vulnerable group and those affected persons by the project by more 10% of their assets and properties. This rate is subject for revision in accordance with the official declaration of Government of Uzbekistan.

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## **EXECUTIVE SUMMARY**

### **1.1. Project description**

1. The aim of the proposed Samarkand Solar Power Project is to increase renewable energy generation and reduce greenhouse gas emissions (GHG) in Uzbekistan. The Project is focused in the construction of a large scale grid connected photovoltaic (PV) power plant in Samarkand region. According to evaluated data, there is a need to increase electricity generation in a 5% to meet region electricity demands. In addition, Samarkand region does not benefit from own regional generating units and needs to take power supply from the grid.
2. The Project is aligned with ADB's Strategy 2020 and with a key pillar of the Energy Policy 2009. The Project directly supports Uzbekistan clean energy and energy security targets as prioritized under the ADB Uzbekistan Country Partnership Strategy for 2012-2016 and is identified in the ADB's Uzbekistan Country Operations Business Plan 2012-2014. The proposed Project will be the first of its kind and scale in Central Asia and will bring Uzbekistan closer to its vision of becoming the region's solar technology and knowledge hub.
3. The estimated project total cost is \$270 million and the Government has requested ADB to finance the procurement and materials in the amount of \$90 million. The Uzbek Fund for Reconstruction and Development will contribute financing the project with \$86 million. Uzbekenergo will finance from its own funds \$50 million for the procurement of local materials, installation, erection, and other civil works. In addition, the Government will provide \$44 million equivalent for taxes and duties.
4. This Land Acquisition and Resettlement Plan (LARP) was prepared based on the preliminary design prepared by the TA Consultants: Nixus and STA in April 2013. According to this design estimated amount of required land for PV power plant is 405 ha. This Project also will require construction of access road and transmission line. Initial assessment was made by the TA Resettlement Expert in June and July 2013. It aims to provide preliminary assessment of the Project impacts and plan needed compensation/rehabilitation measures. This LARP needs to be updated after approval of detailed design for access road and transmission line (TL). The LARP update will require a field survey to confirm or identify additional AHs and APs, systematic consultation with AHs and APs; disseminate the entitlement matrix and grievance redress mechanisms.

### **1.2. Objective of the Land Acquisition and Resettlement Plan (LARP)**

5. The objective of this LARP is to mitigate physical and economic involuntary displacement impacts caused by the project and provide adequate displacement and rehabilitation assistance to the affected households to restore or improve their pre-project standard of living.

### **1.3. Scope of land acquisition and resettlement**

6. PV power plant construction will require in aggregate 405 ha land. From this 405 ha land there will be required 234.2 ha permanent land acquisition from 2 farmers and remaining 20.8 ha from Uzbekenergo branch office. Construction of PV power plant will also imply construction of access road and TL. Access road will be used for delivering construction materials, equipment and maintenance. Transmission line of 220 kV is planned to connect PV power plant to the nearest substation in south from the plant. The right-of-way (ROW) of the TL is estimated about 8 km.
7. The Project construction would entail LAR impacts on 17 Affected Households (AHs). The census in total identified 109 Affected Persons (APs) of which: 13 APs in 3 AHs affected by PV power plant, 56 APs in 8 AHs affected by access road and 40 APs in 6 AHs affected by TL.

#### **1.4. Socio-economic profile of the AHs**

8. Socio-economic census has included 17 AHs with estimated population of 109 APs, with average membership of 7 persons per household. The average age of AHs heads is 46 years old. All household heads are married. Representative number of APs is aged between 16-25 years old – 29% (17 males and 15 females APs). The least presented are senior APs aged 65 and above years – 2% (1 male and 1 female APs).

9. About 43% of the APs have reached high school only, 49% males and 36% females. Other 30% with college degree, 20% males and 41% females. Only 27% are with higher education degrees, 31% males and 23% females.

10. Related agricultural activities are the main occupation of the 29% of the APs, 15 males and 8 females. About 20% are students (9 males and 7 females) at one of district colleges or Samarkand city universities. APs at governmental service are 16% (7% males and 6 females). Housewives who take care of growing/breeding domestic animals in their backyards are 14% and about 10% of APs are unemployed (7 males and 1 female). APs engaged in entrepreneurship are 4% (3 males and 1 female), and 3% are retired (1 male and 2 females). 1% handicraftsman, only one female.

#### **1.5. Public consultation, information dissemination and disclosure**

11. Seven consultations were carried out with AHs during Project preparation, and it is recommended that other consultations need to be carried out after LARP updated and before starting payment of compensations. During the consultation it has also informed to AHs the cut-off date. Apart from the AHs, the participants in these public consultations included representatives of respective government organizations. Details of these meetings are presented in the main report part.

12. Disclosure meeting describing the final LARP will be organized to all AHs (including all households, agricultural farms and private firms) and respective government organizations during LARP evaluation stage (tentative period: III quarter 2013). A leaflet in local language will be distributed to AHs, relevant agencies and organizations during the disclosure meeting. The leaflet will describe the project and land requirement for the project, the entitlement matrix, as well as the grievance mechanism and LARP implementation schedule. The draft and final LARP document will be disclosed on the websites of the Uzbekenergo and ADB upon approval by both ADB and the GOU.

#### **1.6. Grievance redress mechanism**

13. Complaints can be submitted to mahalla, village assembly of citizens, farmer councils or directly to EA and IA. Although usually, the district hokimiyat will be the entry point for receiving complaint or known as a Grievance Focal Point (GFP)<sup>1</sup>. Upon receipt of a complaint, the GFP will establish contact with IA and its PMU and mahalla and other relevant bodies. The Program Management Unit (PMU) will establish a complaint handling team headed by one of the IA management staff designated for handling grievances of the project. All complaints will be resolved in 15-20 days, and in case additional details are required, a maximum of 30 days will be used to resolve and close the complaint. The Project Grievance Redress Mechanism does not prevent any AH to approach the national/government legal system to resolve their complaints at any stage of the grievance redress process. The APs can address their complaints to the courts at any time and not only after using the GRM.

#### **1.7. Legal framework**

14. The recent Government resolutions on land acquisition have been used for preparing this LARP. Policy differences between the GOU and ADB have been reconciled where necessary.

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<sup>1</sup> Under the Government Grievance mechanism, the District khokim is designated as the Grievance Focal Point.



Based on the survey and consultation, the most important safeguard policy in the context of this project are compensation payable for land acquired if the land-for-land option is unavailable, transparent formulas for the estimation of replacement cost for land and other physical assets, prompt payment of compensation for APs affected by loss of employment, and provision for payment of allowances to the small number of poor and vulnerable APs.

15. The LARP has been prepared in line with national laws/regulations and ADB Safeguard Policy Statement (SPS) 2009. In case of any gaps between the national law and ADB SPS 2009, for this project purpose the ADB SPS 2009 shall prevail.

### **1.8. Entitlement and compensation strategy**

16. Compensation eligibility is limited by a **cut-off date** established based on the last day of the census of AHs and IOL. Therefore cut-off date for Pastdargom district is **June 06, 2013** and for Nurobod district **July 10, 2013**. Households who settle in the affected area and/or make any improvements on land parcel to be acquired for the project after the cut-off date will not be eligible for compensation. They will, however, be given sufficient advance notice requesting them to vacate land parcels and dismantle affected structures prior to project implementation. Their dismantled structures will not be confiscated and will not be subject to fine or compensation.

17. The Entitlements Matrix identifies the assets – loss of residential land and housing, temporary loss of agricultural land, field crops, trees of productive value, business assets and incomes derived thereof, waged workers, vulnerable groups, people without formal title or rights to property, and severely AHs – and what entitlements are able to be received using the legal framework and negotiations between the ADB and Uzbekenergo.

18. Special attention to be paid to AHs categorized as vulnerable and with disabled APs. The strategy also provides for unanticipated inputs. The LARP will be fully implemented prior to commencement of any civil works. Compensation and other assistances will be scheduled and paid to APs prior to their physical or economic displacement and commencement of civil work.

### **1.9. Income restoration and rehabilitation**

19. This Project will not have any physical displacement of residential assets and cause unemployment on affected farms. Construction of PV power plant will imply land acquisition of 234.2 ha from 2 AHs, one of AHs will have impact 41.5% and another one 29.2% from their total land. These 2 AHs during the consultations expressed willingness to give up all required land without land to land compensation. However, they requested to deduct this to be acquired land area from taxable amount of land on their balance. Construction of 220 kV TL will not severely impact on cropping farm lands, but will have significant impact (48%) to residential land of AH-17. All severely affected households will be entitled severely affected allowances in accordance with the entitlement matrix in this LARP.

20. However, if after detailed design and update of this LARP will be identified AHs with employment impact then unemployed or losing employment APs will be eligible for rehabilitation and livelihood improvement support from the local authority in assistance of the project. In order to be eligible for rehabilitation and livelihood improvement support, APs before registering at local labor agency as unemployed will need to register at PMU. In this case PMU will be able to monitor progress of APs application at local labor agency and in case of problem assist to resolve appeared issues.

### **1.10. Resettlement budget and financing**

21. The tentative LARP budget, based on compensation calculations for losses to residential and business assets, agricultural land, trees, relocation and support allowances is estimated to be **US\$ 240,000**. The direct compensation cost will comprise 83%, indirect cost 2%, administrative cost 6% and contingency amount about 9% of the total compensation costs.

### **1.11. Institutional arrangements**

22. Uzbekenergo will have overall responsibility to implement the LARP as the executing agency (EA). The PMU within Uzbekenergo will be responsible for the day-to-day management of LARP implementation. The PMU team will consist of Resettlement Consultant responsible for planning, implementation and internal monitoring of LARP. The PMU will work closely with relevant government agencies and community based organizations.

### **1.12. Implementation schedule**

23. As envisaged, the LARP shall start implemented 4 months prior to the award of civil works contract. Uzbekenergo, through its PMU will implement the updated LARP upon receipt of official approval from ADB. It will only award the civil works contract to the civil works contractor in compliance with the following conditions: (i) all the resettlement activities have been completed and no pending complaints and grievances are left unresolved, as validated by external monitoring and (ii) official receipt of Notice to proceed from ADB to proceed with civil work activities. The detailed activities and schedule in updating and implementing of LARP related to the award of civil works contract is illustrated in the main report.

### **1.13. Monitoring and reporting**

24. Monitoring would include both internal and external monitoring. PMU Resettlement Consultant will carry out internal monitoring routinely in close coordination with local khokimiyat. In order to verify internal monitoring and ensure that AHs are compensated prior to commencement of civil work, an external monitoring will be undertaken based on which a Compliance Report will be submitted to ADB and EA. The Monitoring/Compliance report will be used by ADB and EA as a basis to issue notice to proceed with civil work activities to the contractor. The external monitoring report will be disclosed on the website of EA and ADB.

## **I. PROJECT DESCRIPTION**

### **1.1. Background**

1. The aim of the proposed Samarkand Solar Power Project is to increase renewable energy generation and reduce greenhouse gas emissions (GHG) in Uzbekistan. The Project is focused in the construction of a large scale grid connected photovoltaic (PV) power plant in Samarkand region. According to evaluated data, there is a need to increase electricity generation in a 5% to meet region electricity demands. In addition, Samarkand region does not benefit from own regional generating units and needs to take power supply from the grid.
2. The Project is aligned with ADB's Strategy 2020 and with a key pillar of the Energy Policy 2009. The Project directly supports Uzbekistan clean energy and energy security targets as prioritized under the ADB Uzbekistan Country Partnership Strategy for 2012-2016 and is identified in the ADB's Uzbekistan Country Operations Business Plan 2012-2014. The proposed Project will be the first of its kind and scale in Central Asia and will bring Uzbekistan closer to its vision of becoming the region's solar technology and knowledge hub.
3. The expected impact of the Project is the installation of the largest PV plant in Central Asia as a reference for future installations to come. The outcome of the project will be the increase of renewable energy production, increased PV installations know-how and improved energy security and production in Uzbekistan. The outputs of the project include:
  - (i) Construction of a PV Power Plant to be located in Samarkand province based on crystalline technology and fixed tilt structure. The expected annual output of the PV plant is higher than 150 GWh, being able to cover the 5% electricity generation requirements previously mentioned.
  - (ii) Capacity building implementation, increased know-how in PV power plants operation requirements and grid integration.
4. The estimated project total cost is \$270 million and the Government has requested ADB to finance the procurement and materials in the amount of \$90 million. The Uzbek Fund for Reconstruction and Development will contribute financing the project with \$86 million. Uzbekenergo will finance from its own funds \$50 million for the procurement of local materials, installation, erection, and other civil works. In addition, the Government will provide \$44 million equivalent for taxes and duties.

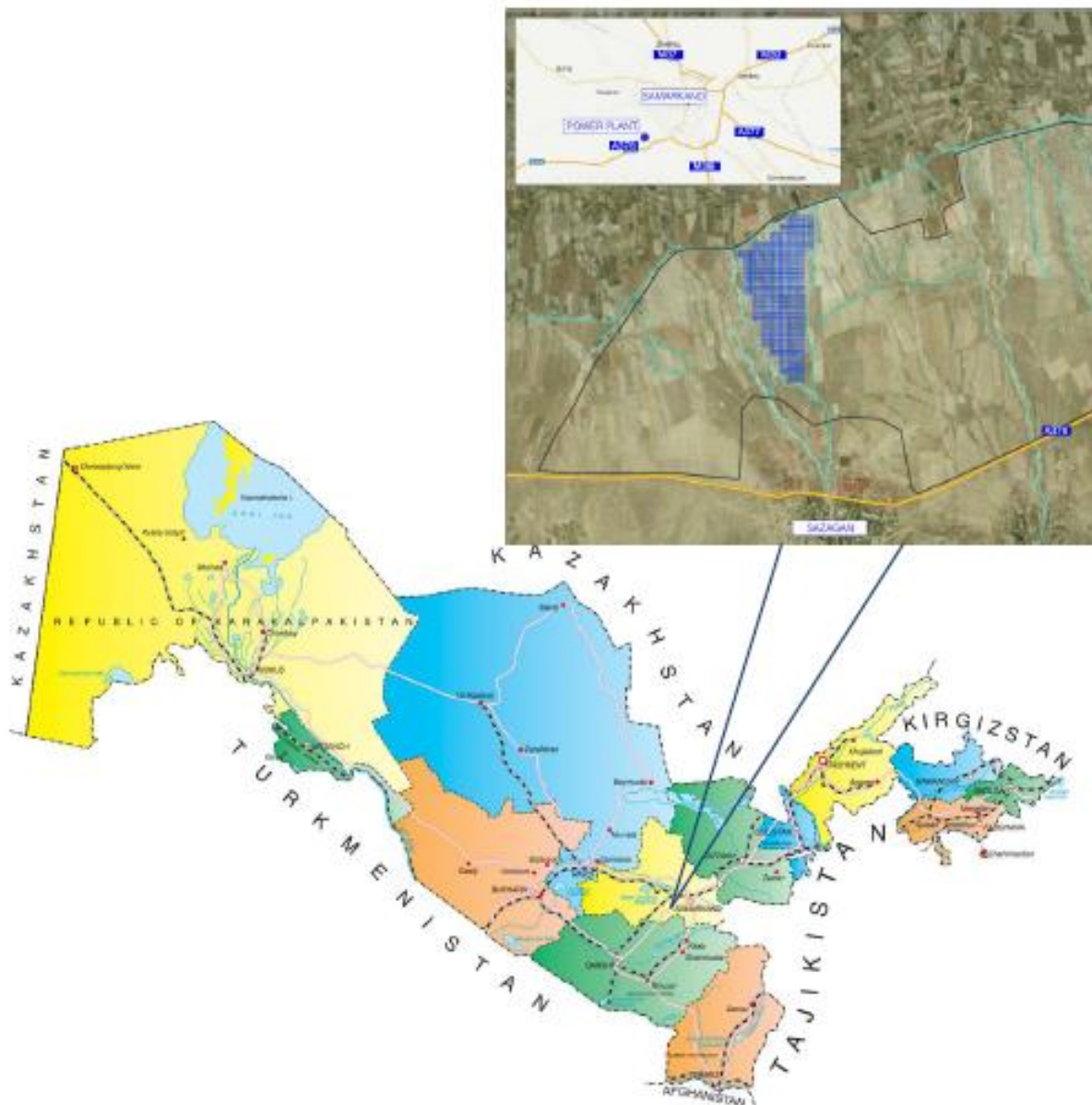
### **1.2. Current status of LARP**

5. This Land Acquisition and Resettlement Plan (LARP) was prepared based on the preliminary design prepared by the TA consultants: Nixus and STA in April 2013. According to this design estimated amount of required land for PV power plant is 405 ha. Initial assessment was made by the TA Resettlement Expert in June and July 2013. This LARP aims to provide preliminary assessment of the Project impacts and plan needed compensation / rehabilitation measures.
6. Construction of PV power plant will also imply construction of access road and transmission line. Access road will be used for delivering construction materials, equipment and maintenance. Transmission line (TL) of 220 kV is planned to connect PV power plant to the nearest 220 kV transmission line in south from the plant. The length of right-of-way (ROW) of the TL is estimated about 8 km having of 12 meters of width. This LARP was prepared based on preliminary design provided by design institute. Considering above mentioned this LARP needs to be updated after approval of detailed designs for access road and TL. The LARP update will require a field survey to confirm or identify additional AHs and APs, meaningful consultation with AHs and APs; disseminate the entitlement matrix and grievance redress mechanisms.

### 1.3. Project location

7. The Project is located in Pastdorgom and Nurabad districts of the Samarkand province, and placed 5 km north from Sazagan. The PV Power Plant will use 405 ha of rainfed land to allow the installation of the solar field and auxiliary equipment required for correct project implementation.

**Fig 1.1: Location of PV power plant**



### 1.4. Project implementation conditions

8. This LARP fits relevant Uzbekistan legislation and the ADB's Safeguard Policy Statement of 2009 (SPS 2009). Based on the Cabinet of Ministers Resolutions № 97 (29.05.2006) and № 146 (25.05.2011) of GOU any land acquisition and demolition of the structures have to be carried out only after the value of compensation has agreed by the land leaseholder and owner of structures. The GOU law and regulation on land acquisition require also that civil works can be commenced only after compensation for land acquisition is fully paid.

