

**SOCIAL IMPACT ASSESSMENT STUDY
FOR PROPOSED LAND ACQUISITION FOR
SUB HEAD- LWSS SHIMLA, KAWALAG,
TEHSIL SHIMLA (RURAL) DISTRICT
SHIMLA H.P.**

Himachal Pradesh Right to Fair Compensation and
Transparency in Land Acquisition, Rehabilitation, and
Resettlement (Social Impact Assessment and Consent)
Rules, 2015 (HPRFCTLARR ACT, 2013 Rules 2015)

Draft Report

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Glossary

- **Act** means: The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013(30 of 2013).
- **Affected Area** means such area as may be notified by the appropriate government for the purposes of land acquisition.
- **Affected Family includes:**
 - I. A family whose land or other immovable property has been acquired.
 - II. A family which does not own any land but member(s) of such family may be agricultural labourers, tenants including any form of tenancy or holding of usufruct right, share-croppers or artisans or who may be working in the affected area, for three years, prior to acquisition of the land, whose primary source of livelihood stand affected by the acquisition of land.
 - III. The scheduled tribes and other traditional forest dwellers who have lost any of their forest rights recognized under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (2 of 2007) due to the acquisition of land.
 - IV. Family whose primary source of livelihood for three years prior to the acquisition of the land is dependent on forests or water bodies and includes gatherers of forest produce, hunters, fisher folk and boatmen and such livelihoods are affected due to acquisition of land.
 - V. A member of the family who has been assigned land by the State Government or the Central Government under any of its schemes and such land is under acquisition.
 - VI. A family residing on any land in the urban areas for preceding three years or more prior to the acquisition of the land or whose primary source of livelihood for three years prior to the acquisition of the land is affected by the acquisition of such land.
- **Agricultural Land** means land used for the purpose of:
 - I. Agriculture or horticulture.
 - II. Dairy farming, poultry farming, pisciculture, sericulture, seed farming breeding of livestock or nursery growing medicinal herbs.
 - III. Raising of crops, trees, grass or garden produce; and

IV. Land used for the grazing of cattle.

- **Below poverty line or BPL Family** refers to families falling below the poverty line as defined by the Planning Commission of India, from time to time, as well as those included in the BPL list of Himachal Pradesh.
- **Central Government** refers to Government of India.
- **Compensation** refers to the amount to be paid as compensation under various provisions of the Act 2013, for private property, structures and other assets acquired for the project, including rehabilitation and resettlement entitlements.
- **Family** includes a person, his or her spouse, minor children, minor brothers and minor sisters dependent on him: Provided that widows, divorcees and women deserted by families shall be considered as separate families.
- **Land** includes benefits to arise out of land, and things attached to the earth or permanently fastened to anything attached to the earth.
- **Land acquisition** means acquisition of land under The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.
- **Landless** means such person or class of persons who may be: Considered or specified as such under any state law for the time being in force; or In a case of landless not being specified under clause (i), as may be specified by the appropriate Government;
- **Land owner** includes any person-
 - I. Whose name is recorded as the owner of the land or building or part thereof, in the records of the authority concerned; or
 - II. Any person who is granted forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (2 of 2007) or under any other law for the time being in force; or
 - III. Who is entitled to be granted Patta rights on the land under any law of the State including assigned lands; or
 - IV. Any person who has been declared as such by an order of the court or authority;
- **Market value** means the value of land determined in accordance with Section 26 of the Act 2013.
- **Notification** means a notification published in the Gazette of India or, as the case may be, the Gazette of a state and the expression “notify” shall be construed accordingly.

- **Public purpose** means the activities specified under sub-section (1) of Section 2 of the Act 2013.
- **Rehabilitation and Resettlement (R & R) means** carrying out rehabilitation and resettlement as per RFCTLARR Act 2013.
- **Scheduled Areas** means the scheduled areas as defined in section 2 of the provisions of the Panchayats (Extension to the Scheduled Areas) Act, 1996 (40 of 1996).
- **Social Impact Assessment** means an assessment made under subsection (1) of Section 4 of the Act.
- **Social Impact Management Plan** means the plan prepared as part of Social Impact Assessment Process under sub-section (1) of Section 4 of the Act.
- **State Government or “Government”** means the Government of Himachal Pradesh
- **Tenants** are those persons having Bonafide tenancy agreements for three years prior to the acquisition of the land, with a property owner with clear property titles, to occupy a structure or land for residence, business or other purposes.
- **Vulnerable groups** include persons such as differently abled, widows, and women headed household, persons above sixty years of age, Scheduled Caste and Scheduled Tribes and other groups as may be specified by the State Government.
- **Women Headed Household** means a family headed by a woman and does not have a male earning member. This woman may be a widow, separated or deserted woman.

List of Abbreviation

Abbreviation	Full Form
HPPWD	Himachal Pradesh Public Works Department
LWSS	Lift Water Supply Scheme
PAF	Project Affected Family
PAP	Project Affected Person
R&R	Rehabilitation and Resettlement
RFCTLARR Act	Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013
SIA	Social Impact Assessment
SIAU	Social Impact Assessment Unit
SIMP	Social Impact Management Plan
SJPNL	Shimla Jal Prabandhan Nigam Limited

Executive Summary

Project Background

The proposed land acquisition is associated with the Lift Water Supply Scheme (LWSS), Shimla, specifically the remaining section of the transmission pipeline under the sub-work for replacement of the rising main from Ashwani Khad to Kawalag 1st Stage and from Kawalag to Kasumpti 2nd Stage.

The larger project was initiated in 2017 and a substantial portion of the planned infrastructure has already been completed. The remaining section near the Kawalag Water Pump House requires a limited area of private land for completion of the planned pipeline alignment. The proposed acquisition is located at Up-Mohal Kawalag, along the Himachal Pradesh Public Work Department (HPPWD) Mehli–Junga Road, Tehsil Shimla (Rural), District Shimla.

The total land proposed for acquisition is 0-04-50 hectares. The acquisition is associated with completion of an existing public drinking water infrastructure project.

Purpose and Scope of the SIA

The Social Impact Assessment (SIA) has been undertaken to assess the social implications of the proposed land acquisition and to provide relevant information for consideration by the competent authority.

The assessment examined:

- the need and public purpose associated with the proposed acquisition;
- the extent, location and existing use of the land proposed for acquisition;
- the persons and property interests potentially affected;
- the possibility of avoiding or minimizing land acquisition;
- potential social impacts during acquisition, construction and operation;
- the views and concerns of affected persons and other stakeholders; and
- measures required to avoid, mitigate and compensate identified adverse impacts.

The assessment was undertaken through review of available project and land records, field investigation, household-level information, stakeholder consultation and analysis of the identified social impacts.

Land Requirement and Affected Persons

The proposed acquisition covers approximately **450 sq. m. of private land**. The land is associated with the existing HPPWD Mehli–Junga Road corridor and is required for the remaining section of the transmission pipeline.

The assessment identified **one extended family and four family branches represented during consultation** in relation to the affected private land interest. The exact legal ownership and respective shares are to be confirmed from certified revenue records as part of the acquisition process.

The assessment did not identify:

Assessment Category	Finding
Private land proposed for acquisition	0-04-50 ha
Affected family / branches consulted	One extended family; four family branches represented
Residential structures	None identified
Commercial structures	None identified
Physical displacement	None identified
Tenants / leaseholders	None identified
Encroachers	None identified
Direct livelihood dependence on acquired land	None identified
Common property resources / community assets	No direct impact identified
Principal permanent impact	Acquisition of private land
Principal temporary impacts	Construction disturbance, traffic, dust, noise, access and safety

The identification of individual legal owners and their respective shares should be confirmed through certified revenue records before compensation is determined and disbursed.

Public Purpose and Need

The proposed acquisition is directly connected with completion of an existing public drinking water transmission project. The larger project has already involved substantial public

investment, and the remaining pipeline section is required to complete the planned transmission infrastructure.

The proposed acquisition is therefore associated with completion of public water supply infrastructure rather than commercial or industrial development.

The assessment also considered the need to minimize land acquisition. As the broader transmission system has already been substantially implemented, changing the established alignment at this stage could require modifications to the project design and may have implications for additional land requirements, technical works, approvals, cost and implementation time.

On the information available for the SIA, no clearly practicable alternative alignment has been identified that would avoid the proposed land requirement without affecting the established project configuration. The final land requirement should nevertheless be verified against the approved engineering drawings, alignment and land schedule.

The ultimate determination regarding public purpose and statutory compliance rests with the competent authority under the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR Act, 2013), the Himachal Pradesh Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Social Impact Assessment and Consent) Rules, 2015 (HP RFCTLARR Rules, 2015), and other applicable legal provisions.

Key Social Impacts

The SIA identified one principal permanent impact and a number of temporary impacts associated with construction.

Permanent impact

The principal permanent impact is the acquisition of private land and the associated private property interest. This impact requires determination and payment of compensation and other applicable statutory entitlements to the legally entitled persons through the prescribed acquisition process.

Temporary construction impacts

Construction of the remaining pipeline section may cause temporary:

- disturbance from excavation;

- dust from construction and vehicle movement;
- construction noise;
- traffic and movement-related inconvenience;
- temporary obstruction or disruption of access; and
- safety risks associated with excavation and construction activities.

These impacts are expected to be managed through appropriate construction planning, traffic management, dust and noise control, safe access arrangements, barricading, warning signage, drainage management and restoration of temporarily affected areas.

Impacts not identified

The assessment did not identify physical displacement, loss of residential or commercial structures, tenants or leaseholders, or direct livelihood dependence on the land proposed for acquisition. No direct impact on common property resources or community assets was identified.

Accordingly, the corresponding rehabilitation and resettlement measures are not presently applicable to the impacts identified through the SIA, subject to verification during the statutory acquisition process.

Consultation Findings

Consultation and field investigation were undertaken to understand the affected land, existing use, family and ownership-related information, concerns regarding acquisition and expectations concerning compensation.

The principal concern identified through consultation relates to appropriate recognition of the private land interest and fair compensation through the acquisition process.

The consultation findings represent the views expressed by persons who participated in the SIA process. They do not determine legal ownership, compensation entitlement or other statutory requirements, which remain subject to certified records and determination by the competent authority.

Compensation and Entitlements

Compensation for the acquired land and any other applicable statutory entitlements shall be determined in accordance with the Right to Fair Compensation and Transparency in Land

Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR Act, 2013), the applicable Himachal Pradesh rules and other relevant government provisions.

The exact ownership and respective interests in the affected land should be verified from certified revenue records before compensation is determined and disbursed.

Since no physical displacement, affected structures or direct livelihood dependence on the acquired land were identified, no project-specific rehabilitation measure has been identified for these categories at this stage. If an eligible impact is subsequently established during the acquisition or implementation process, the applicable statutory provisions should be applied.

Social Impact Management

A Social Impact Management Plan (SIMP) has been developed to address the impacts identified through the assessment.

The principal management measures include:

- limiting acquisition to the land required for the remaining pipeline section;
- verification of ownership and affected interests;
- lawful and timely determination and payment of compensation;
- maintaining access to adjoining properties and the existing road during construction;
- traffic management and public safety measures;
- dust and noise control;
- appropriate management of excavated material and construction waste;
- protection of existing drainage and surrounding land;
- continued communication with affected persons;
- grievance redressal; and
- monitoring of identified and unforeseen social impacts.

The SIMP provides measures for the pre-acquisition, acquisition, pre-construction, construction and post-construction stages.

Key Implementation Considerations

Before and during implementation, particular attention should be given to the following:

1. **Verification of land and ownership:** The final acquisition area, boundaries and legal ownership should be confirmed through the approved project alignment, land schedule and certified revenue records.
2. **Compensation:** Compensation and applicable statutory entitlements should be determined and provided in accordance with the RFCTLARR Act, 2013 and applicable rules.
3. **Construction management:** Construction should be planned to minimize disturbance to road users and adjoining properties and to maintain safe access wherever practicable.
4. **Public safety:** Excavation areas and construction activities along the existing road should be appropriately barricaded, signed and managed.
5. **Communication and grievances:** A clear channel should be maintained for affected persons to obtain information and raise concerns during acquisition and construction.
6. **Monitoring:** Temporary impacts, grievances and any unforeseen social impacts should be documented and addressed during implementation.

1 Project Background and Description

1.1 Project Background

Shimla, the capital of Himachal Pradesh, is an important administrative, commercial, educational, healthcare and tourism center in the state. Located at an elevation of approximately 2,200 meters above mean sea level, the city is spread across a complex system of ridges and valleys. Its steep terrain and dispersed settlement pattern create particular challenges for the provision and maintenance of urban infrastructure.

Over the past several decades, Shimla has experienced continued urban growth, expansion of built-up areas and increasing demand for public services. Seasonal tourism adds further pressure to the city's infrastructure, particularly during periods of high tourist inflow. Among essential urban services, reliable drinking water supply remains a significant concern because of the city's topography, dependence on surface water sources located outside the main urban area, and the infrastructure required to convey water to consumers.

Shimla's drinking water supply depends primarily on surface water sources and associated supply schemes, including Giri, Gumma, Ashwani Khad, Chair, Seog and Cherot. Several of these sources are located outside the main urban area and at lower elevations, requiring water to be lifted through pumping systems before it reaches treatment and distribution facilities. The resulting system involves intake structures, pumping stations, transmission mains, treatment plants, storage reservoirs and distribution networks.

The terrain has a direct bearing on the operation of this system. Significant elevation differences require pumping at different stages, increasing energy and maintenance requirements. The transmission and distribution network is also exposed to leakage, pipe failures and other operational problems associated with ageing infrastructure, difficult terrain and ground conditions.

Water availability also varies seasonally. Reduced source flows during dry periods can coincide with periods of increased demand. At the same time, urban expansion and changing patterns of water use continue to increase pressure on existing infrastructure. These factors make both augmentation of water supply infrastructure and efficient operation of existing systems important for the city's long-term water security.

The Government of Himachal Pradesh, through Shimla Jal Prabandhan Nigam Limited (SJPNL), has undertaken infrastructure improvement works to strengthen the city's water supply system. These include augmentation and rehabilitation of source and transmission infrastructure, replacement of ageing pipelines, improvement of pumping and treatment facilities, storage enhancement and measures to improve operational efficiency.

The present proposal forms part of these broader efforts. It concerns a small parcel of privately-owned land required for completion of the remaining section of a transmission pipeline under the Lift Water Supply Scheme (LWSS), Shimla. The land is located along the existing HPPWD Mehli–Junga Road near the Kwalang Water Pump House at Up-Mohal Kawalag.

The proposal is therefore not for a new water supply corridor or a new stand-alone water infrastructure project. It relates to completion of the remaining section of an already substantially executed transmission system.

1.1.1 Kawalag Village – Overview

Kawalag is located in Tehsil Shimla (Rural), District Shimla, along the Mehli–Junga Road. The area has a predominantly hilly setting with scattered residential development, agricultural land, vegetation and public infrastructure.

The available project information identifies agriculture, horticulture, livestock rearing and employment in government and private sectors among the livelihood activities of the local population. The area has road connectivity and access to basic public services.

Kawalag is relevant to the present project because the Kwalang Water Pump House is located in the vicinity of the proposed acquisition site. The proposed pipeline is to be laid along the existing HPPWD road corridor near this facility.

The land acquisition is limited to the area required for the remaining pipeline section. Based on the project information available for this assessment, no household relocation or demolition of residential structures is proposed.

1.1.2 Interstate and International Aspects

The proposed acquisition is located entirely within Up-Mohal Kawalag, Tehsil Shimla (Rural), District Shimla, Himachal Pradesh. The proposed pipeline will be constructed within the existing HPPWD road corridor and will form part of the water supply system serving Shimla and adjoining areas.

The project does not involve an interstate or international boundary, transboundary infrastructure, or international water resources. No interstate or international issue has been identified in the project information provided for the present assessment.

The principal issues associated with the proposal are therefore local: land acquisition, completion of the transmission pipeline, temporary construction impacts and the rights and entitlements of the affected landowners.

1.1.3 Developer Background

Shimla Jal Prabandhan Nigam Limited (SJPNL) is the implementing agency for the present water supply project. It is responsible for planning and implementation of water supply and sewerage infrastructure for Shimla and associated urban areas.

The project information provided for this assessment identifies SJPNL as the agency responsible for strengthening and improving the city's water supply infrastructure, including transmission systems, pumping facilities, treatment infrastructure, storage and distribution networks.

The present proposal forms part of the Lift Water Supply Scheme (LWSS), Shimla, and specifically relates to the replacement of the rising main between Ashwani Khad and Kasumpti through the Kawalag section.

According to the project records provided for the assessment, the larger work was awarded by the Municipal Corporation Shimla to **M/s Unipro Techno Infrastructure Pvt. Ltd., Chandigarh**, through an Award Letter dated **05 July 2017**, at a contract value of **₹4,84,24,197**, with a stipulated completion period of six months.