9. The ADB safeguard policy also requires that project implementation will subject to the LARP related conditions. The most important conditions are: (i) land acquisition including demolishing of any structure and housing is allowed only after all compensations are fully paid, and (ii) commencement of Civil Works is conditional to the satisfactory implementation of the final LARP to be checked and verified by External Resettlement Consultant and reported in the LARP compliance report.

10. Since this LARP is prepared based on the initial design, therefore, the updated LARP will need to be prepared by Uzbekenergo after completing the final detailed design for PV power plant in Samarkand province. It is important that the detailed design will be done by selecting power plant area and transmission line (TL) route alignment that could minimize land acquisition of this Project. The implementation of this Project in relation with the LARP will require to follow these milestones:

- (i) Uzbekenergo will update the LARP after completing the detailed design that will include principles to minimize land acquisition. The updated LARP will be prepared with meaningful consultations with affected households (AHs).
- (ii) All the field works related with PV power plant construction and other support field works can only be commenced after the updated LARP is approved by ADB, and compensation based on the updated LARP is fully paid.
- (iii) Uzbekenergo will submit to ADB a report on completing the implementation of LARP especially on payment of compensations to AHs.
- (iv) A LARP Compliance Report needs to be issued by an External Resettlement Consultant to be agreed by the Uzbekenergo and ADB to confirm that compensation money and other allowances has been fully paid to AHs. This report will be used by ADB as one of the conditions in the disbursement of loan money.

11. The Project Management Unit (PMU) will monitor the implementation of LARP and record it in the report. The External Resettlement Consultant will check the implementation of LARP and produce LARP compliance report prior to commencement of civil works.

12. A leaflet in the Uzbek/Russian language containing a brief description, eligibility criteria, the entitlement matrix and implementation schedule will be distributed to AHs and any other affected parties by the representatives of Uzbekenergo branch office in Samarkand through mahalla and local authority including district land resources and cadastre department. The LARP and updated LARP will be available on websites of Uzbekenergo and ADB.

### 1.5. Approach and methodology

13. This LARP is based on a comprehensive study of the impacts of land acquisition. In order to accurately assess the impacts of land acquisition, the following activities have been undertaken:

- i. **Inventory of Losses / Detailed Measurement Survey** is aimed to measure the size and type of land, as well as identify households and study of business and farming practice and assets that will be affected by the land acquisition;
- ii. **AH/AP census** aimed to gather the socioeconomic conditions of affected households and affected people;
- iii. **Consultation** with governmental agencies and affected parties;
- iv. **Preliminary estimation** of compensation rates aimed to provide an initial cost estimate for the LARP based on entitlement matrix.

14. The DMS was undertaken by TA Resettlement Expert with professionally qualified surveyors who measured the affected area of land acquisition in the form of land parcels. The DMS considered all existing assets without differentiate the legal status of ownership. Base data of identified land parcels was acquired from AHs, Samarkand land resources and cadastre department.

15. After identifying assets affected by land acquisition, the census on socioeconomic of the land users were undertaken to cover both legal and illegal ownership of the asset. Aside from interviews, the questionnaire (Annex 1) was designed by taking into account a culturally sensitive to record accurate response, was used as a census tool. The questionnaire covers the following aspects: (i) household composition and socio-economic characteristics (age, ethnicity, education, gender, etc.); (ii) occupation and break-down of household expenditures; (iii) land owned/occupied and agricultural activities; (iv) debts and assets; and (v) preferences for compensation and livelihood restoration assistance.

16. The compensation for permanent land acquisition is based on land for land compensation and other compensations were estimated based on replacement costs for the physical structures and crops to be acquired derived from reconciling the compensation policies of the GOU with those of the ADB and preparation of an entitlement matrix that clearly identifies all affected assets, identification of affected persons, and their actual entitlements. For land, crops, relocation assistance and allowances for severe impact compensation estimates were based on formulae of the GOU in its law and regulations consistent with ADB policy.

## II. SCOPE OF LAND ACQUISITION AND RESETTLEMENT

17. This chapter discusses the project impacts, the scope of land acquisition and summarizes the key effects in terms of assets acquired and affected households and people.

### 2.1. Approaches to Identification of Project Impacts

#### 2.1.1. Census and inventory of losses

18. The approach applied in determining the potential impacts of the Project was the conduct of the Inventory of Losses (IOL) where all immovable properties inside the expansion area and ROW corridors were determined, counted, measured, tagged, owners identified and their places of residence were verified with commune authorities. The immovable assets consist of lands, houses, businesses, other structures and essential utilities, fruit trees and timber trees. In assessing the potential losses of these properties, the severity of impacts to AHs were determined, from their sources of livelihoods to their productive capacity. The assessments were based from the information disclosed by APs that cover sources of livelihood, income level, and ownership of productive assets.

Table 2.1: ID names of AHs and project types

AHs	ID	Type of AHs	Impact type
Farxod	AH-1	Farmer	Plant area
Allabobo	AH-2	Farmer	Plant area
Asqar Juraqulov	AH-3 <sup>2</sup>	Farmer	Plant area
Nayrang bobo	AH-4	Farmer	Access Road
Sharif Polvon	AH-5	Farmer	Access Road
Farxod Nurbek	AH-6	Farmer	Access Road
Quvonch	AH-7	Farmer	Access Road
Baxriddin sulolasi pahta dalasi	AH-8	Farmer	Access Road
Juraev Asad	AH-9	Tenant	Access Road
Shuhrat Safarov	AH-10	Tenant	Access Road
Sevara-Elyor	AH-11	Farmer	Access Road
Sanat Sharq Sunmas Chirogi	AH-12	Farmer	220 kV TL_In
Holishon Marvarid	AH-13	Farmer	220 kV TL_In
Bahrom Bobo Vafoqulov	AH-14	Farmer	220 kV TL_In
Yusupov Tuychi	AH-15	Residential	220 kV TL_Out
Jiyanov Zohid	AH-16	Residential	220 kV TL_Out
Narimanov Zokir	AH-17	Residential	220 kV TL_Out

19. The following cropping farms “Ettitepa”, “Mulki Mahmud” had stopped their activities and belonging land was transferred to District Reserve Land. As proof farmers have provided termination certificates during census survey.

### 2.2. Summary of impacts

20. The project will have an impact by construction of three types of subproject components such as construction of PV power plant, widening of access road till the plant area and transmission line having of 220 kV voltage from plant till existing 220 kV TL. Summary of all types of impacts are described in Table 2.2.

<sup>2</sup> AH-3 has two types of impact. 1) Power plant area and 2) 220 kV TL.

Table 2.2: Summary of the impacts

Indicators	PV power plant	Access road	Transmission Line (220 kV)	Total
Total Area and length	405 ha	4 km	8005 meters	-
No. of AHs	3	8	6	17
No. of APs	13	56	40	109
Permanent land acquisition, ha	405	1.56	0.84	407.4
No. of AHs - Farmers	3	8	3	14
No. of AHs – Residential	-	-	3	3
Temporary land acquisition, ha	-	-	2.76	2.76
Affected structure, m2	675	-	-	675
Affected trees, units	-	765	-	765
Towers, units	-	-	34	34
ROW, ha			10.92	10.92
Reserve Land, ha	100.8	-	1.44	102.24
Impact by Districts	Pastdorgom, Nurabad	Pastdorgom	Pastdorgom, Nurabad	

21. The 405 ha of land will include also state enterprise land in the amount of 100.8 ha belonging to Samarkand branch of Uzbekenergo (20.8 ha) and Nurabad district machine tractor park – MTP (80 ha). This land is not included in this LARP since the land is under government operation. Reserve land consists of 1.1 ha that will be taken on temporary period for construction of 220 kV power transmission line.

Table 2.3: Summary of impacts by agricultural type

Type of Impact	Title	Number of AHs	Impact category
PV power plant	Farmer	3	Pasture, Rainfed
<b>Subtotal</b>		<b>3</b>	
Access Road	Farmer	3	Crop
	Farmer	1	Crop & Tree
	Tenant	1	Crop
	Tenant	1	Tree
	Farmer	2	Tree
<b>Subtotal</b>		<b>8</b>	
220 kV	Farmer	4 <sup>3</sup>	Pasture, Rainfed
	Residential	3	Land
<b>Subtotal</b>		<b>7</b>	
<b>Total</b>		<b>18</b>	

### 2.3. Impact types

22. This project will require: (i) permanent land acquisition for PV power plant; (ii) permanent land acquisition for access road; (iii) permanent land acquisition for TL towers and temporary land acquisition for stringing cables. The sections below will describe the types of impact in detail.

<sup>3</sup> AH-3 has two types of impact in power plant and 220 kV TL. Therefore the number of AHs increased to 20.



## 2.4. PV power plant construction

23. The construction of PV power plant according to working design will require permanent land area comprising in aggregate 405 ha of land that is located in Pastdargom and Nurabad districts. The impact for Pastargom district will include 255 ha of agricultural land whereas Nurabad district will have an impact of 150 ha of agricultural land. Main portion 304.2 ha land is operated by 3 leasehold farmers and 100.8 ha belong to Uzbekenergo branch office and Nurabad district machine tractor park-MTP. On the affected territory a structure (livestock shed) is located that belong to the AH-1 which has to be relocated. The structure was built for temporary period to keep livestock.

### 2.4.1. Impact on Land

24. The census identified that land categories such as rainfed (380 ha), pasture (24 ha) and other (1 ha) types of lands will be affected as a result of the of PV power plant construction.

25. The affected land is under operation of 3 cropping farms and 2 enterprise that use land mostly for grazing purposes. These land categories is presented in Table 2.4 below:

Table 2.4: Category of Land Affected and Ownership Status of Affected land

Land category in this LARP	Category of land (Land Code, Uzb)	Category of Rights	Deed or document provided <sup>4</sup>	Land affected (in ha)	No. of AHs
Cropping farms	Agricultural land	Lease for 30-50 years	Contract	304.2	3
Enterprise Land	Agricultural land	Permanent or temporary use	State Act granting the right for permanent possession	100.8	-
<b>TOTAL</b>				<b>405</b>	<b>3</b>

26. In this LARP total AHs within the PV power plant area is considered as 3 AHs since the enterprises land under operation of Uzbekenergo branch in Samarkand who is the Executing Agency of this project and Nurabad district MTP is under operation of local district khokimiyat

### 2.4.2. Impact on Cropping Farm Land

27. In Uzbekistan, land is under state ownership and owned by either the City or the District khokimiyat. In case of cropping farmland, depending on the availability of land in an area, the land is issued to individual households for temporary use on lease (between 30 to to 50 years) by the District Hokimiyat.

28. In line with the above, a total of 304.2 ha of farmland will be affected as a result of this power plant construction. The main purpose of these farmlands is production of grazing for their livestock. No crops are grown on these farms. The land category is considered as land with less precipitation.

29. Severity of Impact on Cropping Farmland: Affected households incurring impact on their farmland will experience significant impact (adverse impact on more than 10% of their productive assets) and special allowance will be provided in accordance with the entitlements described in this LARP.

<sup>4</sup> Some documents are issued by the Cabinet of Ministers. Others are issued by the district or regional khokim.

Table 2.5: AHs Losing Farmland

ID	Total landholding, ha	Affected land, ha	Impact in %
AH-1	480	199.2	41.5
AH-2	120	35	29.2
AH-3	218.4	70	32.1
Total		<b>304.2</b>	

#### 2.4.3. Impact on Orchards

30. No orchards are affected in the area of PV power plant construction since the land is used only for grazing purposes only. Location pictures are given in annex 3.

#### 2.4.4. Impact on Structures

31. The total size of affected structure is 675 square meter located within the farmland of AH-1. The structure has 7 substructures that are being used for keeping livestock and as warehouse for hays. Structure has no legal document and was built for temporary period. In order to be able to receive the compensation AHs should legalize the structure and to evaluate at the Independent Certified Valuation company. This structure is not used for living purposes since the farmer and his family lives at different area.

32. **Severity of Impact on Affected Structures:** Owner of the structures has permanent residential houses and will not experience severe impacts in terms of total building area. AHs will not be relocated to new houses. They will build new temporary structures near to previous one

33. All AHs will be compensated as per the entitlement matrix conforming to the principle of replacement cost. Special assistance will be provided in the form of transportation assistance, to restore structure as pre-project condition.

#### 2.4.5. Impact on Crops

34. On the affected 304.2 ha of farmland and 100.8 ha of enterprise land the main crop is considered as hay. Most of the area is used for grazing of livestock as well. The compensation is considered for hays in accordance with the entitlement described in this LARP. The compensation will be based on average net profit of last 3 years multiplied by 4 years

### 2.5. Access to the site

35. The construction of PV power plant will require improvement of existing access road. By widening and asphaltting of existing field road the Project will have impact on cropping farms, orchards and on irrigation channels. Total length of access road is about 4 km and in aggregate influencing on 8 AHs.

#### 2.5.1. Impact on Land

36. A total of 1.96 ha of land would be required for the project. Of this, 1.31 ha of the land comprises of cropping farm land, 0.25 ha of land comprises of orchard held land whereas the remaining 0.4 ha will be taken from other type of land that is under category of State Reserve Land (bare land). Permanent land acquisition will be applied for all affected lands.

#### 2.5.2. Impact on Cropping Farm Land

37. In Uzbekistan, land is under state ownership and owned by either the City or the District khokimiyat. In case of cropping farmland, depending on the availability of land in an area, the land

is issued to individual households for temporary use on lease (between 30 to to 50 years) by the District khokimiyat.

38. The existing road has 6 meter of width that will not be sufficient to provide suitable access to the PV power plant construction site. During the construction period it has been planned to use heavy trucks for construction and for transportation of necessary equipments from main railroad station till the project area. Therefore in accordance with the preliminary design access road having at least 12 meters of width (category 5) is needed. Therefore during the census the ROW for access road has been taken as 12 meters and all impacts has been calculated by taking consideration of 6 meter expansion from existing road. During the calculation of impact it has been accepted that 3 meters from each side of road will be widened.

39. After detail design for road will be developed the impact of access road section shall be re calculated and final LARP need also updated accordingly.

Table 2.6: AH losing farmland

ID	Type of AH	Affected land, Ha	Type of affected crop
AH-3	Farmer	0.01	wheat
AH-5	Farmer	0.64	wheat
AH-6	Farmer	0.07	cotton
AH-7	Farmer	0.39	wheat
AH-9	Tenant	0.20	corn
<b>TOTAL</b>		<b>1.31</b>	

40. Among the affected households 4 cropping farms will lose wheat and cotton crops and compensation will be paid in accordance with the entitlements described in this LARP.

41. One tenant (AH-10) will be affected and will lose corn crop. This tenant has formal agreement with cropping farm (AH-1). Compensation will be based on tenant agreement where it shows the distribution of net profit from the corn crop for 1 year. The compensation will be distributed to farmer and tenant in accordance with the shares described in tenant agreement. The cropping farm that leased the land will also be exempted from affected land from total land holdings.

42. **Severity of Impact on Cropping Farmland:** Affected household incurring impact on his cropping farmland will not experience significant impact (adverse impact on more than 10% of their productive assets) since the maximum impact in terms of percentage consists of 3.1% whereas minimum is 0.1%.

Table 2.7: Severity of impact on cropping farmland

ID	Type of AHs	Affected land, ha	Total land, ha	Impact, %
AH-3	Farmer	0.01	13.6	0.1
AH-5	Farmer	0.64	40	1.6
AH-6	Farmer	0.07	63	0.1
AH-7	Farmer	0.39	72.1	0.5
AH-9	Tenant	0.20	6.48	3.1
<b>TOTAL</b>		<b>1.31</b>		

### 2.5.3. Impact on orchards

43. Of the total affected land, 0.25 ha land is under orchards comprising of 3 AHs. The 2 AHs are running the orchard activity based on the farming activity (leaseholder from Government). The 1 AH tenant (AH-9) leases orchard land from farmer (AH-7). The impacted landholdings and type of tree (See Table 2.8).

Table 2.8: Land wise detail of affected orchards

AH	Type	Total land, ha	Affected land, ha	Impact, %
AH-4	Farmer	2.0	0.12	6
AH-8	Tenant	5.0	0	0
AH-10	Farmer	4.0	0.13	3.2
<b>Total</b>			<b>0.25</b>	

44. **Severity of Impact:** Of the 3 households incurring impact on trees none of them will experience significant impact on their income (lose more than 10% of their productive asset). The AH-9 will have no land impact (0%) since he leased land from AH-7 and this impact has been included in land impact of farming crops section.

### 2.5.4. Impact on Trees

45. Total of 765 trees will be felled along the proposed ROW belonging to a total of 3 AHs. These 765 trees comprising of 2 varieties of timber trees would be affected in these farming lands. In order to create condition for civil works all trees will be cut on 12 meters of ROW. A total of 215 mulberry trees and 500 poplar trees need to be felled.

Table 2.9: Tree wise detail of affected orchards

ID	Type	Type of tree	Total trees	Affected tree	Impact, %
AH-4	Farmer	mulberry	2,500	215	8.6
AH-8	Tenant	poplar	550	50	9.1
AH-10	Farmer	poplar	5,500	500	9.1
		<b>TOTAL</b>	<b>8,550</b>	<b>765</b>	<b>8.9</b>

46. **Severity of Impact on Affected Trees:** None of the 3 AHs will experience severe impacts on their trees. The maximum percentage of impact is 9.1% whereas minimum is 8.6%.

## 2.6. Transmission line 220 kV

47. Under this Project the transmission line with the power of 220 kV will be constructed to connect PV power plant to the existing 220 kV TL located in Sazagan settlement (Nurabad district) having two separate lines (out and in). "OUT" line comprises of 2830 meter length while "IN" line having 5175 meter length. Both transmission lines will be connected to existing 220 kV TL located in Sazagan settlement of Nurabad district.

48. The construction of TL will impact the agricultural lands of Pastdorgom and Nurabad districts. The construction of TL will impact reserve land of Pastdorgom district and farmers as well as residential lands of Nurabad district.