The present land acquisition is required to enable completion of the remaining section of the transmission pipeline. The project information indicates that most of the pipeline has already been constructed and commissioned, while the section passing through the proposed acquisition land remains incomplete.

SJPNL is responsible for implementation of the project in accordance with applicable technical, statutory and safety requirements and for coordinating the remaining works with the concerned departments and affected stakeholders.

1.2 Project Rationale and Public Purpose

The proposed acquisition relates to the **Lift Water Supply Scheme (LWSS), Shimla**, and involves **0-04-50 hectares (450 square metres)** of privately-owned land at Up-Mohal Kawalag, along the HPPWD Mehli–Junga Road.

The land is required for laying the final remaining section of the rising main transmission pipeline associated with the larger project:

“Augmentation of LWSS at Giri, Chair, Ashwani Khad, Gumma, Cherot and Seog Catchment Area (Sub-Work: Replacement of Rising Main from Ashwani Khad to Kawalag 1st Stage and Kawalag to Kasumpti 2nd Stage).”

The project was initiated in 2017. According to the project information provided, the majority of the transmission pipeline has already been constructed and commissioned. The remaining section at Kawalag could not be completed because the land required for this portion had not been formally acquired.

At present, the newly constructed transmission main is connected to the existing pipeline at this location as an interim arrangement. Acquisition of the proposed land would allow the remaining section of the new pipeline to be laid and connected, completing the transmission system as planned.

1.2.1 Project Rationale

The rationale for the present acquisition is closely linked to the existing condition of Shimla's water transmission infrastructure. The city's water supply system depends on the reliable movement of water from source and pumping facilities to treatment, storage and distribution infrastructure. A break or bottleneck in the transmission system can therefore affect the operation of the wider network.

The larger LWSS project was undertaken to replace the existing rising main between Ashwani Khad and Kasumpti with a new transmission pipeline. The project includes associated civil and structural works, pipeline installation, welding, testing and commissioning in accordance with the applicable technical specifications.

The present acquisition concerns only the remaining section required to complete that system.

The significance of this section is therefore not related to its size alone. Although the land requirement is limited to 450 square meters, the section represents a physical gap in an

otherwise substantially completed transmission system. Its completion would allow the new pipeline to replace the corresponding section of the existing ageing pipeline.

The proposed alignment follows the existing HPPWD Mehli–Junga Road corridor. Use of the existing corridor limits the need for additional land and avoids establishing a separate route through adjoining agricultural or residential areas.

The project information also identifies a long-standing land issue at the site. The existing road was reportedly constructed approximately five decades ago over privately-owned land that was not formally acquired at that time. The land has since remained under public use as part of the road corridor.

The present acquisition therefore has two connected aspects. It provides the land required to complete the remaining water transmission infrastructure and provides a statutory mechanism for addressing the ownership and compensation issue associated with the existing public road.

The assessment should nevertheless distinguish between the need for the project and the legal determination of acquisition. The latter remains subject to the applicable statutory process and determination by the competent authority.

1.2.2 Public Purpose

The proposed acquisition is associated with an essential public utility: the transmission of drinking water for Shimla and adjoining areas.

The RFCTLARR Act, 2013 establishes a framework for land acquisition for public purposes and emphasizes a humane, participative, informed and transparent process, together with fair compensation and rehabilitation and resettlement where applicable. Section 4 specifically provides for preparation of a Social Impact Assessment study, while Section 4(4) requires consideration of whether the land proposed for acquisition is the minimum required and whether alternative locations have been considered.

The proposed acquisition is limited to 0-04-50 hectares and is associated with completion of an already substantially executed transmission system. The proposed pipeline follows an existing road corridor rather than creating a new infrastructure route.

The public purpose therefore arises principally from the need to complete and make effective use of the existing drinking water transmission infrastructure. The acquisition also provides an

opportunity to address the outstanding land-rights and compensation issue associated with the existing public road.

The project's public benefits and its social costs should, however, be assessed on the basis of evidence presented throughout this SIA rather than assumed solely from the nature of the project. The final determination regarding public purpose and acquisition remains with the competent authority under the applicable statutory framework.

1.3 Project Details

The proposed project is part of the Lift Water Supply Scheme (LWSS), Shimla, being implemented by Shimla Jal Prabandhan Nigam Limited (SJPNL).

The present land requirement is for the remaining section of the rising main transmission pipeline at Up-Mohal Kawalag, along the HPPWD Mehli–Junga Road, near the Kwalang Water Pump House.

The proposed acquisition covers 0-04-50 hectares (450 sq. mts.).

The broader project involves replacement of the ageing rising main between Ashwani Khad and Kasumpti, through the Kawalag sections, with a new steel transmission pipeline. The major portion of the work has already been completed according to the project information supplied for this assessment.

The remaining works are limited to the section falling within the proposed acquisition area and include excavation, pipeline laying and jointing, associated civil works, testing, backfilling and restoration of the road surface.

The project does not involve establishment of a new treatment plant, pumping station or reservoir within the proposed acquisition area.

1.3.1 Project Size

The land requirement for the present acquisition is:

0-04-50 hectares = 450 square meters

The land is situated at Up-Mohal Kawalag, HPPWD Mehli–Junga Road, Tehsil Shimla (Rural), District Shimla.

The proposed acquisition is for the final remaining section of the rising main under the larger LWSS augmentation and replacement project.

The project information states that the new transmission main has already been laid along most of the approved alignment. At the proposed acquisition site, the new pipeline remains incomplete and is presently connected to the existing pipeline as an interim arrangement.

No additional pumping station, treatment plant or major surface facility is proposed as part of the present land acquisition.

1.3.2 Location

The proposed land is situated at Up-Mohal Kawalag, along the HPPWD Mehli–Junga Road, in Tehsil Shimla (Rural), District Shimla, Himachal Pradesh.

The site is located near the Kwalang Water Pump House and lies within an established road corridor. The surrounding area includes scattered residential development, agricultural land and public utility infrastructure.

The proposed pipeline follows the existing road alignment. This reduces the requirement for additional land and limits the potential for fragmentation of adjoining landholdings.

The project information indicates that the existing road is already in public use and that the land beneath the road remains privately owned. Formal acquisition is therefore proposed to regularize the land required for the public purpose and enable completion of the pipeline.

1.3.3 Capacity and Output

The present acquisition does not create a new water production or treatment facility. Its purpose is to complete the final section of the transmission main under the LWSS.

The project output should therefore be understood primarily in terms of improved transmission reliability and completion of the upgraded water supply network, rather than an independently measurable new water-production capacity at the acquisition site.

Replacement of the remaining section of the old pipeline is expected to reduce dependence on the ageing section and improve the operational continuity of the upgraded transmission system.

The precise additional hydraulic capacity attributable to the project should be stated using the approved DPR/design documents. No independent capacity figure has been provided in the material reviewed for this chapter and therefore no additional numerical capacity has been assumed here.

1.3.4 Project Cost and Risks

The larger project was awarded by the Municipal Corporation Shimla to M/s Unipro Techno Infrastructure Pvt. Ltd., Chandigarh, through the Award Letter dated 05 July 2017, at a contract value of ₹4,84,24,197, according to the project information provided.

The present acquisition is required for completion of the remaining pipeline section.

The principal risks associated with the remaining works are:

Land acquisition risk:

Delay in acquisition may further postpone completion of the remaining pipeline section and prolong reliance on the existing pipeline at this location.

Construction-related risks:

Excavation and pipeline installation may temporarily affect traffic, pedestrian movement and access and may generate dust and noise.

Utility and road-management risks:

Because the pipeline is to be installed within an existing road corridor, coordination will be required to protect existing utilities and maintain safe movement of vehicles and pedestrians.

Engineering and commissioning risks:

The final section must be correctly connected, tested and commissioned with the completed transmission system. The relevant engineering requirements should be addressed through the approved technical specifications and quality-control procedures.

Social risk:

The acquisition directly affects privately owned land. Although no physical displacement has been identified in the project information, the effect on property rights and compensation must be addressed through the statutory acquisition process.

These risks are relatively localized and can be managed through timely acquisition, construction planning, coordination with concerned departments, appropriate safety measures and effective communication with affected stakeholders.

1.4 Examination of Alternatives

Consideration of alternatives is an important component of the SIA process. The RFCTLARR framework specifically requires consideration of whether the land proposed for acquisition

represents the minimum required and whether land acquisition at an alternative location has been considered.

For the present proposal, the relevant alternative is whether the remaining pipeline section could be routed through another alignment rather than through the proposed parcel at Kawalag. The larger transmission system was initiated in 2017 and, according to the project information provided, most of the pipeline has already been constructed along the approved alignment. The remaining section is required to connect the completed new transmission main with the existing system.

The proposed alignment follows the existing HPPWD Mehli–Junga Road corridor. Use of this corridor avoids the need to establish a separate infrastructure corridor and limits the requirement for additional land.

Changing the alignment at this stage would need to be examined against several consequences, including redesign of the remaining works, compatibility with the already completed pipeline, additional land requirements, engineering implications, additional approvals, additional cost and potential construction delays.

Based on the project information available for the SIA, no alternative alignment has been identified that would avoid the proposed land acquisition while maintaining the established project configuration.

The proposed alignment therefore makes use of an existing public road corridor and requires only a limited parcel of additional land. This limits the need for a new infrastructure corridor and reduces the potential for additional land-related impacts on surrounding landowners.

1.5 Phases of Project Construction

The LWSS project was initiated in 2017 and has been implemented as an integrated transmission infrastructure project.

According to the project information supplied, the major works have already been completed, including the construction and installation of the principal transmission pipeline and associated civil works.

The present land acquisition relates only to the remaining section at Up-Mohal Kawalag. The remaining construction activities are expected to comprise:

1. Surveying and setting out of the remaining pipeline section;

2. Excavation within the approved corridor;
3. Preparation of the pipeline bed and associated civil works;
4. Laying and jointing of the steel pipeline;
5. Welding and installation of fittings and associated components;
6. Testing and inspection;
7. Backfilling and compaction;
8. Restoration of the road surface;
9. and Integration and commissioning of the completed section.

The remaining works are therefore substantially smaller in scale than the project as a whole. Their duration should be established from the contractor's current work program rather than estimated without supporting records.

1.6 Core Design Features, Size and Types of Facilities

The proposed acquisition forms part of a linear water transmission infrastructure project. The principal facility associated with the acquisition is the remaining section of the rising main pipeline.

According to the project information, the broader project uses API X-60 grade steel transmission pipelines together with associated civil and structural works. The supplied project documents identify requirements relating to pipeline installation, welding, fittings, testing and commissioning. The present acquisition does not involve construction of a new treatment plant, pumping station or storage reservoir.

The remaining works within the acquisition area are expected to include: excavation; pipeline laying and jointing; associated support and civil works, where required; testing and inspection; backfilling and compaction; and restoration of the affected road surface. The pipeline will be installed within the existing road corridor. This limits the physical footprint of the new work and reduces the need for additional land.

1.7 Workforce Requirements

Because the larger project has already been substantially completed, the remaining construction works are expected to require a relatively small and temporary workforce. The workforce may include: engineers and technical staff; site supervisors; welders and skilled technicians;

machine operators; masons and other skilled workers; electricians, where required; helpers; and other semi-skilled and unskilled workers required for excavation, laying and restoration.

The exact number of workers should be taken from the contractor's current deployment plan or work programme. No numerical workforce estimate is included here because one has not been provided in the material reviewed.

The remaining employment requirement is expected to be temporary and related to the construction period. Local labour may be engaged where suitable skills are available, particularly for semi-skilled and unskilled activities. Given the limited scale of the remaining work, the project information does not indicate a requirement for a permanent labour camp or large-scale worker accommodation at the site.

The contractor should comply with applicable labour, occupational health and safety requirements and provide workers with appropriate personal protective equipment, safety training, first-aid arrangements and safe working conditions.

Following commissioning, operation and maintenance of the completed pipeline will be incorporated into the existing water supply system. No separate permanent workforce is anticipated specifically for the acquired parcel.

1.8 Environmental Impact and Technical Feasibility

Environmental and technical considerations are relevant to the assessment because the proposed work involves excavation and pipeline installation within an existing road corridor. The project information supplied for the SIA includes technical documents such as the Award Letter, Bill of Quantities, technical specifications, contract conditions and structural drawings. These documents provide the basis for assessing the engineering requirements of the remaining work.

The Requiring Body has not provided a separate project-specific Environmental Impact Assessment (EIA) report or an independent technical feasibility report for the present land acquisition. This distinction should be maintained in the report. The absence of a separate EIA report does not, by itself, establish that the project has no environmental impacts. Rather, the available information indicates that the remaining works are limited to a short section of a pipeline within an existing road corridor.

The principal environmental and community impacts expected during the remaining construction period are likely to relate to: excavation and handling of soil; temporary dust

generation; construction noise; movement of construction equipment; temporary traffic disruption; temporary obstruction of roadside access; and management of excavated material and construction waste. These impacts should be managed through the construction management and mitigation measures set out in the relevant chapters of the SIA.

The technical feasibility of the remaining section should be demonstrated through the approved engineering drawings, alignment, specifications and connection details. The project information indicates that the remaining section forms part of an already substantially completed transmission system, which supports the technical rationale for completing the section along the established alignment.

1.9 Applicable Legislation and Policies

The proposed land acquisition and the associated Social Impact Assessment are governed by the applicable central and state legal framework relating to land acquisition, compensation, rehabilitation and resettlement.

The principal legislation relevant to the present assessment is the RFCTLARR Act. The Act establishes the framework for land acquisition for public purposes and includes provisions concerning Social Impact Assessment, public hearings, appraisal of SIA reports, examination of proposals by the appropriate Government, compensation and rehabilitation and resettlement.

The Act's SIA provisions require consideration of matters including the likely social impacts of the project, alternatives, minimum land requirement, impacts on livelihoods and community resources, and the costs of addressing identified impacts.

The central RFCTLARR Rules, 2014 provide procedural provisions concerning commencement and conduct of SIA studies, consultation with affected local bodies and public hearings.

For Himachal Pradesh, the HP RFCTLARR Rules, 2015 provide the state-level procedural framework for SIA and related processes. The supplied project material identifies these Rules as applicable to the present assessment. The Rules were notified in 2015 and establish procedures relating to SIA and associated processes in the state.

1.9.1 Preparation of Social Impact Assessment Study

Section 4 of the RFCTLARR Act provides for preparation of a Social Impact Assessment study where the Act requires such assessment. The study is intended to identify and assess the likely

social impacts of the proposed acquisition and to inform the examination of the acquisition proposal.

The SIA process includes consultation with the concerned local bodies and a public hearing in the affected area. The RFCTLAAR Rules also prescribe procedures for notification and consultation.

1.9.2 Land Acquisition Process

The land acquisition process involves a sequence of statutory steps under the RFCTLARR Act and applicable state rules. These include, as applicable: preparation and consideration of the SIA; public consultation and hearing; appraisal of the SIA by the prescribed expert group; examination of the acquisition proposal by the appropriate Government; preliminary notification; survey and determination of the land required; hearing of objections; declaration of acquisition where the statutory requirements are satisfied; determination and payment of compensation; and rehabilitation and resettlement measures where applicable.

1.9.3 RFCTLARR Act, 2013

The RFCTLARR ACT, 2013 replaced the earlier Land Acquisition Act, 1894. Its stated purpose includes establishing a more transparent and participatory framework for land acquisition, providing fair compensation to affected families and making provisions for rehabilitation and resettlement where applicable.

For the present SIA, provisions relating to public purpose, SIA, public hearing, appraisal, compensation and rehabilitation and resettlement are particularly relevant.

The Act also requires the social impacts of a proposed acquisition to be considered in relation to affected livelihoods, community properties and infrastructure and other resources.

1.9.4 Himachal Pradesh RFCTLARR Rules, 2015

The HPRFCTLARR Rules, 2015 provide the state-level procedural framework for implementation of the SIA and consent-related provisions of the central Act.

The supplied material identifies provisions relating to SIA, Social Impact Management Plans, public hearings and consent. These provisions should be cited against the specific rule numbers in the final report after verification against the notified Rules.

The Rules should be read together with the central Act and any subsequent amendments, notifications, circulars or government orders applicable to the present acquisition.

2 Team Composition, Approach, Methodology, and Schedule of the Social Impact Assessment

2.1 Introduction

This chapter describes the team, approach, methodology and data sources used for the Social Impact Assessment (SIA) of the proposed land acquisition for the Sub-Head: LWSS, Shimla.

The assessment has been undertaken with reference to the RFCTLARR Act, 2013, the HP RFCTLARR Rules, 2015, and the requirements applicable to the preparation of the SIA and Social Impact Management Plan (SIMP). The Himachal Pradesh Rules define SIA as an assessment undertaken under Section 4(1) of the Act and SIMP as the plan prepared as part of the SIA process under Section 4(6).

The methodology combines review of project and land records, field observation, household-level information, and consultations with affected persons and other relevant stakeholders. The approach is intended to establish the existing social and economic conditions of the affected area, identify the likely effects of the proposed acquisition, assess alternatives and land requirements, and provide a basis for the Social Impact Management Plan.

2.2 Composition of SIA Team

The SIA was undertaken by a multidisciplinary team with expertise relevant to land acquisition, socio-economic assessment, field investigation, data collection and analysis.

The composition of the core SIA team, including the qualifications and areas of responsibility of individual members, is presented in Table 2-1.

Table 2-1 Composition of the SIA Team

Sr. No.	Name	Qualification	Gender	Expertise/Responsibilities
1.	Jitender Sharma	MBA	Male	Team Leader Gender Specialist Report Writing
2	Er. Tarun Gupta	B.Tech (AG), PGDPM, Diploma in Disaster Management, PGDJMC	Male	Senior Environmental Officer, Dept. of Environment, Science & Technology (Retd.) Expertise EIA & SIA
3.	Dr. Raman Kumar	Ph.D.	Male	Survey & Data analysis, Impact Assessment & Community Mobilization, Report Writing

4.	Kapoor Sharma	MSW	Male	Survey & Statistical Researcher
5.	Shalini Sharma	Master of Arts	Female	Survey & Statistical Researcher

The multidisciplinary composition of the team allows the assessment to consider both the physical characteristics of the affected land and the social, economic and livelihood conditions of the persons likely to be affected by the proposed acquisition.

Table 2-2 Field Survey Team

Sr. No.	Name	Qualification	Gender
1.	Kapoor Sharma	MSW	Male
2.	Shalini Sharma	PG	Female

The field survey team was responsible for administering the household questionnaire, conducting field observations and recording information obtained through interactions with affected persons and other stakeholders.

2.3 Description and Rationale for the Methodology and Tools Used

2.3.1 Aim

The aim of the SIA is to assess the social implications of the proposed acquisition of land for the Sub-Head: LWSS, Shimla, and to provide an evidence base for decisions concerning the proposed acquisition, mitigation of adverse impacts and preparation of the Social Impact Management Plan.

The assessment has been undertaken with reference to the RFCTLARR Act, 2013 and the applicable Himachal Pradesh Rules. The statutory SIA framework requires consideration of the public purpose, affected families, land and common properties likely to be affected, the minimum land requirement, alternatives, and the social impacts and costs associated with the proposed acquisition.

2.3.2 Objectives

The principal objectives of the SIA are to:

1. Assess whether the proposed acquisition serves the stated public purpose within the framework of the RFCTLARR Act, 2013.
2. Identify the affected families and assess whether any families are likely to be displaced as a result of the proposed acquisition.
3. Assess the extent and nature of public and private land, houses, settlements, common properties and other assets likely to be affected.
4. Examine whether the land proposed for acquisition represents the minimum extent reasonably required for the stated project purpose.
5. Examine the alternatives considered for the proposed alignment and assess the reasons for their feasibility or otherwise.
6. Identify and assess the likely social impacts associated with the proposed acquisition and construction activities, including impacts on land, property, access, livelihoods, community resources and local services, where applicable.
7. Assess the nature and likely cost of measures required to avoid, minimize or mitigate identified adverse social impacts.
8. Assess the socio-economic and cultural characteristics of the affected area and affected households, using primary and secondary information.
9. Prepare the Social Impact Management Plan (SIMP), including measures for addressing identified impacts and ensuring that affected persons receive applicable compensation, assistance and other statutory entitlements.
10. Document the views and concerns expressed by affected persons and relevant stakeholders and consider these inputs in the assessment and management measures.

2.3.3 Approach and Methodology

The SIA followed a combination of secondary information review, field investigation, household-level data collection, stakeholder consultation and analysis of project and land records.

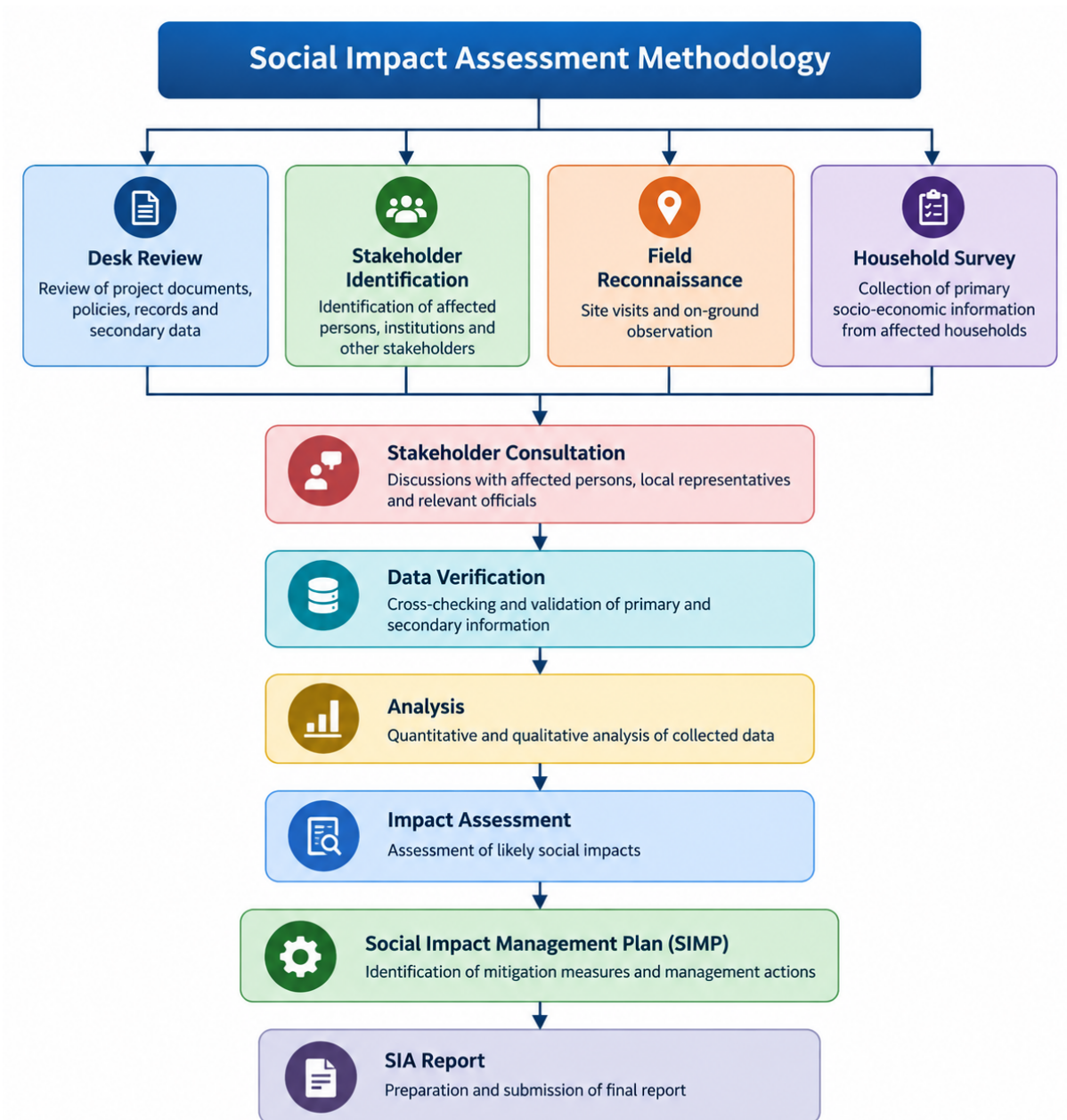


Figure 2-1 Methodological Framework for the Social Impact Assessment

The methodology was designed to relate the proposed acquisition to the actual conditions on the ground rather than treating the acquisition area in isolation. Particular attention was given to the nature and current use of the land, ownership and affected property interests, existing access and infrastructure, livelihood dependence, potential construction-related disturbances and the views of affected persons.

2.3.4 Rationale for the Methodology

The methodology adopted for the SIA was designed to assess the social implications of the proposed land acquisition in relation to the specific characteristics of the project area, the nature of the land proposed for acquisition, and the existing use and ownership of the affected land. Since the proposed acquisition is associated with the remaining section of an already developed water supply infrastructure project, the assessment requires consideration of both the direct effects of acquiring the land and any temporary effects that may arise during the completion of the pipeline works.

A combination of secondary data review, field investigation, household-level survey and stakeholder consultation was therefore adopted. Secondary information provides the broader demographic, socio-economic and institutional context, while field investigation helps establish the actual conditions at the proposed acquisition site. Household-level data and consultations provide information on land ownership, land use, livelihood dependence, access, property interests and concerns of affected persons that may not be adequately captured in administrative records alone.

The methodology also provides a basis for examining whether the extent of land proposed for acquisition is necessary for the stated project purpose and whether feasible alternatives to the proposed alignment have been considered. Information obtained from field observations and affected persons is considered alongside available project, land and departmental records to improve the reliability of the assessment.

The assessment distinguishes between information verified through field investigation and records, stakeholder-reported information, and matters requiring confirmation by the competent authority.

2.4 Review of Project and Background Information

Available project documents and secondary information were reviewed to understand:

1. the purpose and scope of the LWSS;
2. the proposed pipeline alignment; the location and extent of land proposed for acquisition;
3. existing infrastructure in the affected area;

4. the status of project implementation; technical and engineering considerations relevant to the proposed alignment;
5. land and ownership information available from government records; and applicable legal and regulatory requirements.

Where project-specific information was unavailable, the limitation has been identified rather than supplemented with assumptions.

2.4.1 Identification of Stakeholders

Stakeholders were identified based on their relationship with the proposed land acquisition and project area. The principal stakeholder groups considered include:

1. affected landowners and persons having an interest in the land;
2. affected households, where applicable;
3. local residents in the immediate project area;
4. Gram Panchayat/local government representatives;
5. concerned Revenue Department officials;
6. representatives of the requiring body/project implementing agency;
7. Public Works Department or other infrastructure agencies where relevant;
8. and other persons or institutions identified during field visits and consultations.

The stakeholder identification process was kept open to include persons who may not be landowners but could experience temporary or indirect effects from construction activities.

2.5 Data Collection Methodology

Both primary and secondary information were used for the assessment.

2.5.1 Secondary Data

Secondary information was obtained from available official records and published sources relevant to the project area and proposed acquisition. These included, as applicable:

- Census and demographic information;
- district and state statistical publications;

- Revenue Department records;
- land records and related documentation;
- PWD/project drawings and alignment information;
- project and contract documents;
- relevant government reports;
- applicable legislation, rules and notifications; and
- other published literature relevant to the social and economic characteristics of the area.

Secondary information was used primarily to establish the broader demographic, economic, institutional and physical context and to cross-check information obtained during field investigation.

2.5.2 Primary Data

Primary information was collected through field visits, household-level surveys, direct observation and stakeholder consultations. The household survey focused on information relevant to the assessment of social impacts, including: household composition; demographic characteristics; occupation and livelihood; income and economic conditions; landholding and land use; dependence on the affected land; residential and other structures, where applicable; access to roads and public facilities; use of common or community resources; perceived effects of the proposed acquisition; and views and concerns regarding the project and proposed acquisition. Open-ended questions were also used where appropriate to allow respondents to describe concerns or circumstances that may not have been captured through structured questions.

2.6 Preparation and Use of Survey Tools

A structured questionnaire was prepared for collection of household-level information. The questionnaire was designed to capture both quantitative and qualitative information required for the SIA. The questions covered household characteristics, socio-economic conditions, land and property interests, livelihood dependence and perceptions regarding the proposed acquisition.

Where applicable, the questionnaire was reviewed and refined before field administration. Surveyors were briefed on the purpose of the study, the questionnaire and the manner in which responses were to be recorded.

2.7 Field Survey and Ground Verification

Field investigation was undertaken to understand the existing conditions in and around the proposed acquisition area.

The field team examined: the physical setting of the proposed acquisition area; existing land use; existing road and access conditions; structures and other physical assets, if any; existing public infrastructure and utilities; livelihood-related activities, where present; the relationship between the proposed acquisition area and surrounding properties; and potential temporary disturbances associated with construction.

Information obtained through household surveys and consultations was considered alongside field observations and available records. Where discrepancies were identified between documentary information and field observations, the matter was noted for verification with the concerned records or authority rather than resolved through assumption.

2.8 Sampling Methodology

The primary survey was designed around the affected area and the persons identified as having a direct or potentially significant relationship with the proposed acquisition. For the present SIA, the survey approach was purposive rather than a statistical sample of the general population, because the assessment concerns a specific land acquisition area and a defined group of potentially affected persons. The findings are therefore not intended to represent a statistical sample of the wider population.

The principal unit of investigation was the affected household/person associated with the land proposed for acquisition. Where relevant, consultations were also undertaken with other stakeholders in the surrounding area to understand access, community infrastructure and possible construction-related effects.

2.9 Data Analysis and Interpretation

The information collected through primary and secondary sources was reviewed and analyzed using both quantitative and qualitative approaches.

Quantitative analysis

Quantitative information was used to describe, where applicable: household size and composition; age and gender distribution; occupation; income; landholding; land use; ownership and property characteristics; and other measurable socio-economic characteristics. Descriptive statistics, including frequencies, percentages and averages where appropriate, were used to present the findings.

Qualitative analysis

Qualitative information obtained through consultations, interviews and field observations was analyzed thematically. Particular attention was given to: concerns regarding land acquisition; perceptions of the project; dependence on affected land; access and mobility; potential disruption during construction; concerns relating to compensation; community-level effects; and suggestions made by affected persons and stakeholders. The analysis distinguishes between existing conditions, anticipated project impacts and stakeholder perceptions. Stakeholder views are presented as consultation findings and are not treated automatically as independently verified facts.

2.10 Approach to Social Impact Assessment

The assessment considered both direct impacts associated with land acquisition and temporary or indirect impacts that may arise during construction. The following broad impact categories were considered:

Table 2-3 Impact Categories and Issues Considered in the SIA

Impact Category	Issues Considered
Land and property	Ownership, acquisition, land use and property interests
Livelihoods	Dependence on affected land, agriculture, employment and other income sources
Housing and displacement	Residential structures, physical displacement and relocation
Access	Road access, movement and access to properties
Community infrastructure	Roads, utilities, public facilities and common resources
Construction impacts	Dust, noise, excavation, traffic and temporary obstruction
Social and cultural impacts	Community relationships, local institutions and culturally significant resources
Vulnerable groups	Potentially disproportionate impacts on vulnerable households/persons

Impact Category	Issues Considered
Compensation and entitlements	Compensation, assistance and applicable statutory provisions
Public benefits	Expected benefits associated with the proposed water supply infrastructure

Source: SIA assessment framework.

The significance of each identified impact is considered in subsequent chapters based on its nature, duration, extent, affected population and potential for mitigation.

2.11 Social Impact Management Plan

The Social Impact Management Plan (SIMP) has been prepared as part of the SIA process. The SIMP focuses on measures required to avoid or minimize adverse effects and to address impacts that cannot reasonably be avoided. Depending on the findings of the assessment, measures may include:

- payment of compensation in accordance with applicable law;
- protection of access to properties during construction;
- restoration of roads and other affected infrastructure;
- appropriate traffic and construction management;
- measures to control dust and noise;
- advance communication regarding temporary construction activities;
- grievance redressal and complaint handling;
- protection of utilities and community infrastructure; and
- monitoring of implementation of agreed mitigation measures.

The final SIMP should be directly linked to the impacts identified through the SIA rather than presenting generic mitigation measures.

2.12 Information and Data Sources

The SIA has drawn upon the following categories of information:

- Project documents – including available project descriptions, engineering information, drawings, contract documents and other records supplied by the requiring body.

- Government records – including Revenue Department and other relevant departmental records.
- Published secondary information – including Census data, statistical publications and relevant government reports.
- Primary field investigation – including site observations and household-level data collection.
- Stakeholder consultations – including discussions with affected persons, local representatives and relevant officials.
- Legal and regulatory documents – including the RFCTLARR Act, 2013 and the applicable Himachal Pradesh Rules.

2.13 Schedule of Field Survey and Consultations

The primary field survey and consultations for the preparation of the SIA were undertaken during August 2026. The activities included field visits, household-level information collection, site observations and consultations with affected persons and relevant stakeholders.

2.14 Public Hearing and Consultation Process

Public consultation is an important component of the SIA process. Section 5 of the RFCTLARR Act provides for a public hearing in the affected area after preparation of the SIA report and before appraisal, with adequate representation of affected families and local institutions.