49. The Government KMK 2.10.08-97 provides standard and guidance for design, construction, and operation of transmission line particularly with its requirement for land acquisition. For transmission line for power lines having a voltage of 220 kV, the requirement is as follow:

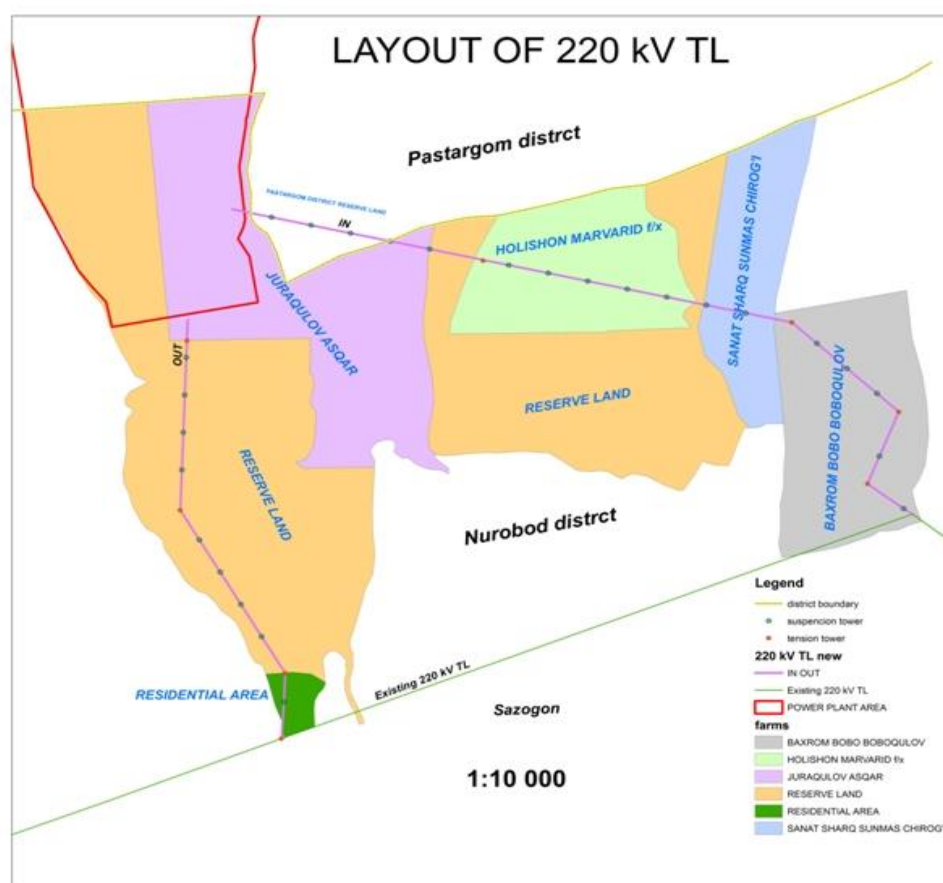
- (i) The TL requires a temporary alignment corridor of 12 meters in width for stringing the conductor cables.
- (ii) For construction of suspension towers 600 square meters is required whereas 1500 square meters for tension towers for temporary period
- (iii) Post-construction the TL require 115 square meters for each suspension tower and 225 square meters for each tension tower for permanent land acquisition.
- (iv) Additionally to the ROW, 30 meters of safety zone will be set from each edge of TL by restricting construction of residential structures. However there will be still possible to carry out any type of agricultural activity within this safety zone area.
- (v) According to the preliminary design in total 8 tension towers and 26<sup>5</sup> suspension towers are required for the construction of 220 kV TL on affected lands.

Table 2.10: Affected permanent and temporary land for erection of towers

Type of Tower	Number of towers	Permanent Land acquisition, m2	Temporary Land acquisition, m2
Tension	8	1800	12000
Suspension	26	3450	18000
<b>Total</b>	<b>34</b>	<b>4790</b>	<b>27600</b>

50. The ROW of TL having 12 meters of width will have an area of 10.92 ha that is necessary for Uzbeknergo to construct, operate, maintain and repair the transmission line facilities in the future.

Figure 2.1. Layout of proposed 220 kV TL



<sup>5</sup> The 4 suspension towers are not included in this LARP due to the land already is in the 400 ha of power plant area.

### 2.6.1. Impact on Land

51. The census identified that 3 types of land will be affected as a result of the construction of new 220 kV TL such as pasture, rainfed and residential. All affected cropping farms have two pasture and rainfed lands whereas residential AHs have residential land. The details of impact on each of these land categories is presented in Table 2.11 below:

Table 2.11: Category of Land Affected

No.	ID	Type	Permanent Land, m2	Temporary Land, m2	ROW, ha
1	AH-3	Farmer	0	0	0.30
2	AH-12	Farmer	230	1200	0.54
3	AH-13	Farmer	800	4500	1.67
4	AH-14	Farmer	1250	7500	2.23
5	Residential land		3606	0	1.83
6	Reserve land, Pastdorgom		460	2400	1.06
7	Reserve land, Nurabad		2050	12000	3.29
Total			8396	27600	10.92

52. A total of 2.76 ha of land would be required for the construction of TL. Of this, 1.32 ha of the land comprises of cropping farms (pasture and rainfed land), whereas the remaining 1.44 ha of land comprises of State Reserve Land. In total 8396 sq.m (0.84 ha) of land will be acquired on permanent basis from affected households. Land for construction of TL will be taken for permanent and temporary periods.

53. The land area under ROW will not be compensated since there are no seasonal or annual crops on affected land and land under ROW will be given back to farmers after completion of construction works. However the agricultural lands taken for erection of towers on temporary and permanent period will be subject for compensation. The residential land within the ROW will be subject for compensation since there is a restriction for residential land and structures.

54. In accordance with the technical requirements provided by design institute the approximate number of towers is calculated as 34 units. Of this, 26 units of suspension towers and 8 units of tension towers. The suspension towers will be erected within the distance of 250 meters while tension towers will be erected on each angles of TL where required. Table 2.12 describes the location of towers within project area.

Table 2.12: Location of towers by types

ID	Suspension towers	Tension towers	Total towers
Reserve land (Pastdorgom)	4	-	4
AH-12	2		2
AH-13	5	1	6
AH-14	5	3	8
Reserve land (Nurabad)	9	4	13
Residential area	1	-	1
<b>Total</b>	<b>26</b>	<b>8</b>	<b>34</b>

55. One suspension tower will be erected on residential land area. In addition to ROW with 12 meter of width, 30 meters of safety zone will be set on each side of the cables of 220 kV TL by restricting construction of any types of residential structures. Figure 2.1

### 2.6.2. Impact on Cropping Farm Land

56. In line with the above, a total of 1.32 ha of cropping farmland will be affected as a result of construction of TL. Three leaseholder cropping farms are using this land. There are no crops on their lands. The land is purposed for grazing of livestock and pasture only.

Table 2.13: AH having impact on their farmland

No.	ID	Type	Affected land, ha	Total Land, ha	Impact, %
1	AH-12	Cropping farm	0.12	100	0.12
2	AH-13	Cropping farm	0.45	267	0.16
3	AH-14	Cropping farm	0.75	100	0.75
	<b>Total</b>		<b>1.32</b>	<b>367</b>	<b>0.35</b>

57. **Severity of Impact on Cropping Farmland:** Affected households incurring impact on their cropping farmlands will not experience significant impact (adverse impact on more than 10% of their productive assets) since the impact in terms of percentage consists of maximum 0.75% whereas minimum is 0.12%. In case of there will be severely AHs after the detailed design, then compensation is considered in accordance with the entitlement described in this LARP

58. Compensation for loss of crops will be provided in accordance with the entitlements described in this LARP. Temporary and permanent land acquisition will be taken into consideration during the calculation of compensation. Temporary land acquisition will not affect any crops on cropping farms since no crops are produced on their lands. Detail information on size of temporary and permanent land acquisition is given in Table 2.11 above.

### 2.6.3. Impact on Residential Land and Structures

59. During the census survey and DMS it has been identified that only residential lands will have an impact along the proposed ROW of new transmission line. No structures will be affected since there is not structure yet erected or safety zone of TL will not impact to structures. Table 2.14 shows the impact to land

Table 2.14: AH having impact on their residential land

No.	ID	Type	Affected land, sq.m	Total Land, sq.m	Impact, %
1	AH-15	Residential	409	4970	8.2
2	AH-16	Residential	277	6000	4.6
3	AH-17	Residential	2920	6031	48
	<b>Total</b>		<b>3606</b>	<b>17001</b>	

60. **Severity of Impact on Residential land:** Affected household (AH-17) will have severe impact on his residential land (adverse impact on more than 10% of their productive assets) by having the impact in terms of percentage 48%. Other residential AHs will not have significant impact. Severely AHs will be compensated in accordance with the entitlement described in this LARP ( three times of minimum wage)

61. During census survey it has been identified that none of the affected residential households have official document or deed to their land that enables them to be entitled for compensation. However, according to the entitlements set in this LARP all illegal households will be legalized.

62. Land to land compensation option will be given to affected households in nearby location.

#### **2.6.4. Impact on orchards and trees**

63. During the census survey no orchard lands and trees have been identified to be affected along the proposed ROW of new transmission line.

#### **2.6.5. Impact on Crops**

64. During the census survey no crops has been identified on agricultural cropping farm lands along the proposed ROW of new transmission line. However in case of there will be identified crops after the detailed design completion, then compensation is considered for crops in accordance with the entitlement described in this LARP. The compensation will be based on average net profit of last 3 years multiplied by 4 years.

#### **2.6.6. Impact on Community Utilized Facilities**

65. On the section of access road Community Utilized Facilities (CUFs) such as water canals will be affected by widening of the existing road. Such facilities will be restored by the EA's own sources as of pre project condition thus enabling the flow of water to affected cropping farms.

66. No CUFs will be affected on the section of PV power plant area with the total area of 400 ha. No CUFs will be affected within the proposed ROW of 220 kV transmission line.

67. In case CUFs will be affected in accordance with final detailed design then those facilities will be restored as of pre project or better condition. CUF includes asphalt roads, water pipelines, streets and etc.

### **2.7. Vulnerability status of the AHs**

68. According to census survey no vulnerable households were identified. This Project will not physically displace residential houses or severely impact on livelihood of any AH.

69. However, the entitlement matrix provides measures for mitigating the impact on the vulnerable AHs. The vulnerable AHs will be entitled to special assistance over and above the compensation for affected assets in order to ensure that they are able to restore or improve their pre-project standard of living.



### III. SOCIOECONOMIC INFORMATION AND PROFILE

70. This chapter presents the findings of the socio-economic census activities undertaken in the affected area with the objective of understanding the existing socio-economic condition and vulnerability of 109 APs in 17 AHs within the survey areas.

#### 3.1. Demography and socioeconomic characteristics

71. **Age and civil status.** The average age of AHs heads is 46 years old. All household heads are married. Representative number of APs as presented in Table 3.1 is aged between 16-25 years old – 29% (17 males and 15 females APs). The least presented are senior APs aged 65 and above years – 2% (1 male and 1 female APs).

Table 3.1: Composition of APs by age

Age	Male APs		Female APs		Total APs	
	No.	Percent	No.	Percent	No.	Percent
1-6	11	19%	11	21%	22	20%
7-15	4	7%	4	8%	8	7%
16-25	17	30%	15	29%	32	29%
26-40	12	21%	9	17%	21	19%
41-65	12	21%	12	23%	24	22%
65-above	1	2%	1	2%	2	2%
<b>Total</b>	<b>57</b>	<b>52%</b>	<b>52</b>	<b>48%</b>	<b>109</b>	<b>100%</b>

72. **Household population and labor force.** The AHs in 4 communities have estimated population of 109 APs, mostly it is 40 APs in S.Tursunov and Sazagon, and least it is 14 APs in Chandirobod. The average membership of each AH is 7 persons per household. Traditions and customs of people in this region usually are to have big families consisting of few generations.

Table 3.2: APs per household

Community	AHs	APs	No. of APs		
			Minimum	Average	Maximum
Chandirobod	2	14	6	7	8
Dustlik	3	15	5	5	5
S. Tursunov	5	40	6	8	12
Sazagon	7	40	4	6	9
<b>Total</b>	<b>17</b>	<b>109</b>	<b>4</b>	<b>7</b>	<b>12</b>

73. **Education.** About 43% of the APs have reached high school only, 49% males and 36% females. Other 30% with college degree, 20% males and 41% females. Only 27% are with higher education degrees, 31% males and 23% females.

Table 3.3: APs by attended education

Education	Male APs		Female APs		Total APs	
	No.	Percent	No.	Percent	No.	Percent
High school	22	49%	14	36%	36	43%
Lyceum / college	9	20%	16	41%	25	30%
University	14	31%	9	23%	23	27%
<b>Total</b>	<b>45</b>		<b>39</b>		<b>84</b>	

74. **Livelihood occupations.** Related agricultural activities are the main occupation of the 29% of the APs, 15 males and 8 females. About 20% are students (9 males and 7 females) at one of district colleges or Samarkand city universities. APs at governmental service are 16% (7% males and 6 females). Housewives who take care of growing/breeding domestic animals in their backyards are 14% and about 10% of APs are unemployed (7 males and 1 female). APs engaged in entrepreneurship are 4% (3 males and 1 female), and 3% are retired (1 male and 2 females). 1% handicraftsman, only one female.

Table 3.4: Livelihood occupations

Occupation / Activity	Male		Female		Total	
	APs	%	APs	%	APs	%
Agriculture	15	36%	8	22%	23	29%
Student	9	21%	7	19%	16	20%
Governmental	7	17%	6	16%	13	16%
Housekeeper	0	0%	11	30%	11	14%
Unemployed	7	17%	1	3%	8	10%
Entrepreneurship	3	7%	1	3%	4	5%
Retired	1	2%	2	5%	3	4%
Handicraftsman	0	0%	1	3%	1	1%
<b>Total</b>	<b>42</b>		<b>37</b>		<b>79</b>	

#### 75. Household expenditure and low-income AHs.

76. The existing methodology<sup>6</sup> in Uzbekistan identifies a low-income family as one in which the monthly income is lower than 1.5 fold of minimal wage per capita. Since December 2012 the minimal wage was set at 79,590 UZS per month, thus the poverty line has been set at 119,385 UZS (58 USD) per month per person. Based on this methodology the official poverty line (as nominal indicator) is about 2 USD<sup>7</sup> per day per capita, which is close to the WB and UN indicator of poverty. In addition in rural areas households are practicing household farming where produced most of food products for home consumption and excess are sold on local markets. According to GOU regulation this practice is considered in determining livelihood level of households and estimated by adopted formula.

77. APs were reluctant or unable to disclose their monthly incomes either individually or on a household basis hence it was decided the best approach would be to ask APs to estimate their average monthly expenditures. According to the SES no AHs are found poor. The average monthly cash expenditure of APs is 136,557 UZS. Two largest cash expenditures are goes on food 55.5% and clothing 16.2%. However, in this estimate were not included food products from own private and/or household farming. Third ranked are expenditures on education which comprise 7.7%. Almost on same level expenditures on social activities (6.2%) and on utilities (6.1%). Interesting to note that communication (mobile) expenditures is identified as significant for APs, whereas health care and recreation expenditures comprise 3.1%.

Table 3.4: Reported cash expenditures of AHs  
(Excluding income from household farming)

№	Expenditures	Average yearly expenditures of AHs by categories (%)	Average monthly expenditures per AP (UZS)
1	Food	55.5%	75,765
2	Clothing	16.2%	22,171
3	Education	7.7%	10,474

<sup>6</sup> Resolution of Cabinet of Ministers № 44 issued on 15.02.2013.

<sup>7</sup> Depending on USD / UZS exchange rate fluctuations.

4	Social	6.2%	8,524
5	Utilities (electricity, gas etc.)	6.1%	8,307
6	Communication (mobile)	4.7%	6,422
7	Health care and recreation	3.1%	4,281
8	Household farming	0.5%	612
	<b>Total / Average</b>	<b>100%</b>	<b>136,557</b>

### 3.2. Household utilities

78. **Water.** All AHs are using the borehole water for drinking and other purposes.

79. **Electricity.** All AHs have access to electricity. This electricity is mainly used for lighting, refrigeration, cooling, and watching television.

80. **Natural gas.** All AHs have no access to natural gas instead of gas they are using wood and other types of fuels for cooking.

### 3.3. Access to social services

81. **Education.** All 6 Higher Education institutions are located in Samarkand city and cover more than 23,000 students.

82. The educational system of Pastdargom district is represented (as of Jan 1, 2013) by 123 general schools with some 47,421 enrolled pupils, 57 kindergartens with 4,787 children, 14 professional colleges with more than 14,855 students enrolled in secondary special education.

83. The educational system of Nurobod district is represented (as of Jan 1, 2013) by 76 general schools with some 21,980 enrolled pupils, 5 kindergartens with 460 children. In Nurabod district 2-7 years aged children are 12,710, therefore coverage with kindergartens is 3.6%.

84. **Health services.** With the total population of 341,211 people Pastdargom district's system of healthcare institutions consists of: four in-patient hospital with 646 beds, which includes section of infectious diseases, children's department and maternity hospital. There are two out-patient polyclinics with maternity consulting center, clinic for elderly and children, stomatology, blood transfusion and etc. The total number of doctors working in healthcare institutions is 360 and nursing staff represented by 1,650 professionals. The coverage of the population by doctors per 10,000 population is 11.3, by nursing staff is 53 (in 2012).

85. With the total population of 129,631 people Nurabad district's system of healthcare institutions consists of: 1 central and 7 branches of out-patient polyclinics, 17 village health care stations and 1 in-patient isolation hospital. There are also 3 sanatoria and health resorts specialized in treatment by mineral water. The total number of workers is 1,126 persons, including 114 doctors, 551 nursing staff, 312 junior health care staff and 149 technical personal.

### 3.4. Vulnerable people

86. According to the census and SES no affected there were not identified vulnerable groups such as those below the poverty line, the landless, the elderly, women headed family and Indigenous Peoples. In this project involuntary resettlement does not consider to physically displace the affected households.