The public hearing is to be conducted as part of the subsequent statutory SIA process. This draft report has been prepared for submission to the Social Impact Assessment Unit (SIAU) prior to the public hearing. Issues, concerns and suggestions raised during the public hearing will be documented and considered during the subsequent stage of the SIA process, as applicable

2.15 Limitations of the Methodology

The SIA has been based on the project information, land records, field observations, primary survey and stakeholder inputs available to the assessment team.

The following limitations should be recognized while interpreting the findings:

- the assessment is specific to the land and project alignment proposed for acquisition;

- the quality of some findings depends on the completeness and accuracy of available land and project records;
- stakeholder perceptions represent individual or collective views and may not always correspond to independently verifiable conditions;
- technical and engineering conclusions remain dependent on the approved project design and records of the requiring body;
- and information relating to compensation, ownership and legal rights should be read together with the records and determinations of the competent authority.

These limitations do not invalidate the assessment but establish the basis on which the findings should be interpreted.

2.16 Summary of Methodological Approach

The SIA combines documentary review, field investigation, household-level data collection and stakeholder consultation to assess the social implications of the proposed land acquisition for the LWSS, Shimla.

The methodology is structured around five principal tasks:

- establishing the existing social and economic conditions of the affected area;
- identifying persons, properties and community resources likely to be affected;
- assessing the direct and temporary social impacts of acquisition and construction;
- examining the proposed land requirement and alternatives; and
- developing measures to avoid, minimize or manage identified adverse impacts.

The methodology provides a transparent link between evidence collected in the field investigation, the impacts identified through the assessment, and the mitigation measures proposed in the Social Impact Management Plan.

Pictures taken during field visits





Shimla, Himachal Pradesh, India 🇮🇳
Water Treatment Plant, Shimla, Himachal Pradesh 171012, India
Lat 31.110335° Long 77.217644°
Friday, 21/08/2026 11:49 AM GMT +05:30

3 Land Assessment

This chapter assesses the land proposed for acquisition for the Sub-Head: LWSS, Shimla. It describes the location, extent, ownership, present use and classification of the land and examines the area likely to be directly or indirectly influenced by the proposed acquisition.

The assessment draws on available land and project records, field observations and primary information collected during the SIA. Particular attention has been given to the relationship between the recorded ownership of the land and its present use as an existing HPPWD road corridor, as well as to the implications of acquiring the land for completion of the remaining section of the water supply pipeline.

3.1 Information from the Land Inventories and Primary Sources

The proposed acquisition relates to a parcel of land situated at Up-Mohal Kawalag, along the HPPWD Mehli–Junga Road, Tehsil Shimla (Rural), District Shimla, Himachal Pradesh.

The available project information identifies a total area of **0-04-50 hectares** for acquisition. The land is recorded as private land and is presently occupied by the existing road corridor. The proposed acquisition is required for completion of the remaining section of the underground transmission pipeline associated with the LWSS, Shimla.

Table 3-1 Land Proposed for Acquisition for the LWSS, Shimla

Sl. No.	District	Tehsil	Village / Mohal / Up-Mohal	Khasra No.	Area	Recorded Classification
1	Shimla	Shimla (Rural)	Kawalag	To be confirmed from revenue record	0-04-50 ha (450 m ²)	Private land

Source: Land and project information made available for the SIA

3.2 Entire Area of Impact Under the Influence of the Project

The area of direct impact is the land proposed for acquisition, measuring **0-04-50 hectares**, located along the existing HPPWD Mehli–Junga Road near the Kwalang Water Pump House.

The proposed underground pipeline will be laid within the existing road corridor. The immediate area may therefore experience temporary effects during construction, including excavation, pipe laying, backfilling, road restoration, temporary traffic management, dust and

noise. These effects are associated with construction activity rather than a permanent change in the surrounding settlement pattern or land use.

The primary area of influence comprises the immediate surroundings of the proposed acquisition area and the section of the road where the remaining pipeline works will be undertaken. This area includes the Kwalang Water Pump House and nearby properties and road users who may experience temporary inconvenience during construction.

The wider area of influence extends beyond the acquisition site because the pipeline forms part of the larger LWSS serving Shimla and adjoining areas. The proposed acquisition is therefore geographically small in relation to the overall water supply system, while the infrastructure it enables forms part of a network serving a much larger population.

Based on the information available for the proposed acquisition, no residential house is identified within the land proposed for acquisition. The field assessment should, however, be read together with the findings on land use, livelihood dependence, access and property interests presented in subsequent chapters.

The distinction between the area directly acquired **and** the wider area benefiting from the infrastructure is important to the SIA. The former is the basis for assessing land and property impacts, while the latter provides the broader context for assessing the public benefits associated with completion of the water supply infrastructure.

3.3 Scope of Acquisition

The proposed acquisition involves 0-04-50 hectares of private land at Up-Mohal Kawalag along the HPPWD Mehli–Junga Road, Tehsil Shimla (Rural), District Shimla.

The land is required for completion of the final remaining section of the underground rising main under the LWSS, Shimla. The acquisition forms part of the larger project:

“Augmentation of LWSS at Giri, Chair, Ashwani Khad, Gumma, Cherot and Seog Catchment Area (Sub-Work: Replacement of Rising Main from Ashwani Khad to Kawalag 1st Stage and Kawalag to Kasumpti 2nd Stage).”

The proposed acquisition is confined to the identified parcel required for completion of the pipeline works. The associated activities include excavation, pipe laying, welding, testing, backfilling and restoration of the road surface.

The proposed alignment follows the existing HPPWD road corridor and adjoins the Kwalang Water Pump House. No new pumping station, water treatment plant, storage reservoir, administrative building or other major permanent surface facility is proposed on the land identified for acquisition under this component.

The larger pipeline project commenced in 2017 and, according to the project information provided for the SIA, the major portion of the work has already been completed. The present acquisition relates to the remaining section required to complete the intended transmission connection.

The existing old pipeline is presently being used as a temporary connection in the affected section. Completion of the proposed works would allow the remaining section of the upgraded transmission system to be connected in accordance with the project design.

The available information also indicates that the existing HPPWD road has been in public use for several decades on land that continues to be recorded as private. The present acquisition therefore concerns land that is already being used for an established public road corridor. The history and legal status of this occupation should be read with the relevant Revenue Department and HPPWD records.

No additional land beyond the identified **0-04-50 hectares** has been identified in the project information provided for this SIA. Confirmation of the final land requirement should be made against the approved alignment drawings and land schedule.

3.4 Total Land Requirement for the Project

The land requirement for the proposed acquisition is 0-04-50 hectares of private land at Up-Mohal Kawalag.

The proposed pipeline is to be laid beneath the existing HPPWD Mehli–Junga Road. Use of the established road corridor avoids the need, based on the information available, to acquire additional land outside the existing corridor.

The proposed land requirement should be considered in relation to the engineering alignment, construction requirements and the space required for installation and associated works. The SIA therefore considers the stated area together with the available project drawings and land records when examining whether the proposed acquisition is limited to the area necessary for completion of the work.

No residential structure, commercial establishment or community facility has been identified within the proposed acquisition area in the information provided for the SIA. Similarly, no additional government, forest or common land has been identified as part of the present acquisition proposal.

The permanent use of the acquired land will remain associated with public infrastructure. The underground pipeline will be located within the road corridor, while the road surface will be restored following completion of the construction works.

3.4.1 Present Use of Public or Unutilized Land in the Vicinity

The area surrounding the proposed acquisition comprises the existing HPPWD road corridor, scattered residential development, agricultural land and public utility infrastructure, including the Kwalang Water Pump House.

The land proposed for acquisition is recorded as private land but is presently used as part of the existing public road corridor. The project has therefore been planned around the established road alignment rather than requiring a new corridor through adjoining land.

Based on the information available for the SIA, no vacant government land, grazing land, forest land or other unutilized public land in the vicinity has been identified as being required for the proposed pipeline section.

The present proposal does not involve a change in the functional use of the existing road corridor. Construction will temporarily require excavation of the road surface, followed by backfilling and restoration after installation of the pipeline.

3.5 Land Already Purchased, Alienated, Leased or Acquired and Intended Use of Each Plot

According to the information provided by the requisitioning department, no land has been purchased, alienated, leased or previously acquired specifically for the proposed pipeline section.

The present proposal involves acquisition of 0-04-50 hectares of private land at Up-Mohal Kawalag for completion of the underground transmission pipeline.

Although the land is recorded as private, it is presently being used as an existing HPPWD road corridor. The proposed pipeline will be installed beneath the road, thereby using the established infrastructure corridor rather than creating a separate alignment through adjoining land.

The intended use of the acquired land is limited to the installation and long-term operation and maintenance of the underground water supply pipeline and associated works. Construction activities will include excavation, pipe laying, welding, testing, backfilling and restoration of the road surface.

No separate parcel of government, leased or previously acquired land has been identified as part of the present acquisition proposal.

The status of previous land acquisition or any historical transfer relating to the existing road should be confirmed from the relevant land records, particularly where the existing road occupies land that remains recorded as private.

3.6 Quantity and Location of Land Proposed to be Acquired

The proposed acquisition comprises 0-04-50 hectares of land situated at Up-Mohal Kawalag, along the HPPWD Mehli–Junga Road, Tehsil Shimla (Rural), District Shimla.

The land is required for the remaining section of the LWSS transmission pipeline. The proposed alignment follows the existing road corridor and is located near the Kwalang Water Pump House.

The acquisition area has been identified in the project information as the land required for completion of this section of the pipeline. The final land schedule should be checked against the approved engineering drawings and the certified revenue records before the acquisition proceedings are finalized.

The proposed works involve an underground installation. No separate land requirement for a pumping station, treatment plant, reservoir or other major permanent facility has been identified for this section.

Following completion of the pipeline installation, the road surface will be restored. Any temporary construction impacts on traffic, access, dust, noise or road use are addressed separately in the impact assessment and management sections of the report.

3.7 Nature, Present Use and Classification of the Land

The land proposed for acquisition measures 0-04-50 hectares and is situated at Up-Mohal Kawalag along the HPPWD Mehli–Junga Road.

According to the information available for the SIA, the land is recorded as private land in the revenue records. Its present physical use, however, is as part of the existing HPPWD road corridor.

This distinction between recorded ownership/classification and present physical use is important for the assessment. The proposed acquisition does not involve taking previously undeveloped private land for a new road or other surface facility. Instead, the acquisition concerns land already incorporated into an established public road corridor, on which the proposed underground water supply pipeline will be installed.

No agricultural, forest, grazing or community-owned land has been identified as part of the proposed acquisition area in the information provided for this assessment. No residential or commercial structure has been identified within the proposed acquisition parcel.

The proposed pipeline will be located beneath the road, and the road surface will be restored following completion of the works. Consequently, the principal long-term land-related issue is the acquisition of the recorded private land interest rather than a major change in the physical use of the site.

Table 3-2 Nature and Classification of Land Proposed for Acquisition

Sl. No.	District Tehsil	Village / Mohal / Up-Mohal	Khasra No.	Area	Recorded Ownership / Classification	Present Physical Use
1	Shimla	Shimla (Rural)	Kawalag	0-04-50 ha	Private land	Existing HPPWD road corridor

Source: Revenue/project information made available for the SIA.

3.8 Size of Holdings and Ownership Pattern

The proposed acquisition involves a relatively small parcel of private land measuring 0-04-50 hectares.

The available information indicates that the parcel forms part of a privately-owned holding over which the HPPWD road has been in public use for several decades. The land therefore presents a situation in which recorded private ownership and long-standing public use coexist.

The information supplied for the SIA indicates that the existing road was constructed approximately five decades ago without formal acquisition of the land now proposed for acquisition. This historical information should be cross-checked with available Revenue Department and HPPWD records before it is presented as a verified historical fact in the final report.

The present acquisition would transfer the relevant land interest in accordance with the applicable land acquisition process and provide for compensation and other statutory entitlements to eligible affected persons, subject to determination by the competent authority.

The available project information indicates that the present acquisition concerns a single private landholding. The number and identity of recorded landowners, their respective shares and the extent of their individual interests should be established from the latest certified revenue records and presented in the land and affected-persons schedules of the report.

The fact that the land is already being used as a public road does not, by itself, remove the property interest of the recorded owners. The SIA therefore considers the acquisition of the private land interest as a direct social and property impact, even where no new physical occupation of the land is created by the proposed project.

3.9 Land Distribution and Number of Residential Houses Affected

The proposed acquisition comprises 0-04-50 hectares of private land at Up-Mohal Kawalag along the HPPWD Mehli–Junga Road.

The proposed underground pipeline is to be installed beneath the existing road corridor. Based on the project information and field assessment available for this report, no residential house is proposed to be acquired or demolished as part of the present land acquisition.

Accordingly, the number of residential houses identified for acquisition is:

Number of residential houses affected: Nil (0).

The absence of residential acquisition means that the proposal does not involve physical displacement or relocation of households from residential structures within the acquisition area.

This finding should be read together with the household survey, field verification and land records. Any structures, access arrangements or other property interests identified during the detailed survey should be reflected in the final affected-person and impact assessment schedules.

The use of the existing road corridor has limited the requirement for acquisition outside the established public infrastructure area. Construction-related effects, including temporary obstruction, traffic management, dust, noise and access restrictions, are therefore expected to be associated primarily with the execution of the pipeline works rather than with permanent displacement of residential properties.

3.10 Summary of Land Assessment

The proposed acquisition for the LWSS, Shimla, is limited to 0-04-50 hectares (450 square metres) of land at Up-Mohal Kawalag along the HPPWD Mehli–Junga Road.

The principal characteristics of the proposed acquisition are summarized below:

Table 3-3 Summary of Land Proposed for Acquisition and Existing Land Use

Particular	Details
District	Shimla
Tehsil	Shimla (Rural)
Village / Up-Mohal	Kawalag
Area proposed for acquisition	0-04-50 ha (450 m ²)
Recorded ownership	Private land
Present physical use	Existing HPPWD road corridor
Proposed use	Underground LWSS transmission pipeline and associated works
Residential houses acquired	Nil (0)
New surface facility proposed	None
Existing public infrastructure	HPPWD road and Kwalang Water Pump House
Additional land identified	None in the information presently available

The land assessment indicates that the proposed acquisition concerns a small, clearly identified parcel that is already incorporated into an existing public road corridor. The principal social issue arising from the acquisition is therefore the effect on the **recorded private land interests**, rather than physical displacement of residential households.

The assessment of compensation, livelihood dependence, access, construction-related disturbance, stakeholder concerns and other social impacts is addressed in the subsequent chapters of this report.

4 Estimation and Enumeration of Affected Families and Assets

This chapter identifies and assesses the persons, households and assets likely to be affected by the proposed acquisition of land for the Lift Water Supply Scheme (LWSS), Shimla.

The assessment is based on the land and project information available to the SIA team, field observations, household-level survey and consultations with representatives of the affected landholding. Particular attention has been given to ownership, livelihood dependence, physical displacement, common property resources and other interests that may be affected by the proposed acquisition.

The proposed acquisition involves 0-04-50 hectares of private land at Up-Mohal Kawalag, Tehsil Shimla (Rural), District Shimla. The land is presently part of the existing HPPWD road corridor. The assessment therefore distinguishes between the effect on recorded private land interests and the physical impacts that may arise from completion of the pipeline works.

4.1 Directly Affected People

The proposed acquisition affects the recorded private landholding associated with the family of Late Sh. Durga Singh. The land proposed for acquisition measures 0-04-50 hectares and is required for completion of the remaining section of the LWSS transmission pipeline.

Based on the household survey and consultations undertaken for the SIA, representatives of the four identified family branches participated in the assessment. The representatives consulted were:

Table 4-1 Representatives of Affected Family Branches Consulted During the SIA

Sl. No.	Family Branch	Representative Consulted
1	Branch of Late Sh. Daleep Singh	Sh. Devesh Attri
2	Branch of Late Sh. Shankar Singh	Smt. Lata Attri
3	Branch of Sh. Prem Singh	Sh. Prem Singh
4	Branch of Sh. Baldev Singh	Sh. Baldev Singh

Source: Primary SIA survey and stakeholder consultations, August 2026.

The survey and consultation process covered all four identified family branches. The findings indicate that the proposed acquisition does not involve acquisition or demolition of residential structures and does not require physical relocation of the affected family.

The land has been in public use as part of the existing Mehli–Junga Road for several decades, according to the information available for the assessment. As a result, the proposed acquisition does not introduce a new physical occupation of the land for the road or pipeline. The principal direct impact relates to the acquisition of the recorded private land interest.

The affected family representatives expressed their views during the SIA process, including their position regarding compensation for the land. Their concerns and views have been considered in assessing the social impacts and in formulating the management measures proposed in the Social Impact Management Plan.