### 3.5. Ethnic minorities and indigenous people

87. In terms of ethnic composition according to census data all 17 households are Uzbeks. There was not identified any ethnic groups maintaining cultural and social identities separate from the mainstream Uzbekistan's society fitting the ADB definition of Indigenous Peoples. Therefore,

the ADB's policy, as described in ADB's SPS, 2009 in the Indigenous Peoples is not triggered. No special action is required for this LARP.

### **3.6. Gender impacts**

88. The required land acquisition does not have gender impact. The results of census and SES indicate that there is no women-headed AHs, involve or influence women activities. Therefore, this LARP does not include measures addressed for gender support or protection.

## **IV. INFORMATION DISCLOSURE, CONSULTATION AND PARTICIPATION**

### **4.1. Consultations**

89. Seven consultations were carried out with AHs during Project preparation, and it is recommended that other consultations need to be carried out after LARP updated and before starting payment of compensations. Apart from the AHs, the participants in these public consultations included representatives of respective government organizations.

90. The key objectives of the consultations were to: (a) identify and help address AH's concerns related to the preparation and implementation of the LARP; (b) get inputs on AHs preferences for the type and delivery of compensation; (c) minimize AHs apprehensions and ensure transparency in LARP activities; (d) inform affected households about resettlement impacts and cut off dates.

91. Five consultations were held during the census and LARP preparation. The venue, number, dates of the consultations and participants are summarized in Table 4.1.

Table 4.1: Summary of Consultation Meetings

<b>Date</b>	<b>Locations</b>	<b>District</b>	<b>Number of meetings</b>	<b>Participants</b>
1 May 2013	Chandirobod	Pastdorgom	1	15
2 May 2013	S.Tursunov	Pastdorgom	1	10
3 May 2013	Dustlik	Pastdorgom	1	12
4 May 2013	Pulatchi mahallasi	Pastdorgom	1	6
5 May 2013	Turayev	Pastdorgom	1	13
28 May 2013	Sazagan	Nurabad	1	5
7-10 July 2013	Sazagan	Nurabad	3	15

92. During the consultation meetings, AHs raised important questions. These questions were addressed to local khokimiyat and land resources and cadastre office. The questions/queries were related to land acquisition and resettlement as well as compensations. Table 4.2 below presents the main queries raised and the responses to the same.

Table 4.2: Main Issues Addressed during the Consultations

Queries	Responses
When land acquisition process is going to be started?	Land acquisition will be updated after completion of final design
What kind of compensation will be provided for farmers?	Compensation will be paid as of entitlement described in this LARP: land to land, loss of crops by multiplying average net profit from crops to four years.
Can farmers take compensation as cash?	No, Compensation will be paid directly to the account number of farmers?
When we have to give up affected land?	After you receive whole compensation and allowances (in case of eligible) and signing the agreement letter.
What kind of compensation will be provided for leaseholders of farmers?	The annual net profit from crop.
In case the road rehabilitation affect to the orchards will it be also subject for compensation?	Yes, any type of affected households including illegal households will be subject for compensation
Is it already defined that PV power plant will be built in this area?	Yes, already district and regional Hokims issued Decrees.
Is it already defined that 110 kV TL will be constructed along the road and affecting to farmers?	It depends on the final design developed by design institute of Uzbekenergo
What if I will build new temporary structure for my own purpose within next month?	It won't be possible then to compensate. Because any types of changes in terms of structure building, tree planting will not be considered as affected by this project after cut off date.
In case of changing the design of 110 kV TL will we be informed?	Yes, local hokimiats, mahallas will be informed about final detail design results and subsequently you may receive information from them.
What if we refuse to take land to land compensation?	In such case you should provide PMU letter of confirmation about refusal land to land compensation. This letter should be signed by affected household only.
Will we still pay the taxes for our affected land	No, the affected part of the land will be taken away from your land balance and you will not pay tax for affected portion of land
When the construction starts?	According to the schedule it should be started in September, 2013. Already contractor for Civil works has been appointed.
Can we benefit from employment within the new PV power plant?	Yes, the LARP will include to give priority to AHs in the period of construction of plant.
What kind of adverse impacts will be from new PV plant?	This plant is considered as green energy and will not have adverse impact to the population living nearby
When PV power plant starts to operate?	It is proposed in 2015 year
Can we use electricity derived from this plant to our own purposes by paying all the fees	The distributed power will be high voltage TL with the capacity of 220 kV that cannot be directly connected to low voltage lines.
Will we still be entitled for compensation in case of absence of official cadastre document to our land?	Yes, but in order to be eligible for compensation AHs should legalize their rights to the land. All fees concerning with registration will be borne by EA. However, in case there will be any additional taxes, then AHs shall pay those expenses on their own sources
Now our residential structures are not being affected, what if sooner it	In case of detail design changes and residential structures will be affected than in accordance with the

Queries	Responses
affects?	entitlements set in this LARP AHs will be entitled for compensation.
Can we require land to land compensation for replacement of affected residential land?	Yes, the land to land compensation will be provided by in nearby location.

## 4.2. Information Disclosure

93. Disclosure meeting describing the current LARP will be organized to AHs (including all households, agricultural farms and private firms) and respective government organizations during LARP evaluation stage (tentative period: III quarter 2013). The organized meeting will gather all stakeholders in order to explain and answer in detail to all raised, unsolved or appeared questions. A leaflet in local language will be distributed to AHs, relevant agencies and organizations during the disclosure meeting. The leaflet will describe the project and land requirement for the project, the entitlement matrix, as well as the grievance mechanism and LARP implementation schedule. The draft and final LARP document will be disclosed on the websites of the Uzbekenergo and ADB upon approval by both ADB and the GOU.

## V. GRIEVANCE REDRESS MECHANISM

94. The APs will have the right to file complaints and queries on any aspect of land acquisition compensation, and resettlement. The EA will ensure that grievances and complaints on any aspect of the land acquisition, compensation, and resettlement are addressed in a timely and satisfactory manner. All possible avenues are made available to the AHs to resolve their grievances at the project level. However, AHs are free to address their complaints to the courts at any time and not only after using the GRM. Under the proposed project level grievance mechanism, AHs may appeal any decision, practice or activity connected with the assessment or valuation of land or other assets, acquisition and compensation. All AHs will be made aware of the procedures they can follow to seek redress, including, if necessary resort to the courts through the Government's grievance mechanism. The Project Grievance Mechanism will be disseminated via the LARP leaflet that will be distributed to AHs through local khokimiyat, the mahalla or village assembly of citizens or farmers councils during the disclosure process.

95. The PMU of the EA will establish a simple and accessible Grievance Redress Mechanism. Figure 5.1 gives the details of the grievance redress mechanism. The GRM provides a number of avenues and levels for grievance resolution and appeals process.

96. The main objective behind project specific grievance mechanism is to ensure timely and user-friendly solution to the complaints received from the AHs. However, the Project Grievance Redress Mechanism does not prevent any AH to approach the governmental legal system to resolve their complaints at any stage of the grievance redress process. The AHs can address their complaints to the courts at any time and not only after using the GRM.

97. Level 1 (Mahalla / Village Assembly). Under this project grievance redress mechanism, complaints can be submitted to Mahalla, Village Assembly of Citizens, Farmer Councils or directly to EA. The mahalla/village assembly will try to resolve or clarify the issue within 1 week. Unresolved issues will be referred to the district khokimiyat GFP.

98. Level 2 (District Hokimiyat). Usually, the District khokimiyat will be the entry point for receiving complaint or known as a Grievance Focal Point (GFP<sup>8</sup>). In case, complaint is submitted to the GFP, the GFP will establish a contact with the EA and its PMU, mahalla and other bodies such as village assembly of citizens, farmers councils of which AH are members and will try to resolve the issue within 1 to 2 weeks.

<sup>8</sup> Under the Government Grievance mechanism, the local khokimiyat is designated as the Grievance Focal Point.

99. Level 3 (Project Management Unit). The EA through its PMU on a regular basis (weekly) and as per immediate request will check with the GFP whether any complaint is received by GFP. The PMU, on receipt of a complaint from GFP or any other local bodies, will immediately take the following actions:

- (i) Will inform the complainant within 2 days;
- (ii) Inform ADB office both resident mission and HQ;
- (iii) Establish complaint handling team with members Head of PMU, representatives from the EA, District Khokimiyat, Land Resources and Cadastral Department, and Mahalla or Village Assembly of Citizens or/and Farmer's Councils, or/and Women Association.

100. The team will be headed by one of the EA management staff designated for handling grievances of the project.

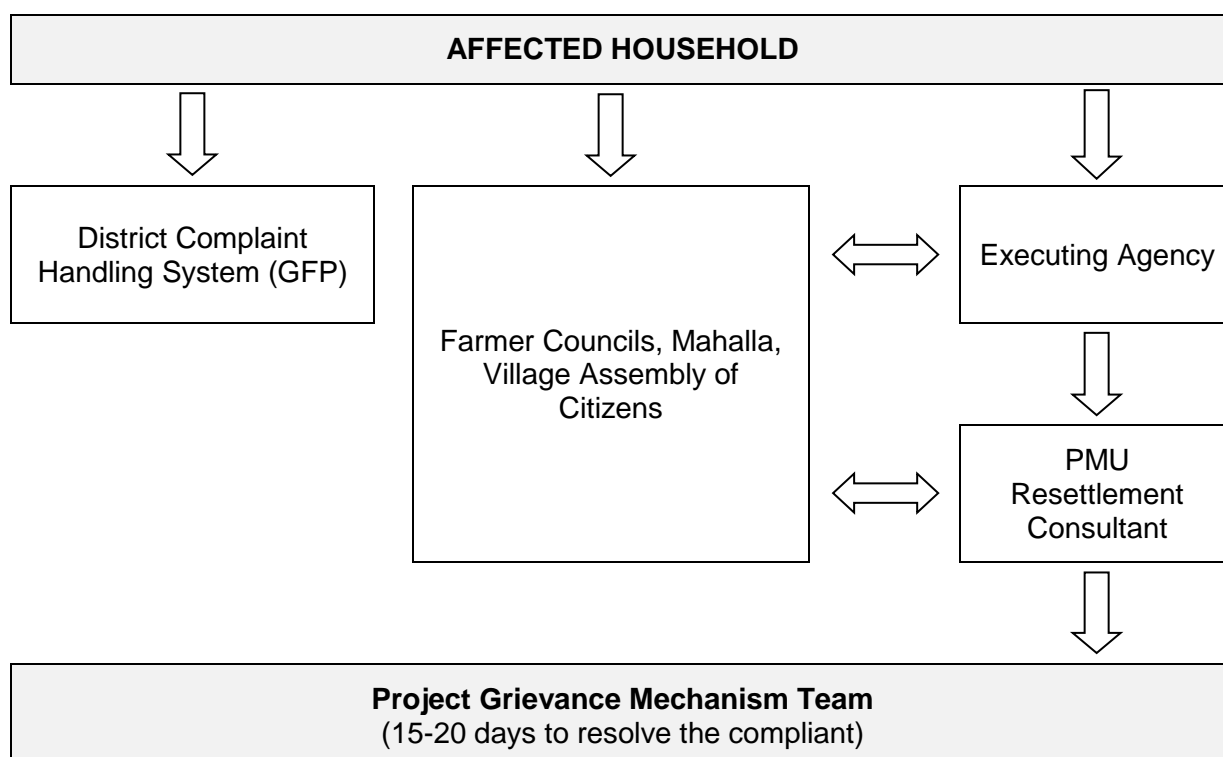
- (i) The team will consult the complainant and gather complainant's concerns;
- (ii) The team will also take advise from independent valuator (in case of grievances related to valuation);
- (iii) All complaints will be resolved in 15-20 days, and in case additional details are required, a maximum of 30 days will be used to resolve and close the complaint;
- (iv) If complaint is not resolved by Project Grievance Mechanism Team, the PMU will inform ADB office and District khokimiyat regarding the same.

101. Level 4 (Provincial Hokimiyat). If a grievance is not resolved within 30 days, the complainants or her/his representative can submit its complaint to the provincial khokimiyat. The Provincial hokimiyat will also have 15 calendar days to resolve the complaint.

102. Level 5 (Court). If the complaint is still unresolved, the complainant can submit his/her complaint to the appropriate court of law.

103. The PMU will be responsible for recording the complaint, the step taken to address grievance, minute of the meetings, and preparation of a report for each complaint. The complaint handling process will be reported to ADB through the quarterly project implementation report.

Figure 5.1: Grievance Mechanism



## **VI. LEGAL FRAMEWORK**

104. This chapter describes the Uzbek laws and regulations on land acquisition and resettlement, and ADB's policy on Involuntary Resettlement, and their particularly underlying principles.

### **6.1. Provisions regulating land acquisition and compensation in Uzbekistan**

#### **6.1.1. Land code**

105. The land code (LC) is the main regulatory framework for land related matters in Uzbekistan. The LC regulates allocation, transfer and sale of land plots, defines ownership and rights on land. It describes responsibilities of different state authorities (Cabinet of Ministers, province, district, city khokimiyat) in land management; rights and obligations of land possessor, user, tenant and owner; land category types, land acquisition and compensation, resolution of land disputes and land protection. The LC defines terms of rights termination on land plot, seizure and land acquisition of land plot for state and public needs, and terms of seizure of land plot in violation of land legislation.

#### **6.1.2. Civil code**

106. The civil code (CC) defines the legal status of participants of civil relations, the grounds and procedure of implementation of property rights and other proprietary rights, rights on intellectual property, regulates the contractual and other obligations, as well as other property and related personal non-property relations. The CC defines general rules of property seizure, determination of property cost and rights for compensation, terms of rights termination.

#### **6.1.3. Resolution of Cabinet of Ministers № 97 (29 May 2006)**

107. This resolution regulates compensation for losses to individuals and legal entities due to seizure of land plots for state and public needs. This regulation is mainly dealing with land plots, houses, building and structures of individuals and legal entities.

108. The resolution determines the procedure for seizure of land or part thereof, as well as the procedure for calculating the amount of compensation to individuals and legal entities for the demolished residential, industrial and other buildings, structures and plantings in due to seizure of land for state and public needs. The Resolution contains:

- procedure for calculating the amount of compensation to individuals and legal entities for the demolishing houses (apartments, buildings, structures and plantings) due to seizure of land plots for state and public needs;
- procedure and conditions for providing residential premises for owners of demolishing houses;
- procedure and conditions for providing land plots to individuals for individual housing construction instead of the demolishing residential house (apartment);
- procedure of losses compensation to legal entities due to seizure of land plots for state and public needs;
- procedure and calculation terms for transfer and reinstatement at the new place of dwelling houses, buildings and structures to be demolished;
- Procedure and calculation terms of in case of construction in a new place of dwelling houses, buildings for individuals and legal entities, houses (apartments) of which are to be demolished.

109. Khokimiyats of respective districts (cities) are required to notify in writing the owners of residential, industrial and other buildings, structures and trees about the decision, not later than six months before the demolition, with the annex to the notice copies of the relevant decisions of the Council of Ministers of the Republic of Karakalpakstan, khokims of provinces and Tashkent city on



seizure of land, demolition of residential, industrial and other buildings, structures and trees located on the land plot.

#### **6.1.4. Resolution of Cabinet of Ministers № 146 (25 May 2011)**

110. Resolution is aimed to improve the procedure of granting land plots, to protect the rights of legal entities and individuals on land, improving the architecture of settlements and the efficient use of their land for construction in accordance with the Land Code and the Town Planning Code.

111. This resolution approved two Regulations: (i) Regulation on the procedure for granting land for urban development and other non-agricultural purposes, (ii) Regulation on the procedure of compensation for land possessors, users, tenants and owners, as well as losses of agriculture and forestry.

112. The regulation on the procedure for granting land for urban development and other non-agricultural purposes contains:

- the order of land plot location, preparation and approval of site selection and land allocation documents without approved planning documentation;
- the order of placement, selection and land allocation with approved planning documentation,
- the order for rejection in the selection and land allocation for construction;
- the provision (sale) of land plots for individual housing construction;
- The stake out land boundaries, the elements of urban planning documents and development regulation lines.

113. The regulation on the procedure of compensation for possessors, users, tenants and land owners, as well as losses of agriculture and forestry contains:

- compensation for losses of owners, users, tenants and land owners;
- compensation for losses of agriculture and forestry;
- cost of irrigation and developing equal new land plot in return for seized irrigated agricultural land;
- cost of fundamental improvement of grassland and pasture;
- scheme for determination of losses of land possessors, users, tenants and owners, as well as losses of agriculture and forestry;
- Coefficients on location of seized land plots.

114. The Losses of land possessors, users, tenants and owners, as well as losses of agriculture and forestry should be compensated before granting of documents certifying rights on land plot.

115. The regulation also orders that demolishment of house, or building shall be done only after agreeing on compensation, and providing replacement premises. The regulation orders that compensation has to be paid before starting any construction work.

116. The land possessors, users, tenants and owners of which land plots are seized and of which land plots are granted in case of disagreement with defined amount of losses can appeal to court.

117. In case of acquisition and temporary occupation of land plot or part thereof, subject for compensation:

- Cost of land plot, owned by individuals and legal entities;
- Cost of residential houses, constructions and installations, including incomplete constructions, and also located outside of allocated plot, if its further utilization is impossible due to seize of land plot;
- Cost of fruits and berries, protection and other perennial plants;
- Cost of incomplete agricultural production;
- Lost profit.

118. Above described Laws and regulations define that non-title and square uatter land and building/structures are ineligible for compensation.

#### **6.1.5. Labor code and employment law**

119. These two documents are main legislations regulating labor relations of individuals employed with labor contract by enterprises, institutions, organizations of all type ownership forms, including contracted by individuals. These legislations are considering interests of employees and employers provide efficient function of labor market, just and secure labor conditions, protection of labor rights and employees health, promote to growth of labor productivity, increase of work quality, raising on this matter welfare and social livelihood level of the population.