The number of affected persons for compensation and other statutory purposes should be determined from the latest certified revenue records and applicable legal provisions, including the identification of persons having legally recognized interests in the land.

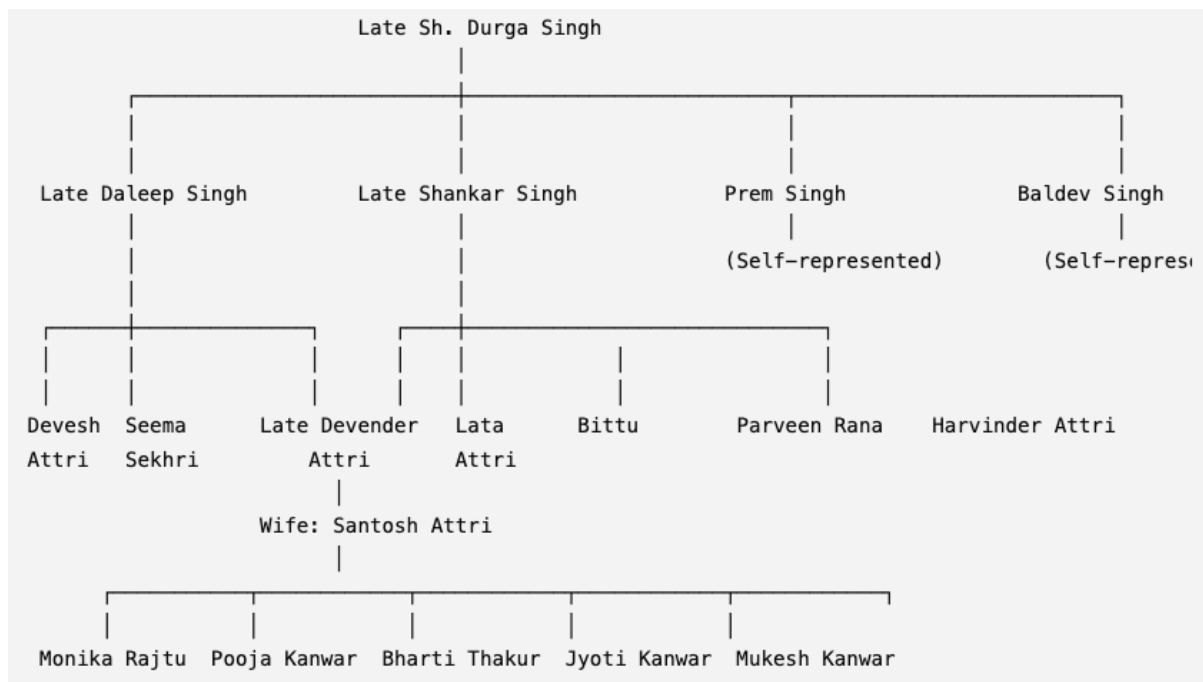


Figure 4-1 Family Chart of Late Sh. Durga Singh

4.1.1 Tenants, Leaseholders and Other Occupiers

Field investigation and stakeholder consultations were undertaken to identify whether any tenants, leaseholders, sharecroppers, encroachers or other private occupiers are present on the land proposed for acquisition.

No tenant or leaseholder was identified during the SIA survey and consultations. The land is presently used as part of the existing public road corridor, and no private residential, commercial or agricultural occupation was identified within the proposed acquisition area.

The available information indicates that the recorded ownership remains with the private landholding associated with the family of Late Sh. Durga Singh, while the physical use of the land is associated with the existing HPPWD road.

Accordingly, no separate tenancy or leasehold impact has been identified through the SIA. Any person or entity identified in the certified revenue records as having a legally recognized interest in the land should, however, be considered during the land acquisition process in accordance with the applicable provisions of law.

4.1.2 Dependence on Common Property Resources

The SIA field survey and site inspection considered whether the proposed acquisition area contains or provides access to Common Property Resources (CPRs) used by the local community.

No community water source, pond, grazing land, village common, religious structure, cremation or burial ground, community building, public park, public well, hand pump or other community-managed resource was identified within the proposed acquisition area during the field assessment.

The proposed acquisition is located within the existing HPPWD road corridor. The pipeline will be installed beneath the road, and the road is expected to remain available for public use following completion and restoration of the works.

No permanent loss of access to a community resource has therefore been identified within the acquisition area. Temporary restrictions on movement or traffic may occur during excavation and pipeline installation. Such construction-related effects are considered separately under the impact assessment and mitigation measures.

The finding relates specifically to the proposed acquisition area. Community resources outside the acquisition area that may be temporarily affected by construction activities should be considered during site-level construction planning.

4.1.3 Dependence of Land for Livelihood

A household-level socio-economic survey was undertaken to assess whether the land proposed for acquisition contributes to the livelihood or income of the affected family.

The survey covered the four identified branches of the family of Late Sh. Durga Singh:

- Branch of Late Sh. Daleep Singh, represented by Sh. Devesh Attri;
- Branch of Late Sh. Shankar Singh, represented by Smt. Lata Attri;
- Branch of Sh. Prem Singh, represented by Sh. Prem Singh; and
- Branch of Sh. Baldev Singh, represented by Sh. Baldev Singh.

Based on the responses obtained during the survey and consultations, none of the four family branches reported current dependence on the proposed acquisition land for their primary livelihood or income generation.

The principal reason identified during the field assessment is that the land has been occupied and used as part of the existing public road for several decades and has consequently not been available to the landowners for productive agricultural or other livelihood use.

The survey findings therefore indicate that the proposed acquisition is not expected to result in the loss of an existing livelihood activity associated with the land. This finding should be distinguished from the loss of the private property interest itself, for which compensation is applicable in accordance with the relevant legal process.

During consultations, the representatives of the affected family expressed their views regarding the proposed acquisition and compensation. The consultation record should be read together with the household survey schedules and supporting documentation.

The principal issue identified for the affected landholding is therefore the acquisition of the private land interest and the associated compensation, rather than displacement from a livelihood activity presently conducted on the land.

4.1.4 Scheduled Tribe and Traditional Forest Dwellers

The SIA considered whether any Scheduled Tribe families, Traditional Forest Dwellers or persons holding recognised forest rights would be affected by the proposed acquisition.

Based on the household survey, available land information and consultations conducted for the SIA, no Scheduled Tribe household has been identified among the affected family branches.

The proposed acquisition also does not involve diversion of forest land according to the project and land information made available to the SIA team. No person claiming or exercising a recognised forest right over the proposed acquisition area was identified during the assessment.

The proposed acquisition is located along the existing HPPWD Mehli–Junga Road and concerns land already incorporated into the existing road corridor. No community forest resource or forest-dependent activity has been identified within the proposed acquisition area.

Accordingly, no specific impact on Scheduled Tribe households or recognized forest rights has been identified through the present assessment. The applicability of any statutory safeguard or special provision should, where relevant, be determined with reference to the certified records and the applicable legal framework.

4.1.5 Land Assigned by the State Government

The SIA also examined whether the land proposed for acquisition had been assigned or allotted by the State Government under any land distribution, rehabilitation, tenancy or other government land-allotment programme.

Based on the information obtained through the household survey, stakeholder consultations and available land records, the affected landholding has been identified as **privately-owned land associated with the family of Late Sh. Durga Singh**. No affected person reported holding the proposed acquisition land under a State Government assignment or allotment scheme.

Accordingly, no State Government-assigned land has been identified within the proposed acquisition area.

The final determination should be cross-checked against the latest certified revenue records before completion of the acquisition process.

4.2 Physical Displacement and Residential Structures

The proposed acquisition does not involve the acquisition or demolition of residential houses.

The proposed pipeline alignment follows the existing HPPWD road corridor, and no residential structure has been identified within the proposed acquisition parcel. Consequently:

- **Residential houses affected: Nil (0)**
- **Households requiring physical relocation: Nil (0)**
- **Residential structures requiring demolition: Nil (0)**

The project therefore does not involve physical displacement of households from their residences.

Temporary inconvenience to nearby residents or road users may occur during construction because of excavation, traffic management, machinery movement or temporary restrictions on access. These are construction-related impacts and do not constitute physical displacement.

4.3 Common Property and Community Assets

The field assessment considered community assets and resources that could potentially be affected by the proposed acquisition.

No community-owned or community-managed property has been identified within the proposed acquisition parcel. No religious structure, community building, public water source, grazing area, burial or cremation ground, public park or similar community asset has been identified within the land proposed for acquisition.

The existing HPPWD road is a public infrastructure asset and will continue to serve its existing function. Pipeline installation will require temporary excavation and associated construction activity, after which the affected road surface is to be restored.

Any temporary effects on road movement, access or other public infrastructure should be managed through appropriate construction and traffic-management measures.

4.4 Summary of Affected Families and Assets

The principal affected categories identified through the SIA are summarized below.

Table 4-2 Summary of Affected Families and Assets

Category	Finding
Land proposed for acquisition	0-04-50 ha (450 m ²)
Recorded land ownership	Private

Category	Finding
Affected landholding	Family associated with Late Sh. Durga Singh
Family branches consulted	4
Tenants / leaseholders identified	Nil
Residential houses acquired	Nil (0)
Households physically displaced	Nil (0)
Commercial structures acquired	Nil identified
Community Property Resources within acquisition area	None identified
State Government-assigned land	None identified
Scheduled Tribe households identified among affected family branches	None identified
Traditional Forest Dwellers / recognized forest rights identified	None identified
Livelihood activity dependent on acquisition land	None reported/identified
Principal direct impact	Acquisition of recorded private land interest

Source: Primary SIA survey, field assessment and available land/project records.

4.5 Overall Assessment of Affected Persons and Assets

The assessment indicates that the proposed acquisition affects a single privately-owned landholding associated with the family of Late Sh. Durga Singh, with representatives of all four identified family branches participating in the SIA.

The proposed acquisition does not involve residential structures or physical relocation of households. No tenant or leaseholder was identified, and no Common Property Resource, State Government-assigned land, or forest-dependent use was identified within the acquisition area.

The household survey also indicates that the proposed land is not presently being used by the affected family for livelihood or income-generating activities. This is consistent with the existing physical use of the land as part of the HPPWD road corridor.

The principal social impact is therefore associated with the acquisition of the private land interest and the corresponding entitlement to compensation and other applicable statutory benefits. Temporary construction-related effects, particularly those affecting road users and nearby properties, are separate from the permanent land acquisition impact and should be addressed through construction management and mitigation measures.

The findings presented in this chapter form the basis for the subsequent assessment of socio-economic conditions, social impacts, compensation and mitigation measures under the SIA and Social Impact Management Plan.

5 Socio-Economic and Cultural Profile

This chapter presents the socio-economic and cultural characteristics of the people and communities associated with the proposed land acquisition for the LWSS, Shimla. It examines the demographic characteristics of the affected family, kinship and property relationships, relevant administrative and community institutions, regional changes affecting the project area, and the existing quality of the living environment. The assessment is based on household-level surveys, field observations, stakeholder consultations, and available project and land-related records. Particular attention is given to the characteristics of the affected persons and to social conditions that may influence the nature and significance of impacts arising from the proposed acquisition.

5.1 Demographic Profile of the Project Affected Peoples (PAPs) in Project Area

The proposed land acquisition affects a single land-owning family associated with the descendants of Late Sh. Durga Singh. The family is represented through four branches descended from his sons: Late Sh. Daleep Singh, Late Sh. Shankar Singh, Sh. Prem Singh, and Sh. Baldev Singh.

As part of the SIA, representatives of all four family branches were consulted through household-level surveys. Information was collected on family composition, education, occupation, livelihood, and socio-economic conditions. The survey provides the basis for understanding the characteristics of the persons whose property interests are affected by the proposed acquisition.

The surveyed family members are part of the local rural community of Tehsil Shimla (Rural), District Shimla. The households represented in the survey include members from different age groups and with different educational and occupational backgrounds. Reported occupations include government and private employment, self-employment, business, and other non-agricultural activities.

None of the surveyed family branches reported current dependence on the land proposed for acquisition as a primary source of livelihood. The land is presently occupied by the existing HPPWD road corridor and is not being used by the affected family for residential purposes or for an identifiable agricultural or other income-generating activity.

The proposed acquisition does not require the relocation of any household or demolition of residential structures. No tenants or leaseholders were identified during the assessment. No Scheduled Tribe household or Traditional Forest Dweller was identified among the surveyed affected family branches, and no recognized forest right over the land proposed for acquisition was identified from the information available for the assessment.

The demographic assessment therefore indicates that the principal direct effect of the acquisition is on the property interests of the affected family rather than on residential settlement or current livelihood activities. The number of affected legal owners should, however, be confirmed from the certified revenue records before final determination of the affected-family and compensation entitlements.

Table 5-1 Summary of Socio-Economic Characteristics of the Affected Family

Indicator	SIA Finding
Affected landholding	One extended family/ancestral landholding
Family branches consulted	Four
Residential displacement	None identified
Livelihood dependence on acquired land	None reported
Tenants/leaseholders	None identified
Scheduled Tribe households	None identified among surveyed affected branches
Traditional Forest Dwellers/forest rights	None identified from available information
Primary livelihood linked to acquired land	None reported

5.2 Kinship Patterns

The affected landholding is associated with the descendants of Late Sh. Durga Singh and has been transmitted through family succession. The family is represented by four branches descended from his sons: Late Sh. Daleep Singh, Late Sh. Shankar Singh, Sh. Prem Singh, and Sh. Baldev Singh.

Over time, the family has developed into separate household units while retaining kinship connections through the common ancestral property. These relationships are relevant to the assessment because decisions concerning inherited land and compensation may involve members of more than one family branch.

Representatives of all four branches participated in the SIA consultations. The consultations provided an opportunity for the affected persons to discuss the proposed acquisition, the existing use of the land, and matters relating to compensation.

Women are also part of the affected family structure and participate in household and family affairs. Where women have a legally recognized ownership or inheritance interest in the affected property, their entitlements should be determined from the applicable revenue and succession records. The assessment does not assume ownership or entitlement solely on the basis of family relationships; these matters should be established through the relevant revenue and legal records.

5.3 Administrative, Institutional, Cultural and Civil Society Context

The project area falls within Tehsil Shimla (Rural), District Shimla, and is subject to the administrative and local governance arrangements of Himachal Pradesh. Various government departments and public agencies have responsibilities relevant to land, roads, water supply, rural development, and other public services in the area.

The Revenue Department is relevant to the identification and verification of land ownership and related records. The HPPWD is responsible for the existing road corridor in the project area, while SJPNL is the agency responsible for the implementation and operation of the water supply infrastructure associated with the project. Local government institutions, including the Gram Panchayat and other statutory bodies, also have a role in local administration and community-level coordination.

The surrounding rural area retains established social and cultural relationships based on family networks, local institutions, community interaction, and participation in social and religious activities. These features form part of the local context within which land-related decisions are made.

Consultations undertaken during the SIA included representatives of the affected family and other stakeholders relevant to the proposed acquisition. The consultations indicated that the affected persons recognize the public-service purpose of completing the LWSS and expressed willingness to cooperate with the acquisition process, subject to determination and payment of compensation in accordance with the applicable legal provisions.

No specific objection from the stakeholders consulted was recorded during the assessment. At the same time, the absence of an objection during consultation should not be interpreted as a

waiver of any statutory right, claim, or entitlement available to an affected person. Any such claims are to be addressed through the applicable land acquisition process.

The existing administrative and institutional arrangements provide the framework for coordination between the Requiring Body, landowners, local authorities, and other concerned departments during acquisition and implementation.

5.4 Regional Dynamics and Historical Change Processes

The project area is located at Up-Mohal Kawalag along the HPPWD Mehli–Junga Road in Tehsil Shimla (Rural), District Shimla. The area forms part of the rural hinterland of Shimla and has experienced changes associated with the expansion of the city, improvements in road connectivity, growth in population and economic activity, and increasing demand for public infrastructure.

Over time, the expansion of Shimla’s built-up area, population, tourism activity and associated services has placed increasing pressure on existing urban infrastructure, particularly the drinking water supply system. The development and augmentation of water supply infrastructure has therefore occurred alongside broader changes in settlement patterns and infrastructure requirements.

An important historical feature of the immediate project area is the existing HPPWD Mehli–Junga Road. Based on information obtained during the assessment, the road has been in public use for approximately five decades, although a portion of the road is reported to occupy privately owned land that was not formally acquired at the time of its construction. The affected landowners have consequently continued to pursue the issue of compensation for the land under public use. The precise ownership position and extent of the affected interests should be established from the relevant revenue records.

The present acquisition is also linked to the completion of the project titled “**Augmentation of LWSS at Giri, Chair, Ashwani Khad, Gumma, Cherot and Seog Catchment Area (Sub-Work: Replacement of Rising Main from Ashwani Khad to Kawalag 1st Stage and Kawalag to Kasumpti 2nd Stage).**” The project commenced in 2017, and the major components have been completed. The remaining section at Kawalag requires acquisition of the land necessary for completion of the transmission pipeline.