### **6.2. ADB involuntary resettlement safeguards**

120. The ADB SPS, 2009 includes requirements for Involuntary Resettlement (IR). The IR underlying principles aim to avoid involuntary resettlement wherever possible; to minimize involuntary resettlement by exploring Project and design alternatives; to enhance, or at least restore, the livelihoods of all affected persons in real terms relative to pre-Project levels; and to improve the standards of living of the affected poor and other vulnerable groups. ADB Policy has the following requirements:

#### **6.2.1. Compensation, assistance and benefits for affected persons (APs)**

- Compensate/assist those with formal legal rights to the land lost and those who have claims to lands that are recognized or recognizable under national laws. APs that have neither formal legal rights nor recognized or recognizable claims to such land are entitled only to compensation for non-land assets.
- Compensate for affected lands, structures and other assets and put in place a comprehensive income and livelihood rehabilitation program **prior to Displacement**.
- Give preference to land-based resettlement strategies for affected persons whose livelihoods are land-based. Provide physically affected persons with relocation assistance, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, and civic infrastructure and community services.
- Promptly compensate economically Affected persons for the loss of income or livelihood sources at full replacement cost, and provided other assistance (i.e. access to credit, training, and employment opportunities) to help them improve, or at least restore, their income-earning capacity, production levels, and standards of living to pre-displacement levels.
- Provide affected persons with opportunities to share Project benefits in addition to compensation and resettlement assistance.

#### **6.2.2. Social impact assessment**

- Conduct socioeconomic survey(s) and a census, with appropriate socioeconomic baseline data to identify all persons who will be affected by the Project and to assess the Project's socioeconomic impacts on them.
- As part of the social impact assessment, identify individuals and groups who may be differentially or disproportionately affected by the Project because of their disadvantaged or vulnerable status.

#### **6.2.3. Resettlement planning**

- A resettlement plan should be based on the social impact assessment and through meaningful consultation with the affected persons if the proposed Project will have involuntary resettlement impacts.

- Ensure that the affected persons are (i) informed about their options and entitlements pertaining to compensation, relocation, and rehabilitation; (ii) consulted on resettlement options and choices; and (iii) provided with resettlement alternatives.
- Pay adequate attention to gender concerns to ensure that both men and women receive adequate and appropriate compensation for their lost property and resettlement assistance, if required, as well as assistance to restore and improve their incomes and living standards.
- Analyze and summarize national laws and regulations pertaining to land acquisition, compensation payment, and relocation of affected persons in the resettlement plan; and compare such laws and regulations with ADB's involuntary resettlement policy principles and requirements. If a gap between the two exists, propose a suitable gap-filling strategy in the resettlement plan in consultation with ADB.
- Consider all costs of compensation, relocation, and livelihood rehabilitation as Project costs.
- Include detailed measures for income restoration and livelihood improvement of affected persons in the resettlement plan. For vulnerable persons and households, include measures to provide extra assistance so that they can improve their incomes in comparison with pre-Project levels.
- Before the completion of engineering design, prepare a final LARP I that (i) adequately addresses all involuntary resettlement issues pertaining to the Project, (ii) describes specific mitigation measures that will be taken to address the issues, and (iii) ensures the availability of sufficient resources to address the issues satisfactorily.
- Consult with Affected persons identified after the formulation of the final resettlement plan phase I and inform them of their entitlements and relocation options. Supplementary resettlement plan or a revised resettlement plan should be submitted to ADB for review before any contracts are awarded.
- Use qualified and experienced experts to prepare the social impact assessment and the resettlement plan.

#### **6.2.4. Information disclosure**

- Submit the following documents to ADB for disclosure on ADB's website: (i) a draft resettlement plan and/or resettlement framework endorsed by the borrower/client before Project appraisal; (ii) the final resettlement plan endorsed by the borrower/client; (iii) a new resettlement plan or an updated resettlement plan, and a corrective action plan prepared during Project implementation, if any; and (iv) the resettlement monitoring reports.
- Provide relevant resettlement information in a timely manner, in an accessible place and in a form and language(s) understandable to affected persons and other stakeholders. For illiterate people, use other suitable communication methods.

#### **6.2.5. Consultation and participation**

- Conduct meaningful consultation with APs, their host communities, and civil society
- Pay particular attention to the need of disadvantaged or vulnerable groups, especially those below the poverty line, the landless, the elderly, female-headed households, women and children, Indigenous Peoples, and those without legal rights to land.

#### **6.2.6. Grievance redress mechanism**

- Establish a responsive, readily accessible and culturally appropriate mechanism to receive and facilitate the resolution of affected persons' concerns and grievances about physical and economic displacement and other Project impacts, paying particular attention to the impacts on vulnerable groups.

### 6.2.7. Monitoring and reporting

- Monitor and measure the progress of implementation of the resettlement plan. For Projects/sub-Projects with significant LAR impacts, qualified and experienced external experts are retained to verify internal resettlement monitoring information. If any significant involuntary resettlement issues are identified, prepare a corrective action plan to address such issues. Do not proceed with implementing the Project until such planning documents are formulated, disclosed and approved.

### 6.2.8. Unanticipated impacts

- If unanticipated involuntary resettlement impacts are found during Project implementation, conduct a social impact assessment, update the resettlement plan or formulate a new resettlement plan

### 6.2.9. Special considerations for indigenous peoples

- Avoid physical relocation of Indigenous Peoples that will result in adverse impacts on their identity, culture, and customary livelihoods. If adverse impacts cannot be avoided, formulate a combined Indigenous Peoples plan and resettlement to meet all relevant requirements specified under ADB Safeguard Requirements 3: Indigenous People.

### 6.2.10. Negotiated settlement

- Acquisition of land and other assets through a negotiated settlement whenever possible is encouraged.
- Negotiated settlements that would result in expropriation are subject to third-party validation to ensure that the compensation is based on fair price (replacement cost of land and/or other assets, and is based on meaningful consultation with APs).

## 6.3. Policy differences and reconciliation

121. A summary comparison between the Uzbekistan law and regulation and ADB policies, and reconciliation provisions to fill the gaps is presented in Table 6.1 below:

Table 6.1: Comparison of ADB resettlement safeguards with Uzbekistan law and regulation for land acquisition and resettlement

ADB Safeguards requirements	UZBEKISTAN law and regulation for land acquisition and resettlement	Reconciliation
AHs are to be informed/consulted on resettlement/compensation options.	The Law and regulation do not provide for consultation.	In this Project, AHs were consulted through group meetings and individual meetings. The LARP summarized in to leaflet in local language and distributed through Land Resources and Cadastre Department or Farmers Council.
AHs to be compensated and assisted, so that their economic/social future would be generally as favorable as it would have been in the absence of the Project.	The Law and regulation provide for compensating for loss on land right, buildings, crops, trees and other assets. However, it is not clear on how income losses of workers, severely and vulnerable AHs are to be compensated.	This Project will provide compensation for loss of land lease, structures and crop losses. In addition, allowance will be also provided for severe impact and vulnerable AHs (see entitlements section for details).

Compensation is to be provided in full at replacement rates	The mandates compensation at replacement rates through provision for land for land. However, replaced land location is not always taken into consideration.	Under this LARP land for land compensation will take into account location of replaced land parcel. Allocated land parcel should be in same farming, living and / or working community and distance agreeable by AH.
Lack of formal legal title by some affected groups should not be a bar to compensation or rehabilitation.	Compensation is provided only to title /registered holders.	The issue is not relevant for agricultural land for this LARP, because, all farmers affected by the land acquisition are title holders. In case of untitled / unregistered land use / houses, IA will ensure its legalization to make eligible for compensation.
ADB safeguards provide for rehabilitation allowances for, severe impacts, vulnerable APs.	The UZB law and regulation does not provide for the ADB required allowances.	In this project, allowances for severe impact and vulnerable AHs will be provided (see entitlements section for details).

## VII. ENTITLEMENTS, ASSISTANCE AND BENEFITS

122. This chapter details the eligibility and entitlements for compensation for assets affected by the project.

### 7.1. Eligibility and cut-off date

123. Compensation eligibility will be limited by a **cut-off date** established based on the last day of the census of AHs and IOL. Therefore cut-off date for Pastdargom district is **June 06, 2013** and for Nurobod district **July 10, 2013**. Households who settle in the affected area and/or make any improvements on land parcel to be acquired for the project after the cut-off date will not be eligible for compensation. They will, however, be given sufficient advance notice requesting them to vacate land parcels and dismantle affected structures prior to project implementation. Their dismantled structures will not be confiscated and will not be subject to fine or compensation.

### 7.2. Legalization and registration of land lease / possession

124. To enable the Project to compensate unregistered land users under Uzbekistan laws, representatives from the Land Resources and Cadastre Office will advise affected land users to register or update the registration of their lands. Under the LARP those who have unregistered land will be legalized and registered prior to compensation. The EA will facilitate the legalization and registration process and refund paid registration fees if such a case.

### 7.3. Compensation and valuation of assets

125. This section details the entitlements for compensation for assets affected by the project.

#### 7.3.1. Land

126. Compensation for permanent land acquisition of agricultural land will be on a “land for land” basis, with land being provided to owners by the local khokimiyat following assessment by the LARC. Such land will be of equal value/productivity in a nearby location and with comparable associated services/ facilities, or compensation to provide such services. Transaction costs, registration fees, if any, will be borne by Uzbekenergo.

127. Alternatively, monetary compensation for agricultural land at replacement cost will be provided. The compensation for the permanent loss of land use rights over the affected agricultural land will be compensated equivalent to 4 years net average income of the past 3 years (of the affected annual crop).

128. In cases where in all or parts of the lease holding become unviable, unaffected portions of a plot will also be compensated.

129. Severe loss of agricultural land. In the case of severe impact, where more than 10% of a productive asset (leased and unleased land) is to be acquired, a severe impact allowance will be paid. This will be equal to the net income from an annual crop production on the affected land area (inclusive of winter and summer crop in addition to standing crop compensation). This is in addition to the compensation for land loss. In case there will be no crops on agricultural land then one-time additional allowance equivalent to 3-month minimum wage income will be paid for AHs.

130. Alternatively, monetary compensation for residential, commercial and agricultural land at replacement cost will also be provided to those AHs losing a small proportion of land holding and not wanting replacement land in lieu for the same.

131. In case where AHs such as cropping farms, orchard owners intend to voluntarily give up affected land and reject the land to land compensation by their own will then letter of refusal shall be provided in hand written and signed form. PMU will collect these letters to proof during the independent monitoring visits.

### **7.3.2. Structures**

132. Buildings (registered or not) will be compensated at full replacement cost without application of depreciation. For partial impacts (structure wall, fences etc), monetary compensation at replacement rates will be paid to restore the remaining structure to its original state. Unaffected portions of a structure will also be compensated if they become unlivable after impact occurs.

### **7.3.3. Crops and Trees**

133. Loss income from crops planted on the affected land will be compensated in monetary value at replacement cost based on 1 year of production cost (inputs) plus an allowance equivalent to 1 year average net income computed based on the average income over the past 3 years. Loss income from fruits trees will be compensated in monetary value based on the average annual income for the past 3 years multiplied by the remaining productive life of the fruit bearing trees. In the case of loss of timber trees, compensation will be based on the market value of their dry wood volume. The compensation for trees will be free of deduction for the value of the wood left to the AH.

### **7.3.4. Vulnerable Households**

134. Vulnerable households will be provided with a one-time additional allowance equivalent to their 3 month average household income. In addition, members of vulnerable households will also be prioritized in project related employment. The Mahallas and district governments have a record of all households in the communities and will be tapped in identifying and certifying vulnerable households.

## **7.4. Compensation estimation process**

135. All compensation estimates of the property and assets will be at the replacement value. The LARP sets eligibility and entitlement provisions establishing compensation rates in accordance with guidelines from the GOU and ADB SPS 2009.

136. Structures and buildings will be valued through calculating the replacement cost based on cost of materials, type of construction, labor, transport and other construction costs as on date. No deductions will be applied for depreciation or transaction costs. The cost of reconnection of lost water, electricity, gas and telephone connections will be included in the compensation (the new land sites are assumed to have similar services available). Salvaged materials will be allowed to be taken away by the AHs prior to demolition at no charge.

137. Assessment of the affected structures will be done by a certified valuation expert requested either by the AHs or Uzbekenergo. If AHs paid fees for valuation service then Uzbekenergo will reimburse to AHs.

138. To determine replacement costs for affected assets, where it is possible to undertake replacement cost surveys, which in Uzbekistan is restricted to houses, other physical structures and land not classified as agricultural land, the Project will base its estimates on current cost estimates of construction markets in Samarkand region. The Department of the Land Resources and Cadastral Department may be consulted for undertaking survey.

139. All compensation and assistance to be provided for this project is summarized in the entitlement matrix below (See Table 7.1).

Table 7.1: Entitlements Matrix

Type	Specifications	Affected HHs	Entitlement
<b>A. Impact on Land</b>			
A.1. Agriculture land	All land losses independent of impact severity.	Leaseholders	<ol style="list-style-type: none"> <li>1. Land for land compensation with plots of equal value/productivity class, comparable location, and agricultural support services (or compensation to provide such services); OR Monetary Compensation at replacement cost by providing compensation for loss of land use rights equivalent to 4 years of the net average income of the past 3 years (of the affected annual crops.)</li> <li>2. Unaffected portions of an affected arable plot will also be compensated, if the same becomes unviable after impact.</li> <li>3. Transaction cost, registration fee, related to new plot allotted, to be will be borne by Uzbekenergo.</li> </ol>
Land for reclamation of new land	Cropland, orchard, state reserve land, pasture and other classified as agricultural land	Special account of Provincial Department for Land Use and State Cadastre of the Samarkand province.	<ol style="list-style-type: none"> <li>1. Compensation is to be paid to develop new lands or through irrigation and agro-irrigation activities to raise the productivity of existing lands in accordance with the unit rate set by Cabinet of Minister Resolution # 146 and in case of absence such value category of agricultural land such as pasture, reserve land and others will be calculated by application of special unit rate set by this Resolution. The period for rehabilitation of under-received products shall be considered as being equal to four years, during which the land plot shall be selected for development of new lands or for irrigation improvement of existing irrigated lands.</li> </ol>
A.2. Residential / Business /Orchard land	Land Loss	Lifelong inheritable possession/ permanent possession	<ol style="list-style-type: none"> <li>1. Land for land compensation through provision of a land plot comparable in value/location to the plot lost including services (or compensation to provide such services) to plots lost with registration and transfer charges if any to be borne by the project; OR Monetary Compensation at replacement cost to be determined by the Independent Valuer.</li> <li>2. Unaffected portions of a plot will also be compensated if they become unviable after impact occurs.</li> <li>3. All mandatory fees for registering the land, completion of required house design, surveys, acquiring permission for construction under the AHs name and any other related costs will be paid by Uzbekenergo.</li> </ol>
	Additional provision in case of severe impacts (more than 10%	Leaseholders Lifelong inheritable possession/	<ol style="list-style-type: none"> <li>1. One time additional allowance equal to the net income from an annual crop production on the affected land area (inclusive of winter and summer crop in</li> </ol>



Type	Specifications	Affected HHs	Entitlement
	loss of productive assets)	permanent possession	<p>addition to standing crop compensation).</p> <p>In case there is no crops on agricultural land and on in case of residential land then,</p> <p>2. One-time additional allowance equivalent to 3-month minimum wage income.</p>
<b>B. Impact on Structures</b>			
Residential / Business and any other structures	Full or partial loss of structures	Ownership	<p>1. Monetary compensation at full replacement rate for affected structure/fixed assets free of salvageable materials, depreciation and transaction costs. OR Construct a house/building with granting full ownership to AH. Salvageable material will be allowed to be taken away by owner at no extra cost.</p> <p>2. Cost of replacing existing water, electricity, gas and phone connections will be included in the compensation.</p> <p>3. In case of partial impacts on structures (structure wall, fences etc), monetary compensation at replacement rates to restore the remaining structure.</p> <p>4. Unaffected portions of the structure will also be compensated at replacement value if they become unviable after impact.</p>
<b>C. Impact on Crops and Trees</b>			
Agriculture land, orchard, within residential complex	Loss of crops	All AHs	1. Monetary compensation at replacement cost for primary (and secondary crops if any) on affected land based on 1 year of production costs (inputs) plus an allowance equivalent to 1 year average net income based on the average income over the past 3 years.
	Loss of fruit trees	All AHs (including non leased land owner)	<p>1. Monetary compensation for fruit trees will be based on the average annual income for past 3 years multiplied by the 4 years.</p> <p>2. Felled trees will be kept by the AHs.</p>
	Loss of timber trees	All AHs	<p>1. Monetary compensation for timber trees will be compensated based on market value of dry wood volume. OR Production costs (inputs) of trees till to cut date.</p> <p>2. Felled trees will be kept by the AHs.</p>
<b>D. Impact on Income and Livelihood</b>			
Employment from affected agricultural land	Loss of employment from affected agricultural land	Agricultural workers losing their contract	1. Monetary indemnity corresponding to their salary (in monetary value and in kind) for the remaining part of the agricultural year/or contractual period whichever is higher in monetary value.
<b>E. Vulnerable Households</b>			
Vulnerable Affected Households		Low income households, female-headed households with	<p>3. One-time additional allowance equivalent to 3-month minimum wage income.</p> <p>4. Priority for employment in project-</p>

Type	Specifications	Affected HHs	Entitlement
		fewer than 2 adult income-earners, the elderly headed HHs with unemployed family members <sup>9</sup> and disabled)	related jobs, training opportunities, self-employment and wage employment assistance.
<b>F. Impact on Community Structures and Assets</b>			
Community Structures and Assets	Loss or damage to public infrastructure and utility	Community owned Assets	1. Rehabilitation/replacement of affected structures/utilities (i.e. footbridges, roads, communication lines, water pipelines, power transmission lines etc.) to pre-Project level.
<b>G. Any unanticipated Impacts</b>			
Any unanticipated impacts identified during Project implementation will be compensated in full at replacement rate.			

<sup>9</sup> In case of unemployed APs, paper (proving) from local Labour authorities is required.

## **VIII. INCOME RESTORATION AND REHABILITATION**

140. Income restoration and rehabilitation plan includes improving the livelihood of AH whose income would be adversely affected by the project to either at par or better than the pre project conditions. The AH who would be incurring impact on 10% or more of their productive assets will be eligible for income restoration assistance and support from the project.