The proposed acquisition thus needs to be considered in the context of two processes that have developed over time: the expansion of public infrastructure in response to the changing needs

of Shimla and the unresolved private land interest associated with the existing road corridor. Completion of the remaining pipeline section and settlement of the associated land acquisition process address these two aspects within the scope of the present project.

The regional context does not indicate any requirement for physical relocation of households as a result of the proposed acquisition. The principal social consideration is the effect of transferring the affected property interest and ensuring that compensation and other applicable entitlements are determined through the prescribed process.

5.5 Quality of the Living Environment

The project area at Up-Mohal Kawalag is located along the HPPWD Mehli–Junga Road and is characterized by an established road corridor, scattered settlement, and existing public utility infrastructure. The surrounding area has access to road connectivity and basic public services through the nearby rural settlements and the wider Shimla area.

The proposed acquisition concerns 0-04-50 hectares of land within the existing road corridor. No residential structure has been identified within the proposed acquisition area, and the acquisition does not require relocation of households. No school, health facility, religious structure, community building, or other identified community facility is located within the land proposed for acquisition.

The completion of the remaining pipeline section will require construction activities within the existing road corridor. During this period, localized disturbance may occur from excavation, construction vehicles, equipment movement, dust, noise, and temporary traffic management. These effects are expected to be associated with the construction period rather than representing permanent changes to the living environment. Appropriate traffic management, work-site safety measures, dust suppression, and timely restoration of the road surface should be implemented to limit inconvenience to road users and nearby residents.

The completed pipeline is expected to support the functioning of the LWSS by replacing the remaining section of the existing rising-main arrangement. The resulting improvement in the water transmission system may contribute to more reliable public water service for the population served by the scheme. The extent of any improvement in supply reliability or reduction in transmission losses should be assessed against the approved technical design and operational records rather than assumed solely from the replacement of the pipeline.

From the SIA findings, the principal permanent social effect associated with the proposed acquisition is the transfer of the affected private property interest. No physical displacement or direct loss of a residential structure has been identified. Construction-related effects are temporary and can be addressed through appropriate site management and mitigation measures.

Table 5-2 Key Social Impacts Identified Through the Assessment

Impact category	Assessment finding	Nature of impact
Land and property rights	Private property interest is proposed for acquisition	Direct and permanent
Residential displacement	No residential structure or household requiring relocation identified	None
Livelihood	No current primary livelihood dependence on the proposed acquisition area reported	No direct livelihood loss identified
Tenancy/occupation	No tenants or leaseholders identified	None
Community assets	No community facility or identified common property resource within the acquisition area	None identified
Access and mobility	Temporary disturbance may occur during excavation and pipeline works	Indirect and temporary
Dust and noise	May arise during construction	Indirect and temporary
Public safety	Excavation and construction traffic may create temporary risks	Indirect and temporary
Public water service	Completion of the pipeline is expected to support the functioning of the LWSS	Long-term potential benefit

5.6 Overall Assessment

The socio-economic and cultural assessment indicates that the proposed acquisition affects a limited number of persons associated with a single ancestral landholding. Four family branches were represented during the household-level consultations. No residential displacement, tenancy, community asset loss, or current livelihood dependence on the proposed acquisition area was identified through the assessment.

The principal permanent social impact is the acquisition of the affected private property interest. This impact is therefore distinct from the absence of physical displacement or livelihood loss and requires appropriate determination of compensation and other applicable entitlements under the land acquisition process.

Temporary effects may arise during construction, particularly in relation to traffic movement, excavation, dust, noise, and public safety along the existing road corridor. These effects can be

managed through construction scheduling, traffic management, site safety arrangements, dust suppression, and restoration measures.

The proposed acquisition should consequently be assessed on the basis of the specific property interests affected, the limited physical footprint of the remaining works, the temporary nature of construction-related disturbance, and the anticipated public-service benefit from completion of the LWSS. Final determination of ownership, affected persons, compensation, and statutory entitlements should be based on certified land and revenue records and the applicable legal process.

6 Social Impacts

This chapter assesses the social impacts associated with the proposed land acquisition for the remaining section of the Lift Water Supply Scheme (LWSS), Shimla. The assessment considers the direct effects of acquiring the affected private land, temporary impacts that may arise during completion of the pipeline works, and the anticipated social benefits associated with completion of the water supply infrastructure. The assessment draws on the household survey, field observations, stakeholder consultations, project documents, and land-related information reviewed as part of the Social Impact Assessment (SIA). Particular attention is given to the concerns and views expressed by the affected family, the nature and duration of identified impacts, and the measures required to manage adverse effects.

6.1 Framework and Approach to Identifying Impacts

The assessment of social impacts has been undertaken in the context of the proposed acquisition of 0-04-50 hectares (450 square metres) of private land at Up-Mohal Kawalag, Tehsil Shimla (Rural), District Shimla. The assessment considers the relationship between the proposed acquisition, the existing use and ownership of the land, the remaining construction activities, and the interests of the affected persons.

The impact assessment draws upon information collected through household surveys, field verification, consultations with affected persons, and review of available project and land-related records. The findings from these sources have been considered together to identify impacts that are direct and permanent, as well as those that are temporary and associated with construction.

The principal areas considered in the assessment include:

- impacts on land ownership and property rights;
- impacts on livelihoods and income;
- physical displacement and residential structures;
- impacts on community assets and common property resources;
- temporary effects on access and movement during construction;
- dust, noise and other construction-related disturbance;

- occupational health and safety risks to construction workers;
- short-term employment opportunities during construction; and
- potential public benefits associated with completion and operation of the LWSS.

The proposed acquisition differs from a project involving greenfield development because the land is already occupied by the existing HPPWD road corridor and the proposed works relate to the remaining section of an infrastructure project that has been substantially completed. Accordingly, the assessment gives particular attention to the permanent effect on private property rights and to the temporary disturbance that may arise while the remaining pipeline works are undertaken.

Based on the information obtained during the assessment, no residential displacement or direct livelihood dependence on the proposed acquisition area has been identified. The principal direct social impact is therefore associated with acquisition of the private property interest. Construction-related impacts are expected to be temporary and can be managed through appropriate site and traffic management measures.

6.2 Social Impacts at Different Stages of the Project

The identified social impacts have been considered according to three stages: the land acquisition/pre-construction stage, the construction stage, and the operational stage. This distinction helps separate the permanent effects associated with acquisition from temporary construction-related effects and the longer-term service implications of completing the project.

6.2.1 Land Acquisition and Pre-Construction Stage

The principal impact during this stage is the acquisition of 0-04-50 hectares of privately-owned land required for completion of the remaining pipeline section. Acquisition results in a permanent change in the affected property interest and therefore requires determination and payment of compensation and other applicable statutory entitlements in accordance with the prescribed legal process.

The affected land has been under public use as part of the existing HPPWD road corridor for several decades. The present acquisition therefore also relates to a longstanding property and compensation issue. The assessment indicates that the acquisition process provides an opportunity to address the affected private property interest through a formal and transparent statutory process.

The possibility of uncertainty or concern among affected persons regarding valuation, compensation and the timing of payment is also recognized. Clear communication regarding the acquisition process, compensation determination and available grievance mechanisms is therefore important.

6.2.2 Construction Stage

Completion of the remaining pipeline section will involve excavation, pipe laying, jointing, testing, backfilling and restoration within the existing road corridor. These activities may temporarily affect road users and persons living or carrying out activities in the surrounding area.

Potential construction-phase impacts include:

- temporary restriction or alteration of traffic movement;
- dust generation from excavation and movement of construction vehicles;
- construction noise and vibration;
- temporary inconvenience associated with excavation and work-site activity;
- possible short-term restriction of access to adjoining properties, where applicable;
- public safety risks associated with open excavations and construction traffic; and
- occupational health and safety risks to construction workers.

These impacts are expected to be temporary and localised. Their significance will depend on the duration and sequencing of the works and on the effectiveness of site management. Traffic control, appropriate barricading and signage, dust suppression, safe working practices and timely restoration of the road should therefore form part of construction management.

The construction phase may also generate short-term employment opportunities for skilled, semi-skilled and unskilled workers. The extent of local employment will depend on the contractor's workforce requirements and availability of suitable local labour.

6.2.3 Operational Stage

Following completion and commissioning, the remaining section of the transmission pipeline will form part of the existing LWSS. The principal anticipated benefit is improved functioning of the transmission system through completion of the planned infrastructure.

The replacement of the remaining old pipeline section is expected to support more reliable operation of the water transmission system and may reduce the need for maintenance associated with the replaced section. The extent of improvements in transmission losses, leakage and service reliability should be assessed through operational performance records after commissioning.

At the wider service level, completion of the project is expected to support the continued provision of drinking water to the population served by the LWSS. Reliable water supply is relevant to household welfare, sanitation and public health; however, the present SIA does not independently quantify these longer-term outcomes.

Table 6-1 Social Impacts and Management Measures by Project Stage

Project stage	Potential social impact	Nature of impact	Management measure
Land acquisition / Pre-construction	Acquisition of 0-04-50 hectares of private land	Direct and permanent	Complete acquisition in accordance with applicable law and determine compensation and statutory entitlements through the prescribed process
Land acquisition / Pre-construction	Uncertainty regarding valuation, compensation and timing	Direct and temporary	Provide clear information to affected persons and maintain an accessible grievance redress mechanism
Land acquisition / Pre-construction	Resolution of longstanding private land interest associated with existing public use	Positive administrative/social effect	Complete verification of ownership and acquisition records and process compensation transparently
Construction	Temporary traffic disruption along the existing road	Indirect and temporary	Traffic management, advance signage, safe diversions and timely restoration
Construction	Dust from excavation and construction traffic	Indirect and temporary	Water sprinkling/dust suppression and appropriate site management
Construction	Noise and vibration from construction activities	Indirect and temporary	Maintain equipment, regulate working hours where practicable and follow good construction practices
Construction	Temporary restriction of access, where required for works	Indirect and temporary	Maintain safe access to adjoining properties and coordinate work sequencing with affected users

Project stage	Potential social impact	Nature of impact	Management measure
Construction	Public safety risks from excavation and construction traffic	Indirect and temporary	Barricading, warning signs, lighting where required and controlled access to work areas
Construction	Occupational health and safety risks	Direct and temporary	PPE, worker training, first-aid arrangements and compliance with applicable safety requirements
Construction	Short-term employment opportunities	Positive and temporary	Local labour may be engaged where suitable and available
Operation	Improved functioning of the LWSS transmission system	Positive and long-term	Regular operation, inspection and maintenance by the responsible agency
Operation	Potential reduction in failures and maintenance requirements in the replaced section	Positive and long-term	Preventive maintenance and periodic monitoring of pipeline performance
Operation	Improved reliability of drinking water transmission	Positive and long-term	Monitor system performance and undertake timely maintenance
Operation	Completion of planned public water infrastructure	Positive and long-term	Integrate the completed section into routine operation and maintenance of the LWSS

6.3 Impacts as Perceived by the PAPs

Consultations and household surveys were undertaken with representatives of the four branches of the family associated with the affected landholding. The PAPs provided information on their understanding of the proposed acquisition, their concerns, and their views regarding the completion of the LWSS.

The PAPs recognized the public-service purpose of the project and indicated that they were aware that the proposed acquisition relates to the remaining section of the transmission pipeline. They also referred to the longstanding public use of the land as part of the existing HPPWD road corridor.

A principal concern raised during the consultations was compensation for the affected land. The affected family indicated that the land has remained under public use for several decades

without formal acquisition and that the present process should address the outstanding property interest through a lawful and transparent determination of compensation.

The consulted representatives did not report concerns relating to displacement of their residences or loss of a livelihood based on the land proposed for acquisition. They also indicated that temporary construction-related effects such as traffic disturbance, excavation, dust and noise would be manageable if appropriate measures were adopted during implementation.

The consultation findings therefore indicate that the principal concern of the affected persons relates to the acquisition and compensation of the private property interest. Their views also indicate an understanding of the public purpose of completing the water supply infrastructure, subject to fair treatment and compliance with the applicable acquisition and compensation process.

6.4 Awareness about the Project and Land Acquisition Process Among PAFs

The household consultations indicated that the PAPs/PAFs were aware of the proposed acquisition and its stated purpose. The respondents reported receiving information from the concerned department during the land acquisition process and were aware that the acquisition is associated with completion of the remaining section of the LWSS transmission pipeline.

The affected persons were also aware that the land is presently under public use as part of the existing HPPWD road corridor and that the proposed acquisition would address the outstanding private land interest associated with the corridor.

The consultations further indicated awareness of the need for compensation under the applicable land acquisition process. The affected persons expressed an expectation that valuation and compensation would be determined transparently and that eligible payments and other statutory entitlements would be processed in accordance with the applicable provisions.

The SIA therefore records awareness among the persons consulted regarding the purpose of the project and the proposed acquisition. The precise legal entitlements of individual affected persons remain subject to verification of ownership and other relevant records by the competent authority.

6.5 View and Willingness of the PAPs

Representatives of all four family branches were consulted regarding the proposed acquisition. During the consultations, the affected persons indicated their willingness to cooperate with the acquisition process and did not raise an objection to completion of the water supply project as such.

Their willingness was expressed in the context of receiving compensation and other applicable statutory entitlements in accordance with the prescribed legal process. The respondents emphasized the importance of transparent valuation, fair compensation and timely processing of payments.

The consultation findings should be understood as the views expressed by the persons who participated in the SIA process. They do not, by themselves, determine the legal status of individual ownership interests or any statutory consent requirements, which remain subject to the provisions of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 and the determination of the competent authority.

The consultation process nevertheless provides an indication of the position of the affected family and identifies compensation and timely settlement of the property interest as the principal matters requiring attention during implementation.

6.6 Compensation Preferences

During the household survey and consultations, the affected persons expressed a preference for monetary compensation for the land proposed for acquisition. They indicated that compensation should be determined on the basis of the applicable statutory provisions and should include all benefits and entitlements for which they are legally eligible.

The affected persons also referred to the longstanding public use of the land as part of the existing HPPWD road and expressed the expectation that the present acquisition process would address the associated outstanding compensation issue.

No preference for land-for-land replacement or relocation was reported during the consultations. This is consistent with the assessment that the proposed acquisition does not involve residential displacement and that the surveyed family branches did not report current livelihood dependence on the affected land.

The valuation of the land and determination of compensation shall be undertaken by the competent authority in accordance with the applicable provisions of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013, the Himachal Pradesh rules framed thereunder, and other applicable government instructions. The SIA does not determine the monetary value of the affected land or the individual compensation entitlement.

The principal preference expressed by the affected persons is therefore for fair, transparent and timely monetary compensation together with all applicable statutory entitlements.

6.7 Overall Assessment of Social Impacts

The assessment identifies the acquisition of private property as the principal permanent social impact of the proposed project. No residential displacement, loss of housing, or direct livelihood dependence on the proposed acquisition area has been identified through the household surveys and consultations.

Construction of the remaining pipeline section may result in temporary disturbance to road users and nearby residents through traffic restrictions, excavation, dust, noise and construction activity. These impacts are localised and temporary and can be reduced through appropriate traffic management, work-site safety, dust suppression, controlled construction practices and timely restoration of affected surfaces and access.

The project also has potential longer-term social benefits associated with completion of the planned water transmission infrastructure. These include improved functioning of the LWSS and support for more reliable drinking water transmission to the population served by the system. The actual magnitude of these benefits will depend on the operational performance of the completed infrastructure.

The consultation findings indicate that the affected family is aware of the proposed acquisition and has expressed willingness to cooperate, while placing particular emphasis on fair compensation and timely settlement of the affected property interest. The concerns expressed by the PAPs regarding compensation and timely settlement of the affected property interest should be addressed through transparent implementation of the land acquisition process and provision of applicable statutory entitlements under the RFCTLARR Act, 2013 and the rules framed thereunder.

Overall, the social impacts identified through the SIA are concentrated around the permanent acquisition of the affected private land and the temporary disturbance associated with completing the remaining works. With appropriate mitigation and compliance with the applicable acquisition and compensation framework, the identified adverse impacts can be managed during implementation.

7 Analysis of Costs and Benefits Recommendations on Acquisition

This chapter brings together the principal findings of the Social Impact Assessment in order to assess the public purpose, land requirement, alternatives considered, nature and intensity of social impacts, and the feasibility of measures proposed to address adverse effects. The assessment considers both the permanent effect of acquiring the affected private land and the temporary impacts associated with completion of the remaining pipeline works. It also considers the anticipated public benefits from completion of the Lift Water Supply Scheme (LWSS), Shimla. The findings presented in this chapter are based on the project and land records reviewed, field observations, household surveys, and consultations undertaken as part of the SIA.