### **8.1. Severely affected AHs**

141. Construction of PV power plant will imply land acquisition of 234.2 ha from 2 AHs, one of AHs will have impact 41.5% and another one 29.2% from their total land. These 2 AHs during the consultations expressed willingness to give up all required land without land to land compensation. However, they requested to deduct this to be acquired land area from taxable amount of land on their balance.

142. Construction of 220 kV TL will not severely impact on cropping farm lands, but will have significant impact (48%) to residential land of AH-17. All severely affected households will be entitled severely affected allowances in accordance with the entitlement set in this LARP.

### **8.2. Rehabilitation and livelihood improvement**

143. As it was mentioned in previous sections, this Project will not have any physical displacement of residential assets and cause unemployment on affected farms.

144. However, if after detailed design and update of this LARP will be identified AHs with employment impact then unemployed or losing employment APs will be eligible for rehabilitation and livelihood improvement support from the local authority in assistance of the project. In order to be eligible for rehabilitation and livelihood improvement support, APs before registering at local labor agency as unemployed will need to register at PMU. In this case PMU will be able to monitor progress of APs application at local labor agency and in case of problem assist to resolve appeared issues.

145. PMU of the EA will be responsible for planning and implementing above described support measures. For that purpose, PMU will closely work with Mahalla, Khokimiyats, Land Resources and Cadastre Department and local labor agencies for effective implementation of income restoration strategy. A detailed action plan will be prepared and submitted to ADB before start of civil works at affected land parcels.

## IX. RESETTLEMENT BUDGET AND FINANCING PLAN

146. This chapter provides an itemized budget for all resettlement activities, including all compensation and assistance and cost for implementation of LARP.

147. In order to ensure that sufficient funds are available for LAR tasks, the Uzbekenergo as the EA will allocate 100% of the cost of compensation at replacement cost and expected allowances estimated in each LARP plus contingencies before LARP implementation. EA will compensate all compensation by their own resources. PIU will be responsible for timely allocation of the funds to implement the LARPs. The PIU will provide compensation for lost assets and other allowances in accordance with the entitlements agreed in the LARP and reflected in the Entitlement matrix.

148. The details of the compensation cost for each category of impact are provided in the following subsections. Enumerated compensation costs are estimated on approximate manner, therefore numbers have to be updated and confirmed through valuation by licensed firms and request of tax/income statements before disbursement of compensation and assessment of actual impact.

### 9.1. Agricultural Land

149. The compensation for the **permanent loss of land** use rights over the affected agricultural land has been determined using the following formula:

$$\text{Compensation} = \text{Total agricultural area affected by LA} \times 4 \text{ net income based average net income of the last 3 year.}$$

150. Data for calculation of compensation is obtained from affected farmers, District Land Resources and Cadastral Department and District Statistical Department. Based on the same, the compensation for cropping farms is enumerated in following Tables below.

Table 9.1: Compensation for cropping farms of PV power plant area

ID	Affected land, ha	Unit price, UZS	Unit price, USD	Total compensation UZS	Total compensation USD
AH-1	199.2	135,000	64.7	26,892,000	12,898
AH-2	35.0	180,000	86.3	6,300,000	3,022
AH-3	70.0	180,000	86.3	12,600,000	6,043
<b>Total</b>	<b>304.2</b>			<b>45,792,000</b>	<b>21,963</b>

Table 9.2: Compensation for cropping farms of Access road area

ID	Affected land, ha	Unit price, UZS	Unit price, USD	Total Compensation, UZS (x 4 years)	Total Compensation, USD (x 4 years)	Type of crop
AH-4	0.01	855,000	410.1	34,200	16	wheat
AH-6	0.64	855,000	410.1	2,188,800	1,050	wheat
AH-7	0.07	1,655,000	793.8	463,400	222	cotton
AH-8	0.39	855,000	410.1	1,333,800	640	wheat
AH-10	0.2	1,500,000	719.4	1,200,000	575	corn
<b>Total</b>	<b>1.31</b>			<b>5,220,200</b>	<b>2,503</b>	

Table 9.3: Compensation for cropping farms of Transmission line area

ID	Affected land. sq.m	Unit price. UZS	Unit price. USD	Total Compensation. UZS (x 4 years)	Total Compensation. USD (x 4 years)
AH-12	230	180,000	86.3	16,560	8
AH-13	800	180,000	86.3	57,600	28
AH-14	1250	180,000	86.3	90,000	43
<b>Total</b>	<b>2280</b>			<b>164,160</b>	<b>79</b>

151. The compensation for the **temporary loss of land** use rights over the affected agricultural land is determined by the following formula:

Compensation = Total agricultural area affected by LA X 1 net income based average net income of the last 3 year. Multiplication for 1 is the construction period of less than 1 year.

152. Data for calculation of compensation is obtained from affected farmers, District Land Resources and Cadastral Department and District Statistical Department. Based on the same, the compensation for cropping farms is enumerated in following Tables below.

Table 9.4: Compensation for cropping farms of Transmission line area

AH	Affected land, square meters	Average net profit per ha, UZS	Unit price, USD	Total Compensation, UZS (x 1 year)	Total Compensation, USD (x 1 years)
AH-12	1,200	180,000	86,3	21,600	10
AH-13	4,500	180,000	86,3	81,000	39
AH-14	7,500	180,000	86,3	135,000	65
<b>TOTAL</b>	<b>13,200</b>	<b>180,000</b>	<b>86,3</b>	<b>237,600</b>	<b>114</b>

153. In total 401,760 UZS will be paid to the account of cropping farms for loss of permanent and temporary lose of crops. Additionally, special rehabilitation assistance in the form of exempting the permanently affected land plot out of cropping farms land balance will be provided. According to the entitlements, AHs will be offered land to land compensation.

154. The affected land under ROW was not included in the resettlement budget due to no crops will be damaged within ROW. This strip is needed to conduct cables of 220 kV for temporary period. After stringing the cables the area of ROW will be returned to the owners for further use as of pre project condition.

## 9.2. Trees

155. Fruit trees will be compensated at replacement cost equivalent to the 1 year net income. No fruit bearing period has been applied since the fruit trees are young and not fruit bearing stage. However, after final design the LARP will be updated then calculation should be based on the entitlements for trees described in this LARP.

156. The timber trees will be compensated at the rate equal to the market value and costs to grow trees until the time when the trees need to be cut. The compensation for the affected trees will be free of deduction for the value of the timber left to the affected households.

Table 9.5: Compensation for tree of Access Road area

ID	Affected tree	Unit price. UZS	Unit price. USD	Total Compensation. UZS	Total Compensation. USD	Tree
AH-5	215	12,000	5.8	2,580,000	1,237.4	mulberry
AH-9	50	14,000	6.7	700,000	335.7	poplar
AH-11	500	6,000	2.9	3,000,000	1,438.9	poplar
<b>Total</b>	<b>765</b>			<b>6,280,000</b>	<b>3,012.1</b>	

157. In total 6,280,000 UZS needs to be paid affected households (Table 9.5) in monetary value for their cut trees. The payment will be paid in accordance with the final LARP that will be based on final detailed design and the valuation report valued by independent valuator.

### 9.3. Houses /Buildings/Other Structures

158. Demolished structures will be valued at the estimated replacement rate based on construction materials and size together with of labor, transport/other construction costs. No deduction for depreciation/transaction costs has been applied. The estimate additional allowance is based on the assumption that all unregistered land and structures can be converted into titled landholdings. The Valuation has taken into account view of the affected households through consultation, market replacement value based comparable sales approach and cost of construction. Table 9.6 describes compensation for affected structures respectively.

Table 9.6: Compensation for Structures of Power Plant area

AH	Affected structure size, sq.m	Unit price, UZS	Unit price, USD	Total compensation UZS	Total compensation USD
AH-1	675	14,829.6	7.1	10,010,000	4801.1

159. In total 10,010,000 UZS shall be paid in monetary form to AH-1.

### 9.4. Compensation Payment for Land Use Change

160. As per Resolution 146 of the Cabinet of Ministers 2011 compensation needs to be paid for land lost to agriculture for other purposes. This compensation payment is used to develop new land for agriculture and restore the pre-Project amount of land available for agricultural production (Table 9.7).

Table 9.7: Compensation for new Land reclamation and Development. Power Plant area (Pastdargom district)

Type of Land	Affected land, ha	Unit price, UZS	Unit price, USD	Total compensation UZS	Total compensation USD
Rainfed	230	825,000	395.7	189,750,000	91,009.4
Pasture	24	160,400	76.9	3,849,600	1,846.4
<b>Total</b>	<b>254</b>			<b>193,599,600</b>	<b>92,855.8</b>

161. In this calculation of compensation 1 ha of land was excluded since this land is under “other” type that is not subject for compensation.

Table 9.8: Compensation for new Land reclamation and Development. Power Plant area (Nurabad district)

Type of Land	Affected land, ha	Unit price, UZS	Unit price, USD	Total compensation UZS	Total compensation USD
Rainfed	140	825,000	395.7	115,500,000	55,397.0
Pasture	4.2	160,400	76.9	673,680	323.1
<b>Total</b>	<b>144.2</b>			<b>116,173,680</b>	<b>55,720.1</b>

162. In this calculation of compensation 5.8 ha of land was excluded since this land is under “other” type that is not subject for compensation.

Table 9.9: Compensation for new Land reclamation and Development. Access Road area

Type of Land	Affected land, ha	Unit price, UZS	Unit price, USD	Total compensation UZS	Total compensation USD
Irrigated land (soil bonitet 55)	1.56	23,661,000	11,348.5	36,911,160	17,703.6
<b>Total</b>				<b>36,911,160</b>	<b>17,703.6</b>

Table 9.10: Compensation for new Land reclamation and Development. TL area

Type of Land	Affected land, sq.m	Unit price, UZS	Unit price, USD	Total compensation, UZS	Total compensation, USD
Rainfed	0.48	825,000	395.7	396,000	190
<b>Total</b>				<b>396,000</b>	<b>190</b>

163. In total 347,080,440 needs to be paid for the special account for Land reclamation and development under Samarkand Regional Land Resource and State Cadastre Department (RLRSC). The exact amount of the compensation will be determined after the provision of approved detail design and in accordance with the decision of Samarkand RLRSC that will be described in the Decree of Samarkand Regional Khokim and this amount can be decreased or increased.

## 9.5. Relocation and Additional Assistance

164. Affected household that needs physically displace his structure as a result of the Project is entitled to relocation allowance of 1,000,000 UZS assistance to hire transportation. In cases where an AH requires support which would typically involve the provision of labor for dismantling of house/building and transportation of materials, RRF will provide the necessary support in addition to seeking assistance from the local Khokimiyat to acquire a new land plot. All the relocation and additional assistance to be paid to different category of households is detailed in Table below:

Table 9.11: Compensation for severely AH

AH	Allowance period, month	Unit price. UZS	Unit price, USD	Total compensation UZS	Total compensation USD
AH-1	3	79,590 <sup>10</sup>	38.2	238,770	114.5
AH-2	3	79,590	38.2	238,770	114.5
AH-3	3	79,590	38.2	238,770	114.5
AH-17	3	79,590	38.2	238,770	114.5
<b>Total</b>				<b>955080</b>	<b>458</b>

165. In total 955,080 UZS needs to be paid to the account of farmers which has significant impact by permanent land acquisition for PV plant area (AH-1-2-3) and 220 kV (AH-17) transmission line area.

#### 9.6. Public and community assets

166. All affected (dismantling and rerouting) public and private infrastructure costs will be covered or restored by Uzbekenergo.

#### 9.7. Summary Budget

167. The tentative LARP Budget is around **US\$ 240,000** (two hundred forty thousand). The detailed budget items are summarized in Table 9.13 below.

Table 9.12: Summary Budget

Subproject	Description	Cost Estimate UZS	Cost Estimate USD
	<b>(A) Direct cost</b>		
PLANT AREA	Land reclamation - (Pastdargom district)	193,599,600	92,856
	Land reclamation - (Nurabad district)	116,173,680	55,720
	Permanent crop lose	45,792,000	21,963
	Structure demolition	10,010,000	4,801
ACCESS ROAD	Land reclamation	36,911,160	17,704
	Permanent crop lose	5,220,200	2,504
	Tree lose	6,280,000	3,012
220 kV TL	Land reclamation	396,000	190
	Permanent crop lose	164,160	79
	Temporary crop lose	237,600	114
	<b>Sub Total (A)</b>	414,784,400	198,942
	<b>(B) Indirect cost</b>		
PV Power Plant	Additional Support for Severely Affected HH	716,310	344
	Relocation for structure	1,000,000	480
220 kV TL	Additional Support for Severely Affected HH	238,770	115

<sup>10</sup> The rate shall be revised in accordance with the current rate of minimum wage of Uzbekistan to the date of payment.



	Duties & Fees	6,000,000	2,878
	<b>Sub Total (B)</b>	7,955,080	3,815
	<b>(C) Administrative costs</b>		
	Monitoring and evaluation (external, internal)	13,500,000	6,475
	LARP update	18,500,000	8,873
	<b>Sub Total (C)</b>	32,000,000	15,348
	<b>Total of (A)+(B)+(C)</b>	454,739,480	218,106
	Contingency cost	45,649,980	21,895
	<b>Grand Total</b>	<b>500,388,000</b>	<b>240,000</b>

## **X. INSTITUTIONAL ARRANGEMENTS**

168. This chapter provides a comprehensive assessment of institutional capacity and resource capability for preparing, implementing, and monitoring resettlement activities, and describes additional measures necessary to enhance institutional capacity. It describes the organizational procedures for delivering entitlements; and describes the implementation process, including how resettlement preparation, approval, and implementation will be linked to contract awards and the start of the project's civil works.

169. Uzbekenergo will have overall responsibilities to implement LARP as executing agency (EA), and Uzbekenergo will provide all budget to implement LARP. There are other governmental agencies that will also be involved in LAR activities such as the local khokimiyat of Pastdargom district as well as branch offices/departments of Goskomzemgeocadastre (Land Resource and Cadastre Committee represented in District Acquisition and Valuation Committee and District Land Acquisition and Resettlement Committee).

### **10.1. Uzbekenergo – PMU**

170. The Uzbekenergo will have overall responsibility for all aspects of the program. The Project Management Unit (PMU) within Uzbekenergo will be responsible for the day to day management of the Project including cross-agency coordination, and via the PMU Resettlement Consultant (RC) for LARP implementation and monitoring the compensation and disbursement.

171. The RE under the PMU will be directly involved in all LAR related planning, implementation, inter-agency coordination, monitoring and reporting. The RE will receive support from the relevant project consultants and benefit from inputs from the Design Institute (DI), district / city executive authority and land resources and cadastre department as appropriate.

172. After approval of this LARP, the PMU through Uzbekenergo central administration office will request local khokimiyat in Pastdargom and Nurabad districts avoid reallocation of affected land parcels to any other parties.

### **10.2. Design Institute (DI)**

173. The Design Institute will be in charge of elaborating the design and construction documents for the project. It will collaborate and work closely with the PMU/RE to:

- (i) look for measures and alternatives to avoid and minimize land acquisition and resettlement impacts;
- (ii) assemble all documents required for compensation;
- (iii) carry out topographic surveys of the expropriated land and replacement lands;
- (iv) elaborate layouts indicating the location of the worksites and the permanent infrastructures and the perimeter of the required surfaces differentiating the land use patterns in the areas being occupied to serve as a base for the selection of compensation land;
- (v) Conduct land marking and pegging of the land assigned for temporary use and permanent occupation of acquired land.

### **10.3. Land resources and cadastre department**

174. This is a permanent department at District levels. However it plays an enhanced role throughout implementation. It is responsible for:

- (i) identifying land losses incurred by land owners and land users plus agricultural output losses;
- (ii) determining the degree and area of land restitution, including removal and temporary storage of productive soil layer;
- (iii) determining the need for protective sanitary and water protection zones around constructions;
- (iv) preparing proposals on allocation of land plots of equal value under land for land;

- (v) investigating alternatives to acquiring currently used land through developing unused land;
- (vi) approving the Implementation Act and the attached plan;
- (vii) amending government edicts on land use and land ownership as well as other cadastre documents.

#### **10.4. Pastdargom and Nurabad district khokimiyats**

175. Pastdargom and Nurabad district khokimiyats will be closely involved in the LARP review and implementation. Particularly khokimiyats will not allow reallocation and transfer of affected land parcels to any other parties. Khokimiyats will form the Land Acquisition and Evaluation Commissions. These will form a district land acquisition and resettlement committee (DLARC) which will undertake the following:

- (i) outline locations of constructions and structures affected by the project;
- (ii) select land for construction sites;
- (iii) prepare and approve legislation for the right (lease) to use land plots and;
- (iv) approve the decree for the right to use the land plot.

176. In addition to permanent members, the Commission may include representatives of Uzbekenergo, as well as affected legal entities and individuals. It is proposed that Land Acquisition and Valuation Commission as part of the DLARC composed of the following members:

- (i) Uzbekenergo PMU
- (ii) Local Department of Agriculture and Water Resources
- (iii) Local Department of Environmental Protection
- (iv) Organizations to which the alienated land has been transferred for use (Uzbekenergo as EA, PMU/RE and DI).
- (v) Mahalla leaders, NGO, Dehkan Association (as relevant)
- (vi) Representatives of the affected people

177. Farmer's and Dehkan Associations (FDA) and Mahalla authorities will be involved in resettlement activities to ensure the rights and interests of affected households.

178. Implementation of LARP will require close coordination with the local Mahalla and farmer associations. This coordination will help Uzbekenergo in the following:

- (i) Dissemination information related with LARP;
- (ii) Checking timely disbursement of compensation to displaced HHs;
- (iii) Obtaining early warnings on the grievances of displaced HHs;
- (iv) Verifying as to whether the Vulnerable displaced HHs were identified according to requirement laid down in this LARP; and
- (v) Obtaining information regarding any unexpected impacts, if any, being incurred by the displaced HHs.