7.1 Assessment of Public Purpose

The proposed acquisition of 0-04-50 hectares of private land at Up-Mohal Kawalag is associated with the completion of the remaining section of the transmission pipeline under the LWSS, Shimla. The larger project, titled **“Augmentation of LWSS at Giri, Chair, Ashwani Khad, Gumma, Cherot and Seog Catchment Area (Sub-Work: Replacement of Rising Main from Ashwani Khad to Kawalag 1st Stage and Kawalag to Kasumpti 2nd Stage)”**, commenced in 2017 and has been substantially implemented.

The proposed acquisition is required for completion of the remaining section of the transmission system. The project concerns drinking water infrastructure serving Shimla and therefore relates to the provision and improvement of an essential public utility.

The principal public benefits identified through the assessment include:

7.1.1 Completion of Drinking Water Infrastructure

The acquisition would enable completion of the remaining section of the rising main and integration of that section with the transmission infrastructure already constructed under the project. Completion of the planned infrastructure would allow the remaining section of the existing arrangement to be replaced and the upgraded transmission system to be brought into full operational use.

7.1.2 Improvement of Water Transmission

The proposed pipeline replacement is expected to support more reliable and efficient transmission of water through the system. The extent of any reduction in leakage, transmission losses, pipeline failures or maintenance requirements will depend on the operational performance of the completed system and should be assessed through the records maintained by the responsible agency.

7.1.3 Public Service and Social Good

The LWSS forms part of the water supply infrastructure serving Shimla and adjoining areas. Completion of the remaining transmission section is therefore expected to support the continued provision of drinking water services to the population served by the scheme. Reliable water supply has wider implications for household welfare, sanitation and public health.

7.1.4 Utilization of Existing Public Investment

The proposed acquisition would facilitate completion of a project that has already involved substantial public investment and implementation over several years. Completing the remaining section would allow the existing infrastructure to be used as intended rather than continuing with a temporary arrangement involving the old pipeline.

7.1.5 Settlement of Existing Land Issue

The proposed acquisition also addresses the private land interest associated with the existing HPPWD road corridor. Based on the information available for the assessment, the road has remained in public use for approximately five decades although the affected private land was not formally acquired. The present acquisition process provides an opportunity to determine the affected property interests and compensation through the prescribed statutory process.

Assessment

The SIA findings indicate that the proposed acquisition is directly linked to the completion of an existing public drinking water supply project and is strictly limited to the land required for the remaining section of the pipeline, with no association to commercial or industrial development.

The ultimate determination of whether the proposed acquisition fulfils the statutory requirements of public purpose rests with the competent authority under the **Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR Act, 2013)**. From the social assessment perspective, the proposed

acquisition is directly connected with the completion of essential public drinking water infrastructure. The limited land requirement, absence of identified residential displacement or direct livelihood dependence, and the longstanding private land interest associated with the existing public road provide a reasonable social basis for consideration of the proposed acquisition, subject to determination of compensation and other statutory entitlements in accordance with the applicable legal process.

7.2 Less-Displacing Alternatives and Minimum Land Requirement

The assessment has considered the extent of land required, the existing alignment of the transmission pipeline, the status of project implementation, and the possibility of alternative arrangements that could reduce the need for acquisition.

The proposed acquisition is limited to **0-04-50 hectares** at Up-Mohal Kawalag. The remaining pipeline section is associated with the existing HPPWD Mehli–Junga Road corridor. Use of an established road corridor avoids the creation of a separate pipeline corridor and reduces the need for additional land acquisition.

The larger project commenced in 2017 and has already been substantially completed. The remaining section is therefore part of an existing project alignment rather than a new alignment being proposed at the present stage. The existing temporary arrangement connects the newly constructed transmission main with the old pipeline pending completion of the remaining section.

Any change to the alignment at this stage would need to be assessed against the completed portions of the transmission system, technical requirements, additional land requirements, construction implications, statutory approvals, and associated costs. On the information available to the SIA team, an alternative alignment has not been identified that would clearly avoid the proposed acquisition without requiring changes to the existing project design and infrastructure.

The assessment also found that the proposed acquisition does not require displacement of residential structures or relocation of households. No community facility or common property resource has been identified within the acquisition area.

The question of whether the proposed land constitutes the minimum land required should ultimately be established with reference to the approved engineering drawings, land schedule

and other project records. On the basis of the information reviewed for the SIA, the proposed acquisition is limited to the remaining section required for completion of the project.

7.3 Nature and Intensity of Social Impacts

The social impacts identified through the assessment differ in their duration and significance. The permanent impact relates primarily to the acquisition of private property rights, while most other adverse effects are associated with the construction period.

The principal impacts identified are summarized below.

Table 7-1 Nature and Intensity of Identified Social Impacts

S. No.	Impact Identified	Project Stage	Nature	Duration
1	Acquisition of private land and associated compensation	Land acquisition	Direct and permanent	Long-term
2	Uncertainty regarding acquisition, valuation and compensation	Land acquisition	Direct	Temporary
3	Temporary traffic disturbance and inconvenience during excavation and pipeline laying	Construction	Indirect and temporary	Short-term
4	Dust, noise and construction-related disturbance	Construction	Indirect and temporary	Short-term
5	Temporary public safety risks associated with excavation and construction traffic	Construction	Indirect and temporary	Short-term
6	Short-term employment opportunities during construction	Construction	Positive and temporary	Short-term
7	Completion of the remaining transmission infrastructure	Operation	Positive	Long-term
8	Potential improvement in reliability and efficiency of water transmission	Operation	Positive	Long-term
9	Resolution of the outstanding private land interest through the	Land acquisition/Implementation	Positive administrative effect for affected landowners	Long-term

S. No.	Impact Identified	Project Stage	Nature	Duration
	acquisition and compensation process			

7.3.1 Permanent Social Impact

The principal permanent social impact is the transfer of the affected private property interest through acquisition. This impact is distinct from physical displacement or livelihood loss. The assessment has not identified residential structures or current primary livelihood activities dependent on the proposed acquisition area.

Compensation and other applicable statutory entitlements therefore constitute the principal measures for addressing the permanent effect on the affected property interest.

7.3.2 Temporary Construction Impacts

Excavation and pipeline installation within the existing road corridor may temporarily affect traffic movement and create dust, noise, vibration and safety concerns. These impacts are expected to be confined to the construction period and can be reduced through appropriate traffic management, work-site controls and timely restoration.

7.3.3 Long-Term Public Benefits

Completion of the remaining pipeline section is expected to support the functioning of the LWSS and the reliability of water transmission to the population served by the system. These benefits are longer-term in nature and relate to the intended service function of the project.

The SIA does not independently quantify the extent of improvement in water availability, transmission losses or public health outcomes. Such effects should be assessed through technical and operational monitoring following completion of the works.

Assessment

The identified adverse social impacts are concentrated around the permanent acquisition of the affected property and temporary construction disturbance. The assessment does not identify physical displacement, residential loss or direct livelihood dependence on the acquired land. The anticipated public benefits relate principally to completion and operation of the drinking water infrastructure.

The significance of these impacts has been considered with reference to their nature, duration, the number and characteristics of affected persons, and the extent to which they can be avoided or mitigated.

On this basis, the principal permanent impact is the acquisition of the affected private property interest, while the other identified adverse impacts are predominantly temporary and associated with construction activities. The anticipated longer-term benefit is the completion of the planned drinking water transmission infrastructure.

7.4 Viability of the Suggested Mitigation Measures

The mitigation measures identified through the SIA are generally practical for the nature and scale of the remaining works. They involve a combination of statutory acquisition procedures, compensation, construction management, public safety measures and stakeholder communication.

7.4.1 Land Acquisition and Compensation

The acquisition process should be completed in accordance with the provisions of the RFCTLARR Act, 2013, the Himachal Pradesh rules framed thereunder, and other applicable government instructions.

The affected persons should be provided with information regarding the acquisition process, valuation, compensation and available grievance redress mechanisms. Compensation and other statutory entitlements should be processed by the competent authority in accordance with the applicable legal provisions.

7.4.2 Traffic and Access Management

Because the remaining works are associated with the existing HPPWD Mehli–Junga Road corridor, construction activities should be planned to maintain safe movement of vehicles and pedestrians.

Measures should include:

- appropriate traffic control and warning signage;
- barricading around excavation areas;
- safe temporary diversions where required;
- maintaining access to adjoining properties wherever practicable; and

- prompt restoration of the road surface following completion of pipeline installation.

7.4.3 Dust, Noise and Construction Management

Construction-related dust and noise can be managed through standard site-management practices, including:

- water sprinkling or other appropriate dust-suppression measures;
- proper handling and covering of excavated and construction materials;
- regular maintenance of construction machinery;
- appropriate control of working hours; and
- prompt removal of construction debris and restoration of the work area.

7.4.4 Public and Occupational Safety

Open excavations and construction traffic may create temporary safety risks. The contractor should therefore provide suitable barricading, warning signs, lighting where required, controlled access to work areas, and other measures appropriate to the site conditions.

Construction workers should be provided with appropriate Personal Protective Equipment (PPE), safety training, first-aid arrangements and safe working conditions in accordance with applicable requirements.

7.4.5 Utility Protection

Before excavation, existing utilities within or near the work corridor should be identified. Appropriate precautions should be taken to avoid damage or unnecessary interruption to water supply, electricity, telecommunications or other public services.

7.4.6 Stakeholder Communication and Grievance Redressal

Communication with affected landowners and other concerned stakeholders should continue during implementation. Information regarding the construction schedule, temporary access arrangements and acquisition/compensation process should be provided as appropriate.

A functioning grievance redress mechanism should be available so that concerns can be recorded, reviewed and addressed through the appropriate authority.

Assessment of Mitigation Viability

The proposed measures are consistent with the scale and nature of the identified impacts and can be incorporated into the remaining construction and acquisition activities. Their effectiveness will depend on timely implementation, coordination between the Requiring Body, contractor and concerned departments, and monitoring during the construction period.

The measures should therefore be incorporated into the Social Impact Management Plan presented in the subsequent chapter.

7.5 Overall Assessment and Recommendations

The SIA has examined the proposed acquisition in relation to its public purpose, land requirement, alternatives, affected persons, social impacts and mitigation measures.

The proposed acquisition concerns **0-04-50 hectares** of private land required for completion of the remaining section of the LWSS transmission pipeline. The assessment has identified the permanent acquisition of the affected property interest as the principal direct social impact. No residential displacement or current primary livelihood dependence on the proposed acquisition area has been identified through the household survey and consultations.

The remaining construction activities may result in temporary traffic disturbance, dust, noise, excavation-related inconvenience and public safety risks. These impacts are localized and can be managed through appropriate construction and traffic management measures.

The principal anticipated public benefit is the completion of the planned water transmission infrastructure. Completion of the remaining section is expected to support the intended functioning of the LWSS and improve the reliability of water transmission to the population served by the system. The SIA does not independently quantify the resulting changes in water supply performance, transmission losses or public health outcomes; such effects should be established through technical and operational records.

The consultations indicate that the PAPs are aware of the proposed acquisition and have expressed willingness to cooperate, while emphasizing fair compensation and timely settlement of their property interests. These concerns should be addressed through transparent implementation of the acquisition process and payment of all applicable statutory entitlements.

7.5.1 Fair Compensation and Legal Compliance

The land acquisition process should be completed in accordance with the RFCTLARR Act, 2013, the HPRFCTLARR rules framed thereunder, and other applicable provisions.

The competent authority should ensure:

- verification of ownership and affected persons through certified revenue records;
- determination of compensation in accordance with the applicable statutory provisions;
- payment of compensation and other eligible entitlements within the prescribed process;
- appropriate disclosure and communication to affected persons; and
- access to applicable grievance redressal mechanisms.

7.5.2 Construction and Environmental Management

The Requiring Body and contractor should ensure that the remaining works are implemented with appropriate safeguards for road users, nearby residents and workers.

Particular attention should be given to:

- traffic management and safe pedestrian movement;
- dust and noise control;
- excavation safety;
- protection of existing utilities;
- occupational health and safety; and
- timely restoration of the road corridor.

7.5.3 Stakeholder Engagement

Communication with PAPs and other relevant stakeholders should continue during the acquisition and construction process. Concerns relating to compensation, access, construction disturbance or other project-related matters should be recorded and addressed through the appropriate institutional mechanism.

7.5.4 Final Assessment

Based on the findings of the Social Impact Assessment, the proposed acquisition is directly associated with completion of an existing public water-supply infrastructure project. The acquisition involves a limited area of private land and does not involve identified residential displacement or direct livelihood dependence on the acquisition area.

The principal adverse impact is the permanent effect on the affected private property interest, together with temporary construction-related disturbance. These impacts can be addressed through statutory compensation, appropriate acquisition procedures and construction-stage mitigation measures.

The proposed acquisition also provides an opportunity to address the longstanding private land interest associated with the existing public road corridor through a formal acquisition and compensation process.

The SIA findings therefore provide a basis for the competent authority to consider the proposed acquisition in accordance with the applicable statutory framework, taking into account the identified social impacts, the land requirement, the alternatives considered, the views of the affected persons, and the anticipated public benefits of completing the LWSS.

The detailed measures for managing and monitoring the identified impacts are presented in the Social Impact Management Plan in the following chapter.

8 Social Impact Management Plan

The Social Impact Management Plan (SIMP) sets out the measures proposed to avoid, minimize, mitigate and compensate for the social impacts associated with the proposed acquisition of private land for the remaining section of the transmission pipeline under the Lift Water Supply Scheme. The plan is based on the findings of the Social Impact Assessment, including review of project and land records, field observations, household-level information and consultations with affected persons. The principal permanent impact identified is the acquisition of approximately 0-04-50 hectares of private land. The assessment has not identified residential displacement, affected structures, tenants or leaseholders, encroachment, or direct livelihood dependence on the land proposed for acquisition. The SIMP therefore focuses on lawful and timely compensation, protection of affected persons' rights, management of temporary construction impacts, public safety, continued access, information disclosure and grievance redressal.

8.1 Approach to mitigation

The mitigation approach follows the principle that social impacts should, as far as practicable, be avoided first, minimized where they cannot be avoided, and compensated or otherwise addressed where an adverse impact remains.

For the proposed acquisition, the following principles will guide implementation:

- **Minimize the land requirement:** Acquisition should remain limited to the land required for the remaining pipeline section, as established through the approved project alignment and land schedule.
- **Protect existing access:** Construction activities should be planned so that access to adjoining properties and movement along the HPPWD Mehli–Junga Road are maintained to the extent practicable.
- **Provide lawful compensation:** Affected landowners and other eligible persons, if any, shall receive compensation and statutory entitlements determined in accordance with the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR Act, 2013), the applicable Himachal Pradesh rules and other applicable government provisions.

- **Avoid unnecessary physical disturbance:** Since no residential or commercial structures have been identified within the proposed acquisition area, construction should avoid creating additional impacts on surrounding properties.
- **Manage temporary construction impacts:** Dust, noise, traffic, excavation, spoil and safety risks should be managed through appropriate construction practices.
- **Maintain communication with affected persons:** Information concerning the acquisition process, compensation, construction schedule and grievance mechanisms should be communicated to affected persons in a timely manner.
- **Document and address unforeseen impacts:** Any adverse impact not identified during the SIA should be recorded and addressed through the appropriate statutory and project-level mechanism.

8.2 Measures to Avoid, Mitigate and Compensate Impacts

8.2.1 Avoidance Measures

1. Limit acquisition to the required area

The proposed acquisition should be restricted to the land necessary for laying the remaining pipeline section. The final area and boundaries should be verified against the approved alignment, land schedule and certified revenue records before acquisition.

2. Avoid additional impacts on adjoining properties

Construction activities should be confined to the designated work area as far as practicable. Temporary occupation of land outside the acquisition area should not occur without appropriate authorization and, where applicable, compensation or restoration.

3. Maintain access

Existing access to adjoining properties and the HPPWD Mehli–Junga Road should be maintained during construction. Where temporary obstruction is unavoidable, suitable alternative access should be provided.

4. Avoid damage to existing public infrastructure

The contractor should identify existing road, drainage, water supply, utility and other infrastructure before excavation and take appropriate measures to prevent damage.

8.2.2 Mitigation Measures During Construction

The following measures should be incorporated into construction supervision and contractor requirements.