#### **10.5. Independent valuation firms**

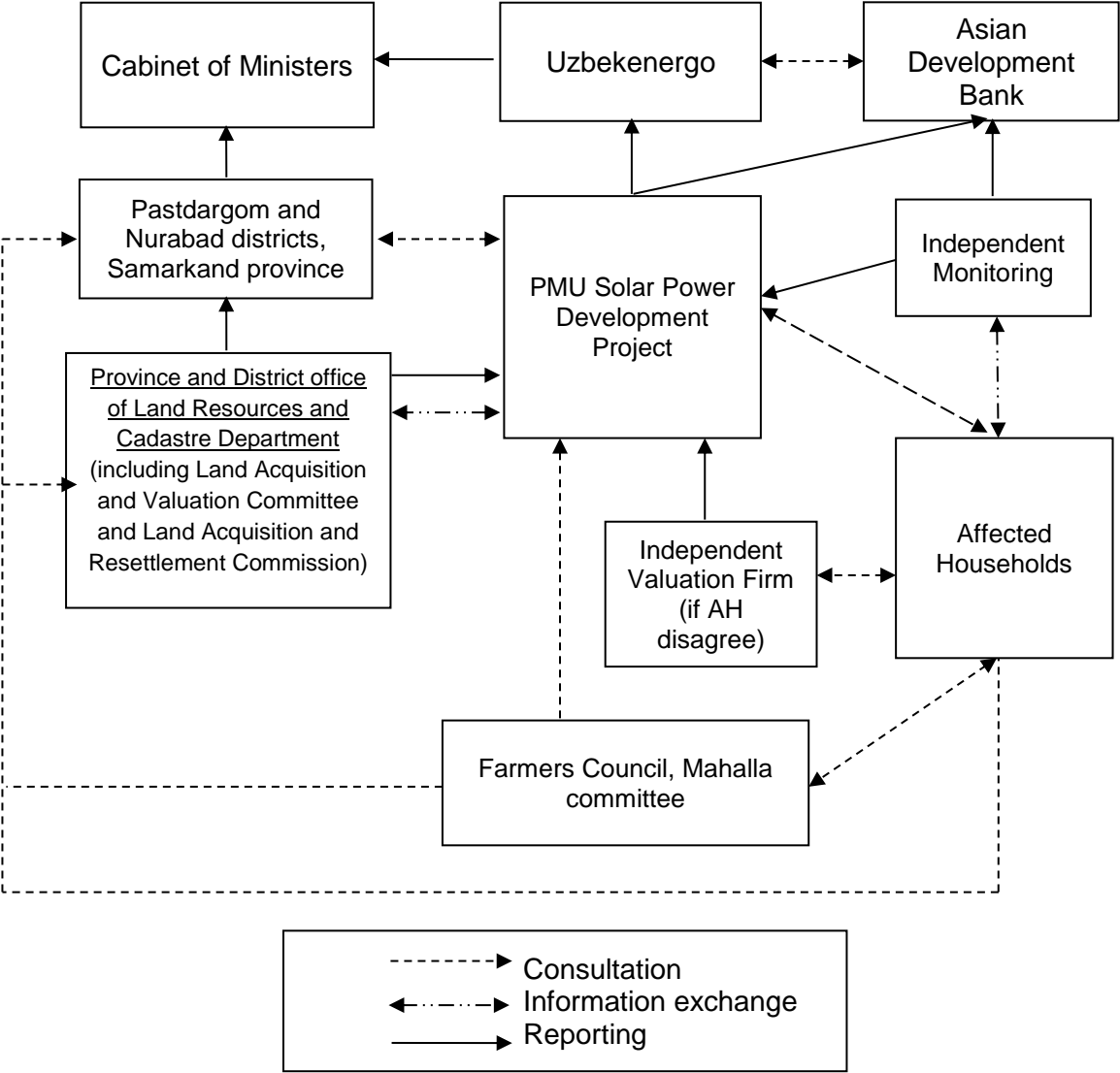
179. Independent valuation firms will comprise of an accredited private firm with valid license for valuation activities. These firms will be involved both by displaced households and if required by the PMU to estimate the replacement cost of the affected assets.

#### **10.6. External monitoring**

180. Implementation of the LARP will be subject to external monitoring. This external monitoring will be conducted by a qualified External Resettlement Consultant to be engaged by the PMU as per the Terms of Reference, which should be approved by ADB. The monitoring aspect of LARP implementations is discussed in detail in Section XII of this LARP.

181. Figure 10.1 below illustrates the Institutional and Project Implementation arrangement for this Project.

Figure 10.1: Project implementation diagram



## XI. IMPLEMENTATION SCHEDULE

182. This chapter includes a detailed, time bound, implementation schedule for all key land acquisition and resettlement activities synchronized with the project schedule of civil works construction.

Table 11.1: Steps for LAR Activities

Step	Action	Responsibility	Timing
<b>A</b>	<b>LARP PREPARATION</b>		
1.	LARP preparation	TA Resettlement Expert	July 2013
2.	Submission of Draft LARP to ADB and GOU for comments and approval	TA Resettlement Expert, ADB and Uzbekenergo	July 2013
3.	Submission final draft LARP for ADB approval	Uzbekenergo	July 2013
4.	LARP Disclosure to AHs	Uzbekenergo	August 2013
<b>B</b>	<b>LARP IMPLEMENTATION</b>		
1.	Updating LARP	Uzbekenergo / PMU	after finalizing detailed design
2.	Preparation of plan for compensations including schedule for compensation action plan	PMU	after updated LARP approved by ADB
3.	Public consultation and information sharing on LAR activities	PMU	prior to providing compensation to APs
4.	Payment compensation to AHs / APs	Uzbekenergo and PMU	prior to awarding contract award for any civil works that require land acquisition
5.	Making available new land parcel and signing land lease contract	Uzbekenergo and Pasterdargom and Nurabad districts khokimiyat	prior to awarding contract award for any civil works that require land acquisition
6.	External Review of LARP Implementation through submission of a compliance report	External Resettlement Consultant	Has to start at the same time when APs receiving compensation
7.	Updating LARP	Uzbekenergo / PMU	after finalizing detailed design
8.	<b>Construction works</b>	After payment of all compensations	
<b>C</b>	<b>MONITORING</b>		
1.	Internal monitoring: Reporting to ADB	PMU	Continuous during the project
2.	External Monitoring: Reporting to ADB	Independent Resettlement Expert	Continuous during the project

## **XII. MONITORING AND REPORTING**

183. While effective institutional arrangements can facilitate implementation, effective monitoring ensures that the course and pace of implementation continues as originally planned. Monitoring is important for ensuring that the LARP is effectively implemented, unforeseen impacts related with land acquisition activities can be identified and appropriate measures to address the same can be taken in a timely manner.

184. The monitoring mechanism for the LARP shall comprise of both internal and external monitoring. While internal monitoring as a mechanism will be carried out in parallel to project implementation and at different stages respectively, external monitoring will be carried out by an External expert to verify the effective implementation of the LARP as well as the monitoring data collected by the PMU. The specific details of internal and external monitoring are summed up below:

185. The implementation of LARP will be monitored by the Resettlement Consultant of the PMU in close coordination with local khokimiyat and CBOs. The External Resettlement Consultant will verify the results of the internal monitoring.

### **12.1. Internal monitoring**

186. Internal monitoring will be the responsibility of the Resettlement Consultant of the PMU. The internal monitoring will include the following:

- (i) Administrative monitoring: daily planning, implementation, feedback and troubleshooting, individual displaced person database maintenance, and progress reports;
- (ii) Socio-economic monitoring: case studies, using baseline information for comparing displaced persons socio-economic conditions, evacuation, demolition, salvaging materials, morbidity and mortality, community relationships, dates for consultations, and number of appeals placed; and
- (iii) Impact evaluation monitoring: Income standards restored/improved, and socioeconomic conditions of the displaced persons.

187. The indicators for internal monitoring will be subject related to immediate activities for LARP implementation and its outputs and results. This information will be collected directly from the field and from the District Land Acquisition Committee. It will be used to assess the progress and results of LARP implementation, and to adjust the work program, if necessary. The quarterly reports will be incorporated in the standard supervision reports to ADB. These monitoring activities will continue until land acquisition is completed. Internal monitoring will need to be carried out continually after completing LARP implementation, and prepare the first semi-annual report, and the second and all subsequent semi-annual reports that will be submitted to the EA, IA management and ADB. The specific monitoring milestones will be:

- (i) Information disclosure to AH;
- (ii) Status of land acquisition and payments of compensation for land
- (iii) Compensation for affected structures and other assets;
- (iv) Relocation of AH;
- (v) Payments for loss of assets;

### **12.2. External monitoring**

188. The External Resettlement Consultant will undertake several on-spot monitoring on a randomized basis and also prepare the LARP compliance report to record whether the LARP has been implemented and all displaced HHs have been compensated. The expert will monitor and verify LARP implementation to determine whether resettlement goals have been achieved, livelihood and living standards have been restored, and provide recommendations for improvement. In order to ensure that all displaced households are compensated prior to

commencement of civil work, an external monitoring will be undertaken of the LARP, based on which a Compliance Report will be submitted to ADB, EA and IA.

189. It is preferred that the External Resettlement Consultant should come from academic or research institutions but the general rule is that it should not be party that prepares and implements the LARP. The Monitoring/Compliance report will be used by ADB and EA as a basis to issue notice to proceed with civil work activities to the contractor for site preparation. The report will be published on the website of the EA, IA and ADB. Independent monitoring will continue beyond the implementation periods of LARP.

190. Table 12.1 below provides an indicative set of monitoring indicators that shall help to evaluate effectiveness of implementation.

Table 12.1: Indicators for Outcomes and Impacts

<ul style="list-style-type: none"> <li>• Satisfaction of land owners with the compensation and assistance paid</li> <li>• Type of use of compensation and assistance by land owners</li> <li>• Satisfaction of structure owner with compensation and assistance</li> <li>• Type of use of compensation and assistance by structure owner</li> <li>• % of APs provided project employment or otherwise</li> <li>• % of APs with better income than before</li> <li>• % of APs provided with alternatives lands for sites</li> <li>• Types of grievances received</li> <li>• No. Of grievances forwarded to GRC and time taken to solve the grievances</li> <li>• % of APs aware about the GRC mechanism</li> <li>• Household income of the vulnerable groups</li> <li>• % of displaced persons satisfied with resettlement benefits and facilities.</li> </ul>
---

191. The PMU will carry out a post-implementation evaluation of both phases of LARP about a year after completion of the implementation of LARP and report whether or not the objectives of the LARP have been attained. The benchmark data of socioeconomic survey of severely affected HH conducted during the preparation of the LARP will be used to compare the pre and post Project conditions. The PMU will recommend appropriate supplementary assistance for the displaced households if the outcome of the study shows that the objectives of the LARP were not achieved.

## Socioeconomic Survey Questionnaire

I. Basic Information			
1. Questionnaire No.:		2. Date (d/m/y):	
3. Name of Interviewer (First/Last/Patronymic):			
4. Region:	5. District:	6. Massive:	
7. Name of the respondent (First/Last/Patronymic):			
8. Respondent's relationship to head of the household:			
<input type="checkbox"/> Father <input type="checkbox"/> Mother <input type="checkbox"/> Brother <input type="checkbox"/> Sister <input type="checkbox"/> Other: _____			
II. Household Identification			
9. Name of the Head of household (First/Last/Patronymic):			
10. Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female			
11. Ethnic background: <input type="checkbox"/> Uzbek <input type="checkbox"/> Tajik <input type="checkbox"/> Kazakh <input type="checkbox"/> Karakalpak <input type="checkbox"/> Jewish <input type="checkbox"/> Russian <input type="checkbox"/> Ukrainian <input type="checkbox"/> Korean <input type="checkbox"/> Other: _____			
12. Religion:			
13. Address: (house No., street)			
14. Total area (ha):			
15. Number of buildings:			
16. Building area (ha):			
17. Do you consider yourself part of a minority?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
18. Do you consider yourself disadvantaged because of this?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
19. How many other households in your minority do you know?			
20. Household Head (Name) (First/Last/Patronymic):			
a. Relationship:			
<input type="checkbox"/> Father <input type="checkbox"/> Mother <input type="checkbox"/> Brother <input type="checkbox"/> Sister <input type="checkbox"/> Other: _____			
b. Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female		c. Age:	
d. Marital status:			
<input type="checkbox"/> Married <input type="checkbox"/> Single <input type="checkbox"/> Divorced <input type="checkbox"/> Widowed <input type="checkbox"/> Other: _____			
e. Education: <input type="checkbox"/> Cannot read and write <input type="checkbox"/> Elementary school <input type="checkbox"/> High school <input type="checkbox"/> Other: _____			
f. Main occupation:			
g. Secondary occupation:			
h. Skills:			
i. Requires special care of disabled:			
<input type="checkbox"/> Special care <input type="checkbox"/> Disabled <input type="checkbox"/> Other: _____			



<b>21. Family member II (Name)</b> (First/Last/Patronymic):			
a. Relationship:			
<input type="checkbox"/> Father <input type="checkbox"/> Mother <input type="checkbox"/> Brother <input type="checkbox"/> Sister <input type="checkbox"/> Other: _____			
b. Gender:		<input type="checkbox"/> Male <input type="checkbox"/> Female	c. Age: _____
d. Marital status:			
<input type="checkbox"/> Married <input type="checkbox"/> Single <input type="checkbox"/> Divorced <input type="checkbox"/> Widowed <input type="checkbox"/> Other: _____			
e. Education: <input type="checkbox"/> Cannot read and write <input type="checkbox"/> Elementary school <input type="checkbox"/> High school			
<input type="checkbox"/> Other: _____			
f. Main occupation:			
g. Secondary occupation:			
h. Skills:			
i. Requires special care of disabled:			
<input type="checkbox"/> Special care <input type="checkbox"/> Disabled <input type="checkbox"/> Other: _____			
<b>22. Family member III (Name)</b> (First/Last/Patronymic):			
a. Relationship:			
<input type="checkbox"/> Father <input type="checkbox"/> Mother <input type="checkbox"/> Brother <input type="checkbox"/> Sister <input type="checkbox"/> Other: _____			
b. Gender:		<input type="checkbox"/> Male <input type="checkbox"/> Female	c. Age: _____
d. Marital status:			
<input type="checkbox"/> Married <input type="checkbox"/> Single <input type="checkbox"/> Divorced <input type="checkbox"/> Widowed <input type="checkbox"/> Other: _____			
e. Education: <input type="checkbox"/> Cannot read and write <input type="checkbox"/> Elementary school <input type="checkbox"/> High school			
<input type="checkbox"/> Other: _____			
f. Main occupation:			
g. Secondary occupation:			
h. Skills:			
i. Requires special care of disabled:			
<input type="checkbox"/> Special care <input type="checkbox"/> Disabled <input type="checkbox"/> Other: _____			
<b>23. Family member IV (Name)</b> (First/Last/Patronymic):			
a. Relationship:			
<input type="checkbox"/> Father <input type="checkbox"/> Mother <input type="checkbox"/> Brother <input type="checkbox"/> Sister <input type="checkbox"/> Other: _____			
b. Gender:		<input type="checkbox"/> Male <input type="checkbox"/> Female	c. Age: _____
d. Marital status:			
<input type="checkbox"/> Married <input type="checkbox"/> Single <input type="checkbox"/> Divorced <input type="checkbox"/> Widowed <input type="checkbox"/> Other: _____			
e. Education: <input type="checkbox"/> Cannot read and write <input type="checkbox"/> Elementary school <input type="checkbox"/> High school			
<input type="checkbox"/> Other: _____			
f. Main occupation:			
g. Secondary occupation:			
h. Skills:			
i. Requires special care of disabled:			
<input type="checkbox"/> Special care <input type="checkbox"/> Disabled <input type="checkbox"/> Other: _____			

<b>24. Family member V (Name)</b> (First/Last/Patronymic):		
a. Relationship: <input type="checkbox"/> Father <input type="checkbox"/> Mother <input type="checkbox"/> Brother <input type="checkbox"/> Sister <input type="checkbox"/> Other: _____		
b. Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female		c. Age: _____
d. Marital status: <input type="checkbox"/> Married <input type="checkbox"/> Single <input type="checkbox"/> Divorced <input type="checkbox"/> Widowed <input type="checkbox"/> Other: _____		
e. Education: <input type="checkbox"/> Cannot read and write <input type="checkbox"/> Elementary school <input type="checkbox"/> High school <input type="checkbox"/> Other: _____		
f. Main occupation:		
g. Secondary occupation:		
h. Skills:		
i. Requires special care of disabled: <input type="checkbox"/> Special care <input type="checkbox"/> Disabled <input type="checkbox"/> Other: _____		
<b>25. Family member VI (Name)</b> (First/Last/Patronymic):		
a. Relationship: <input type="checkbox"/> Father <input type="checkbox"/> Mother <input type="checkbox"/> Brother <input type="checkbox"/> Sister <input type="checkbox"/> Other: _____		
b. Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female		c. Age: _____
d. Marital status: <input type="checkbox"/> Married <input type="checkbox"/> Single <input type="checkbox"/> Divorced <input type="checkbox"/> Widowed <input type="checkbox"/> Other: _____		
e. Education: <input type="checkbox"/> Cannot read and write <input type="checkbox"/> Elementary school <input type="checkbox"/> High school <input type="checkbox"/> Other: _____		
f. Main occupation:		
g. Secondary occupation:		
h. Skills:		
i. Requires special care of disabled: <input type="checkbox"/> Special care <input type="checkbox"/> Disabled <input type="checkbox"/> Other: _____		
<b>26. Family member VII (Name)</b> (First/Last/Patronymic):		
a. Relationship: <input type="checkbox"/> Father <input type="checkbox"/> Mother <input type="checkbox"/> Brother <input type="checkbox"/> Sister <input type="checkbox"/> Other: _____		
b. Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female		c. Age: _____
d. Marital status: <input type="checkbox"/> Married <input type="checkbox"/> Single <input type="checkbox"/> Divorced <input type="checkbox"/> Widowed <input type="checkbox"/> Other: _____		
e. Education: <input type="checkbox"/> Cannot read and write <input type="checkbox"/> Elementary school <input type="checkbox"/> High school <input type="checkbox"/> Other: _____		
f. Main occupation:		
g. Secondary occupation:		
h. Skills:		
i. Requires special care of disabled: <input type="checkbox"/> Special care <input type="checkbox"/> Disabled <input type="checkbox"/> Other: _____		