Table 8-1 Construction-Stage Social Impacts and Proposed Management Measures

Impact / Risk	Proposed Management Measure
Dust generated by excavation and vehicle movement	Regular water sprinkling where necessary; cover loose construction material during transportation; avoid unnecessary stockpiling.
Construction noise	Restrict particularly noisy activities to appropriate daytime hours and maintain construction equipment in proper working condition.
Traffic and movement along the road	Provide appropriate traffic management, warning signs and safe passage; coordinate temporary restrictions where required.
Excavation hazards	Barricade open excavations and provide warning signs and safe pedestrian/vehicle movement arrangements.
Temporary obstruction of access	Maintain access wherever practicable; provide temporary alternative access where necessary.
Excavated soil and construction waste	Store, transport and dispose of excavated material and construction waste at designated locations in accordance with applicable requirements.
Drainage and surface runoff	Ensure that excavation and construction activities do not block existing drainage channels and provide temporary drainage arrangements where necessary.
Damage to surrounding land or vegetation	Restrict construction activities to the designated work area and avoid unnecessary disturbance to surrounding vegetation and land.
Public safety	Clearly demarcate the work area and implement appropriate site safety measures, particularly near the existing road.

The detailed environmental and construction management measures should be incorporated into the contractor's method statements and relevant project-level management plans, where applicable.

8.3 Compensation and Applicable Rehabilitation and Resettlement Measures

The proposed acquisition involves private land. Accordingly, compensation and other statutory entitlements shall be determined through the land acquisition process on the basis of the ownership and revenue records and the provisions applicable to the acquisition.

The principal measures are as follows:

8.3.1 Compensation for Acquired Land

Compensation for the acquired land shall be determined and paid to the legally entitled landowners/title holders in accordance with the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR Act, 2013), the applicable Himachal Pradesh rules and other relevant government provisions.

The identification of individual legal owners and their respective shares should be based on certified revenue records and the determination of the competent authority.

8.3.2 Structures and Physical Displacement

No residential or commercial structure has been identified within the land proposed for acquisition, and no physical displacement has been identified through the SIA.

Accordingly, structure-related rehabilitation and resettlement measures are not presently applicable to the assessed impact. If any eligible structure or physical displacement is identified during the acquisition process or subsequent verification, the applicable statutory provisions shall apply.

8.3.3 Livelihood and Income Impacts

The assessment has not identified direct livelihood dependence on the land proposed for acquisition. Therefore, no project-specific livelihood restoration measure has been identified at this stage.

If subsequent verification establishes an eligible livelihood or income loss attributable to the acquisition, the applicable statutory entitlement shall be assessed and provided in accordance with the RFCTLARR Act, 2013 and applicable rules.

8.3.4 Tenants, Leaseholders, and Other Occupiers

No tenant or leaseholder has been identified in the assessment. Any person subsequently established through the acquisition process as having a legally recognized interest in the affected land or assets shall be dealt with in accordance with the applicable legal provisions.

8.4 Measures for Construction-Related Social Impacts

Although the acquisition itself does not involve physical displacement, construction of the remaining pipeline section may cause temporary inconvenience.

The following measures should therefore be implemented:

- Construction should be planned to minimize disruption to road users and adjoining landowners.
- Excavated sections should not remain unnecessarily open for prolonged periods.
- Adequate barricading and warning signage should be provided around excavation areas.
- Dust suppression should be undertaken where construction activities generate significant dust.
- Construction vehicles should be managed to avoid unnecessary obstruction of the existing road.
- Access to adjoining properties should be maintained wherever practicable.
- Any temporary damage to access, drainage or other property attributable to construction should be restored.
- Construction debris and excavated material should not be deposited in drainage channels or on adjoining private land.
- Complaints relating to construction disturbance should be recorded and addressed promptly.

8.5 Stakeholder Engagement and Information Disclosure

Continued communication with affected persons is important during the acquisition and construction stages.

The requiring body and implementing agency should provide affected landowners with relevant information concerning:

- the proposed acquisition and its extent;
- the acquisition process and applicable statutory provisions;
- identification and verification of affected landowners;
- compensation determination and payment procedures;
- expected construction activities and timing;
- temporary access or traffic arrangements; and

- available grievance redress mechanisms.

Consultation should continue during implementation where changes in construction arrangements or unforeseen impacts may affect affected persons.

The views expressed during consultation should be documented separately from the statutory determination of ownership, compensation and entitlement.

8.6 Grievance Redressal

A clear mechanism should be maintained through which affected persons can raise concerns relating to land acquisition, compensation, construction-related disturbance, access, safety or restoration of temporarily affected areas.

Grievances should, as far as practicable:

- be formally recorded;
- acknowledge receipt to the complainant;
- be referred to the appropriate responsible officer or agency;
- be investigated and responded to within the applicable administrative or statutory framework; and
- be documented along with the action taken.

The project-level grievance mechanism should not replace or restrict the statutory remedies available to affected persons under the RFCTLARR Act, 2013 or other applicable laws.

8.7 Monitoring and Implementation

Implementation of the SIMP should be monitored during the acquisition and construction stages.

The monitoring framework should cover at least the following:

Table 8-2 Social Impact Management Monitoring Framework

Monitoring Area	Key Indicators	Responsibility
Land acquisition	Verification of ownership, acquisition of identified area, compensation determination and payment	Requiring body / competent authority

Monitoring Area	Key Indicators	Responsibility
Compensation	Payment of compensation and applicable statutory entitlements	Competent authority / requiring body
Construction impacts	Dust, noise, traffic, access and excavation-related disturbance	Implementing agency / contractor
Public safety	Barricading, signage and safe movement around work areas	Contractor / site supervision
Access	Continuity of access to adjoining properties and road users	Contractor / implementing agency
Grievances	Number, nature, status and resolution of complaints	Implementing agency
Restoration	Restoration of temporarily affected access, drainage or other facilities	Contractor / implementing agency
Unforeseen impacts	Identification, documentation and corrective action	Implementing agency / competent authority

8.8 Entitlement Framework

The entitlement framework for this project should be based on the actual impacts established through the SIA and verified during the acquisition process, rather than applying a generic entitlement matrix covering impacts that are not present.

Table 8-3 Impact Categories and Applicable Management Measures

S. No.	Impact Category	Assessment Finding	Management / Entitlement Measure
1	Acquisition of private land	Applicable – 0-04-50 ha proposed for acquisition	Compensation and other applicable statutory entitlements to eligible landowners/title holders in accordance with the RFCTLARR Act, 2013 and applicable rules.
2	Residential structures	Not identified	No structure-related entitlement presently applicable. Any subsequently verified eligible structure shall be dealt with under applicable provisions.
3	Commercial structures	Not identified	No structure-related entitlement presently applicable.
4	Physical displacement	Not identified	No resettlement measure presently required on the basis of the SIA findings.
5	Tenants / leaseholders	Not identified	Any legally recognized tenancy or leasehold interest subsequently established shall be dealt with under applicable provisions.

S. No.	Impact Category	Assessment Finding	Management / Entitlement Measure
6	Direct livelihood dependence on acquired land	Not identified	No livelihood restoration measure presently identified. Any subsequently verified eligible loss shall be assessed under applicable provisions.
7	Common property resources	No direct impact identified	Avoid disturbance to community/public assets during construction. Any unavoidable damage should be restored or otherwise addressed.
8	Temporary construction disturbance	Applicable	Traffic management, dust suppression, noise management, access arrangements, safety measures and restoration of temporarily affected areas.
9	Unforeseen impacts	To be monitored	Document and assess the impact and provide appropriate mitigation or statutory entitlement, as applicable.

8.9 Institutional Responsibilities

Implementation of the SIMP will require coordination among the requiring body, competent authority, implementing agency and construction contractor.

The land acquisition authority/competent authority will be responsible for statutory acquisition procedures, determination of compensation and processing of applicable entitlements.

The requiring body/implementing agency will be responsible for ensuring that social safeguards identified in the SIA are incorporated into project implementation and that affected persons receive appropriate information.

The construction contractor will be responsible for implementing site-level measures relating to safety, traffic management, dust, noise, access, excavation, waste and restoration, under the supervision of the implementing agency.

8.10 Outlay for SIMP Implementation

The cost of implementing the SIMP should be incorporated into the overall project and land acquisition budget.

Because the final compensation amount depends on the verified ownership, applicable valuation methodology, statutory factors and determination by the competent authority, where a specific cost cannot be determined at the SIA stage, the report identifies the responsible agency and the basis for determining the cost during implementation.

The SIMP budget should therefore include, as applicable:

- compensation for acquired land;
- statutory rehabilitation and resettlement entitlements, where applicable;
- costs associated with temporary access and restoration;
- traffic and public safety measures;
- dust and noise management;
- grievance and stakeholder engagement activities;
- monitoring and documentation; and
- mitigation of any unforeseen social impacts.

A detailed financial outlay can be prepared by the requiring body once the land schedule, ownership records, valuation and applicable statutory entitlements have been finalized.

8.11 Implementation Schedule

The measures proposed under the SIMP should be implemented in accordance with the project and land acquisition schedule.

Table 8-4 SIMP Implementation Schedule

Stage	Key SIMP Actions
Pre-acquisition	Verify land records, ownership, acquisition boundaries and affected persons; disclose acquisition-related information.
Acquisition	Determine and process compensation and applicable statutory entitlements.
Pre-construction	Inform affected persons about construction activities; establish grievance and communication arrangements; finalize traffic and safety measures.
Construction	Implement dust, noise, traffic, access, safety and drainage measures; monitor grievances and unforeseen impacts.
Post-construction	Restore temporarily affected areas and review outstanding grievances or social impacts.

8.12 Overall Management Commitment

The Social Impact Management Plan is intended to ensure that the remaining land acquisition and construction activities are undertaken with due regard to the rights and interests of affected persons. For this project, the principal permanent social issue is the acquisition of private land,

while the other identified adverse impacts are primarily temporary construction-related disturbances.

Implementation should therefore prioritize lawful and timely compensation, transparent communication, protection of access, public and worker safety, management of construction disturbance, and prompt resolution of grievances. Any impact that emerges during implementation but was not identified during the SIA should be documented and addressed through the appropriate statutory and project-level mechanism.

9 Conclusion

The Social Impact Assessment was undertaken to assess the social implications of acquiring private land for completion of the remaining section of the transmission pipeline under the Lift Water Supply Scheme. The assessment examined the need for the proposed land acquisition, the extent and nature of affected land and persons, possible alternatives, potential social impacts, views of affected persons and measures required to avoid, mitigate and compensate for adverse effects. The findings are based on review of available project and land records, field investigation, household-level information and stakeholder consultation.

9.1 Purpose and Key Findings of the Assessment

The proposed acquisition relates to approximately 0-04-50 hectares of private land at Up-Mohal Kawalag, along the HPPWD Mehli–Junga Road in Tehsil Shimla (Rural), District Shimla. The land is required for the remaining section of the transmission pipeline associated with the augmentation of the Lift Water Supply Scheme.

The broader water supply project commenced in 2017 and a substantial portion of the planned infrastructure has already been completed. The proposed acquisition is therefore associated with completion of the remaining section rather than development of a new standalone project. The assessment found that the proposed land acquisition is directly connected with the completion of public drinking water infrastructure.

The principal findings of the SIA are summarized below:

- The proposed acquisition involves 0-04-50 hectares of private land.
- The land is associated with an existing HPPWD road corridor and the proposed pipeline alignment follows the identified corridor for the remaining section.
- The assessment identified one extended family and four family branches represented during consultation in relation to the affected private land interest. The exact legal ownership and respective shares should be confirmed from certified revenue records as part of the acquisition process.
- No residential or commercial structures have been identified within the proposed acquisition area.
- No physical displacement of households has been identified.

- No tenants or leaseholders were identified during the assessment.
- No direct livelihood dependence on the land proposed for acquisition was identified through the assessment.
- No direct impact on common property resources or community assets was identified.
- The principal permanent social impact is the loss of private land and the associated private property interest through acquisition.
- Temporary impacts may arise during construction, particularly from excavation, dust, noise, movement of construction vehicles, traffic management and temporary access restrictions.
- The assessment identified the need for fair and timely compensation and appropriate treatment of any other statutory entitlements applicable to affected persons.
- The views expressed during consultation indicate the importance attached by affected persons to appropriate compensation and proper handling of the acquisition process.

9.2 Public Purpose and Need for Acquisition

The assessment finds that the proposed acquisition is directly related to completion of an existing public drinking water supply project. The land requirement is associated with the remaining pipeline section and is not connected with commercial or industrial development.

The project has already involved substantial public investment, and completion of the remaining section is necessary for the intended transmission infrastructure to be brought into its planned configuration. The proposed acquisition also concerns a longstanding private land interest associated with the existing public road corridor. The acquisition process therefore provides an opportunity to address the land requirement for the remaining pipeline section through the applicable statutory process and to determine compensation for the affected private land interest.

The SIA provides the social assessment required for consideration of the proposed acquisition. The ultimate determination regarding public purpose, statutory compliance, acquisition and compensation rests with the competent authority under the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR Act, 2013) and the applicable rules.

9.3 Social Impacts and Mitigation

The assessment indicates that the social impacts are concentrated around the acquisition of the affected private land and temporary disturbance during construction.

The acquisition will result in a permanent change in the ownership or property interest in the land acquired. This impact should be addressed through determination and payment of compensation and other applicable statutory entitlements to the legally entitled persons in accordance with the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR Act, 2013) and applicable Himachal Pradesh rules.

At the same time, the assessment has not identified physical displacement, loss of residential or commercial structures, or direct livelihood dependence on the affected land. The absence of these impacts limits the extent of rehabilitation and resettlement measures required for the presently identified affected population.

Temporary construction impacts can be managed through appropriate site planning and supervision. Measures identified in the Social Impact Management Plan include maintaining access, managing traffic, controlling dust and noise, safeguarding open excavations, protecting drainage, maintaining public safety and restoring temporarily affected areas.

9.4 Alternatives and Land Requirement

The assessment considered the need to minimize land acquisition and the feasibility of using the identified existing corridor. Since the larger transmission system has already been substantially implemented, changing the alignment at this stage could require changes to the established project design and may have implications for additional land, technical works, approvals, cost and implementation time.

On the information available for this assessment, no clearly practicable alternative alignment has been identified that would avoid the proposed land requirement without affecting the established project configuration. The final determination of the minimum land required should, however, be based on the approved engineering drawings, alignment and land schedule.

The proposed acquisition should therefore remain limited to the area required for the remaining pipeline section, subject to verification during the statutory acquisition process.

9.5 Overall Assessment

The SIA identifies a limited number of directly affected persons in relation to a relatively small area of private land, with the principal permanent impact being acquisition of the affected property interest. No residential displacement or direct livelihood dependence on the land has been identified. The other adverse impacts identified are predominantly temporary and relate to construction activities.

The anticipated public benefit relates to completion and operation of the planned drinking water transmission infrastructure. The assessment therefore provides a basis for the competent authority to consider the proposed acquisition in light of the project's public purpose, land requirement, affected private interests, alternatives and proposed mitigation measures.

The findings should not be interpreted as replacing the statutory determination of ownership, compensation, rehabilitation and resettlement entitlements, or other approvals required under applicable law. Those matters should be determined through the appropriate legal and administrative process.

9.6 Way Forward

Subject to the decisions of the competent authority and completion of the applicable statutory procedures, the following actions are considered important for implementation:

1. **Verify the final acquisition area and boundaries** against the approved project alignment, engineering drawings and land schedule.
2. **Confirm the legal ownership and respective interests** in the affected land from certified revenue records before determination and disbursement of compensation.
3. **Determine and provide compensation and applicable statutory entitlements** in accordance with the RFCTLARR Act, 2013, applicable Himachal Pradesh rules and other relevant government provisions.
4. **Maintain communication with affected persons** throughout the acquisition and construction process and provide clear information regarding compensation, implementation arrangements and grievance mechanisms.
5. **Implement the Social Impact Management Plan** during construction, particularly measures relating to access, traffic, dust, noise, drainage, excavation and public safety.

6. **Monitor unforeseen impacts and grievances** during implementation and take corrective action where required.
7. **Restore temporarily affected areas and access arrangements** following completion of construction activities.

9.7 Closing Statement

The Social Impact Assessment indicates that the proposed land acquisition is associated with the completion of an existing public drinking water infrastructure project and involves a relatively small area of private land. The assessment has identified the principal social effects and the measures required to manage them, while also documenting the absence of identified residential displacement, affected structures and direct livelihood dependence on the land.

If the competent authority approves the acquisition and the applicable statutory requirements are satisfied, implementation should proceed through the prescribed statutory process, with protection of the rights of affected landowners and determination and payment of compensation and other applicable entitlements. Implementation of the measures set out in the SIMP will be important to minimize temporary construction-related disturbance and to maintain effective communication with affected persons throughout the remaining project activities.

Overall, this SIA provides the social evidence and management framework required for consideration of the proposed acquisition. Final decisions regarding acquisition, compensation and implementation remain with the competent authorities in accordance with the applicable legal and administrative framework.

10 References:

- [1] Award letter
- [2] Contract Award document by SJPNL

11 Annexures

1. Project Notification
2. Questionnaire

Annexure

Survey Questionnaire