<b>27. Family member VIII (Name)</b> (First/Last/Patronymic):		
a. Relationship: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span><input type="checkbox"/> Father</span> <span><input type="checkbox"/> Mother</span> <span><input type="checkbox"/> Brother</span> <span><input type="checkbox"/> Sister</span> <span><input type="checkbox"/> Other: _____</span> </div>		
b. Gender:	<input type="checkbox"/> Male <input type="checkbox"/> Female	c. Age: _____
d. Marital status: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span><input type="checkbox"/> Married</span> <span><input type="checkbox"/> Single</span> <span><input type="checkbox"/> Divorced</span> <span><input type="checkbox"/> Widowed</span> <span><input type="checkbox"/> Other: _____</span> </div>		
e. Education: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span><input type="checkbox"/> Cannot read and write</span> <span><input type="checkbox"/> Elementary school</span> <span><input type="checkbox"/> High school</span> </div> <div style="margin-top: 5px;"><input type="checkbox"/> Other: _____</div>		
f. Main occupation:		
g. Secondary occupation:		
h. Skills:		
i. Requires special care of disabled: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span><input type="checkbox"/> Special care</span> <span><input type="checkbox"/> Disabled</span> <span><input type="checkbox"/> Other: _____</span> </div>		
<b>28. Family member IX (Name)</b> (First/Last/Patronymic):		
a. Relationship: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span><input type="checkbox"/> Father</span> <span><input type="checkbox"/> Mother</span> <span><input type="checkbox"/> Brother</span> <span><input type="checkbox"/> Sister</span> <span><input type="checkbox"/> Other: _____</span> </div>		
b. Gender:	<input type="checkbox"/> Male <input type="checkbox"/> Female	c. Age: _____
d. Marital status: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span><input type="checkbox"/> Married</span> <span><input type="checkbox"/> Single</span> <span><input type="checkbox"/> Divorced</span> <span><input type="checkbox"/> Widowed</span> <span><input type="checkbox"/> Other: _____</span> </div>		
e. Education: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span><input type="checkbox"/> Cannot read and write</span> <span><input type="checkbox"/> Elementary school</span> <span><input type="checkbox"/> High school</span> </div> <div style="margin-top: 5px;"><input type="checkbox"/> Other: _____</div>		
f. Main occupation:		
g. Secondary occupation:		
h. Skills:		
i. Requires special care of disabled: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span><input type="checkbox"/> Special care</span> <span><input type="checkbox"/> Disabled</span> <span><input type="checkbox"/> Other: _____</span> </div>		
<b>29. Family member X (Name)</b> (First/Last/Patronymic):		
a. Relationship: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span><input type="checkbox"/> Father</span> <span><input type="checkbox"/> Mother</span> <span><input type="checkbox"/> Brother</span> <span><input type="checkbox"/> Sister</span> <span><input type="checkbox"/> Other: _____</span> </div>		
b. Gender:	<input type="checkbox"/> Male <input type="checkbox"/> Female	c. Age: _____
d. Marital status: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span><input type="checkbox"/> Married</span> <span><input type="checkbox"/> Single</span> <span><input type="checkbox"/> Divorced</span> <span><input type="checkbox"/> Widowed</span> <span><input type="checkbox"/> Other: _____</span> </div>		
e. Education: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span><input type="checkbox"/> Cannot read and write</span> <span><input type="checkbox"/> Elementary school</span> <span><input type="checkbox"/> High school</span> </div> <div style="margin-top: 5px;"><input type="checkbox"/> Other: _____</div>		
f. Main occupation:		
g. Secondary occupation:		
h. Skills:		
i. Requires special care of disabled: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span><input type="checkbox"/> Special care</span> <span><input type="checkbox"/> Disabled</span> <span><input type="checkbox"/> Other: _____</span> </div>		

30. Average annual income of the family:		
<b>III. Expenditure Pattern</b>		
31. What are the main expenditures of the household?		
<i>Expenditures</i>	<i>Amount</i>	
a. Food		
b. For utilities (gas, electricity, etc.)		
c. Clothing		
d. Health		
e. Education		
f. Communication		
g. Social functions		
h. Agriculture (hiring tools, seed, etc)		
i. Other (specify)		
j. Total		
<b>IV. Indebtedness</b>		
32. Have you received any loans in the last year? <input type="checkbox"/> Yes <input type="checkbox"/> No    (if "No" go to next section)		
33. <b>Source I:</b> who issued you the loan? <input type="checkbox"/> Bank <input type="checkbox"/> Private <input type="checkbox"/> Other: _____		
a. How much is the loan?		
b. How much you have repaid?		
c. How much is interest rate?		
34. <b>Source II:</b> who issued you the loan? <input type="checkbox"/> Bank <input type="checkbox"/> Private <input type="checkbox"/> Other: _____		
a. How much is the loan?		
b. How much you have repaid?		
c. How much is interest rate?		
35. <b>Source III:</b> who issued you the loan? <input type="checkbox"/> Bank <input type="checkbox"/> Private <input type="checkbox"/> Other: _____		
a. How much is the loan?		
b. How much you have repaid?		
c. How much is interest rate?		
<b>V. Assets</b>		
36. What assets do you have?		
<i>Type of assets</i>	<i>Value</i>	
a. Durable assets (Car, Bicycle, TV, Video, etc.), list:		
b. Household items		
c. Livestock		
d. Agricultural assets		
e. Other: _____		
f. Total		
<b>VI. Coverage Under Government Development Schemes</b>		
37. Do you have any benefits under government schemes? <input type="checkbox"/> Yes <input type="checkbox"/> No (if "No" go to 40)		

38. What is the name the scheme?	
39. What benefit did you get?	<input type="checkbox"/> Loan <input type="checkbox"/> Training <input type="checkbox"/> Employment <input type="checkbox"/> Other _____
<b>VII. Migration</b>	
40. Did any of your family members out migrated for work to other parts of Uzbekistan, in the last three years?	<input type="checkbox"/> Yes, Where: _____ <input type="checkbox"/> No <i>(If "No" go to 46)</i>
41. Did any of your family members out migrated for work to foreign countries, in the last three years?	<input type="checkbox"/> Yes, Where: _____ <input type="checkbox"/> No <i>(If "No" go to 46)</i>
42. Was this migration permanently?	<input type="checkbox"/> Yes <input type="checkbox"/> No
43. When did they visit home last time?	_____
44. What kind of employment has the person undertaken?	<input type="checkbox"/> Agricultural labour <input type="checkbox"/> Construction <input type="checkbox"/> Trade & business <input type="checkbox"/> Other _____
45. How much, on average, did the person/s earn?	_____
<b>VIII. Resettlement and Rehabilitation Options</b>	
46. If the proposed project affects your property, will you resettle voluntarily (move out from the land/building you are occupying now)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>(if "No" go to 48)</i>
47. How far are you willing to move from your current location (km)?	_____
48. Would you require assistance?	<input type="checkbox"/> Yes <input type="checkbox"/> No
49. What kind of assistance will you prefer?	_____
50. Do you require compensation?	<input type="checkbox"/> Yes <input type="checkbox"/> No
51. What is your legal status towards the property?	<input type="checkbox"/> Legal owner <i>(skip 53)</i> <input type="checkbox"/> Tenant/sharecropper <i>(go to 53)</i>
52. What kind of compensation would you prefer?	<input type="checkbox"/> Land for land <input type="checkbox"/> Equivalent property for property lost <input type="checkbox"/> Government housing scheme <input type="checkbox"/> Business license <input type="checkbox"/> Monetary compensation <input type="checkbox"/> Part property and part monetary <input type="checkbox"/> Other (please, specify) _____
53. How far will you move from here to find a work (km)?	_____

## Census Survey Questionnaire

<b>I. Basic Information</b>			
1. Questionnaire No.:		2. Date (d/m/y):	
3. Name of Interviewer (First/Last/Patronymic):			
4. Region:	5. District:	6. Massive:	
<b>II. Land Acquisition</b>			
7. Length of the line crossing the land plot (m):		8. Temporary land acquisition (ha):	
9. Width of the line (m):		10. Permanent land acquisition (m2):	
<b>III. Land Use Information</b>			
11. Name of the affected plot owner (First/Last/Patronymic):			
12. Gender:	<input type="checkbox"/> Male	<input type="checkbox"/> Female	13. Land plot size (ha):
14. Ownership:	<input type="checkbox"/> Owner <input type="checkbox"/> Tenant <input type="checkbox"/> Sharecropper <input type="checkbox"/> Other (specify): _____		
15. Land use type:	<input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Other: _____ <i>(If "Agricultural" go to "16", otherwise go to "18")</i>		
16. Land category:	<input type="checkbox"/> Irrigated <input type="checkbox"/> Arable <input type="checkbox"/> Pasture <input type="checkbox"/> Grassland <input type="checkbox"/> Garden <input type="checkbox"/> Other: _____		
17. Soil bonitet: _____			
<b>IV. Economic Assessment of the Agricultural Farm</b>			
18. Crop I name: _____			
	2009	2010	2011
a. Planting area (ha):			
b. Yields (centner/ha):			
c. Production costs per tons:			
d. Average price per tons:			
e. Gross harvest:			
f. Product price per tons			
g. Average profit			
19. Crop II name: _____			
	2009	2010	2011
a. Planting area (ha):			
b. Yields (centner/ha):			
c. Production costs per tons:			
d. Average price per tons:			
e. Gross harvest:			

f. Product price per tons						
g. Average profit						
20. Crop III name: _____						
	2009	2010	2011			
a. Planting area (ha):						
b. Yields (enter/ha):						
c. Production costs per tons:						
d. Average price per tons:						
e. Gross harvest:						
f. Product price per tons						
g. Average profit						
<b>V. Affected Trees</b>						
21. What are the trees that will be affected under the program?						
Type of tree	Total unit	Number of affected units	Cost to grow one unit	Income/Year		
				2009	2010	2011
<b>a. Fruit tree:</b> (i)_____						
Fruit tree: (ii)_____						
Fruit tree: (iii)_____						
Fruit tree: (iv)_____						
<b>b. Timber:</b> (i)_____						
Timber: (ii)_____						
Timber: (iii)_____						
Timber: (iv)_____						
c. Design						
d. Other _____						
<b>VI. Affected Structures (Buildings)</b>						
22. <b>Structure I</b> (name, description): _____						
a. Subject for demolition (Y/N)						
b. Type of the building						
c. Construction year						
d. Ownership right						
e. Ownership since (year)						
<i>Structure details</i>						
f. Total building area (square .m)						
g. Foundation material						
h. Wall material						
i. Roof material						

j. Overall condition (1-lowest, 5-highest)	
k. Estimated replacement cost	
l. Length	
m. Width	
n. Height	
o. Availability of legal documents to support claim for compensation (Y/N)	
p. Document name	
23. <b>Structure II</b> (name, description): _____	
a. Subject for demolition (Y/N)	
b. Type of the building	
c. Construction year	
d. Ownership right	
e. Ownership since (year)	
<i>Structure details</i>	
f. Total building area (square .m)	
g. Foundation material	
h. Wall material	
i. Roof material	
j. Overall condition (1-lowest, 5-highest)	
k. Estimated replacement cost	
l. Length	
m. Width	
n. Height	
o. Availability of legal documents to support claim for compensation (Y/N)	
p. Document name	
24. <b>Structure III</b> (name, description): _____	
a. Subject for demolition (Y/N)	
b. Type of the building	
c. Construction year	
d. Ownership right	
e. Ownership since (year)	
<i>Structure details</i>	
f. Total building area (square .m)	
g. Foundation material	
h. Wall material	
i. Roof material	



j. Overall condition (1-lowest, 5-highest)	
k. Estimated replacement cost	
l. Length	
m. Width	
n. Height	
o. Availability of legal documents to support claim for compensation (Y/N)	
p. Document name	
25. Available utilities: <input type="checkbox"/> Electricity <input type="checkbox"/> Drinking water <input type="checkbox"/> Hot water <input type="checkbox"/> Gas <input type="checkbox"/> Other _____	

## VII. Affected Business

26. Please indicate the following information on the business affected under the project:

a. Ownership	
b. Type of business	
c. Registration	
d. Value if business sold	
e. Income per year	
f. Expenditure per year	
g. Profit per year	

### Workers

h. Number of workers	
i. Number in full time equivalent	

### Including

j. Number of male workers	
k. Number of female workers	
l. Average salary (monthly)	

### Tenants

m. Rent paid per month	
n. Contract validity	

## VIII. Annual Income

27. Please indicate your income by source and by year starting 2008:

Source	Years		
	2009	2010	2011
a. Agricultural production			
b. Forest products			
c. Livestock			
d. Renting			
e. Remittances			
f. Other (specify): _____			

28. Will construction of the power line affect the value of your land plot, business, and/or real estate?

☐ Yes    ☐ No

*(if "Yes" go to 29, otherwise go to 30)*

29. How will construction of the power line affect the value of your land plot, business, and/or real estate?

30. Comment on potential land acquisition or resettlement

**IX. Additional Information. To be filled-in by interviewer**

31. Type of effect:

- ☐ Losing total house
- ☐ Losing house and entire land
- ☐ Losing house and part of land
- ☐ Losing total land
- ☐ Losing part of land
- ☐ Losing only part of house
- ☐ Losing part of house and part of commercial structure
- ☐ Losing part of commercial structure
- ☐ Losing house and commercial structure
- ☐ Losing total commercial structure
- ☐ Losing house and part of commercial structure
- ☐ Losing total commercial structure and part of house
- ☐ Losing source of income only
- ☐ Losing only land fixtures (trees)
- ☐ Other (specify): \_\_\_\_\_

32. Ownership as per revenue records and field verification:

- ☐ Owner as per revenue record and at site is same
- ☐ Owner is not residing/cultivating land but given on lease/rent
- ☐ Absentee land lord
- ☐ Present Owner is not registered his land-ownership record in the name of previous owner
- ☐ Recently purchased land, not registered yet
- ☐ Other (specify): \_\_\_\_\_

33. Any additional comments

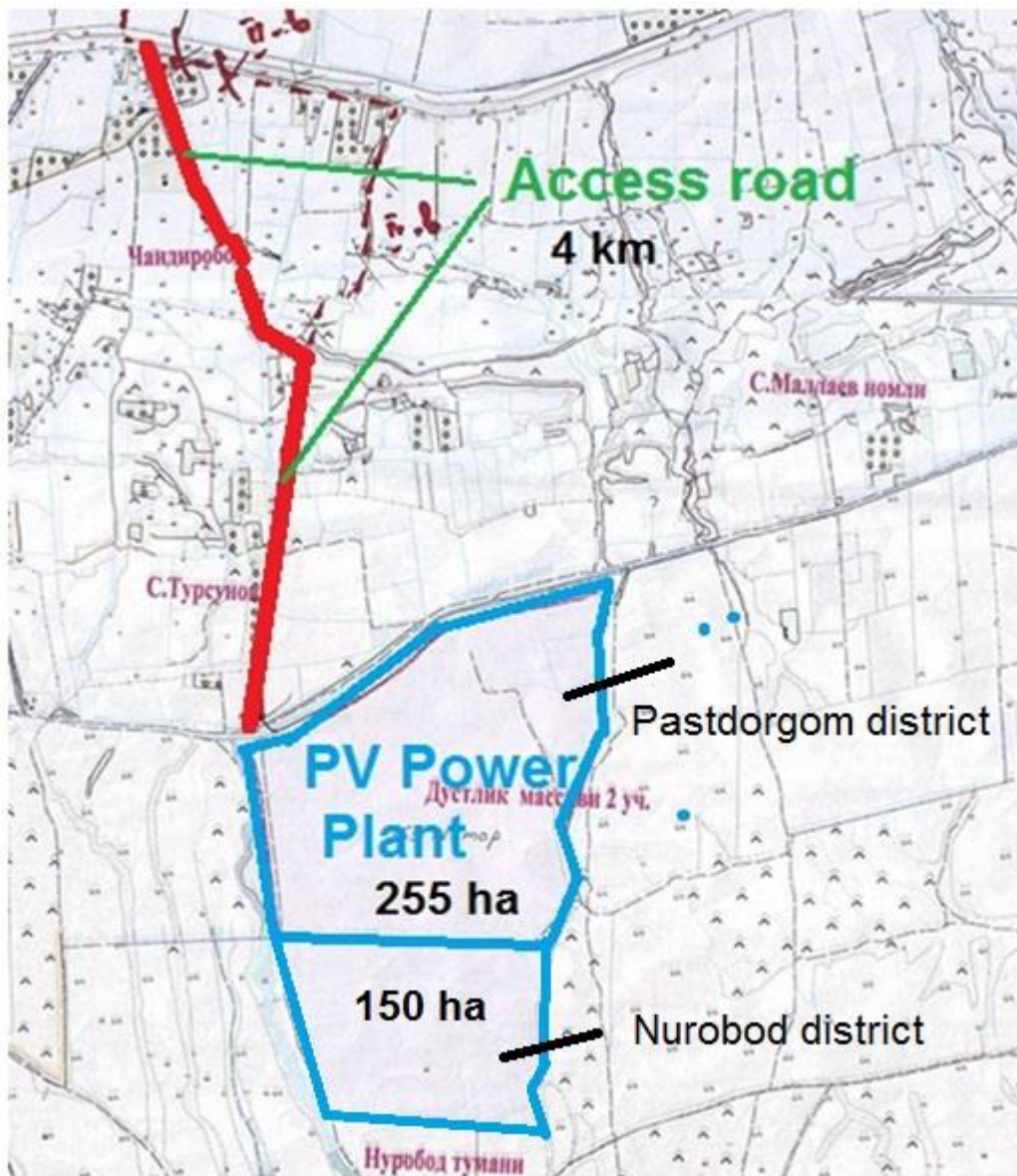
Checked by (signature of interviewer): \_\_\_\_\_

Name \_\_\_\_\_

Date (d/m/y): \_\_\_\_\_



**Annex 2:** Preliminary design for widening of access road and power plant area



### Annex 3: Different public consultation and census survey photos



1. Consultation with AHs



2. View of proposed 110 kV TL route



3. Location of proposed PV power plant



4. Census and SES survey



5. Substation at Chemical Plant



6. Affected temporary structure



#### Annex 4: The location of cropping farms within the project area

